



Michigan Department of Agriculture

Food and Dairy Division

**Annual Report
Fiscal Year 2006**

October 1, 2005 – September 30, 2006

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Food and Dairy Division

2006 Annual Report

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INTRODUCTION

Fiscal Year 2006 was an important year for the Food and Dairy Division. Despite continued challenges with budgets, staffing and foodborne illness outbreaks, we were able to refine our vision for the future in order to focus our limited resources on the most critical issues. That focus is important not just for state government, but for our food safety partners at the local and federal levels, as well as our Michigan food and agriculture industry.

With input from many internal and external stakeholders, we refined our five-year vision to focus in on four key areas:

1. Creating a seamless, integrated food protection and defense system;
2. Ensuring that our staff has the training, tools and authority to proactively solve problems;
3. Ensuring that we have a strong infrastructure to support our staff;
4. Utilizing creative, effective solutions in our work.

A key part of creating a “seamless, integrated food protection and defense system” is close partnerships with our food safety sister agencies at the federal, state and local levels and with industry. Local health departments, in particular, play an integral role in identification and mitigation of food safety problems, while our industry partners are key to the prevention and effective response to problems. Our joint efforts have focused on shared training in areas such as Foodborne Illness Response Strategy (FIRST), Unified Incident Command System, food protection and defense seminars, and advanced milk processing.

We also provided statewide distribution of Emergency Action Plans for Retail Food Establishments, a culmination of work begun after the blackout of 2003. The guide clarifies re-opening requirements for food stores and restaurants after an emergency.

A new project was initiated, in partnership with the Michigan State Police, to evaluate the safety and security of food transported into Michigan from out-of-state. The project was expanded to include several other states in the Great Lakes Region and will be the subject of further surveillance.

The standards we utilize to create a truly seamless, integrated federal, state and local food safety system are called the FDA “Voluntary Retail Food Regulatory Program Standards.” We have completed a baseline self-assessment of the state and local programs and are implementing a strategy to achieve our goal of fully meeting standards by 2010.

It would be impossible to meet our goals without the full cooperation, involvement and assistance of our partners in food safety. Whether public, private or non-profit – our partners are critical to our success in keeping Michigan’s food supply safe.



Katherine Fedder
Director
Food and Dairy Division

PART A - FOOD PROGRAM SUMMARY

Michigan's food service establishments, grocery and convenience stores, food processors and food warehouses are regulated by the Food Section of the Food and Dairy Division, in partnership with Michigan's local health departments. The Food Section works with a variety of corporate, regulatory, consumer and academic partners to assure the food produced, distributed and sold in Michigan is safe. By working closely with these partners, the Food Section has been able to identify and resolve public health issues relating to food safety in a timely manner.

Direct Food Inspection Program

Approximately 46 field staff conduct regular inspections of grocery and convenience stores, food processors, farmer's markets, temporary and fair food operations and food warehouses, ensuring a safe food supply and informing consumers of recalls and other foodborne illness outbreaks. MDA staff perform plan reviews, conduct inspections, process license applications, take enforcement action and investigate complaints.

The division also works closely with various industry segments, such as grocers, wine, cider and honey makers, venison and maple syrup processors, growers and farmers market operators.

Other programs include conducting FDA contract inspections, registration and inspection of bottled water manufacturers and providing certificates of free sale for firms exporting foods around the world.

Local Health Department Food Service Program

Food safety in Michigan's restaurants is a collaborative effort between MDA and the state's 45 independent local health departments. MDA provides statewide program policy, direction, consultation and training services to local health department sanitarians. Local health departments perform plan reviews, conduct inspections, process license applications, take enforcement actions, investigate complaints and conduct foodborne illness outbreak investigations.

Local health department performance is evaluated every three years in conjunction with the "Michigan Local Public Health Accreditation Program." The accreditation program helps to assure accountability for the nearly \$8.8 million allocated by the state to assist local health to conduct the food service program. With the addition of locally set fees and local tax contributions, local health departments operate a \$27 million dollar overall food service program.

Accomplishments

Major accomplishments of the food program in FY06 include:

- **"Emergency Action Plans for Retail Food Establishments"**(EAPs): Laid groundwork for state-wide distribution of EAPs by completing a pilot project measuring the level of establishment emergency preparedness, updated the EAP book based on pilot project results and printed 45,000 copies in four languages. A copy of the EAP will be delivered to most food establishments in 2007. The project utilized a 14-week graduate student internship funded by the University of Michigan School of Public Health.
- Led development of a multi-agency **Interstate Food Transportation Assessment Project** to assess both food safety and food security measures currently used in the Great Lakes Region. Michigan piloted survey techniques and coordinated a four-state survey identifying a need for food safety improvements in the transportation of foods in certain segments of the industry.

- Worked closely with local health departments to achieve significant improvements in their restaurant inspection and foodborne illness investigation programs. The local public health **accreditation program** sets and measures food safety program standards via a partnership between the departments of Agriculture, Community Health, Environmental Quality and the Michigan Public Health Institute. Michigan's accreditation program received one of five national "multi-state learning collaborative" grants awarded to improve the state's accreditation program and share Michigan's successes nationally. Michigan was subsequently awarded a second grant.
- **Expanded problem-solving capacities** by providing multi-disciplinary training for MDA staff and our partners. Examples included: Foodborne Illness Response Strategy (FIRST), Unified Incident Command System, Risk-Based Food Inspections and food protection and defense seminars.
- Selected by federal partners for expanded **fee-for-service partnerships** such as country of origin labeling and food establishment surveillance.
- Hosted the **FDA Central Region Food Protection Conference** in Grand Rapids in June 2006.

Projects

Food Law / Food Code Update: A workgroup was established in 2006 to review and update the Michigan Food Law and consider adoption of the 2005 FDA Model Food Code. Committee recommendations are expected in early 2007.

Foodborne Illness Risk Reduction Initiative: Regulators are continually working with industry to promote active managerial control of food safety and reduce the major foodborne illness risk factors, such as proper holding temperatures and personal hygiene. Strategies include: updates to Michigan's Food Law, the development of new tools for regulators to use such as interactive inspection and risk-based inspection guides, and training/standardization of staff.

FDA Voluntary Retail Program Standards: The division is continually working to meet these eight voluntary national food program standards through its internal food inspection program as well as encourage local health departments to enroll and strive to meet the standards. Standard 1 - Regulatory Foundation - has been self-assessed to be met statewide and the agency will pursue third-party verification auditing in 2007.

Foodborne Illness Outbreak Multi-Jurisdiction Response: A workgroup is developing a plan to improve response when outbreaks occur that involve multiple agencies. Outbreaks may involve a response by several local health departments, along with multiple state and federal agencies.

Wine Industry Good Manufacturing Practices: The Division is participating in a work group to develop good manufacturing practices for the wine industry, working in cooperation with the Michigan Grape and Wine Council.

Honey Industry Good Manufacturing Practices and Guidelines: As a result of a project completed in cooperation with the Southeast Beekeepers, MDA developed guidelines on how to start a honey business. The result has been an increase in the number of requests for plan and label review for new honey producers.

Apple Cider Manager Knowledge: The Cider Guild identified a need to educate their managers on food safety. In response we have worked with Michigan State University, the Cider Guild and other interested stakeholders to identify the basics needed for a manager certification process. A final recommendation should be available in 2007.

Kitchen Incubator in Oceana County: MDA Food Section staff provided guidance regarding how to achieve success as a startup food manufacturer to a group of economic developers in Oceana County. As a result, the kitchen incubator has been able to begin assisting a number of entrepreneurs.

I. FOOD SERVICE – LOCAL HEALTH DEPARTMENTS

PLEASE NOTE: Workload data for FY '05 and '06, except for temporary food service establishments, is the same due to a transition to a new method of counting licensed establishments.

WORKLOAD

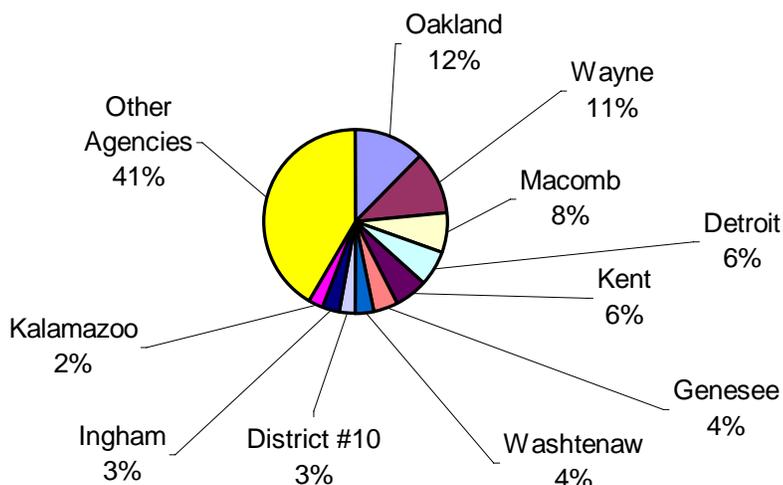
Licensed Establishments	2004/05	2005/06
Fixed Food & Mobile Commissary	31,168	31,168
Temporary	11,575	11,545
Mobile	459	459
Vending.....	5,015	5,015
Special Transitory Food Unit (STFU)	645	645
Total Licensed Establishments	48,862	48,832
Number of licensed establishments per FTE** assigned to conduct inspections	273	253

**FTE = Full time equivalent

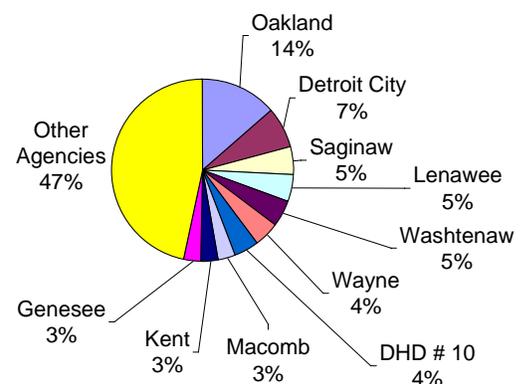
Licensing data from MDA, Food & Dairy Division Annual Reports

Distribution of License Types by Local Health Department

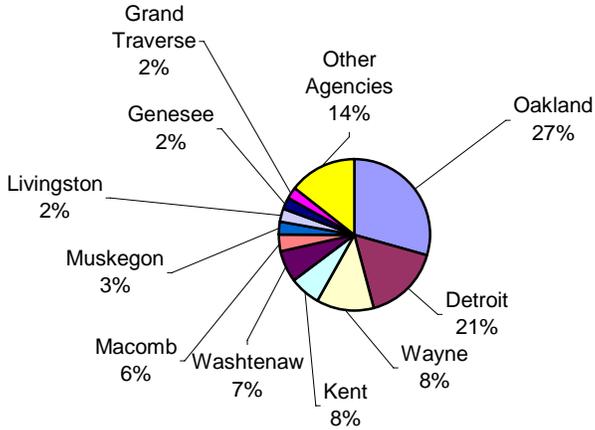
Fixed Licenses



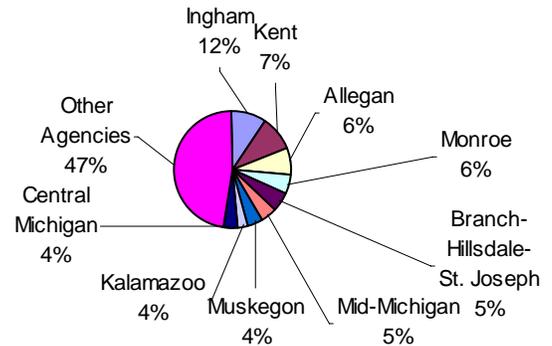
Temporary Licenses



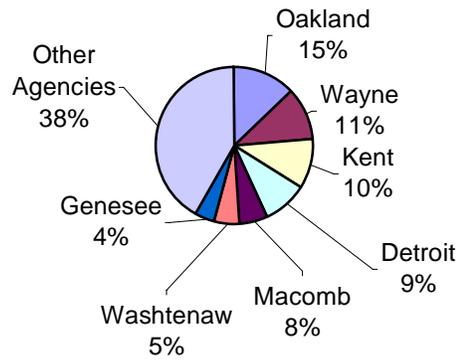
Mobile Licenses



Special Transitory Food Unit (STFU) Licenses



Vending Licenses



WORKFORCE

	LHD Actual	FDA Recommendation	
		Minimum	Recommended
Number of FTEs assigned to conduct food establishment inspections (all types)	193	204	287
Number of FTEs involved in plan review, management and administrative support	135	NA	NA
Total Number of FTEs	328	NA	NA
Number of standardized trainers	60	NA	NA

