

2019 Michigan TB Review

Action Plan

AVIC response due by **February 27, 2020**

Review Team Recommendation	Michigan AVIC/MDARD State Veterinarian response	RHC Response	Action Implemented	Progress report 90-120 days
POLICY AND INFRASTRUCTURE				
Recommendation 1: maintain the current level of TB surveillance in wildlife in the counties bordering the MAZ	<p>MDNR will continue to conduct active surveillance for bovine TB in free-ranging white-tailed deer at current levels as defined below: Active surveillance is defined as testing of free-ranging cervids resulting from deliberate MDNR actions to gather samples including out-of-season hunting opportunities, active promotion of testing of hunter-harvested deer at check stations, and mandatory testing of deer taken under special permits.</p> <ul style="list-style-type: none"> In the MAZ Active sampling of 2,800 free-ranging deer annually. In the Buffer Counties of Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon Counties: Active sampling of 300 free ranging deer annually. Presque Isle County: Active sampling of 500 free-ranging deer annually, with a goal of testing 700. 		Yes. Ongoing.	
Recommendation 2: include Presque Isle County under similar or the same requirements imposed by the MAZ Zoning Order for testing and movement as a result of finding herd #75.	<p>A new zoning order is currently being drafted with an intended implementation date of April 1, 2020. This zoning order will provide MDARD the legal authority to overlay requirements that currently exist in the MAZ to Presque Isle County. Full transition of the program in PI County will be completed January 1, 2021 and includes annual whole herd testing, movement testing, secondary identification, movement certificates, inventory reconciliation, and other requirements identical to those in the MAZ.</p>		Yes. Implementation will begin April 1, 2020 and be in full effect January 1, 2021.	
Recommendation 3: MI DNR, MDARD, and APHIS WS collaborate to eliminate the on farm deer population to reduce exposure	<p>The Michigan TB Program includes efforts to reduce the deer density within the MAZ, areas surrounding cattle farms in the MAZ, and on cattle farms themselves. Population level efforts</p>		Yes. Ongoing.	

<p>risks in cattle and domestic bison. This effort should include education and outreach to producers, hunters, sportsmen, landowners, and the general public about the public health concerns, the impacts on the cattle industry, and impacts on wildlife health and populations</p>	<p>include expanded deer seasons, liberal allotment of antlerless deer permits, and educational meetings and mailings regarding TB and deer harvest opportunities throughout the TB affected areas. On a local level, in addition to the above efforts, Disease Control Permits that can be used 365 days a year to harvest deer are available to cattle farmers and their surrounding neighbors free of cost. MDNR is in the third year of a pilot program of having a January deer hunting season in a portion of Alpena county (MAZ) to assess the effectiveness of winter hunting seasons in harvesting additional deer.</p> <p>USDA APHIS Wildlife Services, through support from USDA APHIS VS, MDARD, and MDNR has for many years conducted deer removal activities upon request on farms in and around the MAZ. Beginning in 2018 a new effort, the Targeted Deer Removal (TDR) Program, became mandatory for farms in the central area of the MAZ (Enhanced Wildlife Biosecurity Area) where the highest risk of TB is in free-ranging deer. This program includes multiple visits by WS staff using infrared surveillance and night vision equipment to identify farms which have deer in close proximity to cattle and feed storage areas that pose a risk to cattle. If a risky behavior is seen, WS staff work with the producer to remove the deer that are pressuring cattle feeding and watering areas and feed storage areas. This program includes approximately 100 cattle herds in the EWB Area and is in its second year of implementation. The TDR Program is a first-of-its-kind program which includes a minimum of 12 observation visits per farm to assess deer activity on farms during various times of the day and over multiple seasons. Based on the information from the observations, response occurs as risks are identified. The responses may include deer removal, farm infrastructure and management changes such as feed storage fencing, fence line modifications, or limiting cattle presence on available, yet risky pastures.</p>			
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	<p>As an expansion of the Targeted Removal effort, USDA WS staff are working alongside MDARD Wildlife Risk Mitigation (WRM) staff as they conduct verification visits in Presque Isle County this winter. During visits, WS staff discuss deer habits, TB transmission risks, and the Targeted Removal Program and offer to conduct surveillance visits to determine the risk that deer may pose to their farm. USDA WS personnel will also be conducting surveillance by driving roads in 2020 in the areas around cattle farms in Presque Isle county to gather information on deer presence and habits.</p> <p>In 2018 MDNR hired a wildlife biologist located in the MAZ to focus specifically on educational efforts with hunters. The MDARD Animal Industry Communications Representative has worked closely to also coordinate efforts with cattle producers and they maintain a quarterly newsletter and hold local Herd and Hunter meetings in the MAZ. The next meetings are scheduled to occur in early March 2020. USDA APHIS WS, MDARD, MSU extension, and MDNR work together routinely on these types of educational efforts and will continue to do so.</p>			
<p>Recommendation 4: MDARD, MDNR, APHIS VS, and APHIS WS continue to utilize multi-agency coordination to allocate various State and Federal resources to eradicate/manage/control bovine tuberculosis.</p>	<p>Michigan's multi-agency collaboration in support of our bovine TB program is one of our greatest strengths. We will continue to routinely partner and communicate with appropriate staff at MDNR, APHIS VS, and APHIS WS. We will maintain our current activities including joint meetings to discuss updates and each agencies resources, roles and responsibilities, public communications and outreach through mailings and public meetings, utilization of each agencies area of expertise and resources to maintain an effective TB program.</p>		<p>Yes. Ongoing.</p>	
<p>Recommendation 5: Michigan should continue to support existing positions and assignments to ensure all epidemiological, herd testing, animal movement controls, and other measures needed to eradicate bovine tuberculosis are in place.</p>	<p>Since the review, Michigan has signed a new MOU with USDA which requires surveillance testing in the counties surrounding the MAZ as well as movement testing, movement certificates and additional requirements in Presque Isle County. The newly required testing represents roughly a 75% increase over our current testing volume. We will be stretching our resources to</p>		<p>Yes. Ongoing.</p>	

