



Legislative Report
October 9, 2018

Bovine Tuberculosis Eradication Program Quarterly Update
Provided by the Animal Industry Division
Michigan Department of Agriculture and Rural Development (MDARD)

Act No. 207, Public Acts of 2018, Approved by the Governor June 21, 2018, EFFECTIVE DATE:
June 21, 2018

AN ACT to make appropriations Sec. 457.

(1) On or before October 15, 2018, the department shall provide to the subcommittees, the fiscal agencies, and the state budget office a report on bovine TB status and department activities.

(2) For each fiscal quarter following the report required in subsection (1), the department shall provide an update to the subcommittees, the fiscal agencies, and the state budget office. The quarterly update reports shall identify significant impacts to the program, including new incidence of bovine TB in this state, department activity associated with specific new incidence of bovine TB, any changes in USDA requirements or movement orders, and information and data on wildlife risk mitigation plan implementation in the modified accredited zone; implementation of a movement certificate process; progress toward annual surveillance test requirements; efforts to work with slaughter facilities in this state, as well as those that slaughter a significant number of animals from this state; educational programs and information for this state's livestock community; and any other item the legislature should be aware of that will promote or hinder efforts to achieve bovine TB-free status for this state.

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A. MDARD Bovine Tuberculosis Eradication Program Activities

Why We Do What We Do

Michigan's Bovine TB Eradication Program protects citizens from exposure to the bovine tuberculosis (TB) organism. The Michigan Bovine TB Program was established under Public Act 466, of 1988, as amended, the Animal Industry Act, and is required by Federal Law for Michigan producers to participate in interstate commerce of animals (9CFR Part 77) and to maintain a state status (9CFR Part 92). Bovine TB has economic and human health implications and the program is of high visibility and interest to farmers, producer groups, hunters, and the federal government. The disease is also of high interest at the national level, and other states would close their markets to Michigan cattle, meat, and milk products if the program were reduced or eliminated. More than 15,000 cattle producers in Michigan maintain over 1.15 million cattle each year. The Michigan program prevents farm to farm transmission of bovine TB and provides access to national and international markets. The 57 dairy producers located within the Modified Accredited Zone (MAZ) can sell Grade A milk because of the program we have in place.

Circle Testing

Circle Testing in Presque Isle County

As a result of finding TB infected, free-ranging, white-tailed deer in northern Montmorency, northern Alpena, and in Presque Isle Counties, potential high-risk areas were established on March 14, 2018. Only Presque Isle County had cattle within the potential high-risk area. There were 31 herds that required testing in this area and to date 29 of these herds have been tested with no finding of disease. There are two bison herds that remain under quarantine with herd plans in place and are scheduled to test in November 2018.

Circle Testing in Ottawa County

A trace investigation from two bovine tuberculosis positive cattle found at a processing facility led to the identification of a bovine TB positive roping cattle herd in Ottawa County Michigan (see discussion on Herd # 71 below). The infected animals originated from an infected herd in Indiana prior to the herd testing positive for bovine TB in December 2016. A three-mile radius special surveillance area was established on February 14, 2018 in Ottawa County. After thorough review of the cattle herds located in circle, 58 herds required testing and have completed the test with no disease found.

Circle Testing in Kalamazoo/Barry Counties

A trace investigation from two bovine tuberculosis positive cattle found at a processing facility led to the identification of a bovine TB positive roping cattle herd in Kalamazoo County, Michigan (see discussion on Herd # 72 below). The infected animals originated from an infected herd in Indiana, prior to the Indiana herd testing positive for bovine TB in December 2016. A three-mile radius special surveillance area was established on February 20, 2018 in Kalamazoo and Barry Counties. All nine herds in the circle that required testing have completed the test with no disease found.

B. MDARD Bovine Tuberculosis Surveillance

On March 21, 2018, a new zoning order was signed by the Director and went into effect removing surveillance testing for Otsego and Cheboygan Counties.

The zoning order requires the following surveillance:

- Annual testing of the non-freezer beef herds in the Modified Accredited Zone, comprised of Alcona, Alpena, Montmorency, and Oscoda counties.
- Triennial testing of all non-freezer beef herds in Presque Isle County.

In the Enhanced Wildlife Biosecurity Area, in and around DMU 452 of the MAZ, producers must do the following to sell cattle other than directly to slaughter:

- They must have signed a contract with the USDA Wildlife Services (USDA-WS) by July 15, 2018 to allow USDA-WS to target the removal of habituated deer near their cattle facilities and pastures.
- They must allow an assessment of their farm for areas that are high risk for spillover of bovine TB from free-ranging white-tailed deer to their cattle. The assessment must be completed by June 1, 2019. Measures to mitigate those risks must be completed by December 31, 2019. There is cost-share money available to assist producers with fencing and other infrastructure improvements that are necessary to comply with the program.

Producers in Presque Isle County were required to have their farms Wildlife Risk Mitigation verified by September 1, 2018 to sell cattle other than directly to slaughter, including through a livestock market. All herds that sought verification were inspected. The next round of WRM verifications will be in Spring of 2019.

C. Bovine Tuberculosis Affected Herds

Infected Feedlot #4

On October 10, 2016, a bovine TB positive steer was found during routine slaughter surveillance at a slaughter plant. The infected animal was traced back to a Huron County feedlot using the Radio Frequency ID (RFID) on the animal. This feedlot was declared affected on October 25, 2016 and placed under quarantine. As of June 13, 2018, all cattle have been slaughtered with no further finding of disease. Partial cleaning has been completed by the producer and disinfection by MDARD. The quarantine remains in effect pending complete cleaning and disinfection of the remaining barns and 30 days downtime afterward.