PROGRAM OUTPUT

I. Inspections

Establishment Type	Inspections Conducted	% Total Inspections	Inspections Due
Fixed food service- routine	57,878	61%	
Mobile, Vending, STFU	4,684	5%	
Sub-Total	62,562	66%	65,608
Follow-up inspections	21,139	22%	
Temporary food service	11,545	12%	
Grand Total	95,246		

Average number of inspections per FTE assigned to conduct food establishment inspections..... 493

II. Plan Review

Number of plans received for review.....	2,024
Number of plans approved.....	1,844

III. Investigations

Consumer complaints investigated (all types).....	4,134
Foodborne illness outbreaks (met MI definition).....	179

IV. Enforcement

Administrative action (office conference, informal hearing, formal hearing, civil fine, order).....	1,508
Court action (civil, criminal).....	4

FUNDING SOURCES

	<u>FY 2004/05</u>	<u>FY2005/06</u>
Fees collected by local health department*	\$ 9,441,840	\$ 10,052,398
Local tax dollars*	\$ 9,064,115	\$ 8,667,427
State dollars- local public health operations (LPHO)*	\$ 8,201,348	\$ 8,249,562
Total local health program revenue.....	\$ 26,707,303	\$ 26,969,387

*Source: Michigan Department of Community Health, Comprehensive Planning and Budgeting Contracts

GENERAL STATISTICS

Occurrence per 100,000 population

Number of fixed food service establishments.....	308
Food related complaints.....	41
Foodborne illness outbreak investigations.....	2.5

Program Dollars Spent Per

Licensed establishment.....	\$723
FTE assigned to the program.....	\$82,209
Michigan citizen (Total Program Revenue).....	\$2.67
Michigan citizen (Fees collected by LHDs)	\$1.00
Michigan citizen (Local tax dollars)	\$0.85
Michigan citizen (LPHO/state dollars)	\$0.82

Michigan population est. broken down by LHD- MALPH.org

II. FOOD – MICHIGAN DEPARTMENT OF AGRICULTURE

WORKLOAD

Licensed Establishments	2004/05	2005/06
Retail Food Establishment	12,796	12,796
Extended Retail Food Establishment	939	939
Wholesale Food Processor	529	529
Limited Wholesale Food Processor	754	754
Food Warehouse	1,004	1,004
Mobile Food Establishment	52	52
Mobile Food Establishment Commissary	42	42
State/County Fair Temporary	1,146	1,146
Special Transitory Food Unit	42	42
Temporary Food Establishment	19	19
Total Licensed Establishments	17,323	17,323
Number of licensed establishments per FTE assigned to conduct inspections	385	385

WORKFORCE

	MDA Actual	FDA Recommended*
Number of FTEs assigned to conduct food Inspections (all types)	45**	66-76
Number of FTEs involved in technical support, management and administrative support	28	NA
Total Number of FTEs	73	NA

*FDA Recommended number from FDA Voluntary Program Standard

** Total number of food inspectors is 46, one FTE of this number dedicated to plan review.

PROGRAM OUTPUT

I. Inspections

Inspection Type	Inspections Conducted	% of Total Inspections	Inspections Due
Routine.....	8,929**	53%	14,771
Ad-hoc*.....	5,124	31%	N/A
Follow-up.....	1,549	9%	1,560
Fair.....	1,166	7%	1,166
Grand Total.....	16,768	100%	17,497

Product samples tested	664
Average number of inspections per FTE assigned to conduct food establishment inspections.....	373

II. Plan Review

Number of plans received for review	314
Number of plans approved	308

III. Investigations

Consumer complaints investigated (all types)	1,087
Illness-related	76
Non-illness related	1,011

IV. Enforcement

Enforcement Letters	268
Compliance Reviews	31
Consent Agreements/Administrative Fines	196/\$61,720
Prosecutions/Fines	6/\$2,900
Seizures	1,143
Dollar Amount of Seized Product	\$814,574
Informal Hearing	5
Formal Hearing/Costs Assessed	1/\$3,800
Reinspections/Fees	147/\$8,820

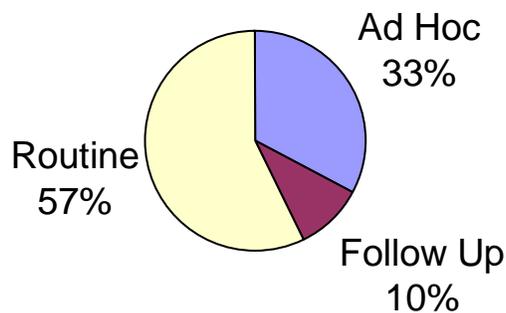
V. Miscellaneous

Certificate of Free Sale	943
Freedom of Information Act Requests	118
Bottled Water Registrations	1,650

*Ad hoc inspections: Includes inspections for new establishments, inspections associated with complaints, and any other inspections initiated by the inspector outside of routine or follow-up inspections.

**Ad hoc inspections often conducted in lieu of routine inspections, thus a number of ad hoc inspections completed fulfill part of the 14,771 routine inspections due. MDA focuses time and resources on highest risk establishments.

Michigan Food Program Inspections by Type



FUNDING SOURCES

	FY 2004/05	FY2005/06
Fees collected by MDA.....	\$2,480,880	\$2,451,625
Federal/Special Revenue funds.....	\$391,420	\$366,610
General fund.....	\$4,211,582	\$4,810,677
Total program revenue.....	\$7,083,882	\$7,628,912

GENERAL STATISTICS

Occurrence per 100,000 population

Number of fixed food establishments*.....	158
Food related complaints.....	11

Program Dollars Spent Per

Licensed establishment.....	\$440
FTE assigned to the program**.....	\$104,506
Michigan citizen (Total Program Revenue).....	\$0.75
Michigan citizen (General Fund).....	\$0.48
Michigan citizen (Licenses Fees/Others)...	\$0.27

* Fixed food establishments include retail food stores, food processors and food warehouses Michigan population est. 10,120,860 (U.S. Census Bureau)

** This number includes Lansing office staff that provide statewide program support

PART B – DAIRY PROGRAM SUMMARY

Dairy inspectors in the Food and Dairy Division carry out a clear mission: ensure safe and wholesome dairy products for consumers. Michigan boasts 2,529 dairy farms – 2,237 Grade A farms and 292 manufacturing farms. In addition, the Dairy Section licenses and inspects more than 70 Michigan dairy processing plants. Enforcement is a strong component of the Dairy Section’s work. Law violations resulted in 171 dairy farm permit suspensions resulting in removal of 3,121,968 pounds of suspect milk from the market with an estimated dollar value of \$424,280.

Accomplishments

Major accomplishments of the dairy program in FY06 include:

- **Dairy Law Update:** In 2000 and 2001, MDA worked with stakeholders to substantially revise Michigan’s dairy laws, combining 21 laws and regulations and adopting the 2001 Pasteurized Milk Ordinance (PMO). The Grade A Milk Law of 2001 and the Manufacturing Milk Law of 2001 are the result of those efforts. Since that time, the PMO, which is the milk safety standard for all 50 states, has been updated and the 2005 revision of the PMO is available for states to adopt.

In June 2006, Food and Dairy Division staff met with the dairy industry to begin the process of updating Michigan’s dairy laws. The Dairy Law Update Workgroup, which is a broad-based group of dairy stakeholders, including dairy farmer representatives, milk haulers and processors, Michigan State University staff, industry organizations and MDA staff, reviewed the major changes in the PMO since 2001. General consensus was reached with regard to adoption of the 2005 PMO. The recommendation will be presented to the Legislature.

During the summer and fall of 2006, the Dairy Law Update Workgroup reviewed proposed amendments to the Grade A Milk Law of 2001 and the Manufacturing Milk Law of 2001 with the goal of finalizing language to be presented to the Michigan Legislature in 2007.

- **Certified Dairy Industry Field Representative Inspection Program:** Because of a reduction in the number of MDA dairy inspectors in late 2005, the Dairy Section, in cooperation with dairy industry cooperatives, implemented the “Certified Industry Field Representative Inspection Program” for Grade A dairy farms located in Huron, Tuscola and Sanilac counties.

Michigan is one of only a few states in the U.S. that has a certified industry field representative inspection program for its Grade A dairy farms. Section 5 of the Grade ‘A’ PMO outlines the requirements for this program. Michigan currently has 28 licensed certified industry field representatives. The program enables these representatives to conduct Grade A dairy farm inspections in place of some inspections normally conducted by MDA dairy inspectors.

Projects

In-Line Milk Samplers: Milk producers in Michigan are installing in-line milk samplers which allow them to direct load milk from the pipeline through a chiller to the milk tanker. This new technology is now available because of a proposal submitted in 2005 by the Dairy Section to the National Conference on Interstate Milk Shipments. Dairy Section staff reviewed the Pasteurized Milk Ordinance requirements for installing in-line samplers and formulated policies, training materials and recommendations to aid dairy farmers in the construction of their facilities to meet the requirements. Many other states are now using the in-line sampler guidelines developed by MDA staff.

Advanced Milk Processing Course: MDA’s Food and Dairy Division, in cooperation with the Food and Drug Administration conducted an Advanced Milk Processing Course in Grand Rapids, Michigan in March 2006. The target audience for the training course was milk safety regulatory staff from Michigan as well as other states. The goal of the course was to enhance participant’s knowledge and skills necessary to evaluate and inspect the sanitary status of milk processing plants. The course included a field trip to an aseptic dairy plant in the area, providing regulatory personnel the opportunity for hands-on training with aseptic processes and equipment.

Formal Hearing for License Revocation: In October 2005, a hearing was held with a dairy plant located in Croswell, Michigan, to discuss alleged violations of the Grade A Milk Law of 2001, 2001 PA 266. This hearing was the first step in the formal proceedings for license revocation based on alleged violations of producer security requirements and other standards requirements. After discussion of the alleged violations, the owner acknowledged responsibility for all violations. As a result, the dairy plant voluntarily relinquished its license.

