



Legislative Report
April 8, 2022

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

Act No. 87, Public Acts of 2021, approved by the Governor September 29, 2021, EFFECTIVE DATE: September 30, 2021.

Sec. 457. (1) On or before October 15 of each year, the department shall provide the subcommittees, the fiscal agencies, and the state budget office a report on bovine TB status and department activities. 10 (2) For each fiscal quarter following the report required in subsection (1), the department shall provide an update to the subcommittees, fiscal agencies, and state budget office. The quarterly update reports shall identify significant impacts to the program, including new incidents 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 (including 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 Tuberculosis Eradication Program protects citizens from exposure to the zoonotic bovine tuberculosis (TB) organism. The 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 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, Michigan's 12,000 cattle producers and their 1.15 million cattle, hunters, and the federal government. The disease is also of high interest at the national level, as other states would close their markets to Michigan cattle, meat, and milk products if the program were reduced or eliminated. 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 (the Accredited Free Zone [AFZ]) can freely move milk because of our split-state status.

B. Special Surveillance Areas

Beginning April 1, 2020, surveillance is required in MAZ Buffer Counties

(Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon Counties):

MDARD's Memorandum of Understanding (MOU) with the Michigan Department of Natural Resources (MDNR) and the United States Department of Agriculture (USDA) signed in December 2019 and the current zoning order (effective April 1, 2020) requires that 150 cattle herds be tested for TB annually for at least two years. Herds are selected for whole herd TB surveillance testing from the combined counties of Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon. Between April 1, 2020, and March 31, 2022, 300 herds were tested, completing this surveillance goal. As a result, one TB-positive animal was discovered in Cheboygan County during the 2020-2021 testing season, and the affected herd was designated Herd #81.

Beginning January 1, 2021, surveillance is required in Presque Isle County:

MDARD's MOU with MDNR and USDA (signed in December 2019) and the current zoning order (effective April 1, 2020) requires all cattle herds, except Freezer Beef herds and approved feedlots, in Presque Isle County to meet the same requirements as those set in the MAZ. This includes an annual whole herd TB surveillance test, double tagging with RFID and an approved supplemental tag, movement testing, and movement permits. All requirements are now in effect in Presque Isle County.

C. Bovine Tuberculosis Affected Herds

Infected Herd #81

A medium-sized beef herd in Cheboygan County was found to be infected on March 11, 2021. This herd was identified through the buffer county surveillance testing program that began in 2020. On October 16, 2020, one animal in the herd was a suspect on comparative cervical testing. This animal was sent to MSU VDL on March 2, 2021, for post-mortem examination and had lesions consistent with bovine TB. These lesions were then found to be histocompatible for bovine TB at USDA's National Veterinary Services Laboratory (NVSL) on March 8, 2021, and confirmed positive for *Mycobacterium tuberculosis* complex by PCR on March 11, 2021.

This is the first bovine TB-positive herd found in Cheboygan County since the surveillance program began in 1998. The whole genome sequence (WGS) for the infected animal was a match to free-ranging white-tailed deer harvested in Alcona County in 2017. A test-and-removal program has been completed, and this herd was released from quarantine. This herd will have annual whole herd tests for the next five years.

Epidemiologic trace investigations of animals sold from this herd in the past five years identified several exposed animals. Because this herd was registered with important genetics, owners of the exposed animals were allowed (by the USDA) to create herd plans that maintained exposed breeding animals through the breeding season prior to their removal or to maintain the exposed animals under a test-and-removal program identical to the infected herd. No exposed animals from this herd have tested positive for bovine TB.

Infected Herd #82

A small dairy herd in Oscoda County, part of the Modified Accredited Zone (MAZ), was found to be infected on January 25, 2022. This herd was identified during routine, annual whole herd surveillance testing. On January 10, 2022, one of the animals was determined to be a reactor on comparative cervical testing. This animal was sent to VDL for post-mortem examination and had lesions consistent with TB. On January 25, 2022, NVSL reported that the animal had microscopic lesions that were compatible with Mycobacteriosis and confirmed the animal as positive for bovine TB by PCR. The WGS from the infected animal is closely related to the WGS from an infected free-ranging white-tailed deer found in Oscoda County in 2016.

