



Michigan Department of Agriculture

Food and Dairy Division

Annual Report
Fiscal Year 2008

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Food and Dairy Division 2008 Annual Report

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Introduction

Michigan's food safety program continues to build on previous years quality improvement efforts. In Fiscal Year (FY) 2008 the Michigan Department of Agriculture (MDA) took additional steps forward by:

- **Improving our program quality**
- **Focusing our efforts based on risk**
- **Leveraging scarce resources**

MDA had major results on two fronts in the area of prevention. Our dairy laws were successfully updated to meet the most recent developments in dairy safety practices, ensuring that Michigan milk and dairy products will be a source of confidence for consumers. Our prevention efforts have also paid dividends in the mid-point survey of our Foodborne Illness Risk Reduction Initiative – demonstrating that a focus of regulatory efforts on the primary causes of foodborne illness will result in a reduction of violations in these areas.

Responding to food safety issues was, and will continue to be, a major responsibility for the Food and Dairy Division. We are pleased to report we attained the third in a series of nine elements to meet the Food and Drug Administration (FDA) Voluntary Retail Standards. The significance of this accomplishment is it brings MDA closer to our goal of meeting all FDA standards by 2011. The third standard is particularly important, because it addresses Foodborne Illness Investigation and Response, an area in which we have invested significant staff resources in recent years. The number of investigations has increased along with the number of imported foods, improvements in technological and communication processes, and integration of federal, state and local food safety regulatory systems. These changes allowed us to identify, communicate, and mitigate problems more quickly than before.

Another important advancement in MDA's response to food safety is the receipt of a three-year, \$500,000 per year grant from FDA for enhancement of our rapid response efforts. This grant ensures MDA has toxicological and epidemiological expertise for risk assessment and mitigation; food and animal feed expertise for field operations; and the ability to link into expertise throughout the department and with our partners to more rapidly identify, respond and mitigate potential food safety problems. Michigan is one of only six states to receive this grant, putting MDA at the forefront of a national effort to identify best practices and create a truly integrated national food safety system.

As we anticipate more challenges in the coming years, our goals will continue to include continuous program improvement, a higher degree of food safety for our citizens, greater focus on assessing and reducing risk, and improved stewardship of valuable taxpayer resources.



Katherine Fedder, Director
Food and Dairy Division

Part A – Food Safety and Inspection Program Summary

Michigan's food service establishments, grocery and convenience stores, food processors, and food warehouses are regulated by MDA's 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.

I Food Inspection

Approximately 49 MDA field staff conducted regular inspections of grocery and convenience stores, food processors, farmers' 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 performs plan reviews, conducts inspections, processes license applications, takes enforcement actions, investigates complaints, collects food samples, responds to fires, power outages, recalls and other emergency situations. The division also works closely with various industry segments, such as grocers; wine, cider and honey makers; venison and maple syrup processors; egg producers, growers, and farmers' market operators. Other programs include conducting FDA and United States Department of Agriculture (USDA) contract inspections, registration and inspection of bottled water manufacturers, and providing certificates of free sale for firms exporting foods around the world.

Accomplishments

Major accomplishments in the food program in FY08 include:

- Sharing information with stakeholders regarding 114 Class I recalls and recall updates involving food products distributed in Michigan, which included conducting 550 recall audit checks to ensure that contaminated products were removed from commerce.
- Coordination of Michigan's response to several large-scale food emergencies was conducted including:
 - A multi-state outbreak of *Salmonella* Saintpaul associated with tomatoes and peppers.
 - An outbreak of E. coli O157:H7 associated with ground beef in Michigan and Ohio.
 - Michigan-processed canned vegetable investigation and recalls due to botulism contamination.
 - Investigation in search of Chinese infant formula and other products potentially contaminated with melamine.
- Initiated sampling of imported products in cooperation with FDA.
- Approval by FDA and ISSC (Interstate Shellfish Sanitation Conference) to be a regulatory auditor for shellfish processors and shellfish shippers. Firms who were previously unable to ship shellfish interstate can now do so with a shellfish certification number issued by MDA.
- Receipt of an FDA Rapid Response Team development grant. This department-wide grant of \$500,000 will help fund additional emergency response resources and coordinate Michigan with national efforts.

Projects

Foodborne Illness Risk Reduction Initiative:

Regulators continued working with industry to promote active managerial control of food safety and reduce the major foodborne illness risk factors, such as temperatures and personal hygiene. Activities in 2008 included:

- Development of a team of MDA food safety trainers who provide training and conduct quality assurance reviews with inspection staff to increase the division's focus on reducing the factors that cause foodborne illness.
- Establishment of regular training for standardized trainers both at MDA and local health utilizing webinar technology.
- Completion of a mid-course survey to determine the occurrence of foodborne illness risk-factors in food establishments. The survey indicated progress in reducing risk factors and showed improper temperature control, poor personal hygiene and contaminated equipment are the areas needing the most focus by the food industry.

FDA Voluntary Retail Program Standards:

The division is continually working to meet the nine voluntary national program standards through its internal food inspection program. Two of the standards were met in FY07 and a third was met in FY08: Standard 5 – Foodborne Illness Investigation and Response.

FDA Manufactured Food Standards:

The division enrolled to assess its compliance with this new voluntary FDA standard.

Inspections:

The division met its goal of conducting at least 92 percent of high risk inspections early or on-time.

Infrastructure Development:

A number of efforts were undertaken to improve internal operations. These included:

- Hiring a supervisor for Region 6 (Lansing area).
- Updating job descriptions for all senior staff and filling a number of vacant senior staff positions.
- Researching a new electronic inspection system.
- Updating internal program policies.
- Updating food safety information and organization on the MDA web site.
- Developing a referral system with local health departments to assure proper reviews of water and sewage systems for new and remodeled establishments.
- Developing the food safety licensing portion of the “Michigan Business One-Stop” licensing web site.

Senior staff resources saw an increased focus on emergency management and food safety training to assist in addressing emergency response and risk-based evaluation training efforts. The E-Health electronic inspection system, developed by Oakland County Health Department, was selected as a replacement for the existing electronic inspection system. Once implemented, E-Health is intended to provide a common food safety inspection system for both MDA and local health departments in Michigan.

Workload

Licensed Establishments	FY07	FY08
Retail Food Establishment.....	14,041	13,884
Extended Retail Food Establishment	924	926
Wholesale Food Processor	581	606
Limited Wholesale Food Processor.....	893	927
Food Warehouse	1,075	1,080
Mobile Food Establishment	51	51
Mobile Food Establishment Commissary	49	46
State/County Fair Temporary.....	1,012	1,007
Special Transitory Food Unit	44	58
Temporary Food Establishment	25	26
Total Licensed Establishments	18,695	18,611
Number of licensed establishments per FTE* assigned to conduct inspections.....	382	380

*Full Time Employee

Workforce

	MDA Actual	FDA Recommended**
Number of FTEs assigned to conduct food inspections (all types).....	49	64-73
Number of FTEs involved in technical support, management and administrative support	29.5	NA
Total Number of FTEs.....	78.5	NA

**FDA recommended number from FDA Voluntary Program Standard

Program Output

I. Inspections

Inspection Type	Inspections Conducted	% of Total Inspections	Inspections Due
Routine	11,530^^	62%	15,264
Ad-hoc^	4,450	24%	N/A
Follow-up	1,683	9%	1,726
Fair	1,007	5%	1,007
Grand Total.....	18,670	100%	17,997

Product samples tested

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

^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 are often conducted in lieu of routine inspections, thus a number of ad hoc inspections completed fulfill part of the 15,264 routine inspections due. MDA focuses time and resources on highest risk establishments.

II. Plan Review

Number of plans received for review	281
Number of plans approved	278

III. Investigations

Consumer complaints investigated (all types)	1,131
Illness-related	72
Non-illness related	1,059

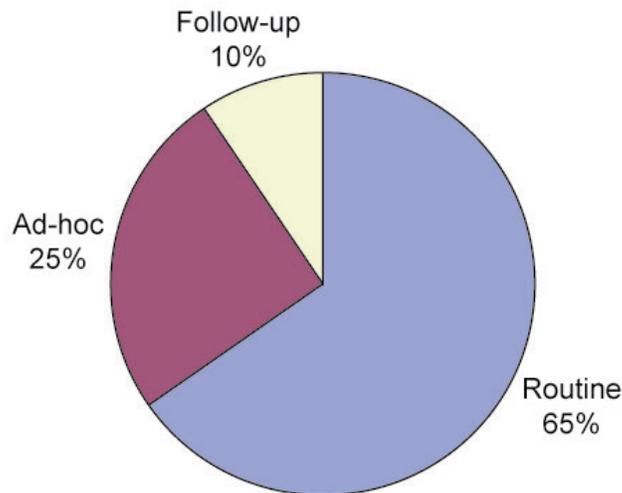
IV. Enforcement

Enforcement Letters	269
Compliance Reviews	28
Consent Agreements/Administrative Fines	153/\$55,344
Prosecutions/Fines	2/\$13,234
Seizures	779
Dollar Amount of Seized Product	\$13,136,340
Informal Hearings	2
Reinspections/Fees	118/\$7,080

V. Miscellaneous

Certificates of Free Sale	1,379
Freedom of Information Act Requests	95
Bottled Water Registrations	1,475

Michigan Food Program Inspections by Type



Funding Sources

	FY07	FY08
Fees.....	\$2,414,463	\$2,629,218
Federal/Special Revenue funds	\$469,445	\$455,018
General fund.....	\$5,626,770	\$6,151,731
Total program revenue.....	\$8,510,678	\$9,235,967

General Statistics

Occurrence per 100,000 population

Number of fixed food establishments*	173
Food related complaints	11

Program dollars spent per

Licensed establishment.....	\$496
Michigan citizen (Total Program Revenue).....	\$0.92
Michigan citizen (General Fund).....	\$0.61
Michigan citizen (License Fees/Others)	\$0.31

*Fixed food establishments include retail food stores, food processors and food warehouses.

