ID and Traceability

Speakers at the spring NIAA meeting share their viewpoints on the animal disease traceability framework. Comment period extended to Dec. 9.

Story & photos by ***Meghan Richey***

It's been about two years since the U.S. Department of Agriculture (USDA) announced it was scrapping the National Animal Identification System (NAIS) in favor of a "new, flexible framework for animal disease traceability" that was to be the responsibility of the 50 states and various tribal nations. Despite the fact that some cattle industry groups have been encouraging a national traceability program for more than 20 years, it appears more work still needs to be done to reach an industry consensus.

Meanwhile, other countries around the world are leaps ahead of the United States in implementing their own traceability programs (see sidebar, "Traceability Around the World," page 170), and U.S. customers — both foreign and domestic — are becoming more vocal in their desire for traceability as an assurance of food safety.

Plans for a national identification (ID) and traceability program have taken many forms over the years, and it can be difficult to keep track of details as plans evolve and respond to industry input. In August 2011, USDA issued the proposed rule on animal disease traceability. Here is the United States' proposed program at a glance:

- Applies only to animals moved in interstate commerce
- Administered by states and tribal nations, not USDA
- States may not require radio frequency identification (RFID); all official forms of ID must be accepted
- Encourages use of low-cost technology (visual ear tags, branding, etc.)
- Relies on existing regulations where appropriate, such as interstate certificates of veterinary inspection (ICVI), brucellosis vaccination tags and "brite" tags
- States/tribes hold producer data and issue location ID numbers, rather than USDA
- Ag Secretary Tom Vilsack has said "this will not be an unfunded mandate," and ID program coordinator Neil Hammerschmidt has said that USDA will not enforce the program if Congress does not fund it.

To read more about the new plan, see *www.aphis.usda.gov/traceability*. USDA will accept comments on the proposed rule until Dec. 9. Comments can be submitted to *www.regulations.gov/#!documentDetail;D=APHIS-2009-0091-0001*.

Phasing in cattle ID without a timeline

A phase-in approach will be used for cattle, though no hard timelines are set as they had been in past versions of the plan.

"We don't want to grow too fast," Hammerschmidt said, speaking at the National Institute for Animal Agriculture (NIAA) annual meeting in April in San Antonio, Texas. "Let's tackle older cattle first and make sure the system is working smoothly before we add feeder cattle to the mix."

The Secretary's Advisory Committee on Animal Health (see sidebar, "Who advises the secretary?" page 172) will help evaluate the initial phase and offer recommendations for official ID before the final phase is implemented. The final rule is expected to be published 12-15 months after the proposed final rule and will include a comment period.

Ear tags imprinted with the U.S. shield and a 15-digit nationally unique animal ID number will be considered official ID, though other methods may be used when agreed upon by animal health officials in both the shipping and receiving state/tribe.

"We won't move to the final phase, where all cattle will require official ID, until we have reached 70% compliance in the initial phase," Hammerschmidt explained, stressing that the advancement to the final phase will be based on real performance, not

CONTINUED ON PAGE 170

Neil Hammerschmidt

Boyd Parr

Charlie Rogers

an arbitrary date. When 70% compliance has been achieved, the Animal and Plant Health Inspection Service (APHIS) will publish notice in the *Federal Register,* announcing when official ID requirements will become effective for remaining cattle.

During the initial phase, official ID will be required for all sexually intact cattle and bison 18 months of age or over; dairy cattle of any age; cattle and bison of any age used for rodeo or recreational events; and cattle and bison of any age used for shows or exhibitions.

Feeder cattle less than 18 months will be temporarily exempt during the initial phase. Cattle and bison moved directly to slaughter (including through one approved livestock facility; for example, auction/market) with a USDA-approved backtag will also be temporarily exempt.

During the final phase, official ID will be required for all cattle moved in interstate commerce.