WORKLOAD

Licensed Establishments	2004/05	2005/06
Farms	2,586	2,529
Grade A Plants	31	30
Manufacturing Plants (includes cheese and ice cream)	41	42
Grade A Milk Distributors	13	12
Grade A Transfer Stations/Receiving Stations/Tank Truck Cleaning	12	12
Grade A Single Service	6	6
Milk Tank Trucks and Can Milk Trucks	512	480
Milk Transportation Companies	147	122
Milk Hauler/Samplers (currently licensed)	731	644
Certified Fieldpersons	28	28
Total Licenses	4,107	3,905
 Number of licensed establishments per FTE assigned to conduct inspections	 228	 230

WORKFORCE

	MDA Actual
Number of FTEs assigned to conduct dairy inspections	17
(dairy, farm & plant inspections)	
Number of FTEs involved in management, technical support and administrative support	8
Total Number of FTEs	25

PROGRAM OUTPUT

I. Inspections and Evaluations

Inspection Type	Inspections Conducted
Farm*	6,223
Plants	401
Hauler/Sampler/Tanker	667
Pasteurization	415
USDA Survey	20
Total Inspections	7,726
 Grade A Survey (audits)	 65
Laboratory Analysts Evaluated	143
Laboratories Evaluated	8
Drug Residue Screening Sites Evaluated	20
Shelf life samples	103
Total milk & milk product samples taken	3,483
Total milk & milk product test determinations	10,011
Average number of inspections per FTE assigned to conduct dairy establishment inspections.....	455

II. Investigations

Consumer complaints investigated (all types)..... 17

III. Enforcement

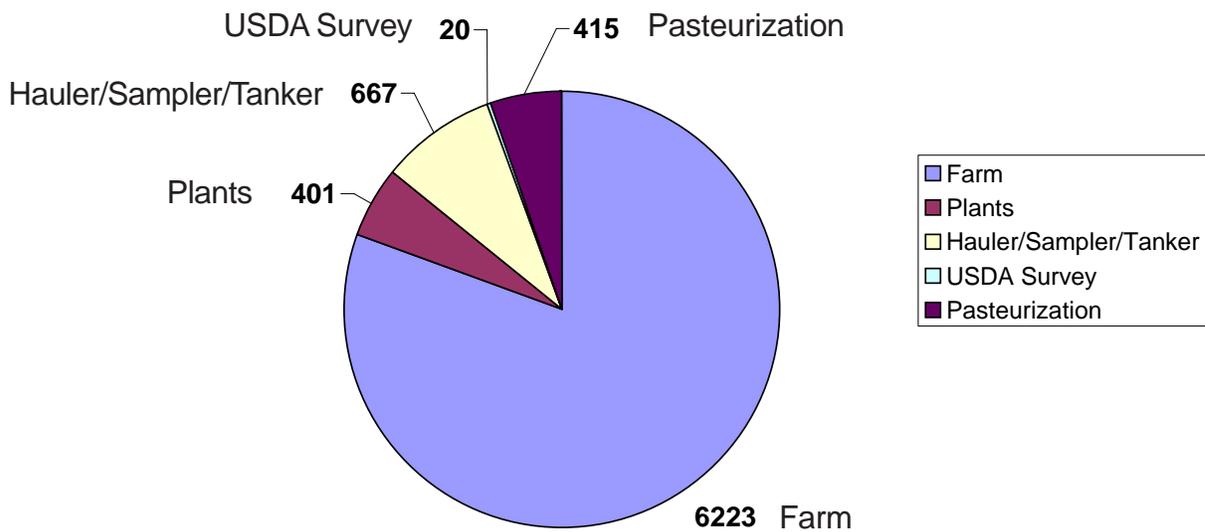
Enforcement Letters 234
 Compliance Reviews 16
 Drug Residue Fines \$4,410
 Prosecutions 0
 Seizures..... 2
 Dollar amount of seized products..... \$140,991
 Total Permit Suspensions 171
 Total Pounds of Contaminated Milk Disposal 3,121,968 (\$424,280)

IV. Miscellaneous

Certificate of Free Sale 350
 Freedom of Information Act Requests 58

*Farm number includes some inspections conducted by certified industry field representatives on behalf of MDA staff

**Number of Inspections by Type,
 performed by the
 Michigan Dairy Program**



FUNDING SOURCES

	FY 2004/05	FY2005/06
Fees collected by MDA	\$46,150	\$62,075
Special Revenue Funds	\$22,146	\$23,023
General funds	\$2,751,018	\$2,707,523
Total program revenue	\$2,819,314	\$2,792,621

GENERAL STATISTICS

Occurrence per 100,000 population

Number of dairy farms	25
Number of dairy manufacturers	1

Program Dollars Spent Per

Licensed establishment	\$715
FTE assigned to the program*	\$111,705
Michigan citizen (Total Program Revenue)	\$0.28
Michigan citizen (General Fund)	\$0.27
Michigan citizen (License Fees/Other)	\$0.01

*This number includes Lansing office staff that provide statewide program support Michigan population est. 10,120,860 (U.S. Census Bureau)

PART C – FOODBORNE ILLNESS OUTBREAKS

SUMMARY

The Michigan Department of Agriculture maintains a database of reported illness incidents that meet the Michigan definition of a foodborne illness outbreak. This comprises incidents involving two or more cases, not of the same household, who have ingested a common food and have similar symptoms, or incidents involving the same pathogen. Also included are single incidents of certain rare foodborne pathogens (based on the definition in the Michigan Food Law, P.A. 92 of 2000, Section 3103). Current guidance for local health departments on foodborne illness outbreak reporting is available in the web: http://www.mda.state.mi.us/industry/fooddata/FSSS/0603_FBI_MPR.pdf



I. Overview of Results

A total of **179** events meeting the Michigan definition of a foodborne illness outbreak were reported by local health departments to MDA. Gastrointestinal illness can be transmitted by several means, including:

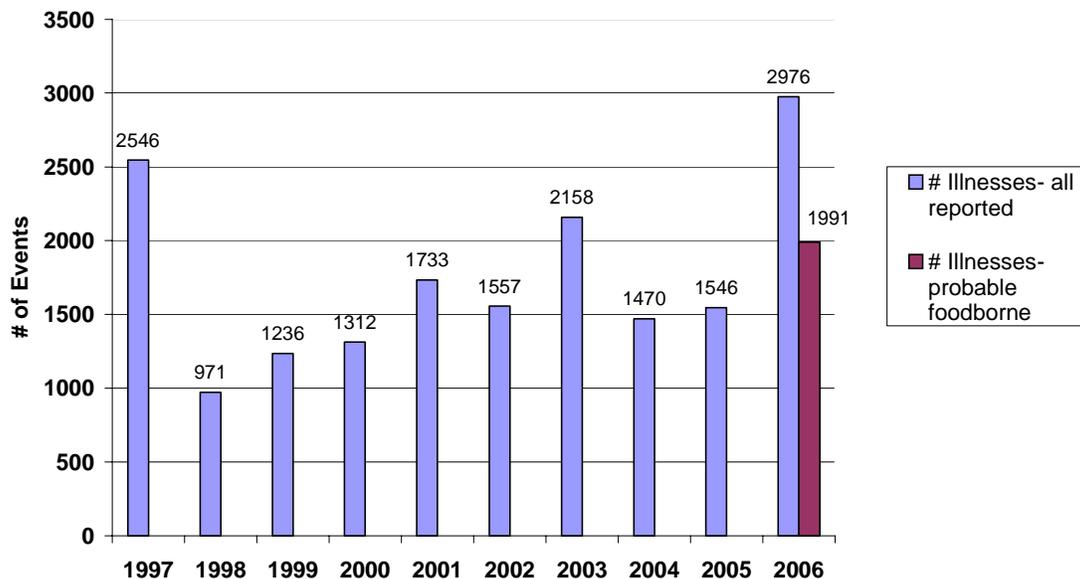
- Person to person contact
- Animal to person contact (Zoonotic)
- Consumption of contaminated water
- Consumption of contaminated food

Although ill individuals in reported outbreaks shared common food sources, it was often not possible to rule out other routes of illness transmission- particularly in smaller incidents.

Of the 179 potential foodborne illness outbreaks, local health departments identified a total of **29** incidents as probable foodborne illness outbreaks after complete investigation. This number is low due to indeterminate conclusions or lack of conclusions stated in final reports.

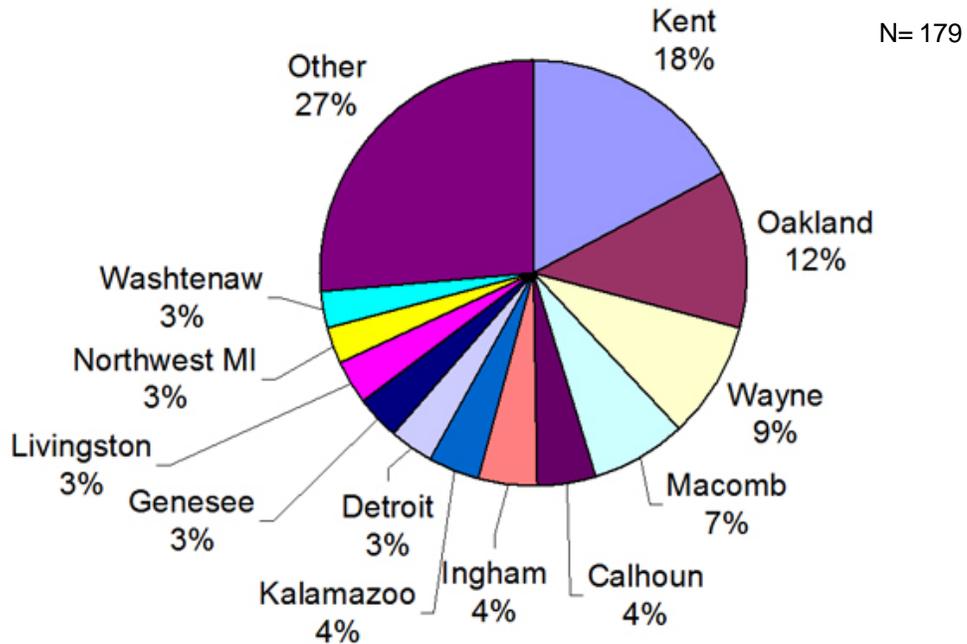
Total of potential foodborne illness outbreak complaints:.....	179 (2,976 illnesses)
Total number of probable foodborne illness outbreak complaints:.....	29 (1,991 illnesses)
Median number of illnesses per probable foodborne illness outbreaks:	28
Leading causative agents in probable foodborne illness outbreaks:	
Norovirus.....	14 (50%)
Percentage of time causative agent identified in all reported potential outbreaks:.....	17%

**Ten-Year Summary of Foodborne Illness Outbreaks,
by Number of Illnesses, 1997-2006**



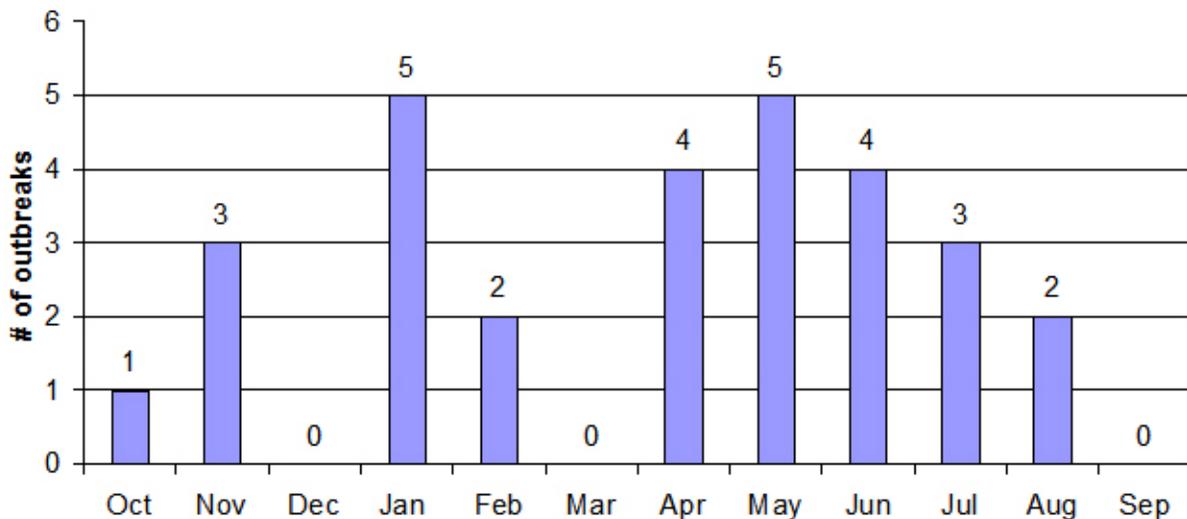
Note: Statistics prior to 2002 were based on the calendar year rather than on the fiscal year.

