



**Legislative Report
April 5, 2018**

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

Act No. 107, Public Acts of 2017, Approved by the Governor July 14, 2017, EFFECTIVE DATE: July 14, 2017

AN ACT to make appropriations Sec. 457.

- (1) On or before October 15, 2017, 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 citizens are protected from exposure to the bovine tuberculosis (TB) organism as a result of the Bovine TB Eradication Program. The Michigan Bovine TB Program was established under Public Act 466, of 1988, as amended, the Animal Industry Act, and is required under Federal Law in order 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 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 13,000 cattle producers in Michigan maintain over 1.1 million cattle each year. The Michigan program prevents farm to farm transmission of bovine TB and provides access to national and international markets. The 60 dairy producers located within the Modified Accredited Zone (MAZ) are able to 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 Presque Isle Counties, potential high-risk areas were established on March 14, 2018. There are 36 herds in the 6.2-mile circle and two partial circles that will require testing.

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 (see Herd # 71 below). The infected animals originated from an infected herd in Indiana, prior to that herd testing positive for bovine TB in December 2016. A 3-mile radius special surveillance area was established on February 14, 2018 in Ottawa County. There are 91 herds that must be tested prior to August 14, 2018 and to date one of the 93 herds has completed their testing with no finding of disease.

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. (see Herd # 72 below). The infected animals originated from an infected herd in Indiana, prior to that herd testing positive for bovine TB in December 2016. A 3-mile radius special surveillance area was established on February 20, 2018 in Kalamazoo and Barry Counties. There are 19 herds that must be tested prior to August 20, 2018 and to date one of the 17 herds has completed their testing with no finding of disease.

B. MDARD Bovine Tuberculosis Surveillance

On June 7, 2016, the former zoning order went into effect and removed requirements for random testing and Wildlife Risk Mitigation inspections for the counties of Antrim, Charlevoix, and Emmet.

The zoning order requires the following surveillance:

- Annual testing of the non-freezer beef herds in the Modified Accredited Zone (MAZ), comprised of Alcona, Alpena, Montmorency, and Oscoda Counties.

- Random testing continues in all herds not tested since April 1, 2014 in the counties of Cheboygan, Otsego, and Presque Isle. Half of these herds will be tested from April 1, 2016 to March 31, 2017 and the remaining half will be tested from April 1, 2017 to March 31, 2018.
 - All 40 herds on the 2016-2017 list completed their tests prior to March 31, 2017.
 - All 56 herds on the 2017-2018 list completed testing prior to March 31, 2018.

For the period of January 1 to March 31, 2018: 68 whole herd tests were completed in the MAZ and 3 whole herd tests were completed in the surveillance area of the TB Free Zone (Cheboygan, Otsego, and Presque Isle).

New 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.

Producers in the Enhanced Wildlife Biosecurity Area, in and around DMU 452 of the MAZ, must do the following or they will not be allowed to sell cattle other than directly to slaughter:

- They must have a signed 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 have their farm assessed for risks that have not been adequately addressed by the current WRM program by June 1, 2019 and have completed the necessary actions for the risks identified by December 31, 2019.

Producers in Presque Isle County must have their farm WRM verified by September 1, 2018 or they will not be able to sell cattle other than directly to slaughter and the cattle will not be able to move through a livestock market.

C. Bovine Tuberculosis Affected Herds

Infected Feedlot #4

On October 10, 2016, a 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 identification (RFID) on the animal. This feedlot was declared affected on October 25, 2016 and placed under quarantine. Per federal regulation, the feedlot will continue to send its animals to a federally inspected slaughter plant, under seal, until empty. Once portions of the feedlot are emptied they must be cleaned by the producer, disinfected by MDARD, and permitted to sit empty for 30 days prior to being restocked. 13 loads of cattle have gone to slaughter since the process began with no further findings of disease.

Infected Feedlot #5

On January 25, 2017, a TB positive steer was found during routine slaughter surveillance at a slaughter plant. The infected animal was traced back to a Newaygo County feedlot using RFID on the animal. This feedlot was declared affected on February 3, 2016 and placed under quarantine. Per federal regulation the feedlot will continue to send its animals to a federally inspected slaughter plant, under seal, until empty. Once portions of the feedlot are emptied they must be cleaned by the producer, disinfected by MDARD, and permitted to sit empty for 30 days prior to being restocked. Several of the facilities utilized by this feedlot have been cleaned and disinfected and released from quarantine. 14 loads of cattle have gone to slaughter since the process began and one additional TB affected animal was found. There remains one load of animals to send to a FSIS processing plant.

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 the Michigan State University's Veterinary Diagnostic Lab (VDL) 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 producers requested the state depopulate the adults in the herd. The adults were sent to slaughter and AID paid the difference between the fair market value to 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 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. As a result of these developments the quarantine on the feed lot portion of the premises was released December 14, 2017. There are still approximately 50 animals to send to an FSIS processing plant.

Infected Herd #70

One animal responded to this Alcona County beef herd's annual TB test on February 24, 2017. The animal was examined at VDL on 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 are 13 animals under a new quarantine. They will be required to be retested in September 2018.

Infected Herd #71 On December 19, 2017, two roping steers were found to have lesions resembling bovine TB during routine surveillance at a slaughter plant in Michigan. These two animals were originally purchased by the owner of herd #72 in 2016, sold to #71 in 2016 and repurchased by #72 in September 2017. The farm was quarantined on December 22. On January 5, 2018, the National Veterinary Service Laboratory (NVSL) confirmed the lesions were bovine TB. The remaining five head of cattle and three goats were ordered destroyed and removed on January 23, 2018 for slaughter or necropsy. Three of the cattle, and one of the goats, had lesions consistent with bovine TB. None of these animals went for human consumption. Genetic testing at NVSL confirmed that the TB from the first two animals was similar to that found in a 2016 beef herd in Indiana. On February 14, 2018, the herd was designated as TB infected. The TB Program is working with the herd owner to complete cleaning and disinfecting of the premises.