	<p>the limits to accomplish this task and agree that we must support our existing positions to ensure the integrity of our TB program. MDARD has hired an additional field veterinarian for the MAZ area and is pursuing hiring additional AHT's as well.</p>			
<p>Recommendation 6: MDARD uses multiple small databases to handle scheduling, WRM/EWB inspections, etc., which while operating adequately currently would be made more efficient if migrated completely to USA Herds. MDARD should strive to consolidate their databases into one system (USAHerds) used statewide in order to avoid data gaps between systems.</p>	<p>This recommendation is being implemented through work with the USAHerds database vendor and MDARD's IT department to develop a project plan. Initial meetings have taken place in order to evaluate our current systems and to create a request for a statement of work from the vendor to integrate these systems. We will continue to work with the vendor to gather business requirements from the bovine tuberculosis program and then integrate necessary data fields into our current USAHerds system. This project will likely take up to three years to complete as it requires work with the program for business requirements, work with the vendor to build the modules into USAHerds and then multiple testing phases before implementation.</p>		<p>In progress, full implementation expected by 2023</p>	
<p>Recommendation 7: MDARD should continue to use the Fast Auction software program at the Northern Michigan Livestock Auction and expand its' use to markets statewide.</p>	<p>MDARD will continue supporting the use of Fast Auction software at the Northern Michigan Livestock Exchange (NMLE). MDARD is currently in discussions with United Producers, Inc. to use the Fast Auction software in Michigan markets in the same way it is used at NMLE, enhancing our animal disease traceability. Discussions with UPI are expected to be completed by September 2020.</p>		<p>Yes, and ongoing to expand current program.</p>	
<p>WILDLIFE RISK MITIGATION AND ENHANCED WILDLIFE BIOSECURITY</p>				
<p>Recommendation 8: MDARD should develop ongoing training for regulatory personnel conducting WRM verification to ensure inspection consistency</p>	<p>MDARD agrees that ongoing training of staff conducting WRM verifications is important to maintain consistency among the approximately 20 MDARD, USDA APHIS VS, USDA AHPIS WS, and Conservation District staff doing these visits. Half-day WRM training sessions have been held annually at the MDARD Atlanta Area office each December prior to the WRM verification season. Beginning in 2019, in conjunction with the implementation of twice annual WRM</p>		<p>Yes. Ongoing.</p>	