Foodborne Illness Outbreaks by Local Health Department

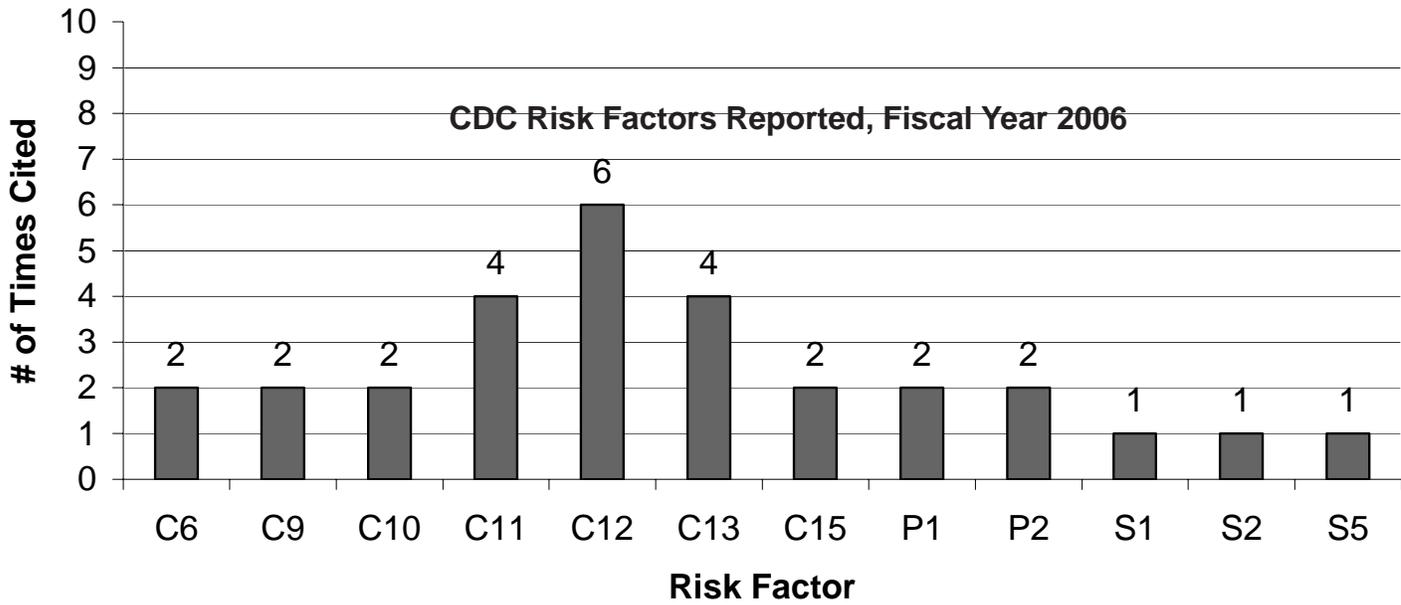
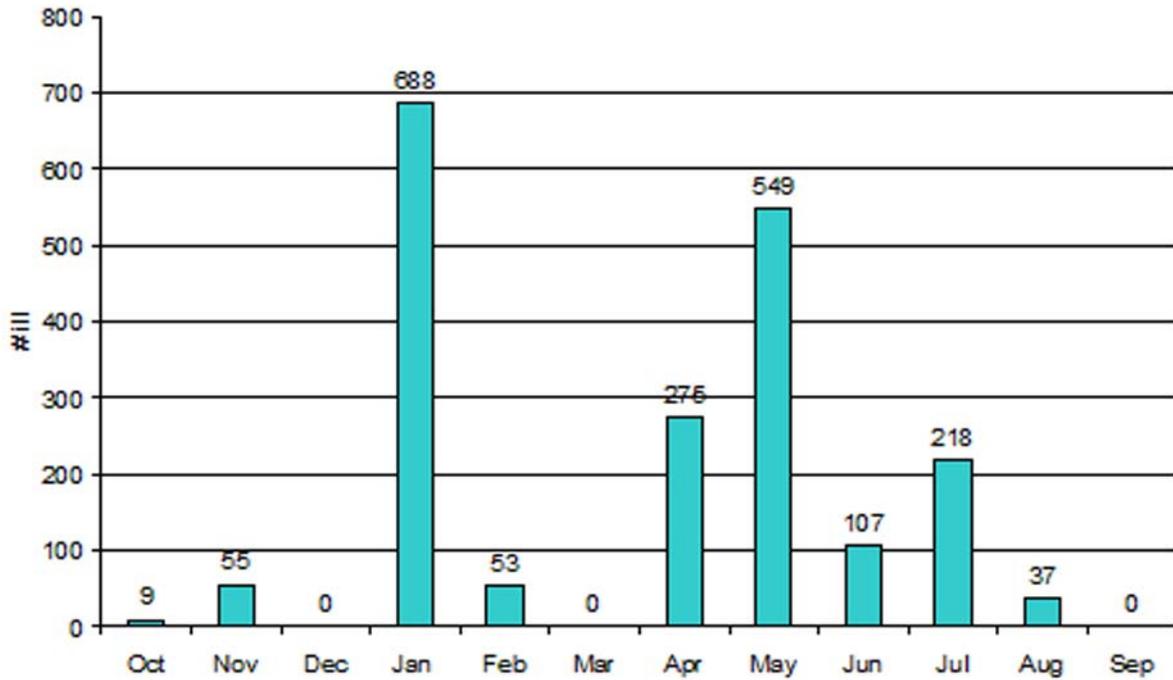


Note: Data cannot be interpreted as indicator of the relative safety of foods in any jurisdiction. Health departments with larger populations would be expected to have larger numbers of outbreaks.

Probable Foodborne Illness Outbreaks, # of Events, by Month



**Probable Foodborne Illness Outbreaks, # of Illnesses,
by Month**



Key: Partial list of risk factors, from CDC form 52.13

C6	Raw product/ingredient contaminated by pathogens from animal or environment
C9	Cross-contamination from raw ingredient of animal origin
C10	Bare-handed contact by food handler/worker/preparer
C11	Glove-handed contact by food handler/worker/preparer
C12	Handling by an infected person or carrier of pathogen
C13	Inadequate cleaning of processing/preparation equipment/utensils
C15	Other source of contamination
P1	Allowing foods to remain at room or warm outdoor temperature for several hours
P2	Slow cooling
S1	Insufficient time and/or temp during initial cooking/heat processing
S2	Insufficient time and/or temp during reheating
S5	Other process failures that permit the agent to survive

I. MDA Recommendations for Regulators conducting Food and Dairy Inspections:

Emphasize exclusion and/or restriction of ill food handlers, discussing risk of transmission and the health and financial consequences that could ensue

- Focus on finding and eliminating unsafe food handling practices that are highly associated with foodborne illness during routine food safety inspections
- Review handwashing and glove-use procedures
- Evaluate cleaning and sanitizing practices for food equipment and utensils

II. MDA Recommendations for Local Health Departments:

- In final reporting and termination reports for outbreaks, give a conclusion stating whether or not the outbreak was deemed foodborne based on investigation findings
- Submit completed CDC 52.13 forms with all events deemed probable foodborne illness outbreaks

III. Foodborne Illness Outbreak Reporting by Local Health Departments:

- MDA uses foodborne illness data to:
 - Investigate emerging threats
 - Illustrate trends, and
 - Ensure accurate reports are reflected at the state and national level
- Final reports were received for 94.4% of reported potential foodborne illness outbreaks
- Accreditation findings show that 92% percent of local health departments were found to respond to a foodborne illness complaints within 24 hours of notification (Minimum Program Requirement 6.1), and 54% percent met foodborne illness investigation procedure requirements relating to documentation and reporting of foodborne illness outbreaks (Minimum Program Requirement 6.2)

APPENDIX I- Workload Data by LHD

FY2005/06 Workload – Output

**Michigan Local Health Department Quarterly Reports
Summary, 2006**

	INSPECTIONS CONDUCTED					INSPECTIONS DUE	PLAN REVIEW		INVESTIGATIONS	
	3. Fixed food establishments	4. Mobile, vending & sfvu	5. Temporary food establishments	6. Follow-up inspections	Total Number of Inspections Conducted (all inspection types)		8. Number of plans received for review	9. Number of plans approved	10. Consumer Complaints Investigated	Number of Consumer Complaints per 100,000 People
Allegan	537	43	60	84	724	397	15	13	3	2.85
BEDHD	901	56	197	114	1,268	1058	39	32	79	47.47
Bay	694	18	161	77	950	20	11	14	32	29.23
Benzie-Leelanau	351	5	129	117	602	372	12	9	12	30.28
Berrien	1,102	31	315	184	1,632	1,139	14	8	48	29.43
BHSJ	923	160	248	238	1,569	1,100	22	24	43	27.41
Calhoun	787	208	264	192	1,451	1,451	16	13	50	35.95
CMDHD	1,249	43	115	850	2,257	1,358	41	31	73	38.27
Chippewa	251	2	46	80	379	395	4	4	33	85.07
Delta-Menominee	463	12	172	345	992	475	12	10	5	7.87
Detroit City	2,259	134	841	838	4,072	3,217	92	75	128	14.22
Dickinson-Iron	343	4	35	104	486	347	9	8	11	27.55
DHD # 2	408	6	177	17	608	473	11	10	20	28.66
DHD # 4	626	12	91	152	881	673	32	28	17	20.52
DHD # 10	1,570	161	505	349	2,585	1,750	50	36	71	26.73
Genesee	2,336	212	323	300	3,171	2,548	75	76	247	55.64
Grand Traverse	617	69	82	110	878	747	23	15	23	27.79
Holland City	255	84	67	204	610	268	4	3	26	75.13
Huron	307	12	137	202	658	319	8	6	1	2.86
Ingham	1,789	189	234	735	2,947	2,967	70	65	269	96.05
Ionia	295	21	175	111	602	316	14	10	23	35.73
Jackson	812	65	133	106	1,116	933	39	26	76	46.63
Kalamazoo	1,492	96	230	269	2,087	1,429	55	58	79	32.82
Kent	3,365	276	353	1,371	5,365	4,262	109	105	260	43.78
Lapeer	444	50	76	95	665	665	17	17	40	43.24
Lenawee	639	98	545	87	1,369	556	25	22	66	64.85
Livingston	735	73	139	166	1,113	808	35	31	103	58.02
LMAS	424	9	148	55	636	472	9	5	5	13.56
Macomb	4,214	184	375	1,477	6,250	4,376	151	199	394	47.89
Marquette	537	53	96	260	946	590	8	9	22	33.91
Midland	658	33	120	62	873	691	45	41	46	54.36
Mid-Michigan	990	100	239	346	1,675	825	35	34	22	12.58
Monroe	859	38	140	266	1,303	919	35	32	64	41.95
Muskegon	912	94	154	528	1,688	1,062	47	47	135	77.41
Northwest	1,004	46	200	338	1,588	1,193	42	41	27	24.78
Oakland	8,632	1,012	1,570	4,956	16,170	10,736	282	283	777	64.04
Ottawa	1,121	105	243	709	2,178	1,118	43	14	61	27.13
Saginaw	1,353	53	572	267	2,245	2,245	73	39	140	66.97
Sanilac	262	20	52	9	343	278	6	6	7	15.62
Shiawassee	278	31	61	28	398	322	12	7	3	4.10
St. Clair	1,055	42	232	139	1,468	907	34	32	56	32.76
Tuscola	273	27	96	144	540	540	15	11	15	25.58
VanBuren-Cass	606	37	134	63	840	700	6	4	3	2.30
Washtenaw	2,053	120	543	558	3,274	2,279	92	76	170	50.12
Wayne	6,404	530	515	3,369	10,818	7,105	211	194	318	28.49
Western UP	693	10	205	68	976	682	24	21	31	43.62
Totals	57,878	4,684	11,545	21,139	95,246	65,608	2,024	1,844	4,134	40.88
Average	1,258	102	251	460	2,071	1,526	44	40	90	37
Median	761	52	174	188	1,192	825	29	23	45	33
Minimum	251	2	35	9	343	268	4	3	1	2
Maximum	8,632	1,012	1,570	4,956	16,170	10,736	282	283	777	96