Infected Herd #72

On December 19, 2017, two roping steers were found to have lesions resembling bovine TB during routine surveillance at a slaughter plant in Michigan. These two animals were originally purchased by the owner of herd #72 in 2016, sold to #71 in 2016, and repurchased by #72 in September 2017. The farm was quarantined on December 22. On January 5, 2018, NVSL confirmed the lesions were bovine TB. The remaining ten head of cattle were ordered destroyed and removed on January 30, 2018 for slaughter. Two of the cattle had lesions consistent with bovine TB. None of infected animals went for human consumption. Genetic testing at NVSL confirmed that the TB from the first two animals was similar to that found in a 2016 beef herd in Indiana. On February 20, 2018, the herd was designated as TB infected. The TB Program is working with the herd owner to complete cleaning and disinfecting of the premises.

D. Wildlife Risk Mitigation Project

The Wildlife Risk Mitigation Project began in 2008 with a goal to enroll commercial farms. MDARD asked that these farmers adopt biosecurity practices that 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, 539 of the 616 active commercial farms (88%) in the present TB surveillance zone have a verified Wildlife Risk Mitigation Action Plan in place.

Because there continues to be several infected herds annually in the MAZ, the TB Program, in conjunction with the TB Advisory Committee, has been working on an Enhanced Wildlife Biosecurity Program that deals with the 130 herds located in the area with the most risk. Using the Epi Team approach that the TB Program has used on affected farms for years, the 130 herd owners will be given a chance to work with one of two teams that will take a more in depth look at each farm's risks and will give the producer some ideas of how to mitigate those risks. The two teams working on this effort are made up of Michigan State University Extension personnel, a wildlife biologist from either USDA-Wildlife Services or the Alpena Conservation District, a local producer, and a MDARD field staff veterinarian. The two teams have completed 55 farms' assessments to date. They are finding 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 may require an investment in physical plant improvements – mainly fencing.

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; and three 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 Movement Permits Jan. 1 – March 31, 2018	239	1,110
TB Free Surveillance Zone Movement Permits Jan. 1-March 31, 2018	3	9

F. Update on Michigan’s Bovine TB Status

USDA has agreed to begin discussions about Michigan’s TB MOU and the first meeting is tentatively set for April 19, 2018. This is important because Michigan’s present Memorandum of Understanding (MOU) with USDA allows three TB affected herds in Michigan’s four county Modified Accredited Zone (MAZ) during a rolling 12-month period.

During 2016, there were five TB affected herds. As a result of the uptick in TB affected farms a number of high level USDA Veterinary Services (VS) officials, including Dr. Jack Shere, the Deputy Administrator for Veterinary Services, visited Michigan to discuss the situation December 19-21, 2016. As a follow up to that meeting, representatives from the Michigan Department of Agriculture and Rural Development (MDARD) and the Department of Natural Resources (MDNR) met with Dr. Shere and other USDA-VS officials on August 10, 2017 at the USDA East Lansing Office to continue the discussion. During this meeting USDA-VS proposed two options to deal with the 2016 uptick in bovine TB in Michigan’s Modified Accredited Zone.

Option 1: Reclassify Michigan’s MAZ to Accreditation Preparatory status for TB.

Option 2: Rescind Michigan’s current status and zones and classify the entire state as Modified Accredited.

A letter to Dr. Shere responding to the two proposals, and offering a third proposal, was sent September 29, 2017. Michigan’s proposal doesn’t involve any loss of status for any portion of the state but focuses on the effort to improve biosecurity on the most at risk farms in the MAZ, including a mandatory program of removing deer that are chronically intruding onto cattle farms. USDA discussed the matter further with Michigan on October 16, 2017. It was agreed that MDARD would draft an MOU with MDARD’s proposed changes for USDA to comment. The draft MOU was submitted to USDA on November 21, 2017. After consultation with the livestock industry and the veterinary profession it was agreed that MDARD would move ahead with requirements to improve biosecurity in the Enhanced Wildlife Biosecurity Area (the higher risk portion of the four county MAZ). In short, the consensus is that the industry, both in the MAZ, as well as state wide, cannot risk another spike in TB positive herds like the one that occurred in 2016. Accordingly, after a series of public meetings in January, an updated TB Zoning Order was signed into effect March 21, 2018.

G. Communications/Outreach

Outreach:

Public Meetings

Public Zoning Meetings to discuss proposed changes to the TB Zoning Order were held in the following locations January 2018:

- January 16 at 7 PM in Hubbard Lake
- January 17 at 7 PM in Hillman
- January 18 at 7 PM in Mio
- January 23 at 2 PM in Rodgers City
- January 23 at 7 PM in Onaway

Public Meeting

A public meeting was held Tuesday, March 6, 2018 at 7 PM in Grandville for TB Program staff to discuss the finding of disease in an Ottawa County herd, and the need to do a three-mile circle test around that herd.

Public Meeting

A public meeting was held Wednesday, March 7, 2018 at 7 PM in Hickory Corners for TB Program staff to discuss the finding of disease in a Kalamazoo County herd and the need to do a three-mile circle test around that herd.

Public Meeting

A public meeting was held Thursday, March 29, 2018 at 7 PM in Rodgers City to discuss circle testing in Presque Isle due to finding TB infected deer.