Michigan population- 2006 estimate, U.S. Census Bureau

II Food Service – Local Health Departments

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, evaluation, 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 more than \$8.3 million in state funds utilized for the food service program. With the addition of locally set fees and local tax contributions, local health departments operate a \$28.8 million overall food service program.

Accomplishments

Major accomplishments of the food service program in FY08 include:

- Eleven local health departments completed successful accreditation reviews with a 99 percent degree of compliance with program standards.
- 23 local health department trainers were standardized by the food service program’s FDA certified trainers. This program promotes consistent and focused inspection for food service establishments across the state.
- 2,886 hours of training was provided by the food service program to local health department inspectors.

Projects

Standardized Trainer Workgroup:

A state-local Standardized Trainer Workgroup was formed to assist in creation of the marking instructions for the Field Evaluation Worksheet (FEW), and will be utilized to help create and guide future trainings.

Virtual Training:

Experimental options were used to train food safety trainers throughout the state in a cost effective manner. Two training sessions were held via videoconferencing at seven sites across the state, and a webinar training was presented, allowing trainers to remain at their desks using their computers and telephones.

Cycle 4 Accreditation:

The accreditation process was reviewed for Cycle 4, and an evaluation option was developed to allow a local health department to self-assess their own programs, with oversight by the food service program.

Risk-Based Evaluation Schedules:

A statewide risk-based MDA/local health evaluation schedule was developed that will allow local health departments to voluntarily group establishments by risk and set evaluation frequencies based on risk.

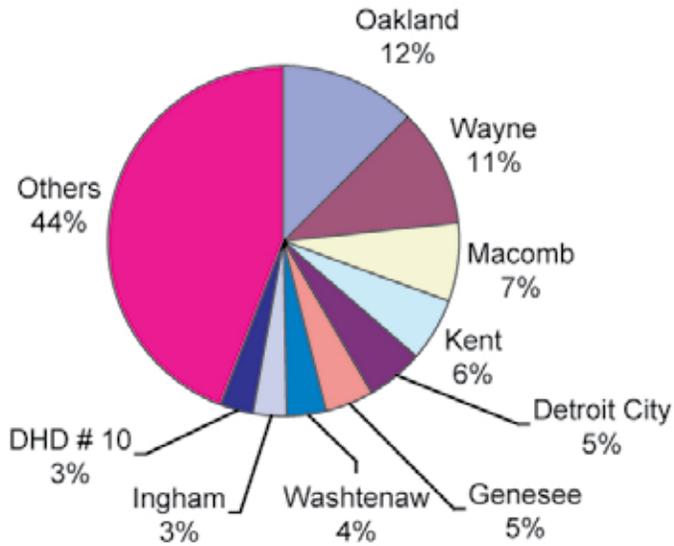
Workload

	FY07	FY08
Licensed Establishments		
Fixed Food & Mobile Commissary.....	31,704	31,839
Temporary.....	10,870	10,937
Mobile.....	531	493
Vending.....	4,689	4,462
Special Transitory Food Unit (STFU).....	688	726
Total Licensed Establishments	48,482	48,457
Number of licensed establishments per FTE* assigned to conduct inspections	253	247

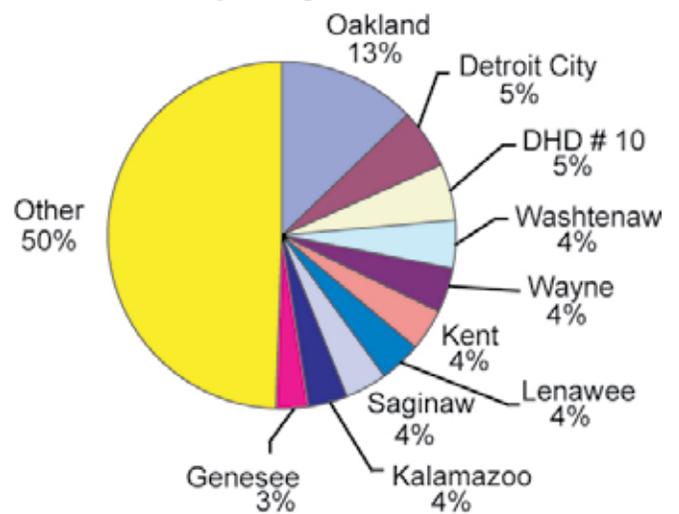
**FTE= Full time employee, taken from MDA License 2000 system*

Distribution of License Types by Local Health Department

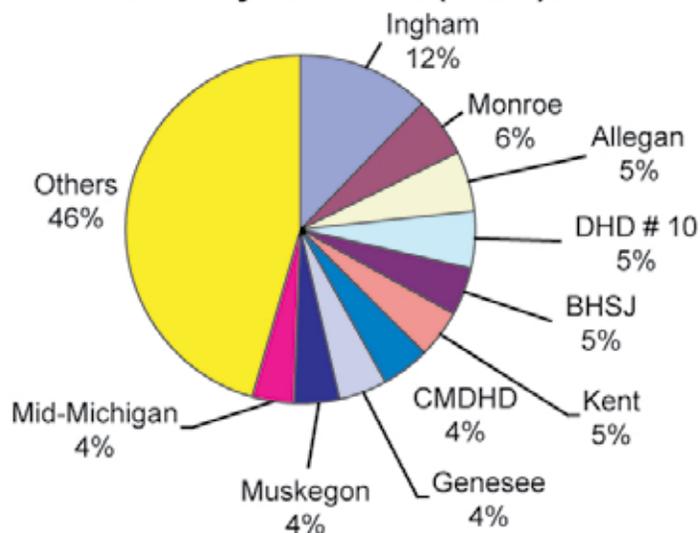
Fixed Licenses



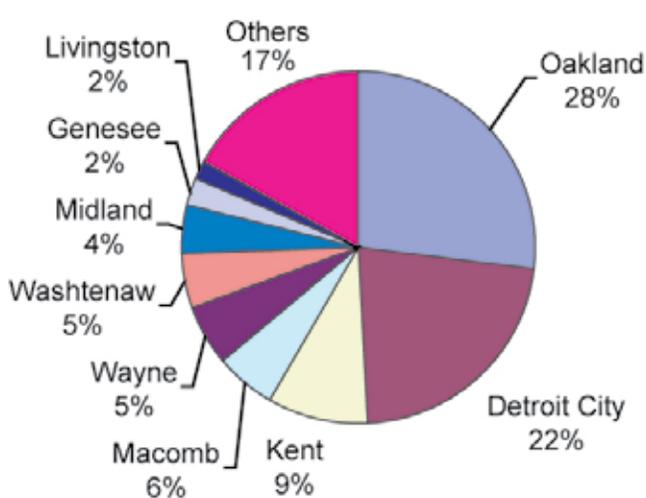
Temporary Licenses



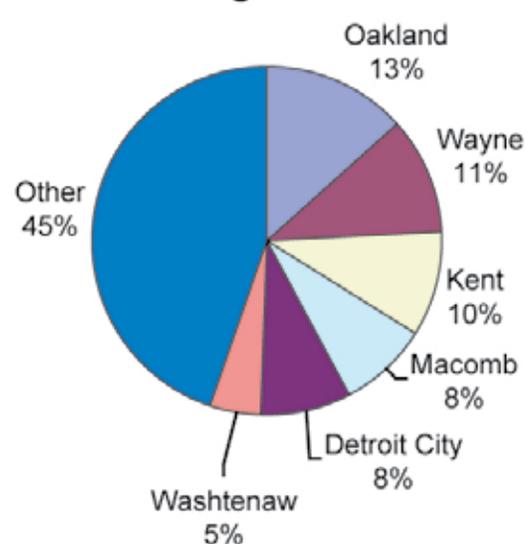
Special Transitory Food Unit (STFU) Licenses



Mobile Licenses



Vending Licenses



Workforce

	LHD Actual	FDA Minimum	FDA Recommended
Number of FTEs assigned to conduct food establishment inspections (all types).....	196	200	282
Number of FTEs involved in plan review, management and administrative support	142	NA	NA
Total number of FTEs	338	NA	NA
Number of standardized trainers	58	NA	NA

Program Output

I. Inspections

Establishment Type	Inspections Conducted	% Total Inspections	Inspections Due
Fixed food service- routine	59,353	63%	
Mobile, Vending, STFU.....	4,146	4%	
Sub- Total	63,499	67%	64,832
Follow-up inspections	19,307	21%	
Temporary food service	10,937	12%	
Grand Total.....	93,743	100%	

Average number of inspections per FTE assigned to conduct food establishment inspections478

II. Plan Review

Number of plans received for review1,741
 Number of plans approved1,570

III. Investigations

Consumer complaints investigated (all types)..... 4,525
 Foodborne illness outbreaks (met MI definition)..... 172

IV. Enforcement

Admin action (office conference, informal hearing, formal hearing, civil fine, order).....1,071
 Court action (civil, criminal) 10

Funding Sources

	FY07	FY08
Fees collected by local health department	\$11,687,057	\$12,817,478
Local tax dollars.....	\$8,359,820	\$7,633,642
State dollars- local public health operations (LPHO).....	\$8,345,613	\$8,345,613
Total local health program revenue	\$28,392,490	\$28,796,733

General Statistics

Occurrence per 100,000 population

Number of fixed food service establishments.....	315
Food related complaints	45
Foodborne illness outbreak investigations	1.7

Program Dollars Spent Per

Licensed establishment.....	\$768
Michigan Citizen (Total Program Revenue).....	2.86
Michigan citizen (Fees collected by LHDs).....	\$1.27
Michigan citizen (Local tax dollars).....	\$0.76
Michigan citizen (LPHO/state dollars)	\$0.83

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 2,385 dairy farms - 2,088 Grade A farms and 297 manufacturing farms – all inspected by the Dairy Section. In addition, the Dairy Section licenses and inspects 74 Michigan dairy processing plants, 31 other dairy facilities, and 1,398 milk hauler/samplers, milk tank trucks, and milk transportation companies. Enforcement is a strong component of the Dairy Section’s work. Law violations resulted in 144 dairy farm permit suspensions and the removal of 2,049,355 pounds of suspect milk from the market with an estimated dollar value of \$386,303.