	<p>verification inspections (which began in 2018), training programs were held in April and December. The April 2019 training session also focused on reviewing the WRM standards and identifying areas where further clarification or standardization of the program would be helpful.</p> <p>In order to further consistency in this program, MDARD is investigating the feasibility of assigning a manager to be located in the Atlanta Area office to oversee the WRM and EWB programs. This position would also be available to coordinate training and work alongside field staff to further consistency in initial assessments and verification inspections. It is recognized that protecting herds from TB requires significant subjective evaluation of farm practices and anticipated deer habits and activity, and consistency can be difficult to achieve with extreme variability in farm facilities and management with large numbers of staff working in the program. MDARD is also investigating the feasibility of identifying a smaller number of staff that would spend the majority of their time on the WRM and EWB programs.</p>			
<p>Recommendation 9: MDARD and APHIS management staff in East Lansing schedule monthly onsite meetings at the Atlanta, MI field office</p>	<p>MDARD and APHIS VS staff will attempt to hold TB management meetings at the Atlanta Field Office as often as possible, with a goal of every 3rd meeting in Atlanta. MDARD TB Management staff will attend Field Staff meetings with all TB staff quarterly. In Addition, TB Program Management will strive to spend at least two days a month in the Atlanta Field Office. USDA APHIS VS AVIC plans to have in-person meetings with personnel stationed in the MAZ (Barratt, Wenzel, LaCross, Kuffel) on a quarterly basis.</p>		<p>Yes. January 2020.</p>	
<p>Recommendation 10: Conduct an evaluation of the WRM program by determining the proportion of cattle herds affected on a yearly basis over time.</p>	<p>Michigan's wildlife risk mitigation program began as a solution to reduce the number of positive cattle herds in areas where the free-ranging white tailed deer population are a reservoir of bovine TB. As the program has evolved, the program standards, implementation, legal authorities and compliance actions have also evolved and improved. Evaluation and improvement of the program has been a practice</p>		<p>Ongoing.</p>	

	<p>and will continue as we build the program into the future. We have examined past positive herds which have been WRM verified and have recognized that the resulting infections have been due to failure to comply with WRM standards, or in some cases, the standards not being sufficiently protective. In 2015, recognizing that within a core area of the MAZ, called DMU 452 by DNR, the prevalence of bovine TB in the free-ranging deer herd was significantly higher than in the remainder of the MAZ, we knew that this prevalence rate meant that WRM standards in the area had to be higher to be protective. The Enhanced Wildlife Biosecurity program was initiated to address this issue. This program requires expensive infrastructure for the producers in the area. Funding was granted to MDARD by the legislature to support required facility improvements. MDARD updated the zoning order to mandate the new requirements. Nearly 1 million dollars were designated, and a cost-share program was put in place. Producers in the area had until December 31, 2019 to comply with the new standards. Most of the producers in the EWB area did participate in the program and had significant infrastructure improvements made to their farms. Those that chose not to participate are restricted to raising cattle as freezer beef or selling directly to slaughter only. This is another tool in our TB program which helps prevent movement of potentially infected animals out of the zonal boundary. We will closely evaluate any additional positive herds over the coming years in conjunction with the implementation of the EWB program. In addition, using our multi-disciplinary team, we will identify the possible failures to the mitigation program when herds are infected and work to improve our program.</p>			
<p>Recommendation 11: Expand APHIS WS contract to remove deer from livestock operations within the EWB boundary</p>	<p>Michigan's wildlife risk mitigation program began as a solution to reduce the number of positive cattle herds in areas where the free-ranging white tailed deer population are a reservoir of bovine TB. In 2015, recognizing that within a core area of the MAZ, called DMU 452 by DNR, the</p>			

