

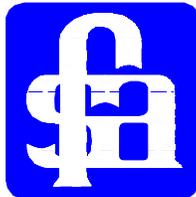
SENATE FISCAL AGENCY ISSUE PAPER

BOVINE TUBERCULOSIS ERADICATION IN MICHIGAN UPDATE

by

Craig Thiel
Fiscal Analyst

August 2002



***A Series of Papers Examining Critical Issues Facing
the Michigan Legislature***

***Gary S. Olson, Director
Lansing, Michigan
(517) 373-2768
TDD (517) 373-0543***

Internet Address: www.senate.state.mi.us/sfa

THE SENATE FISCAL AGENCY

The Senate Fiscal Agency is governed by a board of five members, including the majority and minority leaders of the Senate, the Chairperson of the Appropriations Committee of the Senate, and two other members of the Appropriations Committee of the Senate appointed by the Chairperson of the Appropriations Committee with the concurrence of the Majority Leader of the Senate, one from the minority party.

The purpose of the Agency, as defined by statute, is to be of service to the Senate Appropriations Committee and other members of the Senate. In accordance with this charge the Agency strives to achieve the following objectives:

1. To provide technical, analytical, and preparatory support for all appropriations bills.
2. To provide written analyses of all Senate bills, House bills and Administrative Rules considered by the Senate.
3. To review and evaluate proposed and existing State programs and services.
4. To provide economic and revenue analysis and forecasting.
5. To review and evaluate the impact of Federal budget decisions on the State.
6. To review and evaluate State issuance of long-term and short-term debt.
7. To review and evaluate the State's compliance with constitutional and statutory fiscal requirements.
8. To prepare special reports on fiscal issues as they arise and at the request of members of the Senate.

The Agency is located on the 8th floor of the Victor Office Center. The Agency is an equal opportunity employer.



Gary S. Olson, Director
Senate Fiscal Agency
P.O. Box 30036
Lansing, Michigan 48909-7536
Telephone (517) 373-2767
TDD (517) 373-0543
Internet Home Page <http://www.senate.michigan.gov/sfa>

ACKNOWLEDGMENTS

This issue paper was researched, prepared, and written by Craig Thiel, Fiscal Analyst of the Senate Fiscal Agency. Pam Yeomans prepared the tables and coordinated the production of the report.

The SFA wishes to acknowledge the assistance of the Department of Agriculture in providing data and information included in this report.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
CURRENT STATUS OF BOVINE TB IN MICHIGAN	1
FEDERAL ACCREDITATION STATUS	3
APPROPRIATION/EXPENDITURE HISTORY	3
CONCLUSION	6

INTRODUCTION

In July 2002, two Emmet County cattle herds tested positive for bovine tuberculosis (TB), bringing the total positive cattle herds to 25 since the beginning of the State's eradication program. Although bovine TB was previously identified in Emmet County in a coyote and two free-ranging deer, the presence of the disease in these two cattle herds represents the first known occurrence in livestock in the county. The presence of bovine TB in Emmet County also represents the first occurrence of the disease in livestock outside of the State-established "infected zone" or "surveillance zone", since the zones were established in March 2002.

The goal of Michigan's multi-agency bovine TB program is disease eradication, not control. To this end, the State has dedicated nearly \$47.7 million since fiscal year (FY) 1997-98. This analysis provides an update on Michigan's bovine TB eradication efforts, focusing primarily on the work and resource expenditures of the Michigan Department of Agriculture. This report is intended as an update to an earlier Senate Fiscal Agency report documenting the resources and responsibilities dedicated to bovine TB efforts in Michigan¹.

CURRENT STATUS OF BOVINE TB IN MICHIGAN

In March 2002, the Michigan Department of Agriculture (MDA), under authority of the Animal Industry Act (Public Act 466 of 1988), created three TB eradication zones: "infected", "surveillance", and "disease-free" ([Figure 1](#)). Each zone entails specific animal testing, movement, permitting, and identification requirements. These zones may be changed based on the risk of infection and prevalence of the disease in livestock that is linked to certain factors in a geographic region. Zones are created or changed only after a public comment period and consideration by the Michigan Commission of Agriculture. The current zone designations were established as part of Michigan's strategy to attain split-state status from the United States Department of Agriculture (USDA).