Accomplishments

The major accomplishment of the Dairy Section in FY08 was updating the State’s dairy laws. The Dairy Law Update Workgroup completed its proposed revisions and the updated laws were adopted by the Legislature, signed by the Governor, and became effective in June 2008. The major focus of the law update was the adoption of the latest revision of the Grade A Pasteurized Milk Ordinance, which is the milk safety standard for all 50 states. The workgroup consisted of a broad-based group of approximately 25 dairy industry stakeholders including milk cooperatives, dairy processors, consumers, Michigan Farm Bureau and Michigan State University (MSU) Extension, who met several times over a two-year period to develop the law revisions.

Projects

Enforcement:

The Dairy Section held a total of 16 compliance meetings during this fiscal year. The compliance meetings included Grade A dairy farms, manufacturing dairy farms, one Grade A dairy plant and one manufacturing dairy plant. Various issues were addressed, such as equipment and facility cleanliness, and illegal somatic cell counts. Permit holders were given the opportunity to explain the causes of these conditions. As a result, recommendations for corrections were discussed and implemented. Law violations are tracked for dairy farms, dairy processing plants, bulk milk haulers, milk transportation companies and other licensed dairy facilities to determine if a sanction is warranted. In FY08, 85 licensed entities were assessed an administrative fine resulting in the collection of \$12,250 by MDA.

Sampling Team Exercise:

In February 2008, MDA’s Sampling Team conducted an exercise which included individuals representing five different divisions and featured a realistic scenario potentially impacting multiple divisions: contaminated livestock feed. Dairy Section staff, along with staff from other divisions collected several hundred samples in the three days of the Sampling Team exercise.

Foot and Mouth Disease Exercise:

In August 2008, the Dairy Section, along with staff from other divisions, participated in a multi-agency, multi-location emergency management exercise that demonstrated response activities if Foot and Mouth Disease were identified in Michigan.

Aseptic Pilot Program:

The National Conference on Interstate Milk Shipments Aseptic Pilot Program includes two Michigan dairy plants. Dairy Section staff has taken a leadership role in this pilot program that seeks to streamline the way aseptically processed and packaged dairy products are regulated while continuing to assure milk safety.

Brucellosis Ring Test:

In order for Michigan to maintain its brucellosis-free status, milk from every bovine dairy farm must be tested with the Brucellosis Ring Test (BRT) at least twice a year at approximately six month intervals. USDA has agreed to maintain oversight of the test results and MDA will complete the collection and testing of milk from every dairy farm. Dairy Section staff began collecting the BRT samples in October 2008.

Water Buffalo Dairy:

Michigan’s first water buffalo dairy was put on the Grade A market in March 2008. The milk is hauled in a specially designed steel tote which is transported in an enclosed vehicle to a licensed test kitchen facility in Hart, where it is pasteurized and made into mozzarella cheese. The cheese has been sold to restaurants and farm markets.

Robotic Milker Project:

Dairy Section staff is working with MSU on their plans to install a robotic milking system at Kellogg Biological Station (KBS) dairy farm in Battle Creek. The plan includes extensive grazing capabilities for the dairy herd at KBS. The robotic milker installation will provide information to dairy farmers who are considering the labor cost savings that a robotic milker might provide.

Electrical Safety Checks:

Dairy Section staff, in cooperation with the Michigan Agricultural Electric Council, conducted electrical safety checks on approximately 25 percent of Michigan’s dairy farms.

Workload

Licensed Establishments	FY07	FY08
Farms	2,414	2,385
Grade A Plants.....	31	31
Manufacturing Plants (includes cheese & ice cream).....	40	43
Grade A Milk Distributors	11	10
Grade A Transfer Stations/Receiving Stations/Tank Truck Cleaning.....	14	14
Grade A Single Service.....	6	7
Milk Tank Trucks and Can Milk Trucks	541	597
Milk Transportation Companies	121	127
Milk Haulers/Samplers (currently licensed)	542	674

	FY07	FY08
Certified Fieldpersons.....	27	25
Total Licenses.....	3,747	3,913

Labs Approved/Certified

Certified Industry Labs.....	8	7
Approved Drug Screening Sites	35	35
Certified Commercial Labs	2	2
Approved/Certified Industry Analysts.....	235	193
Number of licensed establishments per FTE assigned to conduct inspections	220	218

Workforce

MDA Actual

Number of FTEs assigned to conduct dairy inspections (dairy, farm & plant inspections, and pasteurization evaluations).....	18
Number of FTEs involved in management, tech support and admin support.....	9
Total number of FTEs	27

Program Output

I. Inspections and Evaluations

Inspection Type	Inspections Conducted
Farm	5,975
Plants.....	257
Hauler/Sampler/Tanker.....	876
Pasteurization.....	414
USDA Survey.....	16
Total Inspections	7,538
Grade A Survey	67
Laboratory Analysts Evaluated	130
Laboratories Evaluated.....	7
Drug Residue Screening Sites Evaluated	23
Shelf life samples	85
Total milk and milk product samples taken	4,189
Total milk and milk product test determinations... ..	15,269
Average number of inspections per FTE assigned to conduct dairy establishment inspections	419

II. Investigations

Consumer complaints investigated (all types).....	16
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III. Enforcement

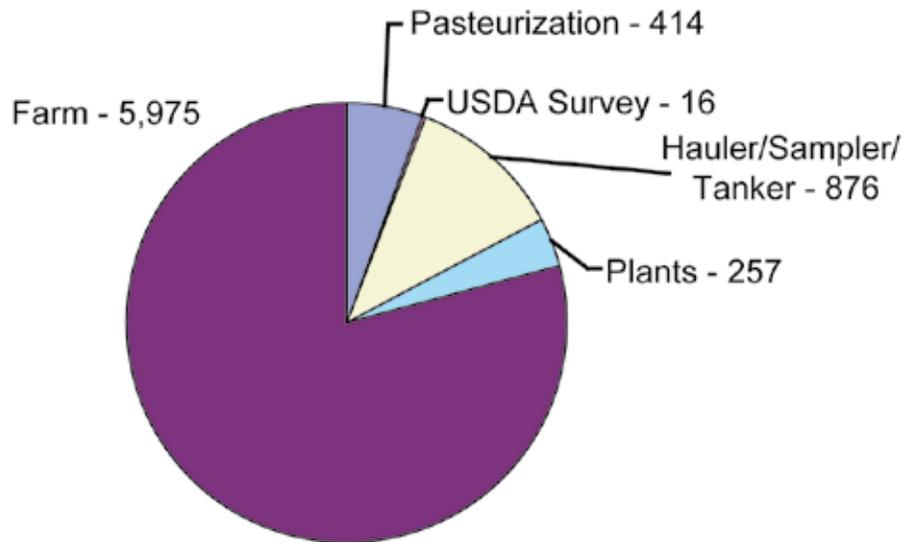
Enforcement letters	515
Informal Hearing/Compliance Reviews	17
Administrative Fines collected by MDA	\$12,250

Prosecutions.....	0
Seizures.....	2
Dollar amount of seized products.....	\$217,985
Total Permit Suspensions.....	144
Total Pounds of Contaminated Milk Disposal.....	2,049,355(\$386,303)

IV. Miscellaneous

Certificate of Free Sale.....	491
Freedom of Information Act Requests.....	66

Number of Inspections by Type, Performed by the Michigan Dairy Program



Funding Sources

	FY07	FY08
Fees collected by MDA.....	\$41,630	\$59,145
Special Revenue Funds.....	\$24,250	\$32,263
General Funds.....	\$2,913,577	\$3,055,369
Total Program Revenue.....	\$2,979,457	\$3,146,777

General Statistics

Occurrence per 100,000 population

Number of dairy farms.....	24
Number of dairy manufacturers.....	1

Program dollars spent per

Licensed establishment.....	\$804
Michigan citizen (Total Program Revenue).....	\$0.31
Michigan citizen (General Fund).....	\$0.30
Michigan citizen (License Fees/Other).....	\$0.01

Part C – Foodborne Illness Recalls and Outbreaks

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

MDA maintains a database of reported illness incidents meeting 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).

MDA spent approximately 3,700 staff hours on recall and outbreak response, as well as food tracebacks associated with human illness. In addition, an MDA staff person is serving as a representative of the Association of Food and Drug Officials on the national Council for the Improvement of Foodborne Outbreak Response (CIFOR), a multi-disciplinary working group convened to increase collaboration across the country and relevant areas of expertise to reduce the burden of foodborne illness in the United States.

I. Overview of Foodborne Illness Outbreak Results

A total of **172** events meeting the Michigan definition of a foodborne illness outbreak were reported by local health departments to MDA.