	<p>prevalence of bovine TB in the free-ranging deer herd is significantly higher than in the remainder of the MAZ. The risk involved with this higher prevalence rate meant that WRM standards in the area had to be more restrictive to be more protective to the cattle herds in the area. The Enhanced Wildlife Biosecurity program was initiated to address this issue. This was one tool to prevent contact between infected free ranging deer and cattle herds. Based on past research, it was known that some free ranging deer in this area had a proclivity for living on the farm, directly in contact with the feed and environment of the cattle herd. The targeted-removal program, which is implemented by USDA APHIS Wildlife Services, was the solution to this issue.</p> <p>USDA APHIS WS, through support from USDA APHIS VS, MDARD, and MDNR has for many years conducted deer removal activities upon request on farms in and around the MAZ. Beginning in 2018 a new effort, the Targeted Deer Removal Program, became mandatory for farms in the central area of the MAZ (Enhanced Wildlife Biosecurity Area) where the highest risk of TB is in free-ranging deer. This program includes multiple visits by WS staff using infrared surveillance and night vision equipment to identify farms which have deer near cattle and feed storage areas. If a risky behavior is seen, WS staff work with the producer to remove the deer that are pressuring cattle feeding and watering areas and feed storage areas. This program includes approximately 100 cattle herds in the EWB Area and is in its second year of implementation. The volume of work in this area is intensive and yet, could expand even more. The TB program views the targeted removal program as one of the most important tools in our program to prevent new infections in cattle herds.</p> <p>Additionally, as an expansion of the Targeted Removal effort, USDA WS staff are working alongside MDARD Wildlife Risk Mitigation (WRM) staff as they conduct verification visits in Presque</p>			
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	<p>Isle County this winter. During visits WS staff discuss deer habits, TB transmission risks, and the Targeted Removal Program and offer to conduct surveillance visits to determine the risk that deer may pose to their farm. USDA WS personnel will also be conducting surveillance by driving roads in 2020 in the areas around cattle farms in Presque Isle county to gather information on deer presence and habits. This increased workload will put additional workload on this staff and MDARD feels that expanding support for additional resources for USDA WS is necessary.</p>			
<p>Recommendation 12: Require herds to implement the EWB plan on January 1, 2020, without extensions.</p>	<p>Response: MDARD discussed this issue with USDA APHIS VS Ruminant Health Program staff and received approval for granting EWB extensions to some herds in the EWB Area. These herds were awaiting implementation of EWB Plans that included fencing or other infrastructure from a contractor, and seasonal weather conditions preclude installation of these structures until spring 2020. The herds are entering a specific EWB Extension Agreement and a listing and a map of these herds have been provided to USDA APHIS VS.</p>		N/A	N/A
<p>Recommendation 13: Conduct an immediate evaluation of the EWB to determine if more cost-effective biosecurity methods can be implemented to separate deer from domestic livestock. If not, consider discontinuing the EWB and reallocating funding to higher value activities.</p>	<p>Michigan's wildlife risk mitigation program began as a solution to reduce the number of positive cattle herds in areas where the free-ranging white tailed deer population are a reservoir of bovine TB. As the program has evolved, the program standards, implementation, legal authorities and compliance actions have also evolved and improved. Evaluation and improvement of the program has been a practice and will continue as we build the program into the future. We have examined past positive herds which have been WRM verified and have recognized that the resulting infections have been due to failure to comply with WRM standards, or in some cases, the standards not being sufficiently protective. In 2015, recognizing</p>		N/A	

	<p>that within a core area of the MAZ, called DMU 452 by DNR, the prevalence of bovine TB in the free-ranging deer herd was significantly higher than in the remainder of the MAZ, we knew that this prevalence rate meant that WRM standards in the area had to be more restrictive to be more protective. The Enhanced Wildlife Biosecurity program was initiated to address this issue. This program requires expensive infrastructure for the producers in the area. Funding was granted to MDARD by the legislature to support required facility improvements. MDARD updated the zoning order to mandate the new requirements. Nearly 1 million dollars were designated, and a cost-share program was put in place. Producers in the area had to comply with the increased standards by December 31, 2019. The cost-share money, which was designated for this program was nearly all used by the end of 2019 while a few projects remain to be completed as the weather improves in the spring of 2020. Most of the producers in the EWB area did participate in the program and had significant infrastructure improvements made to their farms. Those that chose not to participate will be restricted to raising cattle as freezer beef or selling directly to slaughter only. This will be an effective additional tool in our TB program to prevent movement of potentially infected animals out of the zonal boundary. We will be closely evaluating the number of positive herds over the coming years with the implementation of the program. In addition, using our multi-disciplinary team, we will identify the possible failures to the mitigation program when herds are infected and work to improve our program as much as possible within our resources. Additional funding for this program is not expected to be available.</p>			
<p>ANNUAL REPORTING</p>				
<p>Recommendation 14: Make a short notation to explain line 10 of the 6-38 on future reports.</p>	<p>Response: This recommendation has been implemented. Beginning with the FY 2019 Annual Report the following notation was included on the VS 6-38 in reference to SECTION</p>		<p>November 2019</p>	<p>N/A</p>

	<p>1 - SLAUGHTER WITHIN STATE; 10. Rate of 6-35 Submissions: <i>*Cows and Bulls only. Expected rate is 1 VS 6-35 per 2,000 animals slaughtered. Reported rate is the number of submissions divided by the expected number of submissions (93).</i></p>			
<p>Recommendation 15: Continue use of dual method data retrieval for validation of correct MAZ herd inventories</p>	<p>Michigan utilizes the USAHerds database for maintaining premises, testing, and intrastate animal movement information collected in the Michigan TB program. It was identified during the previous reporting period that pre-existing premises queries can provide some duplicate information and require additional analysis. Michigan will continue to use the additional analysis process for determining the number of active cattle herds in the MAZ on future reports.</p>		Yes. Ongoing.	
<p>Recommendation 16: Compare VS 6-38 and corresponding narrative information against previous mid-year and fiscal year reports to identify large discrepancies or errors and provide notation of explanation for major valid differences in data.</p>	<p>Michigan requested USDA VS to perform a query of the Core One database for veterinarians who performed caudal fold testing in FY 2017 and FY 2018. This query identified 41 individual veterinarians in FY 2017 and 75 individual veterinarians in FY 2018 who performed one or more caudal fold tests, which is consistent with the differences identified in the annual reports for those years. Much of the TB testing in Michigan is done through private agreement between producers and veterinarians and does not require notification or approval of MDARD or USDA. As such there is no data available that could be used to validate or explain the variation from year to year in this data set.</p> <p>To avoid confusion on this item Michigan will amend future reports to include information that is specific to veterinarians that conduct 300 or more TB tests in a fiscal year. Michigan will also review the previous annual report during preparation of the next fiscal year report and adjust as necessary to ensure clarity. Mid-Year reports are limited in scope to only the MAZ and only a portion of a year. It can be expected that there will be variability in data from year to year</p>		Yes.	