A follow-up whole herd TB test was conducted in early March to help determine the extent of TB infection in this herd. One animal was a responder on this test. Following completion of necessary lab testing, MDARD will work with the owner to determine whether depopulation or a test-and-removal program will be implemented to eliminate TB from the herd.

Appropriations Bill - Bovine TB Producer Reimbursement

A one-time appropriation of \$400,000 for reimbursement to producers maintaining livestock under a bovine TB quarantine became effective on October 1, 2021. This bill provides the Department with funding for financial assistance to producers for feed, bedding, veterinary care, and electronic monitoring devices. Producers who qualify for the reimbursement will be notified by MDARD. The Department has developed an approach for managing these reimbursements and is notifying eligible producers. At this time, four eligible producers have requested reimbursement from this fund, and \$381,064 remains in the fund.

D. Wildlife Risk Mitigation and Enhanced Wildlife Biosecurity

The Wildlife Risk Mitigation (WRM) Project began in 2008 to enroll all commercial cattle farms in the northern Lower Michigan area. Under this program, farmers implement measures that reduce cattle exposure to bovine tuberculosis (TB) 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 habitats
- 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

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 protect feed storage facilities. Any commercial producer in the EWB area that is not verified under that program is limited to selling cattle direct to slaughter only.

Currently, 322 of the 454 active commercial farms (71%) in the present TB surveillance zone (MAZ and Presque Isle County) have a verified WRM or EWB plan in place.

New Cost-Share Projects Underway

Funding from the FY 2021 budget was moved into the cost-share program to continue enhancing the protection programs. The cost-share program is a 90% State/10% Producer payment to provide the infrastructure needed on farms to protect them from TB in deer, such as fencing off feed storage areas. In Presque Isle County, four herds are currently pursuing cost-share projects. Two herds are on track to receive feed security fences in the spring while the other two projects are still in the planning phase. Five herds in the EWB area have been visited and had design improvements developed. Two of these projects were completed in November, and three are pending. Infrastructure plans have been developed for seven herds in the MAZ.

E. Movement Permits

Under the new Zoning Order, effective April 1, 2020, all movements of cattle from herds in the MAZ counties (Alcona, Alpena, Montmorency, and Oscoda) and from herds in the Accredited Free Zone (AFZ) County of 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 January 1, 2022 – March 31, 2022	293	1,077
TB Free Surveillance Zone (Presque Isle County) Permits issued January 1, 2022 – March 31, 2022	24	83

F. Communications/Outreach

Goals:

- To ensure that cattle producers, hunters, and Michigan's citizens have a high level of trust and understanding of the TB program in Michigan and are able to support our efforts.
- To consistently provide information to cattle producers, hunters, and community members about bovine tuberculosis program activities and initiatives.

MDARD has been working to keep the informational resources for producers and the public about the details of the bovine tuberculosis (TB) program accurate and up to date. Informational publications are routinely updated and distributed through mailings and at livestock markets. Also, MDARD is working together with the MDNR to finalize a program for a series of in-person public meetings in the northeastern Lower Peninsula in late April 2022. These meetings are designed to update local residents on the status of bovine TB in Michigan, and they had previously been suspended in 2020 and 2021 due to COVID-19-related concerns.

Beyond these efforts, MDARD and MDNR continue to work collaboratively to broaden and strengthen their communication strategies for the 2022 deer surveillance season.

G. Michigan's Bovine TB Memorandum of Understanding and Zoning Order

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 MDARD to issue a [Zoning Order](#), which became effective April 1, 2020. The current MOU would have expired in December 2021; however, USDA has granted an extension of this MOU until April 15, 2022. This extension allows for more time to fully evaluate the 2021 deer surveillance data and 2021/22 buffer surveillance testing data. Discussions with USDA for the next MOU are ongoing and nearly complete.

H. COVID-19 Impacts on Michigan's TB Program

Throughout the pandemic, MDARD's field staff have been able to continue with TB testing while following precautions to limit the spread of COVID-19. MDARD's office staff continue to work remotely until May 2, 2022. Despite the COVID-19 restrictions, MDARD staff have continued to meet the additional surveillance requirement goals outlined in the December 2019 MOU and maintain compliance with all other requirements of the MOU.