APPENDIX II- Output Data - Licensing by LHD

Michigan local Health Department Quarterly Reports Summary 2006

	ENFORCEMENT CONDUCTED		LICENSED FACILITIES											
	12. Administrative Action: office conference, informal conference, formal hearing, civil fines, orders	13. Court Action: civil, criminal	Licensed Fixed Food Establishments	Fixed Licenses- % of Total Fixed Licenses	Licensed Mobile Establishments	Mobile Licenses- % of Total Mobile Licenses	Licensed STFU Establishments	STFU Licenses- % of Total STFU Licenses	Licensed Vending Establishments	Vending Licenses- % of Total Vending Licenses	Licensed Temporary Establishments (Number of temporary inspections used to equal # of Licenses)	Temporary Licenses- % of Total Temporary Licenses	Total Licensed Establishments (excluding temporary)	Fixed Food Establishments per 100,000 people
Allegan	1	0	321	1	0	0	41	6	28	1	60	1	390	305
BEDHD	19	1	499	2	5	1	10	2	61	1	197	2	575	300
Bay	3	1	407	1	2	0	2	0	22	0	161	1	433	372
Benzie-Leelanau	2	0	178	1	4	1	2	0	5	0	129	1	189	449
Berrien	2	0	635	2	7	2	3	0	74	1	315	3	719	389
BHSJ	7	0	506	2	5	1	34	5	118	2	248	2	663	323
Calhoun	1	0	486	2	7	2	11	2	80	2	264	2	584	349
CMDHD	9	0	294	1	0	0	25	4	14	0	115	1	333	154
Chippewa	10	0	197	1	1	0	0	0	5	0	46	0	203	508
Delta-Menominee	0	0	265	1	0	0	9	1	19	0	172	1	293	417
Detroit City	23	0	1756	6	96	21	4	1	434	9	841	7	2290	195
Dickinson-Iron	2	0	209	1	1	0	1	0	14	0	35	0	225	523
DHD # 2	54	0	333	1	0	0	6	1	8	0	177	2	347	477
DHD # 4	3	0	416	1	1	0	6	1	3	0	91	1	426	502
DHD # 10	18	1	955	3	4	1	25	4	83	2	505	4	1067	360
Genesee	16	0	1308	4	9	2	19	3	176	4	323	3	1512	295
Grand Traverse	1	0	306	1	9	2	15	2	55	1	82	1	385	370
Holland City	3	0	127	0	0	0	7	1	49	1	67	1	183	367
Huron	3	0	181	1	0	0	10	2	21	0	137	1	212	518
Ingham	102	0	951	3	2	0	75	12	84	2	234	2	1112	340
Ionia	2	0	164	1	0	0	10	2	26	1	175	2	200	255
Jackson	23	0	460	1	0	0	16	2	69	1	133	1	545	282
Kalamazoo	35	0	777	2	4	1	27	4	119	2	230	2	927	323
Kent	95	0	1763	6	36	8	43	7	490	10	353	3	2332	297
Lapeer	19	0	238	1	2	0	11	2	28	1	76	1	279	257
Lenawee	8	0	342	1	6	1	0	0	67	1	545	5	415	336
Livingston	6	0	392	1	11	2	12	2	56	1	139	1	471	221
LMAS	2	0	287	1	3	1	2	0	7	0	148	1	299	778
Macomb	152	0	2349	8	27	6	14	2	394	8	375	3	2784	286
Marquette	25	0	270	1	0	0	5	1	20	0	96	1	295	416
Midland	2	0	260	1	2	0	15	2	16	0	120	1	293	307
Mid-Michigan	52	0	509	2	0	0	30	5	83	2	239	2	622	291
Monroe	2	0	473	2	1	0	40	6	46	1	140	1	560	310
Muskegon	10	0	546	2	15	3	29	4	126	3	154	1	716	313
Northwest	5	1	640	2	3	1	6	1	39	1	200	2	688	587
Oakland	76	0	3801	12	123	27	6	1	745	15	1,570	14	4675	313
Ottawa	113	0	534	2	0	0	0	0	152	3	243	2	686	237
Saginaw	76	0	683	2	2	0	3	0	145	3	572	5	833	327
Sanilac	1	0	152	0	1	0	7	1	19	0	52	0	179	339
Shiawassee	3	0	196	1	0	0	13	2	18	0	61	1	227	268
St. Clair	19	0	496	2	2	0	6	1	98	2	232	2	602	290
Tuscola	10	0	159	1	0	0	6	1	21	0	96	1	186	271
VanBuren-Cass	0	0	392	1	1	0	7	1	34	1	134	1	434	301
Washtenaw	54	0	1111	4	30	7	16	2	271	5	543	5	1428	328
Wayne	426	0	3444	11	37	8	14	2	567	11	515	4	4062	309
Western UP	13	0	400	1	0	0	2	0	6	0	205	2	408	563
Totals	1,508	4	31,168	XXX	459	XXX	645	XXX	5,015	XXX	11,545	XXX	37,287	XXX
Average	33	0	678	XXX	10	XXX	14	XXX	109	XXX	251	XXX	811	308
Median	10	0	412	XXX	2	XXX	10	XXX	52	XXX	174	XXX	453	323
Minimum	0	0	127	0	0	0	0	0	3	0	35	0	179	154
Maximum	426	1	3,801	12	123	27	75	12	745	15	1,570	14	4,675	778

APPENDIX III- Program Staffing- Program Revenue by LHD

**Michigan Local Health Department Quarterly Reports
Summary 2006**

	IMPORTANT FACTOR IV STAFFING						FINANCIAL						Population	
	14. Total number of FTE's assigned to the food program in the following areas: plan review, supervision, coordination, clerical	15. Total number of FTE's assigned to conduct food establishment inspections (all types)	Total FTE's	Minimum Staffing (Compare to column 15)	Recommended Staffing (Compare to column 15)	Average Number of Inspections per FTE Assigned to Conduct Food Establishment Inspections	Fees Collected	Local Tax Dollars	LPHO Dollars	Total Program Revenue	Program Dollars per Licensed Establishment	Program Dollars per FTE		Program Dollars per Citizen
Allegan	0.70	1.80	2.5	1.9	2.8	402	91,292	82,023	89,185	262,500	673	105,000	2.49	105,366
BEDHD	2.00	3.10	5.1	3.2	4.5	409	167,644	135,172	129,927	432,743	753	84,852	2.60	166,427
Bay	0.75	2.50	3.25	2.5	3.4	380	83,966	117,670	91,984	293,620	678	90,345	2.68	109,480
Benzie-Leelanau	1.50	1.20	2.7	1.3	1.7	502	54,798	16,668	41,974	113,440	600	42,015	2.86	39,629
Berrien	1.00	4.50	5.5	4.2	5.8	363	108,510	55,767	152,463	316,740	441	57,589	1.94	163,125
BHSJ	1.00	4.00	5	3.8	5.2	392	169,965	85,029	132,203	387,197	584	77,439	2.47	156,878
Calhoun	4.81	3.50	8.31	3.5	4.8	415	184,122	188,924	184,678	557,724	955	67,115	4.01	139,067
CMDHD	1.30	2.40	3.7	1.9	2.6	940	213,774	122,324	115,149	451,247	1,355	121,959	2.37	190,757
Chippewa	1.07	1.13	2.2	1.1	1.5	335	60,146	51,724	40,208	152,078	749	69,126	3.92	38,791
Delta-Menominee	1.88	1.18	3.06	1.9	2.5	841	71,182	1,515	52,971	125,688	429	41,068	1.98	63,554
Detroit City	5.00	11.00	16	13.0	18.1	370	939,251	206,316	513,576	1,659,143	725	103,696	1.84	900,198
Dickinson-Iron	0.88	0.77	1.65	1.1	1.6	631	62,189	127	51,138	113,454	504	68,760	2.84	39,932
DHD # 2	1.83	0.85	2.68	2.1	2.9	715	93,463	84,608	81,978	260,049	749	97,033	3.73	69,786
DHD # 4	1.00	1.93	2.93	2.2	3.1	456	117,285	42,307	81,467	241,059	566	82,273	2.91	82,832
DHD # 10	6.00	6.00	12	6.4	8.8	431	271,629	225,004	219,452	716,085	671	59,674	2.70	265,600
Genesee	4.40	9.50	13.9	7.8	11.2	334	517,836	510,012	464,911	1,492,759	987	107,393	3.36	443,947
Grand Traverse	0.40	2.40	2.8	2.0	2.8	366	128,321	48,926	76,178	253,425	658	90,509	3.06	82,752
Holland City	1.24	1.33	2.57	1.0	1.4	459				0	0	0	0.00	34,606
Huron	0.30	0.81	1.108	1.4	1.9	814	68,851	20,003	34,218	123,072	581	111,076	3.52	34,948
Ingham	11.80	9.20	21	5.7	8.2	320	498,834	32,036	218,193	749,063	674	35,670	2.67	280,073
Ionia	1.30	1.10	2.4	1.5	1.9	547	53,484	32,352	22,171	108,007	540	45,003	1.68	64,378
Jackson	1.50	2.60	4.1	2.9	4.1	429	190,487	241,668	121,654	553,809	1,016	135,075	3.40	162,973
Kalamazoo	3.00	5.00	8	4.9	6.9	417	251,732	27,518	215,263	494,513	533	61,814	2.05	240,724
Kent	3.10	9.00	12.1	11.5	16.7	596	488,598	146,568	350,443	985,609	423	81,455	1.66	593,898
Lapeer	1.50	2.20	3.7	1.5	2.1	302	77,769	46,162	76,257	200,188	718	54,105	2.16	92,510
Lenawee	1.24	1.33	2.57	3.7	4.6	1,029	130,952	85,910	105,825	322,687	778	125,559	3.17	101,768
Livingston	3.35	3.00	6.35	2.6	3.6	371	251,605	41,744	106,921	400,270	850	63,035	2.25	177,538
LMAS	2.07	0.38	2.45	1.8	2.5	1,674	114,478	1,523	125,699	241,700	808	98,653	6.56	36,867
Macomb	6.00	15.00	21	13.6	19.8	417	523,062	546,963	594,041	1,664,066	598	79,241	2.02	822,660
Marquette	0.67	1.91	2.58	1.6	2.3	495	98,044	10,254	60,678	168,976	573	65,495	2.60	64,874
Midland	1.08	1.04	2.12	1.7	2.4	839	60,949	64,969	70,524	196,442	670	92,661	2.32	84,615
Mid-Michigan	1.70	3.50	5.2	3.6	4.9	479	130,162	146,628	225,899	502,689	808	96,671	2.88	174,823
Monroe	0.40	1.90	2.3	3.0	4.2	686	124,603	53,814	79,850	258,267	461	112,290	1.69	152,552
Muskegon	1.65	4.00	5.65	3.7	5.3	422	250,761	65,777	99,006	415,544	580	73,548	2.38	174,401
Northwest	6.00	3.25	9.25	3.7	5.3	489	193,411	147,016	88,440	428,867	623	46,364	3.94	108,965
Oakland	15.70	22.60	38.3	26.0	36.4	715	689,980	2,249,663	853,593	3,793,236	811	99,040	3.13	1,213,339
Ottawa	2.30	3.30	5.6	3.9	5.4	660	244,648	150,112	143,339	538,099	784	96,089	2.39	224,856
Saginaw	2.80	3.10	5.9	5.6	7.5	724	178,313	49,866	266,664	494,843	594	83,872	2.37	209,062
Sanilac	0.98	0.71	1.69	1.0	1.4	483	0	39,764	44,726	84,490	472	49,994	1.88	44,828
Shiawassee	0.60	0.80	1.4	1.2	1.7	498	51,664	33,504	66,992	152,160	670	108,686	2.08	73,125
St. Clair	9.00	7.00	16	3.4	4.8	210	114,378	183,004	162,592	459,974	764	28,748	2.69	170,916
Tuscola	0.32	0.85	1.17	1.1	1.6	635	46,974	9,149	42,481	98,604	530	84,277	1.68	58,646
VanBuren-Cass	1.40	1.80	3.2	2.4	3.3	467	85,948	93,073	96,459	275,480	635	86,088	2.11	130,302
Washtenaw	3.20	8.40	11.6	8.2	11.3	390	602,472	103,875	273,025	979,372	686	84,429	2.89	339,191
Wayne	12.00	19.00	31	19.8	28.8	569	1,074,260	2,016,559	1,083,300	4,174,119	1,028	134,649	3.74	1,116,004
Western UP	3.05	1.42	4.47	2.5	3.4	687	120,606	53,837	101,867	276,310	677	61,814	3.89	71,067
Totals	134.77	193.29	328	204	287	XXX	10,052,398	8,667,427	8,249,562	26,969,387	30,963	3,661,245	XX	10,112,620
Average	2.93	4.20	7	4	6	493	223,387	192,609	183,324	586,291	723	82,209	2.67	219,840
Median	1.58	2.45	4	3	4	473	128,321	65,777	105,825	319,714	671	83,072	2.60	134,685
Minimum	0.30	0.38	1	1	1	210	0	127	22,171	0	0	0.00	0.00	34,606
Maximum	15.70	22.60	38	26	36	1,674	1,074,260	2,249,663	1,083,300	4,174,119	1,355	135,075	6.56	1,213,339