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 172 potential foodborne illness outbreaks, local health departments identified a total of **27** 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	172 (1,453 illnesses)
Total number of probable foodborne illness outbreak complaints	27 (526 illnesses)
Median number of illnesses per probable foodborne illness outbreak.	14

Leading causative agents in probable foodborne illness outbreaks:

Norovirus.	4*
<i>Clostridium Perfringens</i>	3
<i>Salmonella</i> species	3

Percentage of time causative agent identified in all reported potential outbreaks: 12 percent

**Norovirus was confirmed in nine different events, but investigations concluded only four of the nine were likely or definitely food-related outbreaks.*

II. Food Recalls

In FY08:

- 114 food recall incidents
- 550 audits completed during eleven Class I recalls

This represents a **17.5** percent increase in the number of Class I recalls from FY07. In order to improve its response to recalls and other food emergencies, MDA applied for and received a department-wide FDA Rapid Response Team development grant of \$500,000 to help fund additional emergency response resources and coordinate Michigan with national efforts.

Noteworthy recalls for FY08:

Canned Vegetables – Botulism

- A random review by federal investigators at a Michigan canned produce plant (various institutional-sized canned vegetables) showed potential problems with under-processing.
- Sampling of product found *Clostridium Botulinum* spores present in some cans.
- A total of three recalls of various lots and products were issued nationwide.

Ground Beef Product – E. coli O157:H7

- Michigan and Ohio experienced an outbreak of E. coli O157:H7 that was eventually determined to be associated with ground beef products sold at a grocery chain.
- Resulted in a large supplier in the Midwest recalling over 500,000 pounds of beef products nationally.

Frozen Pot Pies – Salmonella I 4,[5],12:i:

- Between January 1, 2007 and October 29, 2007, a multi-state outbreak of Salmonella associated with frozen pot pies identified over 270 confirmed cases of illness nationwide (Michigan – 3 cases).
- Illnesses were often associated with inadequate cooking of the products when consumers heated them in microwaves or in ovens for too little time.
- MDA staff conducted 285 audit checks at retail and wholesale facilities throughout the state to ensure the implicated product was being removed from store shelves.

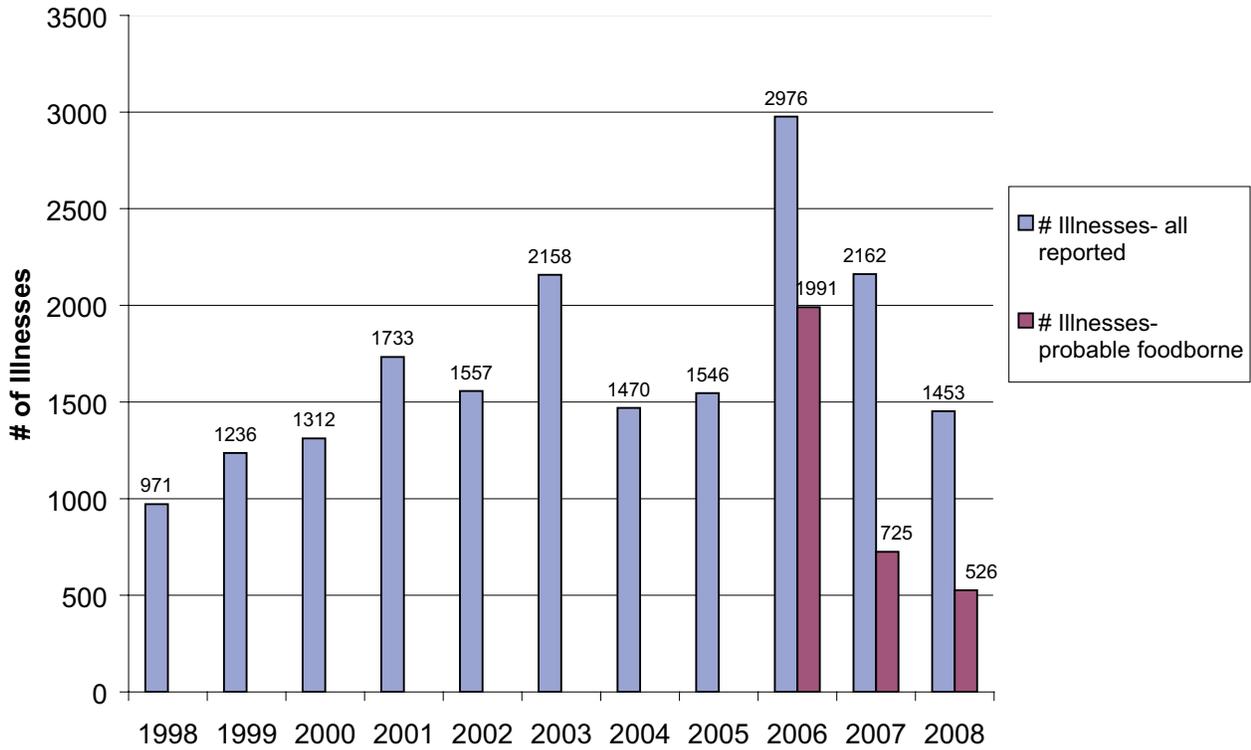
Imported Cantaloupe – Salmonella Litchfield

- MDA collaborated with local health departments to conduct some 60 audit checks for cantaloupe imported from Honduras.
- Nationwide, some 51 ill people were identified in 16 states, but no cases were linked to this product in Michigan.

Ground Beef Product – E. coli O157:H7

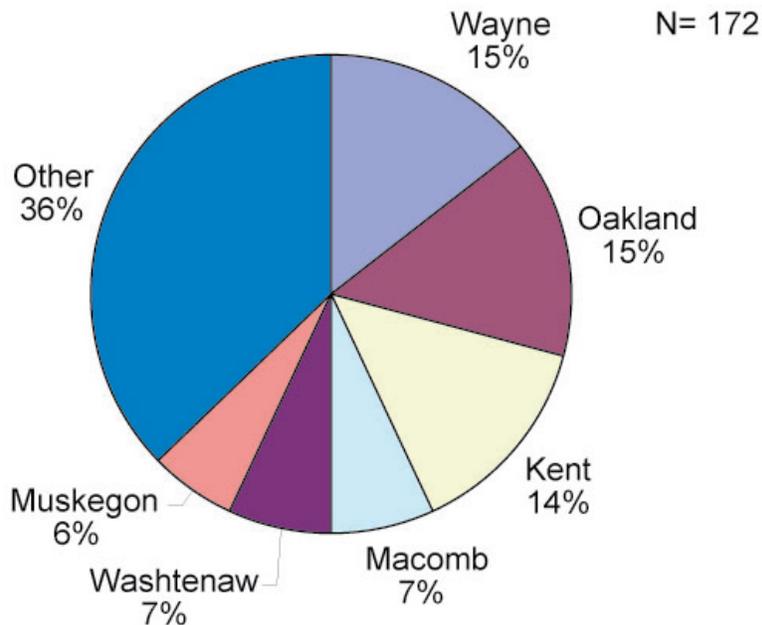
- MDA assisted USDA in conducting a number of direct contacts of Michigan consumers who purchased the recalled product from a large chain.
- The consumer list provided to MDA by USDA was based on member card numbers that had recorded the sales in the months previous to the recall.
- Nationwide, the company recalled 1,084,384 pounds of ground beef products.

Ten-Year Summary of Foodborne Illness Outbreaks, by Number of Illnesses, 1998-2008



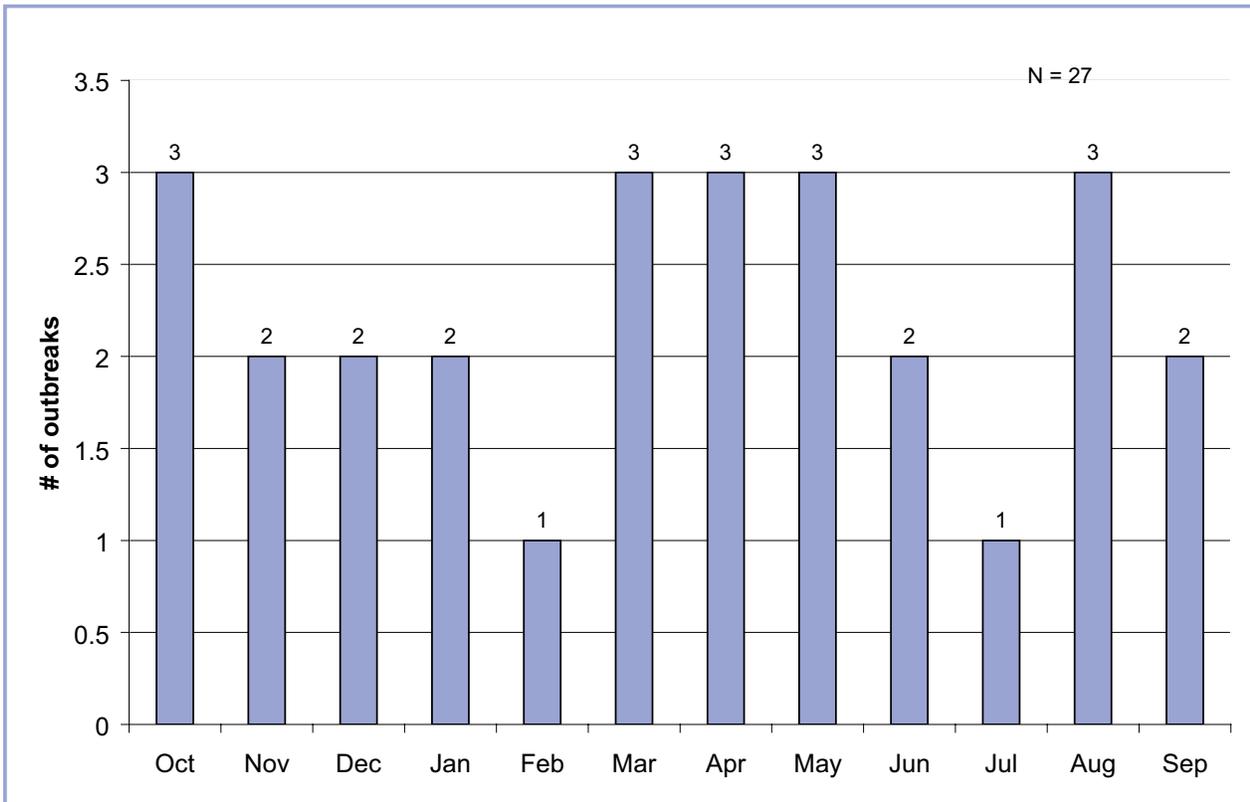
Note: Statistics prior to 2002 were based on the calendar year rather than the fiscal year.