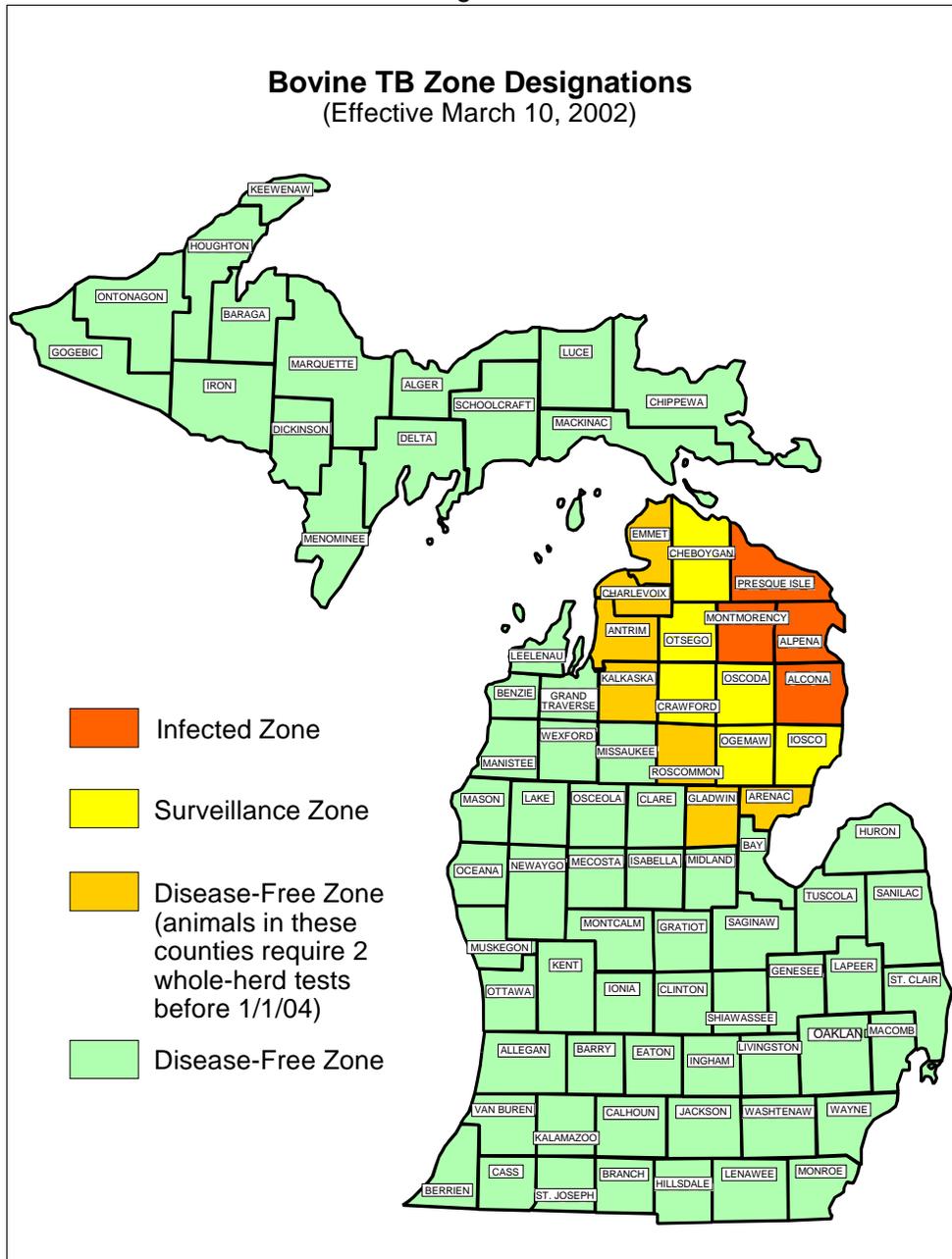
While the zone designation was primarily developed for Michigan's transition to Federal split-state status, the Animal Industry Act also authorizes the Director of the MDA to establish "high risk" and "potential high risk" areas to determine the level of testing and movement restrictions required to control and eradicate bovine TB. Unlike the zone designations, which are intended to be long-term in nature, area designations give the MDA Director authority to respond quickly to the disease through testing requirements and movement restrictions in a given geographic area. A high risk area is defined as an area where bovine TB has been diagnosed in domestic livestock. The high risk designation requires all cattle and goat herds in the area to be tested at least once per year for approximately three years. Currently, the four-county infected zone is classified as a high risk area. This designation, effective March 2001, effectively released farms east of I-75 and north of M-55 from the general quarantine that existed since January 1999, thereby removing the movement restrictions placed on animals unaffected by bovine TB, e.g., horses, swine, and domestic animals.

