



**Legislative Report
July 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.

Table of Contents

Topic	Page
A. MDARD Bovine Tuberculosis Eradication Program Activities	2
B. Special Surveillance Areas	2
C. Bovine Tuberculosis Affected Herds	3
D. Wildlife Risk Mitigation and Enhanced Wildlife Biosecurity	4
E. Movement Permits	5
F. Communications/Outreach Activities	5
G. Bovine TB MOU	5-6
H. Zoning Order 2020 Summary	6-7
H. USDA Review of Michigan's TB Program	7

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 38 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

Special TB Surveillance Areas in Allegan and Saginaw Counties

As a result of finding herd #78 and feedlot #6 in Allegan and Saginaw Counties respectively, on April 16, 2020, Special TB Surveillance areas of three miles were established around each of these premises. Testing must be completed within six months of the designation. If a farm is unable to test within that six-month period, the farm will be quarantined, and a herd plan will be developed until the testing can be completed. At this time, one herd has been tested in the Saginaw County area and nine herds have been tested in the Allegan County area with no findings of bovine TB.

Beginning April 1, 2020 surveillance is required in MAZ Buffer Counties: (Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon Counties)

In accordance with MDARD's MOU with DNR and USDA, signed in December 2019 and following the current zoning order, effective April 1, 2020, 150 herds annually for at least two years will be selected by the MDARD Director for whole herd surveillance testing from the combined counties of Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon. At this time, 29 herds have been tested. 150 herds must be tested by March 31, 2021 to be compliant with the MOU.

Beginning April 1, 2020 surveillance required in Presque Isle County:

In accordance with MDARD's MOU with DNR and USDA, signed in December 2019 and following the current zoning order, effective April 1, 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. There are 30 herds that have been identified as requiring a test under the new requirement and to date six herds have been tested. If a farm is unable to complete a whole herd TB test by December 31, 2020, the farm will be quarantined, and a herd plan will be developed.

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, after which MDARD can perform disinfection followed by 30 days downtime before the quarantine can be released.

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 had been removed to slaughter, with no finding of disease. In February 2019, the quarantine area was reduced to include only an outdoor area that required cleaning, disinfection, downtime, and sunlight. The quarantine on this premises was released in June 2020.

Infected Herd #75

As part of required triennial whole herd testing in Presque Isle County, a small cow-calf beef herd was tested positive for bovine TB in March 2019. This was the first positive herd in Presque Isle County since 2000. The herd was depopulated, the 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. The quarantine will be released in July 2020.

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 (PI) County herd to the Emmet County herd, prior to the PI herd being found infected. As an exposed trace movement from the PI 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 herd has completed a test and removal program with no additional infected animals found. The herd was released from quarantine in May 2020 and will undergo yearly assurance tests until 2025.

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, three additional animals in the herd were found to be infected. The Whole Genome Sequence (WGS) of the bTB was consistent with an Alcona County bovine TB strain, indicating infection was likely due to exposure to TB infected free ranging deer. A test and removal program is ongoing in this herd.

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. An 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 for bovine TB by PCR at the USDA's NVSL. The WGS of this herd confirms that the infection occurred at herd #77. The remaining animals from this herd will be fed out under quarantine and moved to slaughter when finished.

Infected Feedlot #6

This feedlot was found by 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 WGS of this herd confirms that the infection occurred at herd #77. 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, 375 of the 460 active commercial farms (82%) in the present TB surveillance zone (MAZ 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 was 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 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.

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: 100%
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$980,152 **
- Pending project cost in EWB: \$13,140

**Current grant funding, which began 2014

New cost-share projects underway:

- Funding which remained after the EWB effort is being used to provide a cost share program to assist producers with feed storage protection. This is a 90% State/10% producer cost share program with a maximum of \$3,000 per farm that was offered to herds in the non-EWB area of Alcona county as well as higher risk herds in other areas of the MAZ. Funding is provided on a first-come, first-served basis. Currently, we have funding available for all known requests.

E. Movement Permits

Under the new Zoning Order, effective April 1, 2020, all movements in the MAZ counties (Alcona, Alpena, Montmorency, Oscoda) and Accredited Free Zone (AFZ) county Presque Isle, require a movement permit. Below is the movement permitting data for these counties.

	Number of Movement Permits	Number of Animals Moved
MAZ (Alcona, Alpena, Montmorency, and Oscoda Counties) Permits issued April 1, 2020 – June 30, 2020	381	1778
TB Free Surveillance Zone (Presque Isle County) Permits issued April 1, 2020 – June 30, 2020	8	21

F. Communications/Outreach

Goals:

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

Five public meetings were held in and around the MAZ in March to take public comments on the proposed Zoning Order, which was effective April 1, 2020. In addition to the public meetings, more than 600 letters were mailed to all known producers in the MAZ, Presque Isle County and the MAZ buffer counties, outlining the Zoning Order requirements as well as notifying those who were selected for surveillance testing. A brochure outlining all requirements has been updated and 500 copies were printed for distribution through mail, at livestock markets and by field staff visiting farms.

In addition to communications regarding cattle surveillance, the DNR has also been working on communications about the surveillance requirements for deer in the MAZ, Presque Isle and MAZ buffer counties. MDARD and DNR are partnering with the Michigan Cattlemen's Association and Farm Bureau to get this message to cattle producers in the area as well. To maintain compliance with our MOU, we must meet surveillance testing goals for free-ranging white-tailed deer as well as cattle surveillance.

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

A 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 December 16, 2019. This MOU required that a new Zoning Order be issued as described below. In early 2020, an additional infected herd and an infected feedlot were found in the AFZ. As required by the MOU, discussions with USDA about the need to adjust activities covered in the MOU were initiated within 30 days of receipt of the WGS. At this time, USDA has not provided an official response to our proposal to make no changes to the MOU.

H. 2020 Zoning Order Summary

On April 1, 2020, a new Zoning Order became effective as required by 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. Selection will occur on an annual cycle. For the first year, selected herds shall complete a whole herd bovine tuberculosis test by March 31, 2021.
- 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.
- The Wildlife Risk Mitigation program, including inspections and verifications have been suspended and movement permits are no longer required in Cheboygan and Otsego counties.

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 that 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. Herds that are unable to complete testing by that date will be quarantined and a herd plan will be developed. 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 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

In September 2019, a USDA Team conducted a review of Michigan's TB eradication program. The team concluded that the MDARD and the MDNR were meeting the articles as outlined in the April 2019 MOU. The team identified areas for improvement and MDARD has developed an action plan to address those areas. The team recognized the great support and collaboration with the MDNR and USDA APHIS Wildlife Services (WS).

USDA plans to conduct another review of Michigan's TB eradication program August 24-28, 2020. This review will be dependent on the ability for USDA and other staff to travel without Covid-19 restrictions.