



Legislative Report
April 6, 2017

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

Act No. 252 Public Acts of 2014, Approved by the Governor June 30, 2014, Filed with the Secretary of State June 30, 2014, EFFECTIVE DATE: June 30, 2014.

AN ACT to make appropriations Sec. 457. On or before October 15, 2008, and on a quarterly basis thereafter, the department shall report to the senate and house agriculture committees, the senate and house appropriations subcommittees on agriculture, and the senate and house fiscal agencies on the department's progress toward meeting USDA requirements as outlined in the March 2007 bovine TB program review. The report shall include, but is not limited to, 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 set out in the June 2007 MOU; compliance efforts and rates for animals crossing the Mackinac Bridge; efforts to work with slaughter facilities in Michigan, as well as those that slaughter a significant number of animals from Michigan; educational programs and information for Michigan's livestock community; any other item the legislature should be aware of that will promote or hinder efforts to achieve bovine TB-free status for Michigan.

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A. MDARD Bovine Tuberculosis Eradication Program Activities

Why We Do What We Do

Michigan's citizens are protected from exposure to the bovine tuberculosis (TB) organism as a result of the Bovine TB Eradication Program. The Michigan Bovine TB Program was established under Public Act 466, of 1988, as amended, the Animal Industry Act, and is required under Federal Law in order 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 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. More than 13,000 cattle producers in Michigan maintain over 1.1 million cattle each year. The Michigan program prevents farm to farm transmission of bovine TB and provides access to national and international markets. The 65 dairy producers located within the Modified Accredited Zone (MAZ) are able to sell Grade A milk because of the program we have in place.

Trace Testing

All 44 trace investigations relating to TB affected herd 64 have been completed. 29 of these herds require a whole herd test. 28 of these tests have been completed with no finding of disease.

All nine trace investigations relating to TB affected herd #65 have been completed. It has been determined that seven of the nine herds must have a whole herd test. All these tests have been completed with no finding of disease

35 of 39 trace investigations relating to TB affected herd #66 have been completed. One whole herd test was required relating to these investigations. This test has been completed with no finding of disease.

Two source trace tests have been completed for TB affected feedlot #4. No further disease was discovered.

23 of 32 trace investigations relating to TB affected herd #67 have been completed. Two of four required whole herd tests have been completed with no finding of disease.

49 of 99 trace investigations relating to TB affected herd #68 have been completed. 6 of 16 required whole herd tests relating to these trace herds have been completed.

All three of the trace investigations relating to TB affected feedlot #5 have been completed. The source herd whole herd test has been completed and was negative.

Circle Testing in Iosco County

As a result of discovering a TB infected herd in southern Alcona County (see Infected Herd #66 below for details), a special surveillance area was established on August 31, 2016 that impacted three herds in northern Iosco County. All three herds affected by this circle completed their testing prior to February 28, 2017.

Circle Testing in Huron Count

As a result of discovering a TB infected feedlot in Huron County (see infected Feedlot #4 below for details), a special surveillance area was established on October 31, 2016 for herds within three miles of the affected feedlot. To date, 10 of the 13 known herds in this surveillance area have tested. All testing must be completed by April 30, 2017.

B. MDARD Bovine Tuberculosis Surveillance

On June 7, 2016, the current zoning order went into effect and removed requirements for random testing and Wildlife Risk Mitigation inspections for the counties of Antrim, Charlevoix, and Emmet.

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.
- Random testing continues in all herds not tested since April 1, 2014 in the counties of Cheboygan, Otsego, and Presque Isle. Half of these herds will be tested from April 1, 2016 to March 31, 2017 and the remaining half will be tested from April 1, 2017 to March 31, 2018.
 - All 40 herds on the 2017 list to test from Cheboygan, Otsego, and Presque Isle completed their tests prior to March 31, 2018. A number of producers who did not have cattle in April 2017 have since purchased cattle. At present the TB Program is tracking 81 herds that will need to test prior to March 31, 2018. To date, three of these 2017-2018 herds have tested.

For the period of January 1 to March 31, 2017, 81 whole herd tests were completed in the MAZ and 14 whole herd tests were completed in the surveillance area of the TB Free Zone (Cheboygan, Otsego, and Presque Isle counties).

C. Bovine Tuberculosis Affected Herds

Infected Herd #64

On March 30, 2015, a beef herd in Oscoda County had one animal that responded to TB testing. That animal was removed from the premises for confirmatory testing at Michigan State University Diagnostic Center for Population and Animal Health (DCPAH) and had lesions consistent with bovine TB. The herd was designated as affected on April 7, 2016. The herd is following a test-and-remove process, and the third removal test was performed September 27-30, 2017. One additional TB positive animal was found during the first removal test. The final test in the process was completed April 3, 2017. A Herd Plan should be signed the second week of April permitting the TB Program to release the quarantine, provided the farm passes its Enhanced Wildlife Risk Mitigation inspection on April 7, 2017.

Infected Herd #65

An Alcona County beef herd epidemiologically linked to infected herd #64 was tested April 12-18, 2016 and eight animals were taken to DCPAH for further diagnostic testing. One animal was found to be positive for bovine TB. The herd was designated as affected on May 12, 2016. This is the second time this herd has been infected. The first infection occurred in 2003. The herd is following a test-and-remove process, and the second removal test was performed August 22-25, 2016. The next test in the process will be April 10, 2017. The TB Program is working with the herd owner to improve herd biosecurity.

