
Bovine Tuberculosis

Bovine TB Split State Status and Zoning Rules

*Information for
Michigan Cattlemen*
2011



Introduction

Bovine tuberculosis (TB) is a contagious bacterial disease found in cattle, but can be transmitted between mammals, including humans. In 1917, the federal government established a Bovine TB Eradication Program nationwide designating certain status levels for each state based on the prevalence of the disease.

Currently the U.S. Department of Agriculture (USDA) has five designated status levels that apply to an entire state, or a zone within a state:

1. Accredited Free
2. Modified Accredited Advanced
3. Modified Accredited
4. Accredited Preparatory
5. Non-Accredited

The highest status level is "Accredited Free" which means there is zero percent prevalence of bovine TB in a state (or zone). The lowest designated status is Non-Accredited.

Each state (or zone) has specific requirements for movement, surveillance testing (keeping a close watch through whole-herd TB testing), record keeping and animal identification, depending on their USDA bovine TB status designation. The requirements are more restrictive in Non-Accredited states and zones, and become less restrictive as states and zones move toward Accredited Free status.

Bovine TB in Michigan

In 1979, Michigan achieved Bovine TB Free Status. Unfortunately, in 1994, a TB-positive deer was harvested and subsequently diagnosed with a strain of bovine TB unique to Michigan. As a result, the Michigan departments of Agriculture (MDA) - now the Michigan Department of Agriculture and Rural Development (MDARD), Natural Resources (DNR), and Community Health (MDCH) embarked on a comprehensive surveillance plan to determine the extent of the disease in Michigan's livestock and wildlife.

Based on initial surveillance USDA revoked Michigan's Bovine TB Free Status in 2000, and designated the entire state of Michigan as Modified Accredited. This resulted in extensive restrictions on animal movement.

From January 2001 to December 2003, MDA, USDA and private veterinary practitioners tested every known cattle, goat, bison and privately owned cervid in Michigan for bovine TB. During that time, DNR, MDCH and Michigan State University (MSU) tested.

Please Note:

The Bovine TB Program is evolving and MDARD will notify producers when additional regulatory or policy changes occur. To receive regulatory updates via email join the Animal Health Listserv at: www.michigan.gov/emergingdiseases

For more information:

Additional information about Michigan's Split State Status designation, including telephone numbers of other State Veterinarians, may be found at: www.michigan.gov/emergingdiseases or call MDARD at 800-292-3939.

Producers can expect other states to have different import requirements. A list of State Veterinarians may be found at: www.michigan.gov/emergingdiseases.

Contacts:

Northeastern Lower Michigan

Michigan Department of Agriculture & Rural Development
Atlanta: 989-785-5616
Or toll free 1-888-565-8626

Michigan Department of Natural Resources
Mio: 989-826-3211

United States Department of Agriculture
VS in Atlanta: 989-785-5616
WS Gaylord: 989-705-8467

Statewide:

Michigan Department of Agriculture & Rural Development
Lansing: 517-373-1077
or 1-800-292-3939

Michigan Department of Natural Resources, Laboratory
East Lansing: 517-336-5030

United States Department of Agriculture
VS – East Lansing: 517-324-5290
WS – Okemos: 517-336-1928

Michigan Department of Community Health
Lansing: 517-335-8165

Modified Accredited Zone

Alcona, Alpena, Montmorency, and Oscoda counties.

The Modified Accredited Zone is the area in Michigan identified as having a higher risk of bovine TB.

TABLE 3: Movement Testing Requirements For MAZ

MAZ Bovine TB Cattle Testing Requirements for Movement within the State of Michigan			
TYPE OF MOVEMENT	CLASS OF CATTLE		
	Calves Less Than 2 Months of Age	Cattle more than 2 months of age	Slaughter Cattle†
Within MAZ	Must come from herd with a negative whole herd test within 12 months	<ul style="list-style-type: none"> • Originate directly from a bovine TB Accredited Free Herd, OR • Had negative whole herd test within 60 days, OR • Had negative movement test within 60 days 	None
To another zone in Michigan	Must come from herd with a negative whole herd test within 12 months	<ul style="list-style-type: none"> • Originate directly from a bovine TB Accredited Free Herd, OR • Had negative whole herd test within 12 months AND had negative movement test within 60 days • Steers or spayed heifers are required to only have a negative bovine TB test within 60 days prior to movement. 	None

†Moved directly to a USDA approved slaughter plant or through a licensed Michigan auction market to a USDA approved slaughter plant.

thousands of hunter-harvested deer for bovine TB. Testing of cattle and surveillance of deer demonstrated that in areas where deer are infected with bovine TB, cattle are at risk of becoming infected with the disease.

Zoning Events in Michigan

- In 2000 Michigan became a Modified Accredited Zone (MAZ).
- The first Split State Status for bovine TB was granted to Michigan by USDA in April 2004. All of Michigan became Modified Accredited Advanced (MAAZ), except Alcona, Alpena, Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Montmorency, Oscoda, Otsego and Presque Isle counties, and those parts of Iosco and Ogemaw that are north of the southern most boundaries of the Huron National Forest and the Au Sable State Forest, they became the MAZ (the previously designated "Infected Zone") in the Federal Code of Regulations.
- In late 2005, USDA granted TB free status to the Upper Peninsula.
- In January 2010, Michigan expanded the MAAZ into Antrim, Charlevoix, Cheboygan, Crawford, Emmet, and Otsego counties and created State of Michigan Subzones for targeted surveillance and disease management purposes. Each subzone had decreasing prevalence of disease in wildlife, the further the zone was geographically from the core area, known as Deer Management Unit (DMU) 452. These subzones became part of the MAAZ.
- USDA recently granted bovine TB free status to 57 counties in the lower Peninsula; reduced the MAAZ to Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Otsego and Presque Isle counties; and consolidated the MAZ to the four higher risk areas: Alcona, Alpena, Montmorency and Oscoda counties.

