



**Legislative Report
April 10, 2020**

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

Act No. 65, Public Acts of 2019, approved by the Governor September 29, 2019, EFFECTIVE DATE: September 29, 2019.

AN ACT to make appropriations

Sec. 457

(1) On or before October 15, 2019, 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. Special Surveillance Areas

Circle Testing in Presque Isle and Cheboygan Counties

As a result of finding a herd positive for bovine TB in Presque Isle County (herd #75) a special surveillance area (SSA) was designated on July 29, 2019 for herds in portions of Presque Isle and Cheboygan Counties located within 10km of either herd #75 or one of the two source herds which supplied cattle to herd #75. All herds have been tested in this circle and no bovine TB was found.

Circle Testing in Allegan and Saginaw

As a result of finding herd #78 and feedlot #6 in Allegan and Saginaw Counties respectively, we are discussing the plan for testing around these herds with USDA. Both infected herds were found because animals had been sold to them from herd #77 in Alcona County and were part of the epidemiologic investigation from that herd.

C. Bovine Tuberculosis Affected Herds

Infected Feedlot #4

On October 10, 2016, a bovine TB positive steer was discovered during routine slaughter surveillance. The animal originated from a feedlot in Huron County which was declared affected on October 25, 2016 and placed under quarantine. All cattle have 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. The herd was designated as affected on December 1, 2016. As of December 2018, all remaining animals have been removed to slaughter with one additional positive animal with the disease. In February 2019, the quarantine area was reduced to include only an outdoor area that required downtime and sunlight. At this time, one lean-to in this outdoor area requires cleaning by the owner and then MDARD can disinfect the structure and release the quarantine.

Infected Herd #74

This is a medium sized beef herd in Alpena County. The infected animal was found on a routine whole herd test in March 2019. The animal was examined at MSU VDL and was confirmed positive on April 24, 2019 at USDA's NVSL by PCR. This herd underwent, and successfully completed, a test and removal program as outlined by the USDA. The quarantine was lifted on March 2, 2020 and requires that ongoing wildlife risk mitigation measures are followed.

Infected Herd #75

As part of the routine triennial whole herd testing required in Presque Isle (PI) County, a small cow-calf beef herd tested positive for bovine TB in March 2019. This was the first positive herd in Presque Isle County since 2000. The herd was depopulated. This premises has been cleaned and disinfected. If the farm owner chooses to get more cattle, a herd plan which outlines the wildlife risk mitigation measures will be developed.

Infected Herd #76

Movement investigations from herd #75 in Presque Isle County led to the finding of an additional infected herd in Emmet County, designated herd #76. An animal had been moved from the Presque Isle County herd to the Emmet County herd, prior to the PI herd being found infected. As an exposed trace movement from the Presque Isle herd, the animal was removed from the Emmet County herd for testing and was confirmed positive for bovine TB by USDA's National Veterinary Services Laboratories on May 14, 2019. The Emmet County herd is under quarantine and is undergoing a test and removal program. Whole herd tests were performed in June, August and October 2019 with no additional TB positive animals detected. A verification test is scheduled for April 2020 and, if negative, the quarantine on this farm will be lifted.

Infected Herd #77

This medium sized beef herd in Alcona County was found during an annual whole herd TB test in December 2019. Seven animals from that test went to MSU VDL in January and six of the animals had lesions consistent with bovine TB. Confirmation of infection was made by PCR at the USDA's National Veterinary Services Laboratory (NVSL) on January 13, 2020. After the first removal test, two additional animals had lesions consistent with bovine TB. The Whole Genome Sequence (WGS) was consistent with an Alcona County bovine TB strain. This herd will undergo a test and removal plan before being released from quarantine under a wildlife biosecurity plan.

Infected Herd #78

This is a medium sized beef herd in Allegan County. This farm purchased cattle from herd #77 before it was known to be infected. The animals sold from herd #77 had completed all required testing prior to movement. Epidemiologic trace investigation was performed, and all exposed animals were removed to MSU VDL for necropsy, where one animal was found to have lesions consistent with TB. On March 9, 2020 that animal was confirmed positive by PCR at the USDA's NVSL. Culture and WGS is pending. The remaining animals from this herd will be fed out under quarantine and moved to slaughter when finished.

