State Notes

TOPICS OF LEGISLATIVE INTEREST
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Mandating Electronic Animal Identification for Cattle
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Introduction

Discoveries in the United States of cattle with bovine spongiform encephalopathy (BSE), also know as "mad cow disease", along with the increasing global threat of other zoonotic diseases (i.e., diseases capable of being transmitted from animal to human) have demonstrated the importance of accurate, rapid animal identification systems. Responding to these recent developments, the Michigan Commission of Agriculture, at its November 2005 meeting, adopted a resolution directing the Michigan Department of Agriculture (MDA) to create an electronic animal identification system as the official identification for all cattle in Michigan. The Commission resolution established an implementation date of March 1, 2007. The proposal to develop this system is a direct result of the State's efforts to eradicate bovine tuberculosis (TB) from Michigan. It is believed that such a system is a necessary step to assist Michigan in moving toward bovine TB-free status statewide as well as a critical component for overall disease prevention and surveillance in Michigan's cattle herd.

What is Electronic Identification?

Animal identification has been around in some form for centuries. Cattle branding, for example, is one of the oldest known techniques for identifying cattle. Today, most cattle producers use a metal ear tag with a unique number to identify specific animals. Systems and techniques of identification vary across animal types. Generally, electronic identification (EID) applies modern technology to traditional systems. Specifically, EID employs an ear tag imbedded with a radio frequency device and marked with a unique number that cannot be duplicated. The ear tags are linked to databases that include information specific to each animal. In addition to the animal information, the central databases contain information specific to premises that house cattle, such as farms, feedlots, auction facilities, and slaughter facilities. Radio frequency readers are used to determine the location and movement of animals in the event of a disease outbreak.

Regulatory Pressures Driving Force

Animal identification systems exist for different reasons and purposes. For example, a business case can be made for the voluntary development of such systems. Specifically, economic forces in the food animal industry, most notably beef and dairy cattle, are driving producers to certify the origin, movement, health, and history of animals as they move through the marketplace. Michigan's electronic identification program for cattle is being established for one reason alone: to support the State's animal disease control, eradication, monitoring, and surveillance programs.

Originally, Michigan's program was launched as a voluntary pilot project in November 2001 as part of the bovine TB eradication program. Early on, the EID program was viewed as an integral part of Michigan's application for bovine TB split state status from the United States

Department of Agriculture (USDA).[1] By employing EID in the "infected zone" of northeastern Lower Peninsula, Michigan is able to demonstrate its ability to identify diseased animals accurately and rapidly and prevent the movement of such animals to other parts of the State. Further, use of this system is key to ensuring that testing requirements are met before animal movement from the infected zone.

Today, the program is being expanded outside of the infected zone to help Michigan regain statewide bovine TB-free status. For example, as part of the identification requirements for animal movement statewide, the Director of the MDA recently issued an order to require that all cattle be identified with EID ear tags before movement from premises within Michigan. Previously, EID was required only for animal movement from premises within the infected zone. This mandate will become effective for all cattle movement in Michigan beginning March 2007.

Michigan's mandatory program is being developed concurrently with the development of a voluntary national animal identification system (NAIS). The NAIS is not specific to any one animal industry, whereas Michigan's program is specific to cattle at this point. Similar to the Michigan program, the driving force of the Federal program is the risk of an outbreak of a foreign animal disease. The goal of the NAIS is to be able to identify all animals and premises that have had contact with an animal disease within 48 hours of discovery. Because of Michigan's seminal work in EID, the Federal program is looking to Michigan as a model in many respects.

What Will Statewide EID Cost?

While there are a number of components to a statewide EID program for cattle, the majority of the costs will be incurred in the development of the infrastructure necessary to identify, locate, and track animals as they move through the commerce channels. At the center of this system is the mandate to provide radio frequency ear tags to all cattle before movement in Michigan by the March 2007 deadline. According to the most recent count, there are approximately 1,010,000 head of cattle in Michigan. To date, some producers have received these tags free of charge or at a reduced rate from the State. As part of the bovine TB program, the MDA made the tags available free of charge to producers in the infected zone and to owners of some selected herds outside of this zone.

As part of Michigan's attempt to obtain bovine TB-free status for the Upper Peninsula, the MDA offered to split the cost of the ear tags with producers in the Upper Peninsula from August 2004 through September 2005. Approximately 46,000 animals received tags under this program. (Note: The Federal government granted the Upper Peninsula bovine TB-free status effective September 30, 2005.) As of January 2006, about 290,000 animals statewide had been identified with the radio frequency ear tags. It is estimated that it will cost the cattle industry about $1.4 million to outfit the remainder of the Michigan cattle herd with the tags by March 2007.

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[1] Split State status allows Michigan to be divided into more than one zone, defined geographically, for the purpose of animal testing and movement requirements.

In addition to the ear tags, the EID infrastructure consists of ear tag readers and database development. The MDA has paid for readers at a number of locations throughout Michigan, including a number of large processing plants and 11 animal markets. Readers also are being used in smaller processors and some farms. As of January 2006, there were about 15,000 livestock premises identified in a central database managed by the MDA.

Appropriations for the EID program have consisted of both State and Federal resources from the USDA. An initial $1.3 million Federal grant was received in fiscal year (FY) 2000-01 to jump-start the program. Through December 2005, a total of $1.6 million had been spent on the EID program, with about $1.5 million coming from Federal funds and $100,000 from State resources. The FY 2005-06 budget assumes expenditures totaling $250,000, entirely from Federal resources.

Conclusion

Michigan's EID program has come a long way in a relatively short period. While initially it was implemented as a local, voluntary program, today it is moving toward a mandatory statewide program. Clearly, the regulatory pressures posed by Michigan's unique bovine TB situation have fueled this progression. As a result of the successful and fairly rapid implementation of this animal identification system, Michigan is recognized as a leader in EID for cattle in the United States. For this reason, Michigan will be well positioned in the event that a nationwide program is developed, and possibly mandated by the Federal government. Similarly, the State will be able to draw upon its experiences with cattle for the development of other animal species EID systems.

Despite Michigan's relative success to date with its EID program, stakeholder concerns remain as the program moves forward. Specifically, the issue of cost associated with purchasing ear tags, readers, and database development is not completely resolved. At this time, it appears that the producers will be responsible for outfitting their animals with the tags at a price of nearly $1.4 million. If there is some level of cost sharing, how will the State fund its portion? A second concern relates to confidentiality of the information collected from producers and how the State and others will gain access to and use that information. Will this information be subject to government disclosure laws, such as the Freedom of Information Act? A third concern deals with outreach and communication regarding the State mandate and deadline. What resources will the State commit in order to ensure that the regulated community is informed about its responsibilities? Finally, there is concern about consistency with Federal program implementation.

Sources: "Electronic Identification Program" brochure, Michigan Department of Agriculture; "National Animal Identification System, Draft Strategic Plan 2005 to 2009", United States Department of Agriculture.