Population figures from www.malph.org

APPENDIX IV- Foodborne Illness Outbreaks by LHD

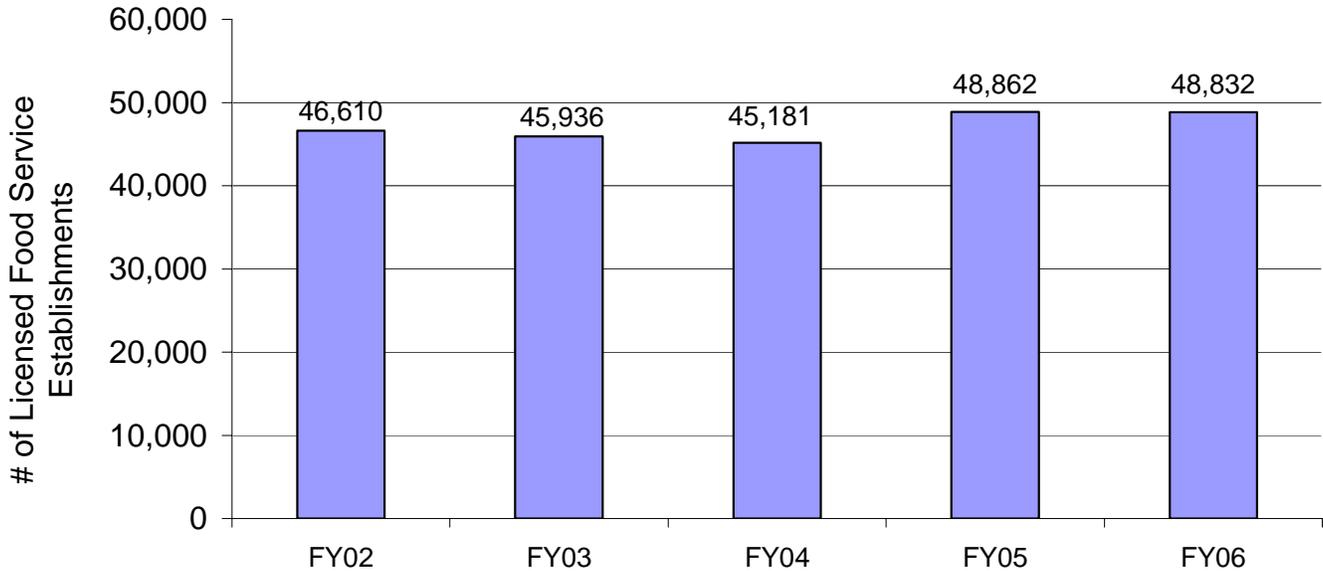
Potential Foodborne Illness Outbreaks by Local Health Department							
Jurisdiction	FBI Outbreaks	% of Total FBIs	% of Total MI FSEs	Population	% of Total Population	Reports Filed w/ State	Missing Reports
KENT	31	17.3%	5.7%	593,898	5.9%	31	0
OAKLAND	21	11.7%	12.2%	1,213,339	12.0%	18	3
WAYNE	16	8.9%	11.0%	1,116,004	11.0%	14	2
MACOMB	13	7.3%	7.5%	822,660	8.1%	13	0
CALHOUN	8	4.5%	1.6%	139,067	1.4%	7	1
INGHAM	8	4.5%	3.1%	280,073	2.8%	8	0
KALAMAZOO	7	3.9%	2.5%	240,724	2.4%	7	0
DETROIT	6	3.4%	5.6%	900,198	8.9%	6	0
GENESEE	6	3.4%	4.2%	443,947	4.4%	6	0
LIVINGSTON	6	3.4%	1.3%	177,538	1.8%	6	0
NORTHWEST MI	5	2.8%	2.1%	108,955	1.1%	3	2
WASHTENAW	5	2.8%	3.6%	339,191	3.4%	5	0
BERRIEN	4	2.2%	2.0%	163,125	1.6%	4	0
DHD #10	4	2.2%	3.1%	265,600	2.6%	4	0
GRAND TRAVERS	4	2.2%	1.0%	82,752	0.8%	4	0
OTTAWA	4	2.2%	1.7%	224,856	2.2%	4	0
SAGINAW	4	2.2%	2.2%	209,062	2.1%	4	0
BR-HILLS-STJOE	3	1.7%	1.6%	156,878	1.6%	3	0
BARRY-EATON	2	1.1%	1.6%	166,427	1.6%	2	0
JACKSON	2	1.1%	1.5%	162,973	1.6%	2	0
MIDLAND	2	1.1%	0.8%	84,615	0.8%	2	0
MID-MI DHD	2	1.1%	1.6%	174,823	1.7%	2	0
MUSKEGON	2	1.1%	1.8%	174,401	1.7%	2	0
TUSCOLA	2	1.1%	0.5%	58,646	0.6%	2	0
ALLEGAN	1	0.6%	1.0%	105,366	1.0%	1	0
CENTRAL MI	1	0.6%	0.9%	190,757	1.9%	1	0
CHIPPEWA	1	0.6%	0.6%	38,791	0.4%	0	1
DELTA-MENOMINE	1	0.6%	0.9%	63,554	0.6%	1	0
DHD #2	1	0.6%	1.1%	69,786	0.7%	1	0
DHD #4	1	0.6%	1.3%	82,832	0.8%	1	0
GENESEE (MDA E)	1	0.6%	4.2%	443,947	4.4%	1	0
HOLLAND	1	0.6%	0.4%	34,606	0.3%	1	0
IONIA	1	0.6%	0.5%	64,378	0.6%	1	0
LENAWEE	1	0.6%	1.1%	101,768	1.0%	0	1
MARQUETTE	1	0.6%	0.9%	64,874	0.6%	1	0
WAYNE, DHD #2*	1	0.6%	~	~	~	1	0
	179	100.0%				169	10
Estimated Michigan Population (2004 estimate) = 10,112,620 (Source: Population Division, U.S. Census Bureau)							
Michigan Foodservice Establishments = 31,168							
NOTE: The number of reported illnesses cannot be interpreted as indicating the relative risk or safety of food in any jurisdiction.							

*Multi-jurisdictional investigation

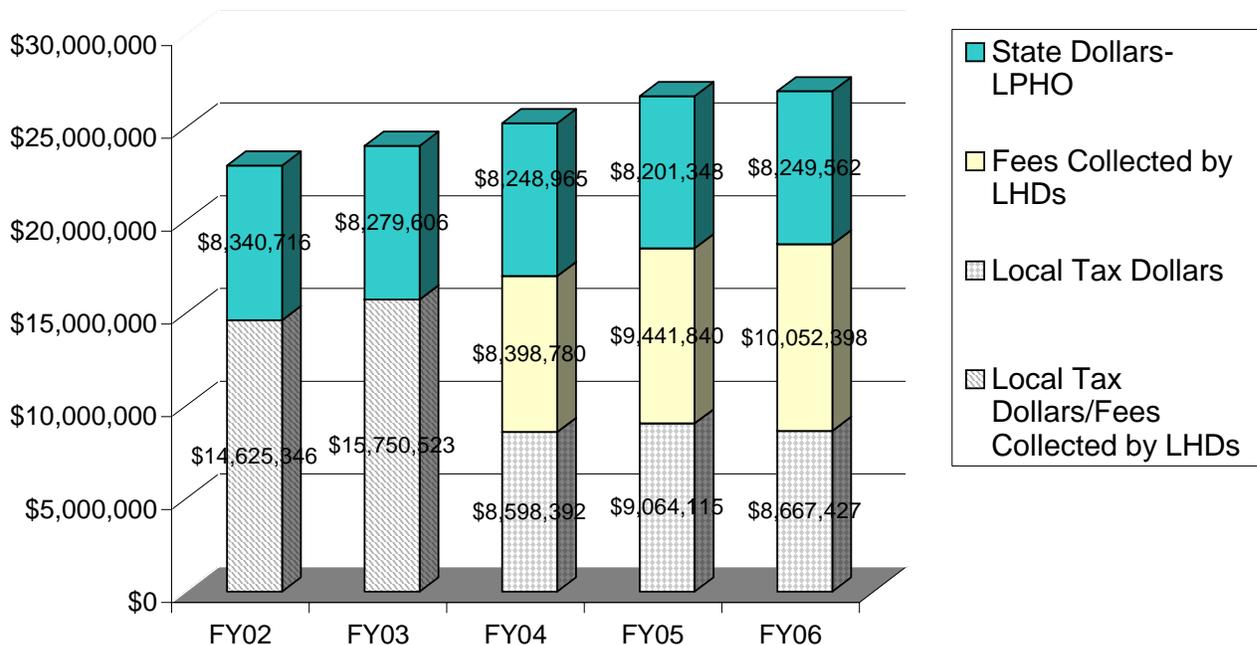
APPENDIX V- Five Year Trend Analysis Charts