Foodborne Illness Outbreaks by Local Health Department

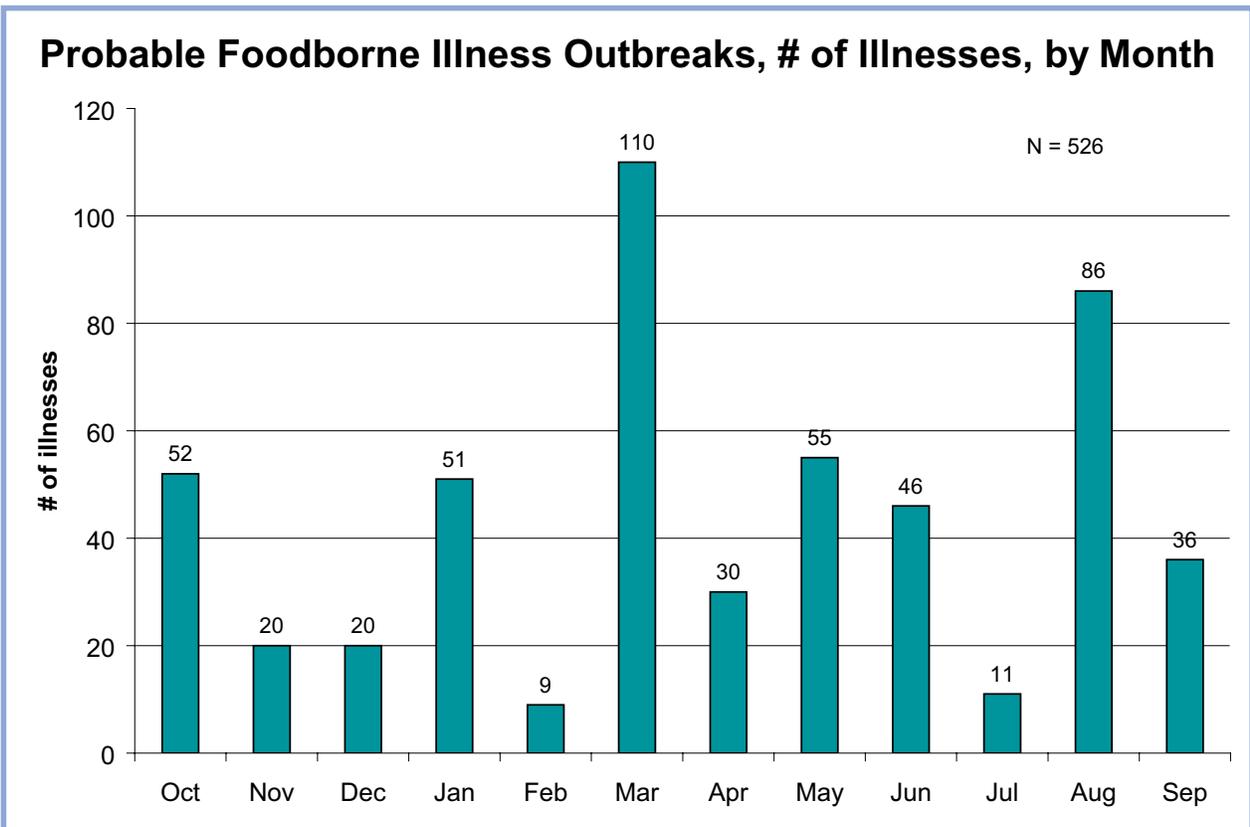


Note: Data cannot be interpreted as an indicator of the relative safety of foods in any jurisdiction. Health departments with larger populations would be expected to have larger numbers of outbreaks.

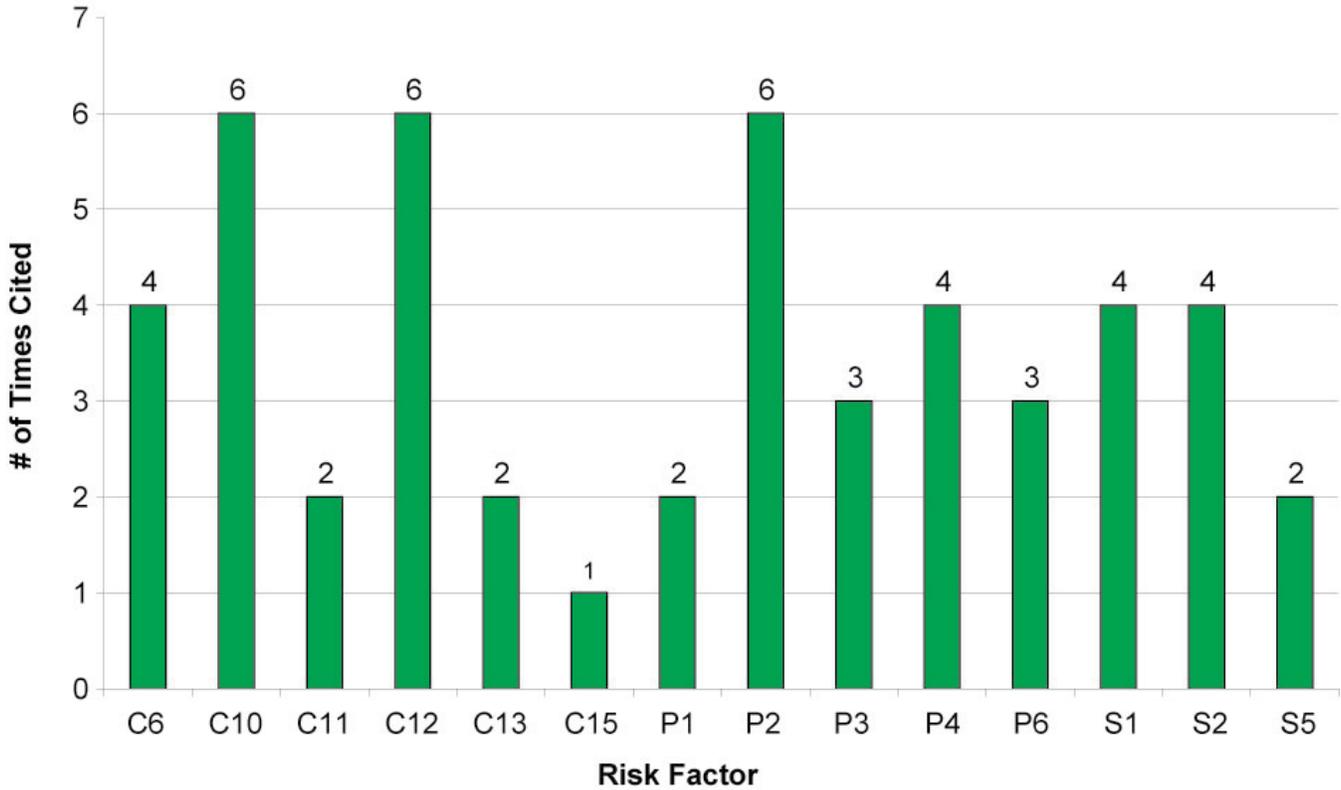
Probable Foodborne Illness Outbreaks, # of Events, by Month



Probable Foodborne Illness Outbreaks, # of Illnesses, by Month



CDC Risk Factors Reported, Fiscal Year 2008



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

C6	Raw product/ingredient contaminated by pathogens from animal or environment
C10	Bare-handed contact by handler/worker/preparer
C11	Glove-handed contact by 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
P3	Inadequate cold-holding temperatures
P4	Preparing foods a half day or more before serving
P6	Insufficient time and/or temperature during hot holding
S1	Insufficient time and/or temperature during initial cooking/heat processing
S2	Insufficient time and/or temperature 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, discuss 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.
- Evaluate slow-cooling practices, to ensure proper time and temperature standards for foods.

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 Centers for Disease Control (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 92 percent of reported potential foodborne illness outbreaks.
- Accreditation findings show 100 percent of local health departments were found to respond to a foodborne illness complaint within 24-hours of notification (Minimum Program Requirement 19), and 100 percent met foodborne illness investigation procedure requirements relating to documentation and reporting of foodborne illness outbreaks (Minimum Program Requirement 20).

Note: Accreditation Minimum Program Requirement reviews are based on a summary of random sample evaluations, and are not an evaluation of every foodborne illness complaint received.

