

Legislative Report January 8, 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 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 zoning order* was signed by the Director and went into effect, removing surveillance testing for Otsego and Cheboygan Counties.

That zoning order required 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 2018 zoning order also established requirements for producers in the Enhanced Wildlife Biosecurity (EWB) Area in the highest-risk area of the MAZ. In the EWB 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.
- Allowed an assessment of their farm to identify necessary mitigation strategies to reduce risk of introduction of bovine TB from free-ranging white-tailed deer to their cattle. Measures to mitigate those risks must have been completed by December 31, 2019. There were nine herds that had completed the necessary steps, up to the construction of the fences, but were unable to have fences completed due to the winter weather. These herds will be placed under an extension agreement, requiring them to comply with all available mitigation strategies until the fences can be constructed in Spring 2020. Cost-share money was available to assist producers with fencing and other infrastructure improvements that were 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.

* An updated MOU, signed on December 16, 2019 will require development of a new zoning order to go into effect by early 2020. Details of the new MOU requirements are outlined in the MOU section of this document.

Circle Testing in Iosco and Ogema County

In the MOU between MDARD, DNR and USDA, signed in April 2019, MDARD committed to expand 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 losco and Ogemaw Counties. A potential high-risk area was designated on April 12, 2019. There were eight herds in those two counties that were required to TB test within six months of the designation or have a written herd plan and scheduled test date. All eight herds have completed their test with 588 animals tested. No TB was found in any of the tested herds.

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 28 herds which must be tested. At this time, 24 herds have been tested and three herds are scheduled to test. At this time, no TB was found in any of the tested herds. Herds which do not test by January 29, 2020 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, all six herds that were required to test have been tested, with no TB found.

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 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 (MSU VDL) and was confirmed positive at USDA's National

Veterinary Services Laboratory (NVSL) 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 for a total of two infected animals. Additional herd tests were performed in November 2018, January 2019, and October 2019 with no additional positive animals detected. This herd has been released from quarantine and is under a continuing herd plan.

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 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 verification test can be performed in February 2020. If the verification test is negative the quarantine may be released when the farm's herd plan, which outlines the steps required for release of quarantine, including wildlife risk mitigation measures, is being followed.

Infected Herd #75

As part of the routine triennial whole herd testing required in Presque Isle County, a small cowcalf 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 has undergone cleaning and disinfection and remains under quarantine until 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, 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 may be performed in April 2020 and, if negative, the quarantine on this farm will be lifted.

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, 570 of the 621 active commercial farms (91%) in the present TB surveillance zone have a verified Wildlife Risk Mitigation Action Plan in place.

Because of a higher TB prevalence in the free-ranging white tailed deer in the EWB area of the MAZ, the risk to cattle herds is greater than it is in other areas. Therefore, the TB Program, in conjunction with the TB Advisory Committee, developed an 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 risks and are provided recommended actions 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.

Current update on the EWB program is:

- Number of herds participating in EWB program: 101
- Percentage of farms in EWB Area that, if required, have a fully implemented biosecurity plan or are under an extension agreement: 96%
- State cost-share funds spent to date in Enhanced Wildlife Biosecurity Area: \$793,832.00**
- Projects in progress cost-share funds estimate: \$257,721

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 a permit to move.

	Number of Movement Permits	Number of Animals Moved
MAZ (Alcona, Alpena, Montmorency, and Oscoda Counties) Permits issued January 1, 2019 – December 31, 2019	1070	4763
TB Free Surveillance Zone (Cheboygan, Otsego, and Presque Isle Counties) Permits issued January 1, 2019 – December 31, 2019	36	144

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 routinely to cattle producers, hunters, and community members about bovine tuberculosis program activities and initiatives.

2019 Fall Hunter Newsletter: This is the first issue of a newsletter developed to improve communication between the DNR and deer hunters in DMU 487. It was sent by DNR to a mailing list of individuals who've indicated that they are interested in information regarding deer management, workshops, hunter discussions, and/or grants in Deer Management Unit 487.

^{**}Current grant funding, which began 2014

Hard copies are available at deer check stations in Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties and the Gaylord and Roscommon Customer Service Centers.

2019 Fall Cattle Newsletter: This is the third issue of a newsletter that has been sent by DNR to all cattle producers in Alcona, Alpena, Montmorency, and Oscoda counties (the MAZ) and Presque Isle County. The purpose is to improve communication between the DNR and cattle producers in the TB area. It has been distributed in the spring and fall since 2018.

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 April 12, 2019. Discussions with USDA on MDARDs response to finding herds #75 and #76, as required by the April 2019 MOU, led to renewed negotiations and resulted in a new MOU which was signed on December 16, 2019. Significant changes associated with the new MOU include:

- Required testing of 150 herds from the six counties surrounding the MAZ, excluding Presque Isle (Includes: Cheboygan, Otsego, Crawford, Roscommon, Ogemaw, and Iosco)
- Expanding the TB surveillance, Identification, Movement Certificate, and Movement Testing requirements currently in the MAZ into Presque Isle County. These include:
 - TB testing each herd yearly, within 9 15 months of their previous test date anniversary
 - o Placing two forms of approved ID in their cattle
 - o Undergo inventory reconciliation of the herd annually
 - o Obtain permits for movement of all cattle
 - o Complying with movement test requirements

At this time, a new zoning order and a public communications plan are being prepared for implementation of the new requirements in early 2020.

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 has not yet received the final report.