This advancement was based on extensive disease surveillance testing of 1.2 million cattle on more than 17,000 farms from 2001 through 2003; and continuous testing of cattle in the Subzones and the MAZ over the years. In 2010 alone, MDARD tested over 77,000 cattle on 1,929 farms.

All Bovine TB Zones within Michigan

Cattle Identification Requirements

Before moving off a farm premises, all cattle must have a radio Frequency Identification (RFID) also called an electronic identification ear-tag with a premises identification number, unique to each farm. The tags may not be shared with other farms.

Wildlife Risk Mitigation Action Plans

Scientists at the USDA Livestock Research Center have studied the bovine tuberculosis bacterium and have confirmed that bovine TB can be transmitted between wildlife and livestock, and that livestock feed can harbor the bacterium for up to 40 days in cold weather.

The goal of the Wildlife Risk Mitigation Project is to enroll 1,000 MAAZ and MAZ cattle producers into the program, conduct Wildlife Risk Mitigation Assessments on their farms, develop Wildlife Risk Mitigation Action Plans, and verified the tools in the action plan have been put into place.

- Feed cattle away from deer
- Store feed in a manner that prevents wildlife access
- Prevent access to potentially contaminated water

MDARD has Wildlife Risk Mitigation Project cost-share funding for hoop barns or feed storage fences for producers. The United States Department of Agriculture (USDA) Natural Resource Conservation Service's (NRCS) Environmental Quality Initiative Program (EQIP) has funding available for feed storage facilities and other management changes on the farm that will mitigate the risk of deer transmitting bovine TB to cattle.

Cattle from the MAAZ or MAZ in Michigan must come from a farm with a verified Wildlife Risk Mitigation Action Plan in order to prevent a post-movement test.

Modified Accredited Advanced Zone

This zone includes the Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Otsego, and Presque Isle counties.

TABLE 2: Movement Testing Requirements For MAAZ

MAAZ Bovine TB Cattle Testing Requirements for Movement within the State of Michigan			
TYPE OF MOVEMENT	CLASS OF CATTLE		
	Calves less than 2 months of age	Cattle more than 2 months of age	Slaughter cattlet
MOVEMENT WITHIN MAAZ			
With WRMAP*	None‡	None	None
Without WRMAP*	None‡	Negative movement test within 60 days if > 2 months of age	None
MOVEMENT TO MAZ			
With WRMAP*	None‡	None	None
Without WRMAP*	None‡	Negative movement test within 60 days if > 2 months of age	None
MOVEMENT TO TB FREE ZONE			
With WRMAP*	None‡	None	None
Without WRMAP*	None‡	Negative movement test within 60 days if > 2 months of age	None

† Moved directly to a USDA approved slaughter plant or through a licensed Michigan auction market to a USDA approved slaughter plant.
 * WRMAP – verified Wildlife Risk Mitigation Action Plan. Note: all bovine TB Accredited Free Herds are verified as Wildlife Risk Mitigated.
 ‡ MAAZ: cattle less than 2 months of age may be moved if they originate from a herd that is determined to be up-to-date on TB surveillance testing.

TABLE 1: All Requirements For All Zones

Bovine TB Cattle Testing (Surveillance and Movement), Movement Certificate and Identification Requirements for Movement WITHIN the Zones of Michigan					
ZONE	Surveillance (Whole Herd Test)	Movement Testing	Movement Certificate	ID Requirement	Post-Movement Testing
TB Free ♦	High risk herds as determined by epidemiologist (such as traces)	None	None	Yes - RFID	Yes All non-Wildlife Risk Mitigated cattle, from the MAZ and the MAAZ, not moving directly to slaughter must be post-movement tested at the purchaser's expense between 60-120 days from when the animal(s) left the farm of origin.
	Herds in Iosco-Ogemaw Surveillance Area - 2011 - 2012		Herds in Iosco-Ogemaw Surveillance Area must use Owner-Shipper Statement when moving cattle farm to farm.		
MAAZ ■	Whole herd testing: <ul style="list-style-type: none"> • Producer moves breeders - annual test • Producer moves non-breeders - test every 2 years • Producer moves cattle to slaughter only - test every 3 years • Freezer beef exempt 	Yes See Table 2	Yes prior to all movements *	Yes - RFID	Yes All non wildlife Risk Mitigated cattle, from the MAZ and the MAAZ, not moving directly to slaughter must be post-movement tested at the purchaser's expense between 60-120 days from when the animal(s) left the farm of origin.
MAZ ‡	<ul style="list-style-type: none"> • Annual test • Freezer beef exempt 	Yes See Table 3	Yes prior to all movements *	Yes - RFID	Yes All non-Wildlife Risk Mitigated cattle, from the MAZ and the MAAZ, not moving directly to slaughter must be post-movement tested at the purchaser's expense between 60-120 days from when the animal(s) left the farm of origin.

♦ The TB Free Zone is made up of all counties in Michigan's Upper Peninsula and the southern 57 counties of the Lower Peninsula not included in the MAZ or MAAZ (see map, page 4)

■ The seven counties in the MAAZ included: Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Otsego, and Presque Isle counties (see map, page 4)

‡ The four counties in the MAZ include: Alcona, Alpena, Montmorency and Oscoda counties (see map, page 4)

* If cattle movement is to the Northern Michigan Livestock Association Saleyard on the sale day, or to a USDA approved slaughter plant, no movement certificate is required.