Existing ID: Brands, brites and brucellosis

Producers in the 14 western brand states have argued for years that their cattle are already identified by brands and could be traced through existing paperwork if needed. USDA has received vocal criticism from groups such as R-CALF USA for its exclusion of brands as a recognized form of ID. Hammerschmidt said that USDA acknowledges this concern and now supports the option of using brands to identify cattle moving interstate in certain circumstances.

In the proposed rule, the official ID method for cattle will remain official ear tags. However, if animal health officials in both the shipping and receiving state agree, cattle traveling interstate may instead be identified by brands, tattoos or breed registry certificates.

"This minimizes work by using existing programs and prevents a state from requiring all cattle to have an RFID tag," Hammerschmidt said, noting that this keeps with USDA's objective to support the use of low-cost technology.

A variety of tags will be considered official ID to capitalize on existing programs and minimize duplicate work for producers, Hammerschmidt said. Among these are nine-character silver brite tags, as well as brucellosis tags (Bang's tags) that are often applied free by veterinarians at the time of vaccination.

Regardless of the agreed-upon ID form, cattle traveling interstate must be accompanied by an ICVI.

Challenges of a manual ID system

A four-person panel — including a state animal health official, a private practice veterinarian, a representative from a data management company and an auction market representative — discussed the challenges of a manual ID system at the NIAA meeting. Conversation focused on the difficulty of manually reading and recording ID tags, and the increased manpower needed for a paper-based ID system.

One point of consensus was that although it may initially be cheaper to install a visual ID ear tag or utilize an existing form of ID (such as brite tags or brucellosis tags) instead of using electronic ID (eID), the low-tech approach costs more in the long run for all involved in terms of both time and money.

"Manually reading tags leads to more

Traceability around the world

"All around the world, traceability programs have been couched as epidemiological, but historically the real drivers are primarily economic," says Brian Bolton, CEO of Allflex USA Inc., which has 1,000 people working on some 40 regulatory identification (ID) and traceability programs globally. "Traceability is tied to food security because if animals die or are unfit for consumption, we go short of food. It's also an issue of preserving local economies, because if a region is unable to produce for a period of time, it causes social restructure. And of course there's the tie to market access, as traceability can easily become a non-tariff trade barrier. It can also be a tool to bolster consumer confidence. We saw this in the European Union (EU) after the UK (United Kingdom) outbreaks of BSE."

Bolton points out that most developed countries are ahead of the United States in terms of traceability capabilities.

"Until we have industry desire in the U.S., we won't have a traceability program. And if we have no timeline, we have no program," he says.

"The U.S. shouldn't get too hung up on the how's of making it happen. Just begin already. I'm a native of England, and watching my country's program develop I've learned that you begin, you evolve and eventually you'll make real progress. But you have to start."

Here's Bolton's overview of traceability programs already in place throughout the world.

European Union

- ►All 27 member countries have mandatory programs for cattle and sheep, some also for swine.
- ►Animals must be individually tagged at birth.
- ►Animal movement is recorded via paper passports.
- ►Cattle have double visual tags, but are moving to radio frequency ID (RFID) tags.

Japan and South Korea

- ►Mandatory programs are similar to programs in the EU, including tagging at birth and animal movement recording.
- ►Jail time is a penalty for compliance failure.
- ►Food safety is a cultural concern and driving factor.

Australia

- ►A mandatory program records 30 million movements per year, with greater than 99% traceability.
- ►Electronic ID (eID) for cattle is mandatory before they're moved off the farm.
- ►Australia is a key Asian exporter and uses traceability to appeal to trading partners' cultural needs.

New Zealand

- ►A mandatory national traceability program is in place.
- ►New Zealand is a critical exporter of dairy and lamb.

Canada

- ►National ID has been mandatory since 2002.
- ►It started with visual tags and moved to eID in 2005.
- ►Provincial differences exist in movement recording, but there is a national bookend system for recording the beginning and end of an animal's life.

handling time since it is an inefficient and difficult process. Anyone can tell you that more handling means more shrinkage in the animals and that decreases profits," said panelist Charlie Rogers, New Mexico Livestock Marketing Association. "A paper system will decrease industry profits, plain and simple."