LOCAL HEALTH DEPARTMENTS

Licensed Food Service Establishments (LHD), Five-Year Comparison



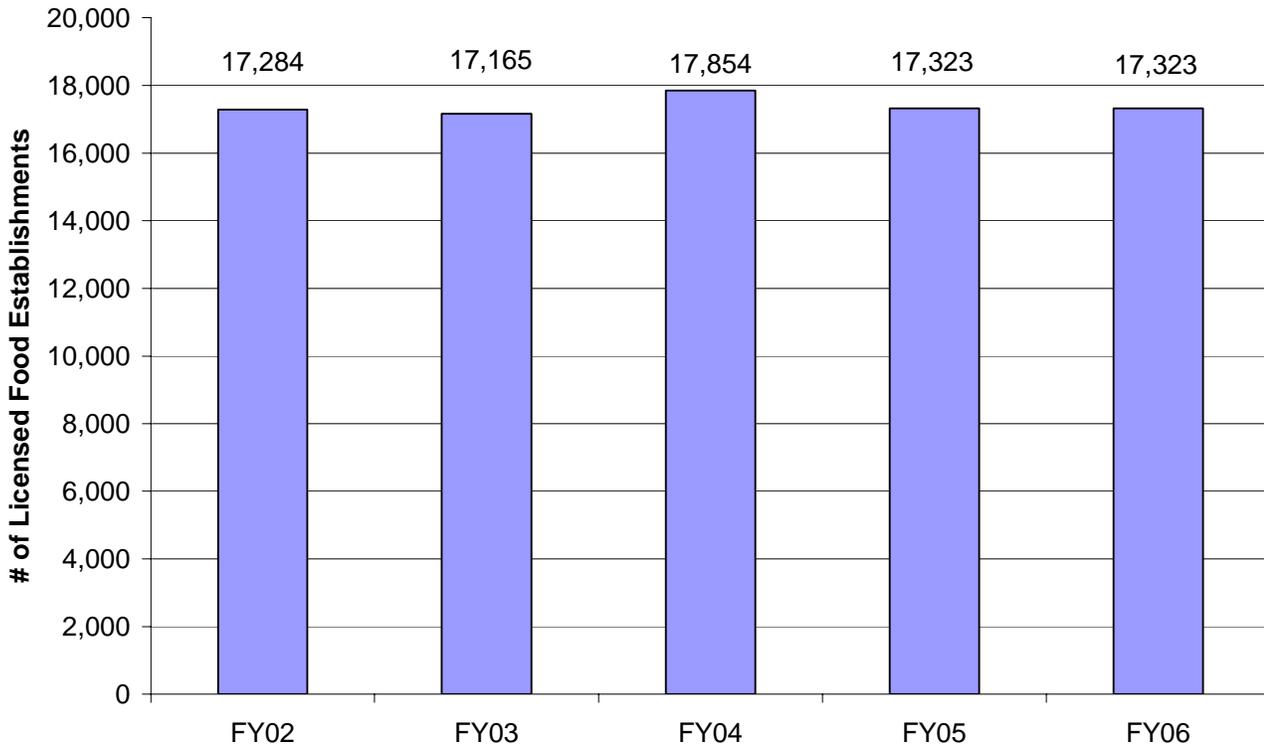
LHD Funding Sources, Five-Year Comparison



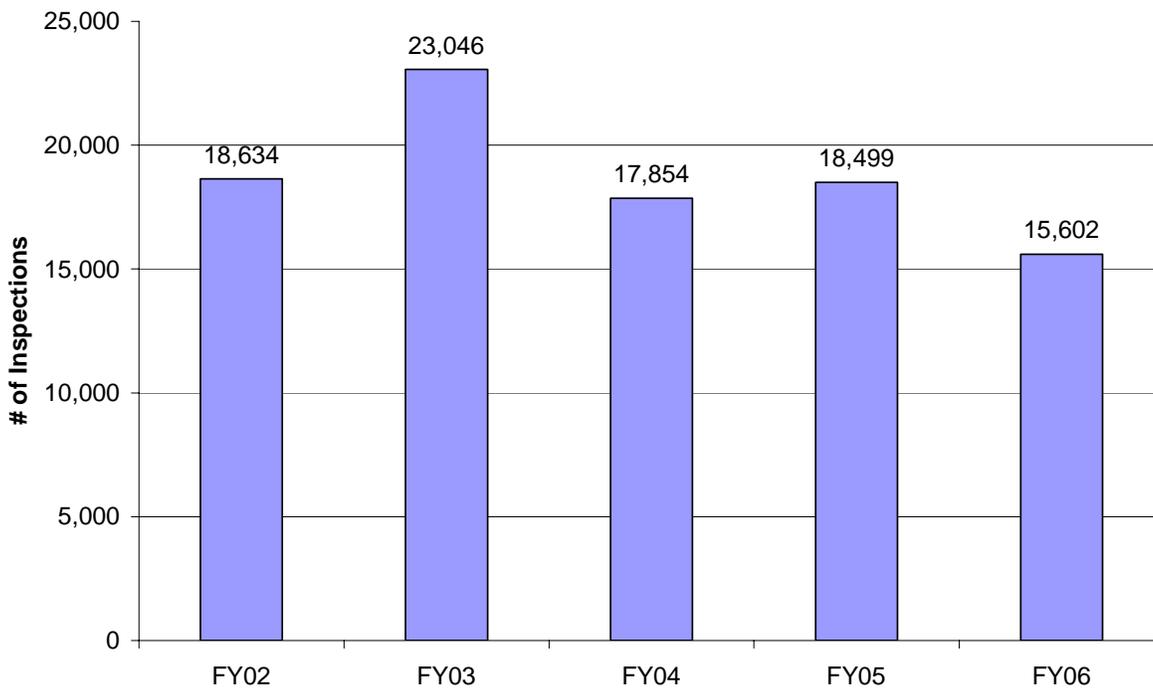
Note: Prior to FY04, fees collected by LHDs and local tax dollars were reported as a combined figure.

MDA – FOOD SECTION

Licensed Food Establishments (MDA), Five-Year Comparison

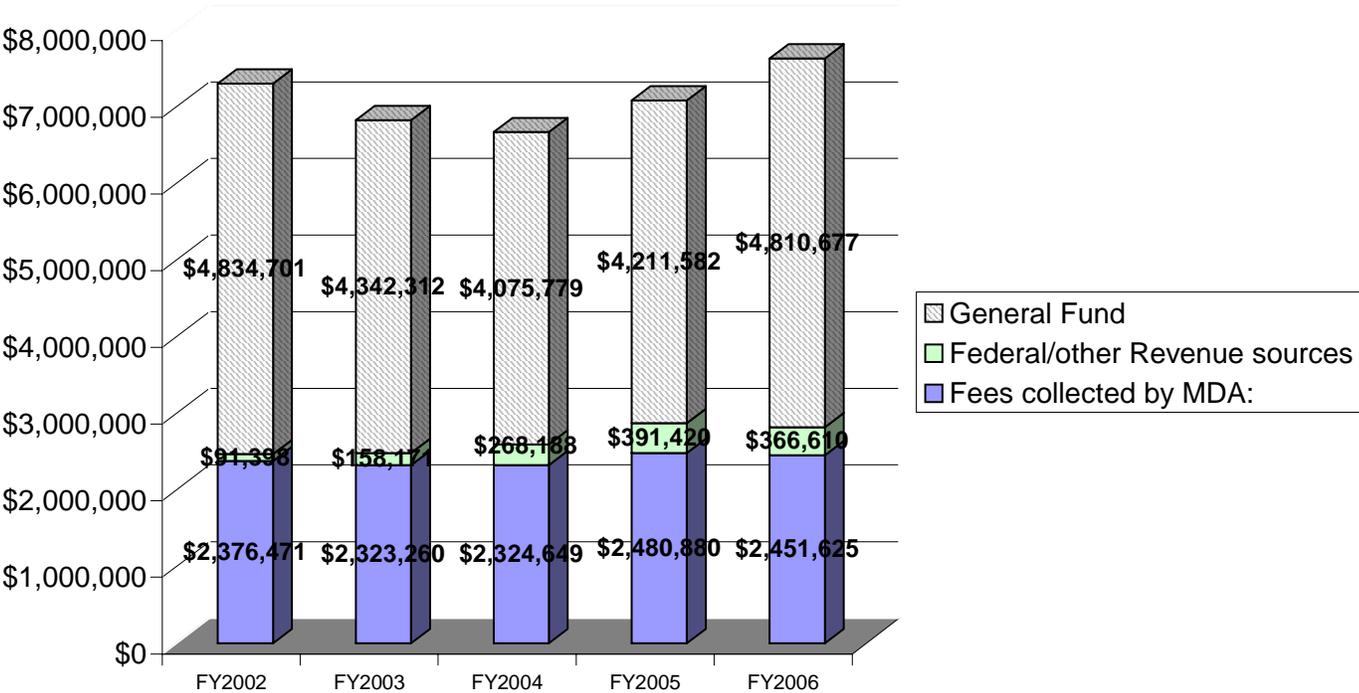


Number of Food Inspections, Five-Year Comparison



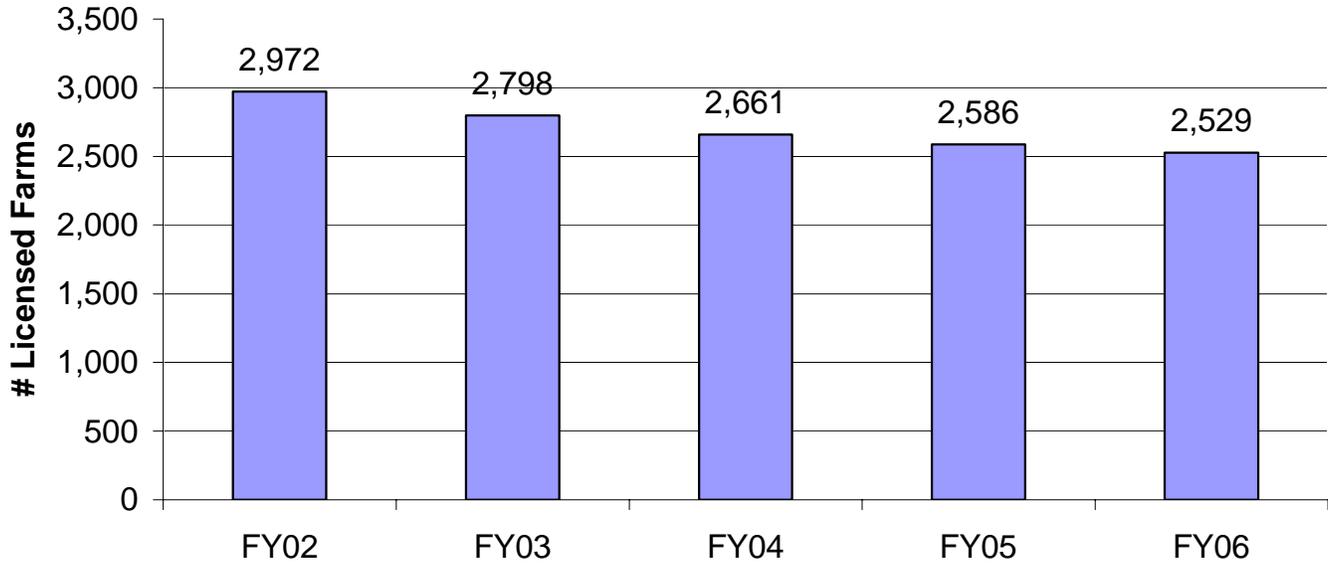
Note: Fair inspections are not included in the food inspection counts for this graph.
FY06 number down due to staff turnover and new staff training time