	<p>and no specific efforts will be made to compare the partial data sets included in the Mid-Year reports.</p> <p>Michigan will respond in a timely manner to any requests for clarification when a Mid-Year or Annual Report is reviewed by USDA APHIS VS program staff following submission. Historically, there have been no requests for clarification or additional information from USDA APHIS VS following submission of these reports.</p>			
<p>Recommendation 17: Continue advancing use of electronic technology as previous.</p>	<p>This recommendation is being implemented through efforts to move our USAHerds database to the vendor's cloud-based server. Currently we have established a work project with our IT department and have received estimates for this work. This will allow for increased animal disease traceability as we cannot use available modules in our current environment. An example of this is, that once we are on the vendor's cloud environment, we will be able to enable Global Vet Link which will allow for increased traceability. We are working to enhance our use of more wands and personal digital assistants (PDAs) for bovine tuberculosis testing. We have been training veterinarians on the use of this equipment to reduce the number of paper TB test charts. This allows for increased accuracy and better data quality. The use of PDAs creates efficiency for farmers to no longer write out their cattle RFID numbers on paper. The move to the vendor's cloud environment is projected to be completed within two years.</p>		<p>Ongoing with full implementation anticipated in 2022.</p>	
<p>Recommendation 18: If feasible in future, potentially seek to reduce number of databases in use by both USDA and MDARD.</p>	<p>This recommendation is being discussed with USDA to work to enhance our data quality as multiple systems are currently being used. The State of Michigan has very strict firewall rules that prevent direct connections to other outside databases and this has limited our ability to connect USAHerds to any outside system. We are currently working to move USAHerds to the vendor's cloud environment which will allow us to utilize more direct connections to outside systems. The move to the USAHerds vendor's</p>		<p>Ongoing with full implementation anticipated in 2022.</p>	

	cloud environment is projected to be completed within two years.			
Recommendation 19: Pursue software database communications options in future if financially and technologically feasible.	This recommendation will be obtainable once we are integrated into the USAHerds vendor's cloud environment. Our current environment does not allow for online communications due to protective firewall rules. The new cloud environment will allow for more modules to be developed online that can be used by producers and MDARD staff. An example of this is an inspection module that will allow for staff to complete inspections in the field and complete their assessments online. The move to the vendor's cloud environment is projected to be completed within two years.		Ongoing with full implementation anticipated in 2022.	
Herd 75 Presque Isle County				
Recommendation 20: Develop the next Quarantine Order to include language that requires immediate producer reporting of all new herds in the MAZ and PI County.	<p>Response: MDARD does not have regulatory authority to require licensing or registration of cattle farms, outside the requirement that a dairy herd obtain a permit to sell Grade A milk. Beginning April 1, 2020 all cattle herds in Presque Isle County will be transitioned into a TB program comparable to the current Modified Accredited Zone (MAZ). The requirements of this program will be included in an amended TB Zoning Order. Full transition of the program will be completed January 1, 2021 and includes annual whole herd testing, movement testing, secondary identification, movement certificates, inventory reconciliation, and other requirements identical to those in the MAZ.</p> <p>Due to the volume and complexity of interactions that a cattle herd must have with regulatory staff in an area with these types of regulations, the rapid identification of any new herds in Presque Isle County will be significantly enhanced. Our experience in the MAZ is that farmers desiring to start a cattle herd will contact the Atlanta area office prior to assembly of the herd. Ongoing regulatory activities such as validating the origin and destination premises on all movement certificates and reviewing data received from the</p>		April 1, 2020	

	<p>Gaylord sale yard for unknown buyers, also provide comprehensive ways to rapidly identify new producers.</p> <p>Following implementation of the new program requirements in Presque Isle County, MDARD will continue to monitor the effectiveness of identifying newly assembled herds, and work with the Michigan USDA APHIS VS office to adjust as appropriate.</p>			
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