Infected Feedlot #6

This feedlot was part of the epidemiologic trace from herd #77. Typically, exposed animals moved to a feedlot are fed out under quarantine until slaughter. However, the feedlot owner elected to have the exposed animals tested and one animal was a reactor to the test. The animal was taken to MSU VDL for necropsy and had lesions consistent with TB. On March 16, 2020 that animal was confirmed positive by PCR at the USDA's NVSL. The remaining animals from this herd will be fed out under quarantine and moved to slaughter when finished.

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. Under this program, farmers implement measures which reduce the risk of cattle exposure to bovine tuberculosis from 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, 474 of the 607 active commercial farms (78%) in the present TB surveillance zone (MAZ, Cheboygan, Otsego and Presque Isle Counties) have a verified Wildlife Risk Mitigation plan in place. Beginning April 1, 2020, the WRM program in Cheboygan and Otsego Counties will be suspended. Producers in those areas are encouraged to continue to practice wildlife biosecurity measures, however, MDARD no longer has the resources to perform WRM activities in those counties.

Because of a higher bovine TB prevalence in free-ranging white-tailed deer in the core area of the MAZ, the risk to cattle herds is greater than in other areas. Therefore, the TB Program, in conjunction with the TB Advisory Committee, developed an Enhanced Wildlife Biosecurity (EWB) Program to assist farmers with protection of their herds. Herd owners in the EWB area work with specialized staff to evaluate their farm's specific risks and are provided a plan of action to mitigate the risk. Some risks may be addressed by changing the farm's management practices, while in other cases the pressure from wildlife necessitates an investment in physical improvements – primarily fencing. Producers in the EWB area were able to participate in a 90% State /10% Producer cost share program to construct fences and feed storage facilities. On January 1, 2020, any commercial producer in the EWB area that was not verified under that program is limited to selling cattle direct to slaughter only.

Current update on the EWB program:

- Number of herds participating in EWB program: 100
- Percentage of farms in EWB Area that, if required, have a fully implemented biosecurity plan or are under an extension agreement: 95%
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$820,816**
- Projects in progress cost-share funds estimate: \$170,406

**Current grant funding, which began 2014

E. Movement Permits

Below is the movement permitting data from the seven counties where movement permits were required from January to March 31, 2020: Modified Accredited Zone (MAZ) counties (Alcona, Alpena, Montmorency, Oscoda) and Accredited Free Zone (AFZ) counties (Cheboygan, Otsego, Presque Isle).

Until March 31, 2020, movement permits were required for all movements in the MAZ and for cattle from herds that were not WRM verified in Cheboygan, Otsego and Presque Isle Counties. Beginning April 1, 2020, under the new Zoning Order, all movements in the MAZ, and beginning July 1, 2020 in Presque Isle County, will require a movement permit, and Cheboygan and Otsego Counties will no longer be required to have a movement permit to move cattle nor to participate in the WRM program.

	Number of Movement Permits	Number of Animals Moved
MAZ (Alcona, Alpena, Montmorency, and Oscoda Counties) Permits issued January 1, 2020 – March 31, 2020	262	875
TB Free Surveillance Zone (Cheboygan, Otsego, and Presque Isle Counties) Permits issued January 1, 2020 – March 31, 2020	11	42

F. Communications/Outreach

Goals:

To ensure that cattle producers, hunters, and Michigan's citizens have a high level of trust and understanding what we are doing and why. To provide information routinely to cattle producers, hunters, and community members about the bovine tuberculosis program activities and initiatives.

Public Meetings:

Meetings were held the week of March 2-5, 2020 to present the proposed zoning order and receive public comments on the order and to provide updates from the MDNR, USDA WS, and MDARD. Two of these meetings were also “Herd and Hunter” meetings, where information on tick borne diseases was shared with both farmers and hunters. Two meetings, one afternoon and one evening, were held on March 2 in Presque Isle County, evening meetings were held on March 3 in Alpena County, March 4 in Otsego County and March 5 in Iosco County. Public turnout was good, with 25 – 60 people attending each meeting.