MDA Food Funding Sources, Five-Year Comparison

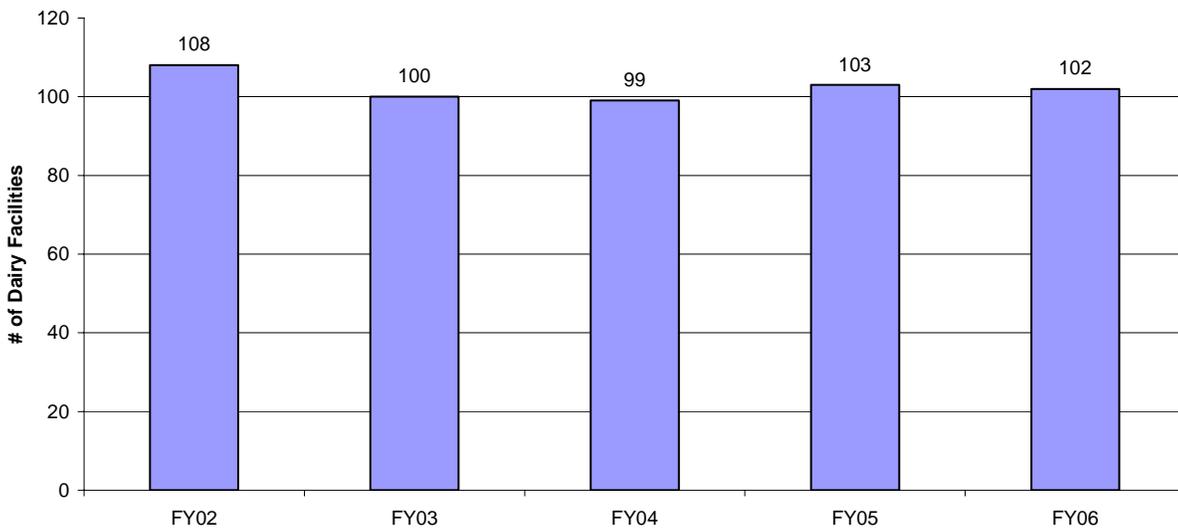


MDA – DAIRY SECTION

Licensed Dairy Farms, Five-Year Comparison

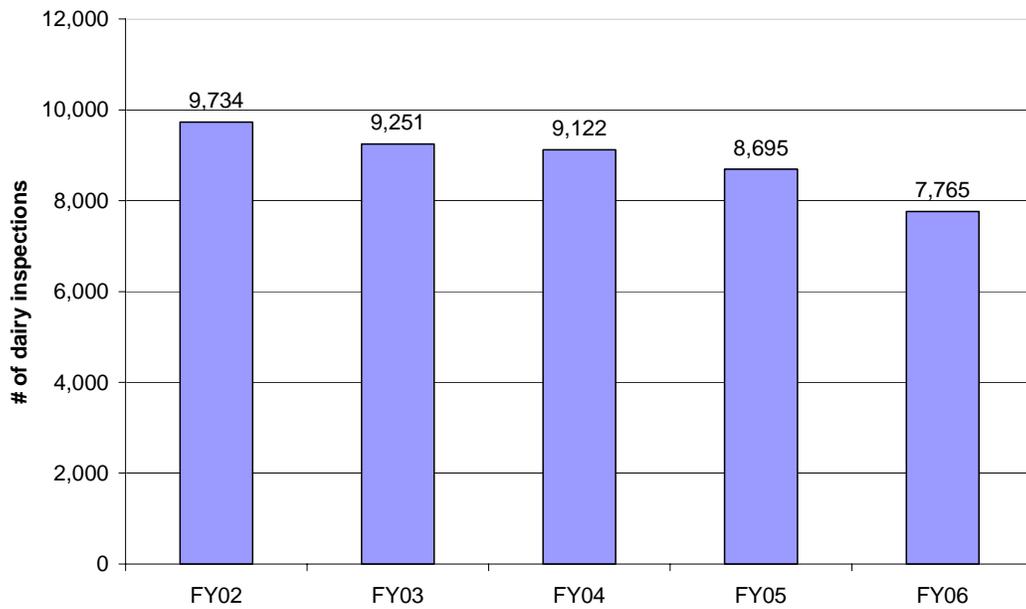


Licensed Dairy Facilities, Five-Year Comparison

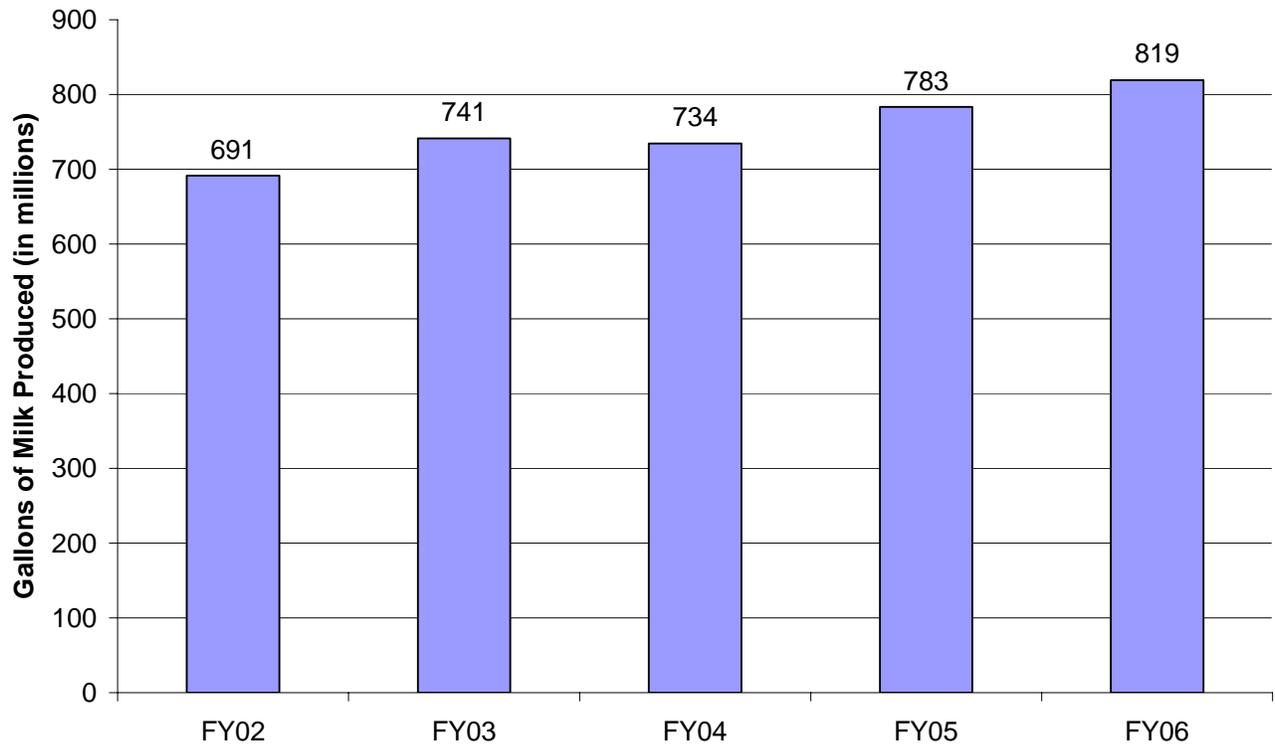


Licensed Facilities Includes: Grade A Plants, Manufacturing Plants, Grade A Milk Distributors, Grade A Transfer Stations/Receiving Stations/Tank Truck Cleaning and Grade A Single Service

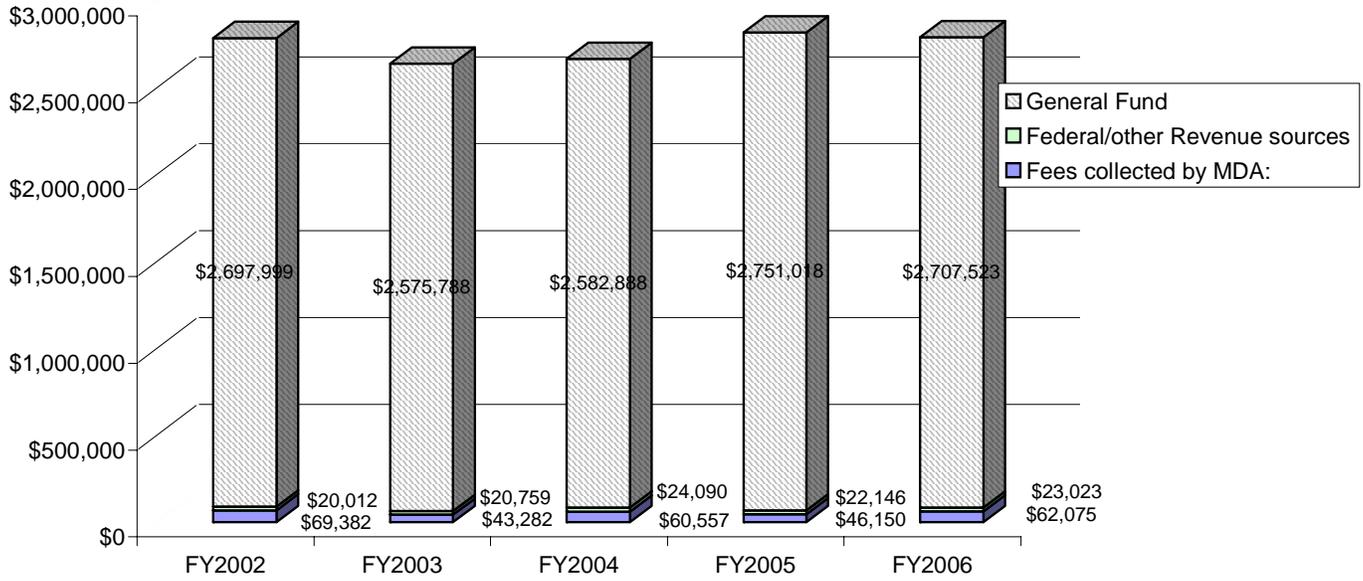
Dairy Inspections, Five-Year Comparison



Total Milk Production in Gallons, Five-Year Comparison



MDA Dairy Funding Sources, Five-Year Comparison





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