



Legislative Report
October 14, 2019

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. MDARD Bovine Tuberculosis Surveillance	2-3
C. Bovine Tuberculosis Affected Herds	3-4
D. Wildlife Risk Mitigation and Enhanced Wildlife Biosecurity	4-5
E. Movement Permitting Data	5
F. Communications/Outreach Activities	5-6
G. Update on Michigan's Bovine TB MOU	6
H. USDA Review of Michigan's TB Program	6

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 40 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 an agreement 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. 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. Herds in Cheboygan and Otsego Counties that do not have their farm WRM verified must obtain a movement certificate and cattle must have a negative bovine TB test within 60 days prior to movement other than to slaughter.

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 eight herds in those two counties that are required to TB test within six months of the designation or have a written herd plan and scheduled test date. At this time, six herds have completed their test with 270 animals tested. Herds which do not test by October 12, 2019 will be placed under quarantine until the test has been completed. Testing may be done by MDARD staff or the producer may choose a private veterinarian to do the testing who can be reimbursed by MDARD.

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 that are within 10km of either herd #75 or two source herds which supplied cattle to herd #75. In this SSA, there are approximately 32 herds which must be tested. At this time, six herds have been tested. Herds which do not test by January 29, 2019 will be placed under quarantine until the test has been completed. Testing may be done by MDARD staff or the producer may choose a private veterinarian to do the testing who can be reimbursed by MDARD.

Circle Testing in Emmet County

As a result of the movement of an undetected TB-positive animal from herd #75 into a herd in Emmet County, herd #76, a special surveillance area (SSA) was designated on July 29, 2019 for herds in Emmet County within ten km of the affected herd. In this SSA, there are six herds which must be tested. At this time, four herds have been tested. Herds which do not test by January 29, 2019 will be placed under quarantine until the test has been completed. Testing may be done by MDARD staff or the producer may choose a private veterinarian to do the testing who can 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. This feedlot 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 no finding of 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 #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 Michigan State University's Veterinary Diagnostic Laboratory and was confirmed positive at 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 herd is under quarantine and is undergoing a test and removal plan. Additional herd tests were performed in November 2018, January 2019, and October 2019 with no additional positive animals detected. 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 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 Michigan State University's Veterinary Diagnostic Laboratory and was confirmed positive on April 24, 2019 at USDA's National Veterinary Services Laboratory by PCR. This herd is under quarantine and is undergoing a test and removal plan. Additional herd tests were performed in June and August 2019 with no additional positive animals detected. 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 #75

As part of the routine triennial whole herd testing required in Presque Isle County, a small cow-calf beef herd was tested positive for bovine TB in March 2019. As required, the adult animals in the herd were tested and all six were classified as reactors on the comparative cervical test. The USDA paid indemnity for the six adult animals but declined to purchase the remaining ten animals in the herd without them being tested first. MDARD determined that with the apparent level of infection in the herd, it was prudent to remove the animals quickly. MDARD paid indemnity to remove the remaining ten animals to the lab. Seven of the sixteen animals were ultimately found to be positive. This was the first positive herd in Presque Isle County since 2000. This premises remains under quarantine until cleaning and disinfection is completed and a herd plan which outlines the wildlife risk mitigation measures is in place.

Infected Herd #76

Movement investigations from herd #75 in Presque Isle County led to the finding of an additional infected herd in Emmet County. 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 and August 2019 with no additional positive animals detected. The quarantine on this farm will be lifted when the test and removal program is completed, and cleaning and disinfection is done.

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, 530 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 the surrounding counties. 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:

- Total number of herds in EWB Area: 154
- Total herds participating in EWB program: 99
- Number of farms in EWB Area that have fully implemented biosecurity plan: 50
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$442,240.68**
- Projects in progress cost-share funds estimate: \$504,386.31

**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 – September 30, 2019	828	3310
TB Free Surveillance Zone (Cheboygan, Otsego, and Presque Isle Counties) Permits issued January 1, 2019 – September 30, 2019	29	120

F. Communications/Outreach

Goals:

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

Presque Isle and Cheboygan County Meetings – On August 13, 2019, two public meetings were held for producers in this area in response to the declaration of a special surveillance area in portions of Cheboygan and Presque Isle Counties. The first was held at the Presque Isle District Library in Rogers City, Michigan. The second was held at the Allis Township Hall in Onaway, Michigan. In addition to the public meetings, all herds in the designated area were sent informational letters.

Emmet County – On August 14, 2019 a public meeting was held at the Friendship Township Hall in Harbor Springs, Michigan for producers in this area in response to the declaration of a special surveillance area in a portion of Emmet County. In addition to the public meeting, all herds in the designated area were sent informational letters.

Herd and Hunter Meetings – Herd & Hunter Bovine TB Connections meetings are great opportunities for the groups most affected by bovine TB to get the latest information and discuss how we can work together to improve our communities.

Meetings were held on September 17, 2019 at Jay’s Sporting Goods in Gaylord, Michigan and on September 18, 2019 at Knights of Columbus Hall in West Branch, Michigan. Dr. Tom Cooley, wildlife biologist and pathologist with the DNR’s Wildlife Disease Lab presented information on deer health issues, while MDARD, MSU Extension and USDA Wildlife Services staff provided program updates.

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 continue with USDA on MDARDs response to finding herds #75 and #76 as required by the new MOU. MDARD has designated special surveillance areas in portions of Cheboygan, Emmet and Presque Isle Counties in response to finding these herds and will carry out surveillance as prudent until a final decision is made by USDA. Although we anticipated an agreement with USDA on our proposed actions we do not yet have a formal decision.

H. 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. MDARD expects a final report from the team in late November 2019.