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

Finding positive bovine TB herds in Presque Isle and Emmet Counties led to renewed negotiations with USDA and resulted in 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), which was signed on December 16, 2019. This MOU required that a new Zoning Order be issued as described below. In early 2020, two additional infected herds were found in the AFZ, which will require renewed negotiations with USDA. We expect these discussions to begin in early May 2020.

H. 2020 Zoning Order Summary

On April 1, 2020, a new zoning order became effective and is required to comply with the MOU signed in December 2019.

Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon Counties (Accredited Free Zone)

- All cattle herds in these counties must obtain a premises identification number and be placed into a database from which herds will be selected for whole herd bovine tuberculosis testing.

- One hundred and fifty (150) herds annually, for at least two years, must TB test in the Surveillance area. Herds will be selected from the combined counties of Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon. Selection will occur on an annual cycle.
- Herds selected as of April 1, 2020, shall complete a whole herd bovine tuberculosis test by March 31, 2021.
- The Wildlife Risk Mitigation program, including inspections and verifications have been suspended and movement permits are no longer required in Cheboygan and Otsego counties. Freezer beef herds in these two counties will not be exempt from whole herd testing.

Alcona, Alpena, Montmorency, and Oscoda Counties (Modified Accredited Zone)

- Annual Surveillance testing, movement certificates, ID requirements, WRM and EWB program requirements remain the same.
- All movements, including movements within the MAZ, must meet the current testing requirements for moving out of a zone.

Presque Isle County (Accredited Free Zone)

January 1, 2020 – December 31, 2020

- All herds in Presque Isle County which have not completed a whole herd bovine tuberculosis test since January 1, 2019 shall complete a whole herd bovine tuberculosis test prior to December 31, 2020. Approved freezer beef herds are exempt from the surveillance testing requirement.

Beginning July 1, 2020

- Cattle which undergo bovine tuberculosis testing in Presque Isle County must be identified with both an official RFID ear tag and an approved secondary identification ear tag.
- All cattle must be identified with both an official RFID ear tag and an approved secondary identification ear tag prior to movement from a premises in Presque Isle County. Cattle less than 15 days of age, and cattle moved from an approved freezer beef herd directly to a slaughter plant, require an official RFID tag but are exempt from needing an approved secondary identification tag.
- All cattle moved from a premises in Presque Isle County must receive a movement certificate prior to movement, unless moving directly to Northern Michigan Livestock Exchange in Gaylord on sale day.

Beginning January 1, 2021

- All herds in Presque Isle County shall complete an annual whole herd bovine tuberculosis test. Approved freezer beef herds are exempt from the surveillance testing requirement.
- Movement Testing will be required of cattle 60 days of age and older for movement other than to a USDA FSIS approved or custom slaughter plant. Cattle must originate from a herd that has a Verified Wildlife Risk Mitigation Plan and must comply with one of the following prior to movement:
 - Originate directly from a bovine tuberculosis accredited free herd, or
 - Originate from a herd that has completed a negative whole herd bovine tuberculosis test within 12 months prior to movement, and complete a negative bovine tuberculosis test within 60 days prior to movement, or
 - If a steer or spayed heifer, complete a negative bovine tuberculosis test within 60 days prior to movement.

Beginning July 1, 2021

- All cattle must be identified with both an official RFID ear tag and an approved secondary identification ear tag prior to movement from a premises in Presque Isle County. Cattle less than 15 days of age and cattle moved from an approved freezer beef herd directly to a slaughter plant do require an official RFID tag but are exempt from needing an approved secondary identification tag.

USDA's Review of Michigan's TB Program

From September 17 through 20, 2019, a USDA Team was in Michigan to Review Michigan's TB eradication program. The TB Review Team was comprised of five members, including USDA staff from USDA offices across the country as well as the State Veterinarian from Wyoming. Representatives from MDNR, USDA Veterinary Services, and USDA Wildlife Services were present during the review week to assist the team with questions and information requests.

The team concluded that the MDARD and the MDNR are meeting the articles as outlined in the 2019 MOU. The team identified areas for improvement and MDARD has developed an action plan to address. The team recognized the great support and collaboration with the MDNR and USDA APHIS Wildlife Services (WS).