



**Legislative Report
July 10, 2019**

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. Approximately 12,000 cattle producers in Michigan maintain over 1.2 million cattle. The Michigan bovine TB program works to prevent, detect and respond to cases of bovine TB and provides access to national and international markets for Michigan producers. The 37 dairy producers located within the Modified Accredited Zone (MAZ) can sell Grade A milk because of the program we have in place and the herds in the remainder of the state (AFZ) can freely move milk because of our split state status.

B. MDARD Bovine Tuberculosis Surveillance

Zoning Order

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.

The zoning order also established requirements for producers in the Enhanced Wildlife Biosecurity (EWB) Area in the high-risk portion of the MAZ. In this area, to sell cattle other than directly to slaughter, producers 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.
- Allow an assessment of their farm that will identify mitigation strategies for practices that result in a high risk of introduction 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.

The zoning order further required producers in Presque Isle County to have their farm 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 completed during summer 2019.

Circle Testing in Iosco and Ogemaw County

In our recent MOU between MDARD, DNR and USDA, signed in April 2019, MDARD committed to expanding the potential high-risk areas around TB positive, free-ranging deer found in the MAZ to a 15-mile radius. During the 2018 hunting season, a positive deer was identified in Alcona County.

Although the deer was within DMU 452 (TB core area), the 15-mile radius circle extended into Northern portions of Iosco and Ogemaw Counties. A potential high-risk area was designated on April 12, 2019. There are approximately eight herds in those two counties that will be required to TB test within six months of the designation or have a written herd plan and scheduled test date. The testing may be done by MDARD staff or the producer may choose a private veterinarian to do the testing and be reimbursed by MDARD.

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 had been slaughtered with no further finding of disease. Partial cleaning has been completed by the producer with disinfection completed by MDARD. The quarantine remains in effect pending complete cleaning of the remaining barns by the producer and disinfection by MDARD followed by 30 days downtime.

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 planned to feed his 2016 calf crop until they were 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. As of December 2018, all remaining animals have been removed to slaughter with no finding of disease. In February 2019, the quarantine area was reduced again to include only an outdoor area that will require downtime and sunlight. The quarantine is expected to be released in July 2019.

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. One additional animal was found positive from the initial WHT on follow up testing. This farm is under quarantine and is undergoing a test and removal plan. Additional herd tests were performed in November 2018 and January 2019, with no additional positive animals found on either test. The farm's herd plan, which outlines the steps required for release of quarantine, including wildlife risk mitigation measures, is in the process of implementation.

Infected Herd #74

This is a small beef herd in Alpena County which was found on routine whole herd testing and found to be TB positive at USDA's National Veterinary Services Laboratory by PCR on April 24, 2019. This farm is under quarantine and is undergoing a test and removal plan. A herd test was performed in June 2019, with no additional animals found positive. The farm's herd plan, which outlines the steps required for release of quarantine including wildlife risk mitigation measures, is in process.

Infected Herd #75

This is a small beef herd in Presque Isle County and was discovered on routine triennial whole herd testing, which is required in this county. All six animals in the herd that were eligible for testing were found to be TB positive by USDA's National Veterinary Services Laboratory by PCR on April 26, 2019. USDA declined to pay indemnity for the remaining animals in the herd. However, the level of infection in the tested animals was concerning to MDARD so the decision was made to use State funds for depopulation of the herd. No additional animals were found to be positive in the depopulated group of animals. A herd plan, including wildlife risk mitigation is being evaluated. Cleaning and disinfection of the farm must be completed before the quarantine is released and the farm can be repopulated. This is the first cattle herd to be identified in Presque Isle County since 2000.

Infected Herd #76

This is a small beef herd in Emmet County which was found during an animal movement investigation from herd #75. The positive animal in the Emmet County herd had been purchased from herd #75 the previous year. Initial follow up testing has revealed no additional positive animals in herd #76. A test and removal program will be completed, and cleaning and disinfection of the farm will be required prior to release of the quarantine.

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. Farmers implemented biosecurity practices designed to reduce the risk of cattle exposure to bovine tuberculosis infected free-ranging white-tailed deer. The following steps help prevent disease transmission to cattle:

- Store feed behind a fence or in a building
- Feed cattle away from deer habitat
- Feed cattle daily so feed is not left over
- 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, 529 of the 601 active commercial farms (88%) in the present TB surveillance zone have a verified Wildlife Risk Mitigation Action Plan in place.