A potential high risk area is an area where bovine TB has been diagnosed in wild animals only. A potential high risk area requires all cattle, bison, and goat herds in the area to be tested

¹Senate Fiscal Agency, "A Summary of the Resources and Roles Dedicated to the Eradication of Bovine Tuberculosis in Michigan", January 2001

within six months of designation. Upon completion of the required testing, the MDA Director must remove the designation. In this sense, this designation is more short-term in nature than the high risk designation, which lasts a minimum of three years. For example, upon discovery of the disease in wild deer in Emmet County, a portion of Emmet and Cheboygan Counties was designated as a potential high risk area. However, following the required testing, the designation was removed. Discovery of the disease in livestock will cause Emmet County to be designated a high risk area. Whole-herd testing of all other cattle and goats outside the high/potential high risk areas is statutorily required by January 1, 2004.

Figure 1



FEDERAL ACCREDITATION STATUS

Under the current Federal five-stage bovine TB accreditation system, Michigan's bovine TB status is "modified accredited". Prior to the discovery of the disease in livestock, Michigan enjoyed the "accredited free" status. Michigan's current status reflects the fact that the disease exists in livestock at a herd prevalence rate of less than 0.1%. The specific Federal designation determines testing requirements for interstate and intrastate movement of cattle, which directly affects the cost of business to livestock owners. In order to address the concern over annual testing costs for bovine TB, the State is seeking split-state status from the USDA. Split-state status will allow Michigan to be divided into different zones, each with its own TB status designation. The different zones will improve the State's ability to target its resources dedicated to bovine TB. Zone status also will relieve those producers in areas of the State where the disease is not present from the more stringent testing requirements and movement restrictions that apply in areas where the disease has been found in cattle and/or wild animals.

The State of Michigan has prepared well to apply to the USDA for split-state status. First, the MDA has created zones or areas where the disease is a threat and areas where it is not. The State created three zones, effective March 2002 ([Figure 1](#)). Second, the Michigan Departments of Natural Resources and Agriculture and the USDA signed a Memorandum of Understanding (MOU) clarifying agency roles and responsibilities in March 2002. The third important action to achieve split-state status is a program review by the USDA, which was completed in May 2002. On August 6, 2002, Michigan submitted its formal application to the USDA for split-state status. The USDA must publish a final rule granting Michigan split-state status in the Federal Register. Following publication of the final rule, the MOU will have to be updated to maintain Michigan's new status.

If provided to Michigan, split-state status will allow the infected and surveillance zones to remain in the current "modified accredited" stage while the remaining 73 counties in the State will advance to the "modified accredited advanced" status. This designation will relieve livestock owners in the Upper Peninsula and the southern portion of the Lower Peninsula from the stringent animal testing and movement requirements associated with the "modified accredited" status for interstate movement of cattle. It is unknown, at this time, if or when Michigan will achieve split-state status.