Panelist Boyd Parr, South Carolina state animal health official, pointed out that a paper-based system requires considerably more administrative time to manage data, in addition to the extra time spent reading and recording tags.

"Consider that the UK employs a staff of more than 800 to manage its paper-based system, yet Canada requires only 80-110 staff positions to manage its digital system," he said.

Another point of consensus was that it's difficult to read and record tags manually while ensuring accuracy, especially if you endeavor to maintain the speed of commerce. Parr mentioned that although brite tags and brucellosis tags can be used as ID, they were never intended to be read frequently and thus are not user-friendly. Tom DeMuth, AgSource Solutions, agreed and lamented the challenge of differentiating between a letter O and a number 0 printed on brite tags and brucellosis tags.

"Error rate is much higher than you might expect when writing down numbers and letters vs. using a digital scanner. It's a challenge to read even my own writing sometimes when I have to read and record tags under less-than-ideal conditions, which happens more often than not," Parr agreed. "With a paper-based system we simply must accept that we'll have a higher error rate and won't be able to trace some animals because of that."

Some panelists were unable to accept that reality.

"Anything less than 100% traceability is inadequate and unacceptable," said DeMuth. "You can't get to 100% traceability unless you have eID."

Panelists also commented on the role that existing infrastructure will play in a paper-based system.

"States that have been unfortunate enough to have brucellosis in recent years actually have an advantage here because they're accustomed to tagging cattle and have the proper infrastructure to do so," Parr said.

"The fact is that there will always be people in every state who choose for various reasons to not tag their cattle at the ranch. Maybe they don't have tagging facilities. Whatever the reason though, some people will always rely on auction markets to tag their cattle," said Rogers. "And it's actually easier for us to put new tags in cattle than to try to restrain the cattle, locate existing tags, clean the tags, try to read them and get the ID written down accurately without slowing us down too much."

Relying on auction markets to tag cattle may be a more expensive option for producers, however.

"I think USDA is trying to prove that eID isn't as costly as industry thinks. RFID tags are available for $1.60 to $2.25, but sale barns charge $3.50 per head to manually record animal ID at the markets," said Dave Rethorst, American Association of Bovine Practitioners (AABP). "We've heard the auction market folks say how hard it is to read and record tags manually, and anyone who's done it knows that's true. We

CONTINUED ON PAGE 172

Uruguay
- ►Country has had mandatory eID (with accompanying visual tag) for cattle since 2006.
- ►Tags are subsidized.
- ►Full traceability is on target for September 2011, precisely five years after beginning.
- ►The program is used extensively as a marketing tool; Uruguay will always be an exporter because of its population.

Brazil
- ►Started program in 2004 that attempted to mimic EU with double visual tags and paper passports.
- ►Viewed as an export program, not an animal health program.
- ►Program failed the EU Food and Veterinary Office inspection in 2009.
- ►Two new mandatory programs are in discussion.

Argentina
- ►Mandatory ID and visual tags are required for cattle before entering commerce.
- ►Politics are at play, as exports are restricted to 15% of production today.
- ►Country may become a meat importer within 10 years.

Chile, Paraguay and Columbia
- ►Regional traceability efforts exist.

Mexico
- ►Several regional programs exist for export to the United States, but they are incomplete.
- ►Programs are partially subsidized through tags.
- ►Mandatory national program is in discussion.

United States: Michigan
- ►First state in United States to have a traceability program, March 2007.
- ►Driven by tuberculosis (TB) and intra- and interstate trading needs.
- ►All cattle must be eID tagged with a certificate of veterinary inspection (CVI) before moving off farm.
- ►More than 3 million cattle have been eID tagged.
- ►Movement recording in sale yards and packing plants.

"They followed the original NAIS plan and it worked. No one has died or gone out of business. NAIS works," Bolton says.