The threat of infection for herds in the MAZ, especially in the EWB area, is greater than in other areas in the surveillance zone. Therefore, the TB Program, in conjunction with the TB Advisory Committee, has developed an EWB Program that assists farmers to protect herds. Using the Epi Team approach that the TB Program uses on affected farms, the herd owners in the EWB area work with specialized staff that evaluate each farm's risks and provide recommendations to the producer on steps to mitigate the risk. Some risks may be addressed by changing the farm's management practices while in other cases, the pressure from wildlife will necessitate an investment in physical improvements – primarily fencing.

Current update on the EWB program is:

- Number of active commercial herds in (EWB) Area: 124
- Number of farms in EWB Area that have completed assessments: 114*
- Number of farms in EWB Area that have fully implemented biosecurity plan: 18
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$ 229,000**
- Projects in progress cost-share funds estimate: \$167,700

*Not all assessments will need to be completed, as some farms plan to change their business model and would not be required to have the assessment.

**Current grant funding, which began 2014

E. Movement Permitting Data

Below is the movement permitting data from the seven counties where movement permits are required: four Modified Accredited Zone (MAZ) counties (Alcona, Alpena, Montmorency, Oscoda) – all movements require a permit; three 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, 2019 – May 31, 2019	424	2020
TB Free Surveillance Zone (Cheboygan, Otsego, and Presque Isle Counties) Permits issued January 1, 2019 – May 31, 2019	13	54

F. Communications/Outreach

Ogemaw County – On May 2, 2019, a public meeting was held at the Rose Township Hall in Lupton, Michigan. This meeting was held in response to the declaration of a potential high-risk area after a TB positive, wild, white-tailed deer was found in Alcona County. MDARD’s new Memorandum of Understanding with DNR and USDA mandates a 15-mile circle around a TB positive wild deer found in the MAZ. Herds in the MAZ and also within the circle already have a requirement for an annual WHT and do not require additional testing. However, the 15-mile circle extended into Northern portions of Iosco and Ogemaw Counties where approximately eight herds are in the potential high-risk area. The Animal Industry Act requires that a WHT is completed within six months of designating the area or a herd plan will be put in place until testing can be completed. There was good attendance at the meeting where staff from MDARD and MDNR presented information on the requirements and testing process, while MSU extension and USDA Wildlife Services staff answered questions that were specific to their areas of expertise.

Alpena and Oscoda County – On May 21 and 22, 2019 respectively, public meetings were held at the Wilson Township Hall in Alpena and the Oscoda County Community Center in Mio. These meetings, called “Herd and Hunter Meetings” were the first two in a series of planned educational events intended to provide information and provide a venue for MDARD, DNR, and USDA WS to receive feedback from both farmers and hunters on TB issues. Plans are to have these meetings routinely, with the next ones to be held in September 2019. Staff from MDARD, MDNR, MSU extension and USDA Wildlife Services were all present to provide information and answer questions.

G. Update on Michigan's Bovine TB Memorandum of Understanding

A new 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) was signed on April 12, 2019. Major changes from last MOU included:

- Increased wild deer surveillance in counties surrounding MAZ to a goal of 300 samples per county. Failure to meet the goal will require additional cattle testing.
- Finding one or more positive cattle herds with MAZ deer strain in Michigan's Free Zone prompts discussions with USDA on response activities. Actions under consideration will include options such as: withdrawing Michigan's split-State status and reclassifying the entire State of Michigan in accordance with the Code of Federal Regulations (CFR) and the state's overall herd prevalence; adjusting the MAZ to include additional counties; adjusting surveillance approaches; adjusting movement restrictions; and other program adjustments designed to reduce the spread of TB.
- Increased size of surveillance circle around a free-ranging TB positive deer in the MAZ to 15 miles, which will increase surveillance in buffer counties when deer are found near county borders.
- Annual renewal of the MOU is required.

Discussions are underway with USDA on actions upon finding herds #75 and #76, given the new MOU requirement in bullet two above. MDARD has proposed additional surveillance testing in response to finding these herds. We anticipate an agreement with USDA on our proposed actions no later than mid-July.