Appendix I – Workload Data by LHD

FY 07/08 Workload – Output

	INSPECTIONS CONDUCTED					INSPECTIONS DUE	PLAN REVIEW		INVESTIGATIONS	
	3. Fixed food establishments	4. Mobile, vending & sfdu	5. Temporary food establishments	6. Follow-up inspections	Total Number of Inspections Conducted (all inspection types)	7. Fixed, mobile, vending & sfdu inspections due (annual total)	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	512	31	104	117	764	572	14	11	5	4.70
BEDHD	916	60	167	101	1,244	990	21	22	67	40.09
Bay	632	14	128	74	848	820	14	8	40	36.90
Benzie-Leelanau	325	4	128	41	498	278	14	14	11	27.66
Berrien	1,150	49	321	123	1,643	1,176	18	14	61	37.72
BHSJ	931	146	223	160	1,460	1,079	17	12	53	34.01
Calhoun	796	62	186	167	1,211	552	24	24	30	21.74
CMDHD	1,218	53	260	397	1,928	1,696	26	25	68	35.64
Chippewa	297	3	49	19	368	326	5	4	30	77.57
Delta-Menominee	435	29	165	157	786	520	8	9	10	15.91
Detroit City	3,249	185	598	573	4,605	3,815	62	44	159	18.25
Dickinson-Iron	358	6	45	117	526	420	11	6	25	62.78
DHD # 2	357	13	152	23	545	545	8	8	35	50.44
DHD # 4	605	23	74	90	792	717	8	5	7	8.54
DHD # 10	1,476	139	582	253	2,450	1,615	35	33	68	25.56
Genesee	2,225	187	346	201	2,959	2,395	80	80	276	62.45
Grand Traverse	666	62	63	43	834	728	26	17	14	16.48
Holland City*	268	81	67	234	650	267	12	5	26	75.92
Huron	304	21	131	164	620	327	3	2	4	11.72
Ingham	1,913	168	124	744	2,949	2,240	70	57	274	98.95
Ionia	346	37	158	103	644	384	8	9	26	40.11
Jackson	1,003	33	158	27	1,221	998	25	21	64	39.06
Kalamazoo	1,459	34	389	380	2,262	1,780	42	36	123	51.10
Kent	3,754	268	435	994	5,451	3,635	85	77	280	46.70
Lapeer	411	49	82	36	578	460	20	18	53	56.53
Lenawee	658	66	425	66	1,215	675	23	20	72	70.46
Livingston	740	41	136	85	1,002	900	28	25	105	56.91
LMAS	487	24	187	47	745	458	12	9	16	44.27
Macomb	4,275	179	300	1,424	6,178	4,454	139	116	402	48.27
Marquette	492	17	99	208	816	593	10	13	11	17.01
Midland	607	77	90	65	839	684	16	14	27	32.22
Mid-Michigan	994	84	226	201	1,505	1,200	34	34	8	4.55
Monroe	878	93	153	128	1,252	937	27	29	96	61.92
Muskegon	1,004	133	205	509	1,851	1,013	35	35	131	74.76
Northwest	1,007	37	186	239	1,469	1,469	31	27	20	18.31
Oakland	8,295	829	1,405	5,881	16,410	9,289	245	274	923	76.01
Ottawa	1,124	77	226	554	1,981	1,201	43	31	86	37.29
Saginaw	1,226	3	417	182	1,828	1,373	49	13	134	64.95
Sanilac	225	21	54	35	335	241	6	6	1	2.25
Shiawassee	274	27	65	19	385	306	5	5	9	12.34
St. Clair	1,202	55	228	333	1,818	1,012	43	42	91	52.99
Tuscola	297	24	142	116	579	300	8	6	14	24.19
VanBuren-Cass	465	9	121	32	627	425	7	6	7	5.37
Washtenaw	2,273	98	483	522	3,376	2,472	96	79	192	55.81
Wayne	6,493	491	454	3,230	10,668	6,771	215	207	347	31.52
Western UP	731	4	200	93	1,028	724	13	18	24	34.29
Totals	59,353	4,146	10,937	19,307	93,743	64,832	1,741	1,570	4,525	44.82
Average	1,290	90	238	420	2,038	1,409	38	34	98	40
Median	768	49	166	143	1,213	860	22	18	47	38
Minimum	225	3	45	19	335	241	3	2	1	2
Maximum	8,295	829	1,405	5,881	16,410	9,289	245	274	923	99

Appendix II – Output Data – Licensing by LHD

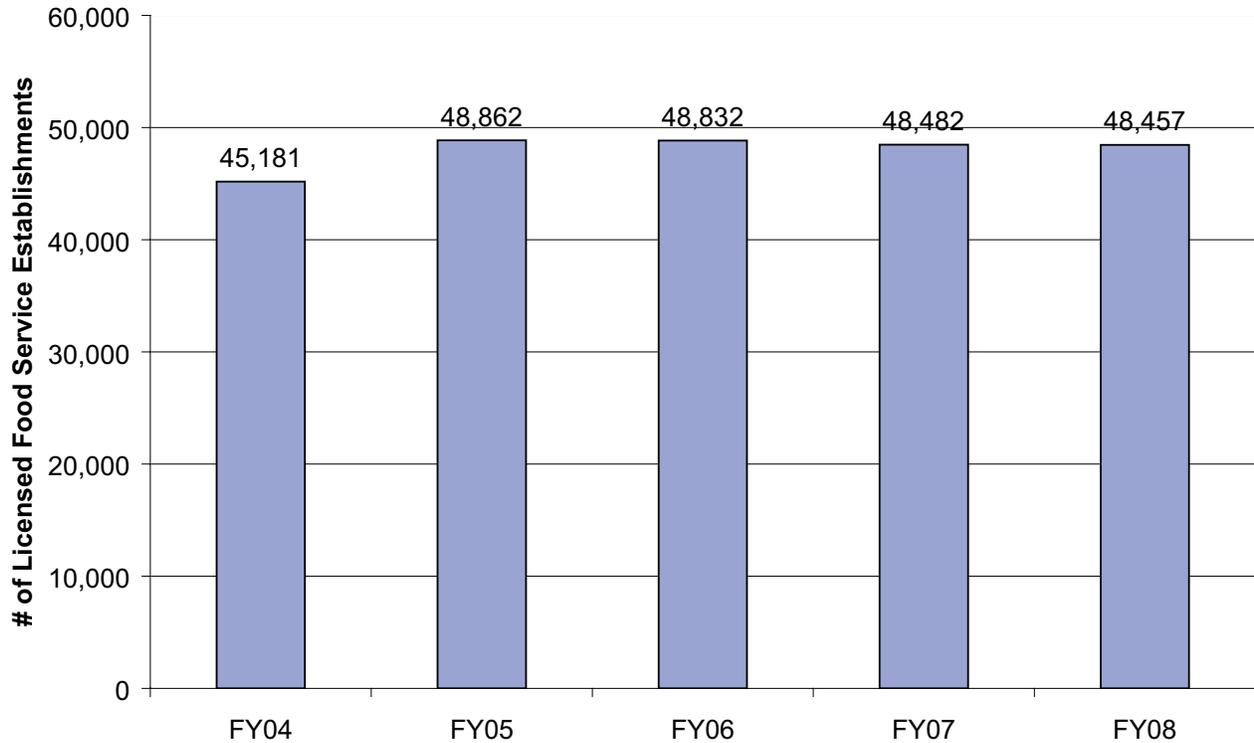
Michigan Local Health Department Quarterly Reports Summary 2008														
	ENFORCEMENT CONDUCTED		LICENSED FACILITIES											
	11. Administrative Action: office conference, informal conference, formal hearing, civil fines, orders	12. Court Action: civil, criminal	Licensed Fixed Food Establishments	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	0	0	318	1	2	0	39	5	27	1	104	1	386	299
BEDHD	4	0	501	2	5	1	12	2	68	2	167	2	586	300
Bay	0	0	390	1	4	1	2	0	19	0	128	1	415	360
Benzie-Leelanau	1	0	178	1	5	1	0	0	4	0	128	1	187	448
Berrien	1	0	630	2	8	2	4	1	74	2	321	3	716	390
BHSJ	1	0	499	2	4	1	33	5	103	2	223	2	639	320
Calhoun	3	0	490	2	4	1	8	1	72	2	186	2	574	355
CMDHD	6	0	657	2	1	0	32	4	34	1	260	2	724	344
Chippewa	3	0	188	1	0	0	3	0	5	0	49	0	196	486
Delta-Menominee	6	0	253	1	0	0	9	1	20	0	165	2	282	403
Detroit City	21	0	1692	5	110	22	9	1	361	8	598	5	2172	194
Dickinson-Iron	0	0	205	1	0	0	2	0	14	0	45	0	221	515
DHD # 2	13	0	332	1	0	0	7	1	7	0	152	1	346	478
DHD # 4	0	0	420	1	0	0	11	2	5	0	74	1	436	512
DHD # 10	34	0	914	3	7	1	38	5	87	2	582	5	1046	343
Genesee	15	0	1465	5	12	2	32	4	182	4	346	3	1691	331
Grand Traverse	3	0	317	1	8	2	20	3	51	1	63	1	396	373
Holland City	4	0	132	0	0	0	8	1	46	1	67	1	186	385
Huron	3	0	175	1	2	0	14	2	18	0	131	1	209	513
Ingham	69	0	956	3	1	0	88	12	81	2	124	1	1126	345
Ionia	8	0	166	1	0	0	15	2	25	1	158	1	206	256
Jackson	1	0	483	2	0	0	19	3	68	2	158	1	570	295
Kalamazoo	16	0	825	3	5	1	25	3	100	2	389	4	955	343
Kent	78	0	1806	6	44	9	33	5	436	10	435	4	2319	301
Lapeer	0	0	234	1	2	0	13	2	22	0	82	1	271	250
Lenawee	11	0	320	1	3	1	0	0	63	1	425	4	386	313
Livingston	7	0	412	1	9	2	18	2	42	1	136	1	481	223
LMAS	10	0	256	1	2	0	4	1	9	0	187	2	271	708
Macomb	116	2	2362	7	28	6	15	2	376	8	300	3	2781	284
Marquette	2	0	279	1	0	0	6	1	21	0	99	1	306	431
Midland	0	0	269	1	22	4	16	2	18	0	90	1	325	321
Mid-Michigan	10	0	506	2	1	0	27	4	71	2	226	2	605	288
Monroe	8	0	483	2	5	1	42	6	39	1	153	1	569	312
Muskegon	29	0	567	2	4	1	31	4	132	3	205	2	734	324
Northwest	0	0	644	2	3	1	5	1	31	1	186	2	683	590
Oakland	48	0	3978	12	133	27	10	1	599	13	1,405	13	4720	328
Ottawa	82	1	548	2	0	0	3	0	144	3	226	2	695	238
Saginaw	47	0	644	2	1	0	4	1	108	2	417	4	757	312
Sanilac	2	0	170	1	1	0	7	1	20	0	54	0	198	382
Shiawassee	0	0	201	1	1	0	13	2	13	0	65	1	228	276
St. Clair	34	0	500	2	2	0	4	1	87	2	228	2	593	291
Tuscola	1	0	151	0	0	0	7	1	21	0	142	1	179	261
VanBuren-Cass	0	0	371	1	1	0	6	1	40	1	121	1	418	285
Washtenaw	30	0	1142	4	25	5	15	2	216	5	483	4	1398	332
Wayne	311	0	3418	11	27	5	17	2	479	11	454	4	3941	311
Western UP	33	7	392	1	1	9	0	0	4	0	200	2	397	560
Totals	1,071	10	31,839	XXX	493	XXX	726	XXX	4,462	XXX	10,937	XXX	37,520	XXX
Average	23	0	692	XXX	11	XXX	16	XXX	97	XXX	238	XXX	816	315
Median	6	0	452	XXX	2	XXX	12	XXX	44	XXX	166	XXX	525	330
Minimum	0	0	132	0	0	0	0	0	4	0	45	0	179	194
Maximum	311	7	3,978	12	133	27	88	12	599	13	1,405	13	4,720	708