Global commonalities

"When we look at all these programs, there are some commonalities that stand out," Bolton says. "A voluntary system earns participation only when there is individual economic need. When the needs of many are considered, it must be a regulatory program to get needed participation.

"All programs were initially met with a high degree of resistance by producers. But none of these countries would give up their traceability systems now that they have them in place. There is shared responsibility between industry and animal health managers. Typically there is seed money or a cost share from the state. Also note that none of the programs are voluntary. They are all mandatory."

need eID to maintain speed of commerce, especially when it comes to feeder cattle."

Panelists also suggested their own improvements to USDA's proposed final rule on ID and traceability. Rogers suggested scaling back the required records on movement.

"The Wright brothers didn't build a space shuttle, and we shouldn't attempt it the first time, either. Let's start with a bookend system on adult cattle, similar to Canada's system," he said. "Tags should be read when applied at the place of origin, then simply confirm the presence of the tag when the animal is moving through commerce, but don't read it again until slaughter."

Rethorst commented on the regional shortage of veterinary inspectors and the difficulty this presents when ICVIs are required for interstate movement. He suggested that USDA should approve veterinary technicians to write ICVIs, instead of just veterinarians.

"Vets are in short supply already. Let's leave the health tasks to the vets, and let techs handle the paperwork tasks required for ID and traceability."

Parr said, "When we can include vets we have a stronger system," but he cautioned that staying flexible is the best approach to reaching the ultimate goal of traceability.

"The USA is traditionally great at reducing costs and improving efficiency. It's something we've prided ourselves on throughout history," DeMuth said. "The rest of the world is ahead of us, and they're watching us and waiting. We have a responsibility to come together as an industry to show we do have a safe, traceable food supply."

Who advises the ag secretary?

The Secretary's Advisory Committee on Animal Health (SACAH) discusses issues concerning public health, conservation of natural resources, stability of livestock economies, livestock disease management and traceability strategies, and prioritization of animal health issues. It includes 20 nominated individuals who serve a two-year term, with membership set to turnover in August 2012. The committee is chaired by Don Hoenig, the state animal health official of Maine, and co-chaired by Judith McGreary, an attorney of agricultural law in Texas. The committee includes veterinarians, producers, processors, representatives from prominent industry organizations, academia and others.

Committee member Boyd Parr, the state animal health official of South Carolina, shared some of the committee's recent topics of conversation with attendees of the National Institute for Animal Agriculture (NIAA) annual meeting in April.

Boyd said committee discussion topics related to animal ID and traceability have included:

- ► role of brands,
- ► avoidance of an unfunded mandate scenario,
- ► inclusion of feeder cattle,
- ► security and confidentiality of information collected,
- ► extension of the comment period for the proposed rule,
- ► maintaining the speed of commerce,
- ► technology for both ID devices and CVIs, and
- ► tribal sovereignty.

Here are the committee's official recommendations to Ag Secretary Tom Vilsack regarding the draft proposed rule on animal ID and traceability.

Avoidance of an unfunded mandate scenario

Issue: Information technology, data management, tags and other performance requirements could impose costs that would burden stakeholders.

Committee recommendation: The proposed rule should incorporate concrete provisions to ensure it will not result in an unfunded mandate. The proposed rule should provide that the regulatory requirements will be suspended if, at any point, there is insufficient funding, specifically for the costs to producers for identification devices; costs to states for necessary personnel and technology; and the costs to other affected individuals (such as veterinarians, sales facilities and other market facilitators) for any mandated practices and technology.

Extension of the comment period for the proposed rule

Issue: The proposed rule for animal disease traceability will be published during a busy season for those in agriculture, and many individuals will be affected.

Committee recommendation: The comment period for the proposed rule should be extended to 120 days. On Oct. 7, USDA announced its decision to extend the comment period to Dec. 9.

Public participation in SACAH meetings is allowed. For more information, see *www.aphis.usda.gov/animal_health/acah/*.

Dave Rethorst

Tom DeMuth

Brian Bolton