Infected Herd #67

On November 4, 2016, a beef herd in Montmorency County had one animal that responded during a whole herd test. That animal was examined at Michigan State University's Veterinary Diagnostic Lab and had lesions consistent with bovine TB. The herd was designated as affected on December 1, 2016. A second TB test was performed January 2, 2017 with no finding of disease. USDA indicated that the herd should follow a test and removal process, and that no federal indemnity of this herd would be made available. The producer requested the state depopulate the adults in the herd. The adults were sent to slaughter and Animal Industry Division paid the difference between the fair market value of the animals and what was paid by the slaughter plant. In the process of having the adult animals inspected at slaughter, a second TB positive animal was discovered that had not responded to either the November or January TB tests. This animal was condemned at slaughter. The producer plans to feed his 2016 calf crop until they are old enough to slaughter. The portion of the premises that the producer will use as a small feedlot in the future was cleaned and disinfected in October 2017 and completed 30 days of sitting vacant. The producer signed a herd plan December 8, 2017. Additionally, a fence was placed around the farm's feed storage area. These actions allowed for the quarantine on the feed lot portion of the premises to be released on December 14, 2017. Currently, four animals remain and will eventually be sent to custom slaughter or to an FSIS inspected processing plant.

Infected Herd #70

On February 24, 2017, one animal responded to this Alcona County beef herd's annual bovine TB test. The animal was examined at MSU's Veterinary Diagnostic Lab April 5, 2017 and found to have lesions compatible with bovine TB. The herd was designated as affected on April 11, 2017. A test and removal process began on June 5, 2017 with the first removal test.

The second removal test was on August 8, 2017 with the verification test February 9, 2018. The quarantines were released on both premises. As one premises was not WRM verified, MDARD transported 17 cows and one bull to a FSIS slaughter facility for processing on March 15, 2018. One cow was found to have a lesion consistent with bovine TB and the National Veterinary Service Laboratory (NVSL) confirmed it by PCR testing on March 21, 2018. There were 13 animals under a new quarantine. These remaining animals were retested in September 2018 and the final quarantine was released on September 25, 2018.

Infected Herd #73

This is a large beef herd in Alcona County in which one animal was a suspect on an annual whole herd test in late August 2018. The animal was examined at MSU's Veterinary Diagnostic Laboratory and was further tested and confirmed positive by USDA's National Veterinary Services Laboratory by PCR. The herd was designated as affected on October 2, 2018. This farm is under quarantine and a herd plan for release from quarantine is being developed.

D. Wildlife Risk Mitigation and Enhanced Wildlife Biosecurity

The Wildlife Risk Mitigation Project began in 2008 with a goal to enroll all commercial cattle farms. MDARD asked these farmers to adopt biosecurity practices designed to reduce the risk of cattle coming into direct or indirect contact with bovine tuberculosis infected free-ranging white-tailed deer. Farmers in Northern Lower Michigan whose cattle have been identified as at risk for bovine TB transmission from wildlife are using the following steps to prevent disease transmission and to market their cattle:

- Fence in feed – and keep the gates closed
- Store feed in buildings
- Feed cattle away from deer cover
- Feed cattle daily
- Provide water to cattle where it cannot be contaminated by deer
- Use disease control permits from DNR to keep deer numbers down on cattle farms

Presently, 534 of the 611 active commercial farms (87%) in the present TB surveillance zone have a verified Wildlife Risk Mitigation Action Plan in place.

Because the threat of infection for herds in the MAZ, and especially in the Enhanced Wildlife Biosecurity zone, is greater than in other areas, the TB Program, in conjunction with the TB Advisory Committee, has developed an Enhanced Wildlife Biosecurity Program that assists farmers to protect herds located in areas of highest risk for exposure. Using the Epi Team approach that the TB Program has used on affected farms for years, the herd owners in the Enhanced Wildlife Biosecurity area are being given a chance to work with a team that will take a more in depth look at each farm's risks and will give the producer recommendations on mitigating those risks. The teams working on this effort are composed of Michigan State University Extension personnel, a wildlife biologist, and a MDARD field staff veterinarian. They are finding that some risks can be addressed by changing the farm's management practices. In other cases the pressure from wildlife on either cattle feeding sites or cattle feed storage sites will require an investment in physical improvements – primarily fencing. The current update on the EWB program is below:

- Number of farms in Enhanced Wildlife Biosecurity (EWB) Area: 136
- Number of farms in EWB Area that have completed assessments: 86
- Number of farms in EWB Area that have fully implemented biosecurity plan: 6
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$52,429
- Projects in progress cost-share funds estimate: \$62,068

E. Movement Permitting Data

Below is the movement permitting data from the seven counties where movement permits are required: 4 Modified Accredited Zone (MAZ) counties (Alcona, Alpena, Montmorency, Oscoda) – all movements require a permit; 3 bovine TB Free Surveillance counties (Cheboygan, Otsego, Presque Isle) – only herds that do not have biosecurity plan in place are required to have permit to move.

	Number of Movement Permits	Number of Animals Moved
MAZ (Alcona, Alpena, Montmorency, and Oscoda Counties) Permits issued January 1 - September 30, 2018	885	3600
TB Free Surveillance Zone (Cheboygan, Otsego, and Presque Isle Counties) Permits issued January 1 - September 30, 2018	25	68

F. Update on Michigan’s Bovine TB Status

Discussions to update the Memorandum of Understanding (MOU) between the Michigan Department of Agriculture and Rural Development (MDARD), the Michigan Department of Natural Resources (MDNR), and the United States Department of Agriculture (USDA) began April 26, 2018 with a broad outline of issues USDA wished to discuss with Michigan; cattle surveillance, deer surveillance, metrics, and risk to rest of the country. These discussions have been paused; however, we expect them to resume soon. When MDARD understands USDA’s requirements for the new MOU, there may be a need to update the TB Zoning Order.