APPROPRIATION/EXPENDITURE HISTORY

[Table 1](#) lists State appropriations to the MDA for bovine TB activities. To date, over \$35.2 million has been committed. The \$14.5 million appropriation contained in Public Act (P.A.) 291 of 2000, the largest appropriation to date, was intended to meet the significant changes to the Animal Industry Act resulting from P.A. 323 of 2000. This legislation requires whole-herd testing, establishment of a producer assistance program, creation of an equipment cost share program, and increases to indemnification payments. Coupled with the nearly \$3.5 million annual operating appropriation, this supplemental funding was intended to cover the costs of the Department's bovine TB efforts through FY 2002-03. Bovine TB appropriation balances at the end of each fiscal year have been carried forward and available in subsequent years.

Table 1

MICHIGAN DEPARTMENT OF AGRICULTURE BOVINE TB PROGRAM APPROPRIATIONS - STATE RESOURCES FY 1997-98 TO PRESENT			
Fiscal Year	Authorization	Amount	Source
1997-98	P.A. 103 of 1997 - MDA Appropriation	\$225,000	Restricted
1997-98	P.A. 103 of 1997 - MDA Appropriation	347,400	GF/GP
1997-98	P.A. 273 of 1998 - Supplemental Appropriation	500,000	Restricted
1997-98	P.A. 273 of 1998 - Supplemental Appropriation	250,000	GF/GP
1997-98	Legislative Transfer	300,000	GF/GP
1998-99	P.A. 69 of 1999 - Supplemental Appropriation	9,637,000	GF/GP
1999-2000	P.A. 291 of 2000 - Supplemental Appropriation	14,500,000	GF/GP
1999-2000	Legislative Transfer	(1,016,540)	GF/GP
2000-01	P.A. 270 of 2000 - MDA Appropriation	3,488,900	GF/GP
2001-02	P.A. 53 of 2001 - MDA Appropriation	3,528,100	GF/GP
2002-03	P.A. 516 of 2002 - MDA Appropriation	3,469,000	GF/GP
	Total	\$35,228,860	

Source: Appropriations Bills

In addition to the nearly \$35.2 million appropriated to the MDA since FY 1997-98, other State departments and agencies involved in bovine TB eradication have received State appropriations for their work: the Department of Community Health, \$1.3 million; the Department of Natural Resources, \$10.7 million; and the Michigan Strategic Fund, \$425,000. In total, over \$47.7 million has been appropriated from State resources for bovine TB eradication activities in Michigan through FY 2002-03. In addition, the State appropriated \$58.3 million of General Fund/General Purpose (GF/GP) funds for the planning, design and construction of a new animal health diagnostic laboratory at Michigan State University (MSU) to address, in part, the bovine TB problem. The lab at MSU is scheduled to open sometime in 2003.

Table 2 lists expenditures of State resources by purpose for the MDA's bovine TB program through June 2002. Administrative expenditures include payroll, vehicle leases, regional office facility operations, and equipment purchases, while testing costs include fee-based testing, testing supplies, and equipment. Legislatively-mandated whole-herd testing accounts for nearly half of the total expenditures to date. The State completed statewide whole-herd testing of all dairy farms in the summer of 2001, as required under the Federal Grade "A" Pasteurized Milk Ordinance. Whole-herd testing of all cattle herds in the four-county high risk area also was completed in 2001. Nearly half of the total expenditures to date occurred in FY 2000-01, driven primarily by administrative and testing costs. The Department has been relying on the carryforward balance of the \$14.5 million supplemental appropriation to cover program expenditures not covered by the annual \$3.5 million appropriation. As of the end of FY 2000-01, the bovine TB program had about a \$5.9 million carryforward balance to begin FY 2001-02. It is anticipated that the carryforward balance will be less than \$3 million

at the end of FY 2001-02. It is unknown at this time whether the carryforward balance, combined with the annual operating budget of \$3.5 million, will be sufficient to support the current level of program expenditures in FY 2002-03.