Appendix III – Program Staffing – Program Revenue by LHD

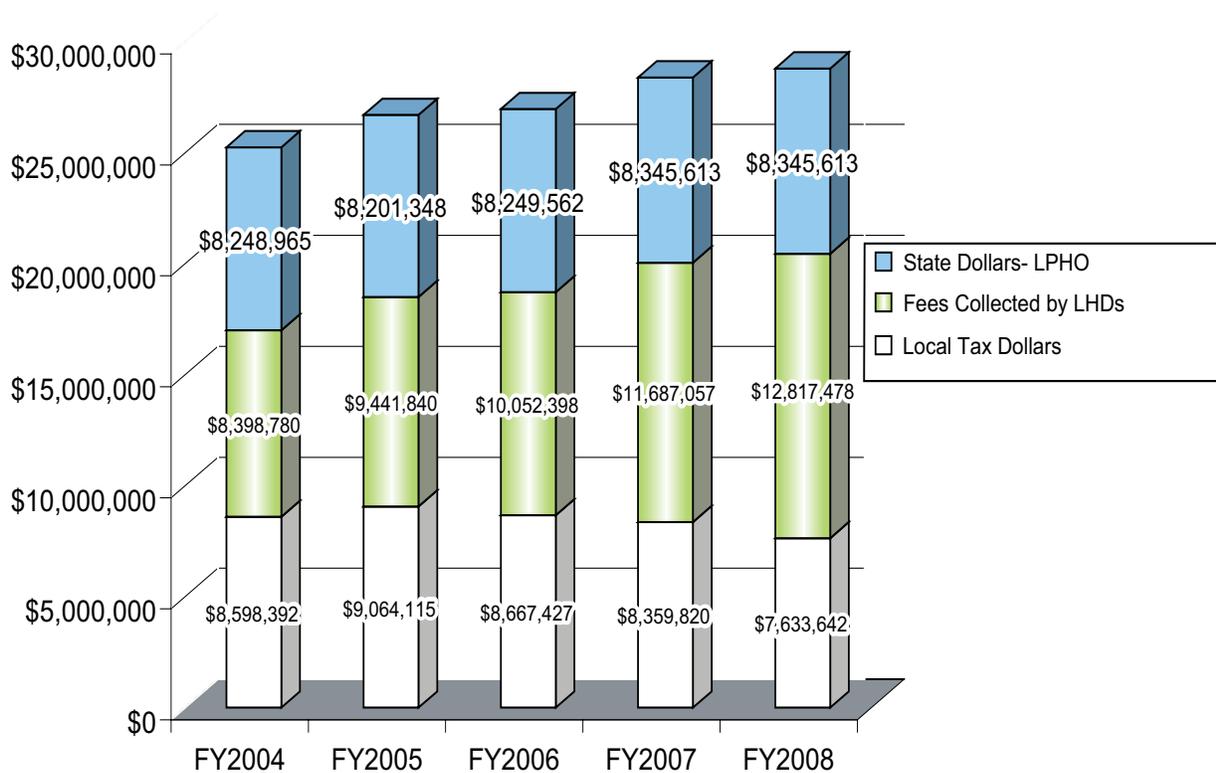
Michigan Local Health Department Quarterly Reports Summary 2008														
	IMPORTANT FACTOR IV STAFFING						FINANCIAL							
	13. Total number of FTE's assigned to the food program in the following areas: plan review, supervision, coordination, clerical	14. Total number of FTE's assigned to conduct food establishment inspections (all types)	Total FTE's	Minimum Inspection Staffing per FDA	Recommended Inspection Staffing per FDA	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	Population
Allegan	1.00	2.00	3	2.1	2.9	382	95,000	87,454	89,185	271,639	704	90,546	2.56	106,310
BEDHD	1.64	3.00	4.64	3.2	4.5	415	213,226	173,880	129,927	517,033	882	111,430	3.09	167,136
Bay	0.75	2.00	2.75	2.3	3.2	424	128,900	35,396	93,481	257,777	621	93,737	2.38	108,390
Benzie-Leelanau	0.90	0.70	1.6	1.3	1.7	711	62,237	28,633	41,974	132,844	710	83,028	3.34	39,764
Berrien	1.00	4.50	5.5	4.3	5.8	365	135,000	14,936	157,384	307,320	429	55,876	1.90	161,705
BHSJ	3.80	1.20	5	3.6	5.0	1,217	214,091	67,585	132,203	413,879	648	82,776	2.66	155,858
Calhoun	1.50	3.50	5	3.2	4.4	346	210,237	105,070	184,678	499,985	871	99,997	3.62	137,991
CMDHD	4.00	1.60	5.6	4.1	5.7	1,205	252,260	156,963	117,101	526,324	727	93,986	2.76	190,805
Chippewa	2.15	0.33	2.47	1.0	1.5	1,132	60,500	29,140	44,868	134,508	686	54,457	3.48	38,674
Delta-Menominee	2.18	1.40	3.58	1.8	2.4	561	95,000	7,787	52,971	155,758	552	43,508	2.48	62,852
Detroit City	6.00	11.00	17	11.6	16.5	419	1,060,000	63,270	522,380	1,645,650	758	96,803	1.89	871,121
Dickinson-Iron	1.50	1.50	3	1.1	1.6	351	75,000	31,250	54,732	160,982	728	53,661	4.04	39,824
DHD # 2	2.40	0.64	3.041	2.0	2.8	846	125,802	25,947	83,367	234,916	679	77,250	3.39	69,395
DHD # 4	3.01	2.28	5.29	2.2	3.2	347	140,000	67,919	81,467	289,386	664	54,704	3.53	81,971
DHD # 10	6.00	6.00	12	6.6	8.9	408	236,903	196,805	219,452	653,160	624	54,430	2.45	266,085
Genesee	5.50	9.50	15	8.7	12.4	311	610,956	795,284	464,911	1,871,151	1,107	124,743	4.23	441,966
Grand Traverse	0.70	2.00	2.7	2.0	2.9	417	143,500	32,492	82,998	258,990	654	95,922	3.05	84,952
Holland City	1.00	0.80	1.8	1.1	1.5	813								34,245
Huron	1.10	1.00	2.1	1.4	1.8	620	92,645	4,222	34,218	131,085	627	62,421	3.84	34,143
Ingham	11.30	7.90	19.2	5.4	7.9	373	541,832	436,281	218,193	1,196,306	1,062	62,308	4.32	276,898
Ionia	0.79	0.64	1.43	1.4	1.9	1,006	53,000	25,878	53,000	131,878	640	92,222	2.03	64,821
Jackson	1.70	1.60	3.3	3.1	4.3	763	181,701	9,476	123,392	314,569	552	95,324	1.92	163,851
Kalamazoo	8.00	7.00	15	5.5	7.7	323	281,900	105,658	215,263	602,821	631	40,188	2.50	240,720
Kent	3.52	9.00	12.52	11.8	16.9	606	726,000	82,661	350,443	1,159,104	500	92,580	1.93	599,524
Lapeer	0.90	1.80	2.7	1.5	2.1	321	99,109	20,481	76,257	195,847	723	72,536	2.09	93,761
Lenawee	1.80	1.50	3.3	3.1	4.0	810	144,000	40,926	107,537	292,463	758	88,625	2.86	102,191
Livingston	2.00	3.25	5.25	2.6	3.7	308	341,175	21,737	118,532	481,444	1,001	91,704	2.61	184,511
LMAS	1.89	1.85	3.74	1.8	2.4	403	121,000	14,740	125,699	261,439	965	69,903	7.23	36,143
Macomb	6.00	16.00	22	13.4	19.5	386	544,300	577,428	567,080	1,688,808	607	76,764	2.03	832,861
Marquette	0.30	1.40	1.7	1.7	2.4	583	128,807	41,452	60,678	230,937	755	135,845	3.57	64,675
Midland	1.80	1.40	3.2	1.7	2.5	599	108,908	58,931	70,524	238,363	733	74,488	2.84	83,792
Mid-Michigan	6.00	8.00	14	3.4	4.8	188	211,224	78,820	238,003	528,047	873	37,718	3.00	175,993
Monroe	0.40	1.30	1.7	3.0	4.3	963	180,000	146,752	79,850	406,602	715	239,178	2.62	155,035
Muskegon	2.68	2.49	5.17	3.9	5.6	743	299,395	110,984	103,461	513,840	700	99,389	2.93	175,231
Northwest	2.50	3.25	5.75	3.7	5.2	452	200,000	147,115	88,440	435,555	638	75,749	3.99	109,203
Oakland	15.60	25.00	40.6	25.7	36.2	656	724,080	960,100	853,593	2,537,773	538	62,507	2.09	1,214,255
Ottawa	2.50	4.10	6.6	3.8	5.4	483	311,450	301,901	143,339	756,690	1,089	114,650	3.28	230,617
Saginaw	2.80	3.10	5.9	4.8	6.4	590	279,909	30,372	266,664	576,945	762	97,787	2.80	206,300
Sanilac	0.47	0.93	1.4058	1.1	1.5	359	63,391	0	48,661	112,052	566	79,707	2.52	44,448
Shiawassee	0.60	0.80	1.4	1.2	1.7	481	62,783	46,133	66,992	175,908	772	125,649	2.41	72,912
St. Clair	1.50	4.00	5.5	3.4	4.7	455	142,000	341,408	167,906	651,314	1,098	118,421	3.79	171,725
Tuscola	0.07	1.14	1.21	1.3	1.7	508	71,665	167	42,481	114,313	639	94,474	1.98	57,878
VanBuren-Cass	0.75	0.75	1.5	2.3	3.2	836	89,500	138,612	96,459	324,571	776	216,381	2.49	130,347
Washtenaw	3.80	9.00	12.8	7.8	10.9	375	719,967	128,524	277,653	1,126,144	806	87,980	3.27	344,047
Wayne	13.00	19.50	32.5	19.0	27.8	547	2,108,400	1,823,551	1,096,349	5,028,300	1,276	154,717	4.57	1,100,732
Western UP	3.05	4.42	7.47	2.4	3.3	233	130,925	19,521	101,867	252,313	636	33,777	3.61	69,985
Totals	141.84	196.07	338	203	287	25,642	12,817,478	7,633,642	8,345,613	28,796,733	33,481	4,059,844	136	10,095,643
Average	3.08	4.26	7	4	6	478	284,833	169,636	185,458	639,927	768	85,218	2.85	219,471
Median	1.95	2.00	5	3	4	468	144,000	63,270	107,537	324,571	710	88,625	2.84	134,169
Minimum	0.07	0.33	1	1	1	188	53,000	0	34,218	112,052	429	33,777	1.89	34,143
Maximum	15.60	25.00	41	26	36	1,217	2,108,400	1,823,551	1,096,349	5,028,300	1,276	239,178	7.23	1,214,255