Infected Herd #66

On August 4, 2016, a beef herd in Alcona County had one animal that responded to a movement test. That animal was examined at DCPAH and had lesions consistent with bovine TB. The herd was designated as affected on August 31, 2016. A whole herd test was performed on the herd September 19-22, 2016, December 5-8, 2016, and again February 14-17, 2017. The next test in the process will be in mid-August 2017. The TB Program is working with the herd owner to improve herd biosecurity.

Infected Feedlot #4

On October 10, 2016, a TB positive steer was found during routine slaughter surveillance at a slaughter plant. The infected animal was traced back to a Huron County feedlot using the radio frequency identification tag (RFID) on the animal. This feedlot was declared affected on October 25, 2016 and placed under quarantine. Per federal regulation the feedlot will continue to send animals to a federally inspected slaughter plant, under seal, until empty. Once portions of the feedlot are emptied they must be cleaned by the producer, disinfected by MDARD, and permitted to sit empty for 30 days prior to being restocked. A number of loads of cattle have gone to slaughter since the process began with no further findings of disease. The TB Program, using the animal's RFID, was able to trace the animal back to two farms in Presque Isle County. Both of these herds were placed under quarantine and TB tested, with no disease being found on either farm.

Infected Herd #67

On November 4, 2016, a beef herd in Montmorency County had one animal that responded during a whole herd test. That animal was examined at DCPAH and had lesions consistent with bovine TB. The herd was designated as affected on December 1, 2016. A second TB test was performed January 2, 2017 with no finding of disease. USDA indicated that the herd should follow a test and removal process, and that no federal indemnity of this herd would be made available. The producers requested the state depopulate the adults in the herd. The adults were sent to slaughter and Animal Industry Division paid the difference between the fair market value to the animals and what was paid by the slaughter plant. In the process of having the adult animals inspected at slaughter a second TB positive animal was discovered that had not responded to either the November or January TB tests. This animal was condemned at slaughter. The producer plans to feed his 2016 calf crop until they are old enough to slaughter. The TB Program is working with the herd owner to improve herd biosecurity.

Infected Herd #68

On November 4, 2016, a dairy herd in Alpena County had one animal that responded during a whole herd test. That animal was examined at DCPAH and had lesions consistent with bovine TB. The herd was designated as affected on December 1, 2016. This herd is following a test and removal process and was retested January 6 and March 14, 2017. Their next TB test will be in mid-September 2017. The TB Program is working with the herd owner to improve herd biosecurity.

Infected Feedlot #5

On January 25, 2017, a TB positive steer was found during routine slaughter surveillance at a slaughter plant. The infected animal was traced back to a Newaygo County feedlot using the radio frequency identification tag (RFID) on the animal. This feedlot was declared affected on February 3, 2016 and placed under quarantine. Per federal regulation the feedlot will continue to send its animals to a federally inspected slaughter plant, under seal, until empty. Once portions of the feedlot are emptied they must be cleaned by the producer, disinfected by MDARD, and permitted to sit empty for 30 days prior to being restocked. Two loads of cattle have gone to slaughter since the process began and one additional TB affected animal was found. The TB Program, using the animal's RFID, was able to trace the animal back to a farm in Newaygo County. This herd was TB tested, with no disease being found. On March 14, 2017, a report of the genome of the TB organism that was found in the first animal was received which clearly linked this infection to TB that is circulating in the Modified Accredited Zone (MAZ). Movement records also demonstrate that this farm had purchased animals originating in the MAZ

D. Wildlife Risk Mitigation Project

The Wildlife Risk Mitigation Project began in 2008 with a goal to enroll commercial farms. MDARD asked that these farmers adopt biosecurity practices that reduce the risk of cattle coming into direct or indirect contact with bovine tuberculosis infected free-ranging white-tailed deer. Farmers in Northern Lower Michigan whose cattle have been identified as at risk for bovine TB transmission from wildlife are using the following steps to prevent disease transmission and to market their cattle:

- Fence in feed – and keep the fences closed
- Store feed in buildings
- Feed cattle away from deer cover
- Feed cattle daily
- 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, 503 of the 614 active commercial farms (82%) in the present TB surveillance zone have a verified Wildlife Risk Mitigation Action Plan in place.

Because there continues to be several infected herds annually in the MAZ, the TB Program, in conjunction with the TB Advisory Committee, has been working on an Enhanced Wildlife Risk Project that deals with the 120 herds located in the area with the most risk. These herds have been grouped into 13 clusters. Using the Epi Team approach that the TB Program has used on affected farms for years, the 120 will be given a chance to work with one of two teams that will take a more in depth look at each farm's risks and will give the producer some ideas of how to mitigate those risks. The two teams working on this effort are made up of Michigan State University Extension personnel, a wildlife biologist from either USDA Wildlife Services or the Alpena Conservation District, a local producer, and a MDARD field staff veterinarian. The two teams have completed 17 farms visits to date. They are finding some risks can be addressed by changing the farm's management practices. In other cases the pressure from wildlife on either cattle feeding sites or cattle feed storage may require an investment in physical plant improvements. The goal is to complete evaluations on an additional 50 of these at risk farm during 2017.

E. Communications/Outreach

Outreach:

Public Meeting

On January 10, 2017, a public meeting was held at the MDARD Office in Atlanta, Michigan for TB Program staff to discuss the 67th and 68th TB affected herds, and the need for Enhanced Wildlife Risk Mitigation measures in the core area of the Modified Accredited Zone.

Public Meeting

On March 27, 2017, a public meeting was held in Grant for TB Program staff to discuss the finding of the affected animal in a Newaygo County feedlot and the need to do a three-mile circle test around that feedlot.