Table 2

MICHIGAN DEPARTMENT OF AGRICULTURE BOVINE TB PROGRAM EXPENDITURES FY 1997-98 TO PRESENT					
Fiscal Year	Testing	Indemnifi- cation	Producer Assistance	Admin.	Total
1997-98	\$482,112	\$27,282	\$0	\$0	\$509,394
1998-99	1,746,699	203,708	0	10,001	1,960,408
1999-2000	5,176,792	659,106	25,238	34,069	5,895,205
2000-2001	4,857,670	1,725,782	1,822,465	5,547,239	13,953,156
2001-02*	1,016,594	379,981	228,254	2,804,743	4,429,572
Totals	\$13,279,867	\$2,995,859	\$2,075,957	\$8,396,052	\$26,747,735

* Through June 2002

Source: Michigan Department of Agriculture, Finance Division

In addition to the State resources, the MDA received \$2,464,900 from the USDA in FY 2000-01 for livestock identification, wildlife testing, research, training, and outreach. Michigan bovine TB eradication efforts have received significant support, including emergency appropriations, from the USDA through the Cooperative State-Federal Tuberculosis Eradication Program, administered by the Animal and Plant Health Inspection Service (APHIS). Nearly all Federal resources allocated to Michigan do not come through the State budget, but instead are spent directly by APHIS, Veterinary Services office in Michigan for epidemiology, testing, surveillance, animal depopulation, and indemnity.

The level of State expenditures for bovine TB activities is driven, in large part, by the level of expenditures under the Federal government's program. Therefore, resource allocation decisions by the USDA that divert funding from bovine TB eradication efforts in Michigan to other diseases and/or states would require an increase in State expenditures to maintain the program. Similarly, an increase in Federal expenditures in Michigan would relieve the State of some of its financial responsibility. For example, the USDA recently increased the amount it indemnifies producers for animals that have to be destroyed for testing. This change is expected to result in a sizable decrease in the overall level of State indemnification payments. The U.S. Senate Appropriations Committee's recommendation for FY 2002-03 would guarantee \$5 million for the bovine TB program in Michigan. At this time, it is unclear whether Michigan will receive additional Federal funding for eradication efforts in the State above the current level.

CONCLUSION

The most difficult aspect of budgeting for a program such as bovine TB eradication is the uncertainty surrounding the existence and movement of the disease in the wild deer population. As long as the disease exists in the wild deer population, and transmission to livestock a possibility, predicting program costs outside of the infected/surveillance zones will be difficult. In the infected/surveillance zones, where the number of livestock herds is known, State officials can plan, with some certainty, for the costs associated with required whole-herd testing and surveillance. Outside of the infected/surveillance zones, program costs are identifiable, but only to the extent that statewide whole-herd testing is required by January 1, 2004.

Budgeting for the program becomes extremely difficult in the disease-free zone given the possibility that the disease could cross over to livestock. The Michigan Department of Agriculture has proposed a bovine TB surveillance plan for the disease-free zone in Michigan, which will provide State officials with a surveillance strategy based on science and resource availability. While the costs of such a plan can be incorporated into the annual bovine TB project, further discovery of the disease in the disease-free zone will require resources that have not been identified yet.

As surveillance continues in the disease-free zone and more is learned about the status of bovine TB in Michigan, it appears that additional resources may be required. The Michigan Department of Agriculture bovine TB program has been able to rely on its carryforward balance to sustain program expenditures through FY 2001-02; however, it is unknown whether the current resources will support the program through FY 2002-03. Also, disease eradication efforts in Michigan have been supported by significant Federal resources, but it is unclear whether Michigan will receive additional resources from the Federal government in the near future. It is clear, however, that disease monitoring and surveillance will extend for some time beyond FY 2002-03, but at this time the requisite resources have not been identified. The Legislature must consider the proper priority of the bovine TB program in the context of finite State resources, keeping in mind that the goal of the program must remain disease eradication, as opposed to control.