Appendix V – Five Year Trend Analysis Charts Licensed Health Departments

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

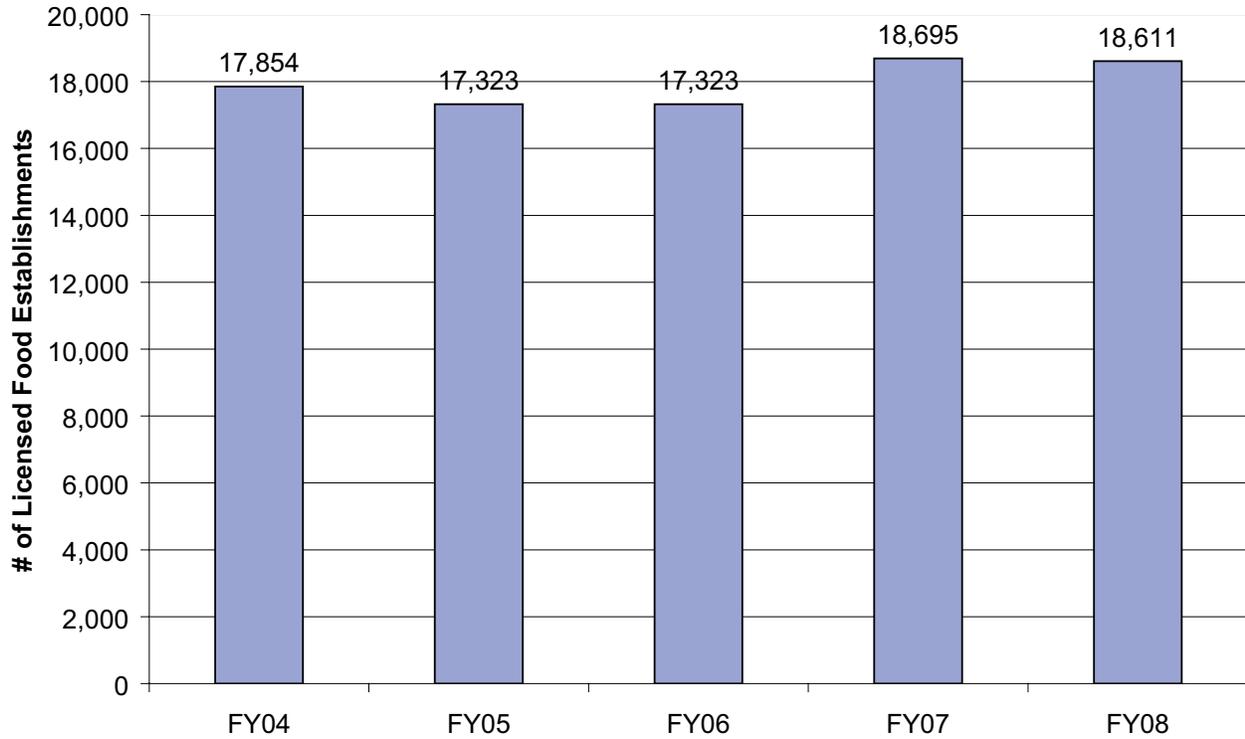


LHD Funding Sources, Five-Year Comparison

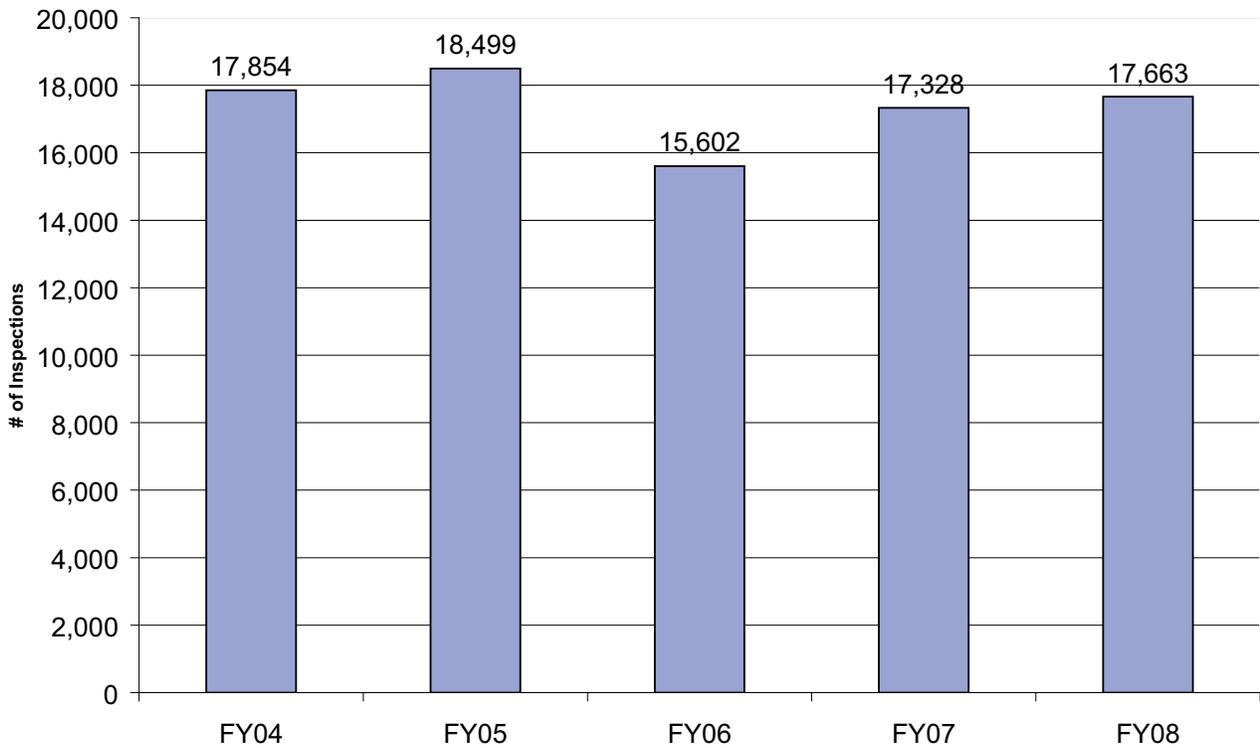


MDA Food Section

Licensed Food Establishments (MDA), Five-Year Comparison

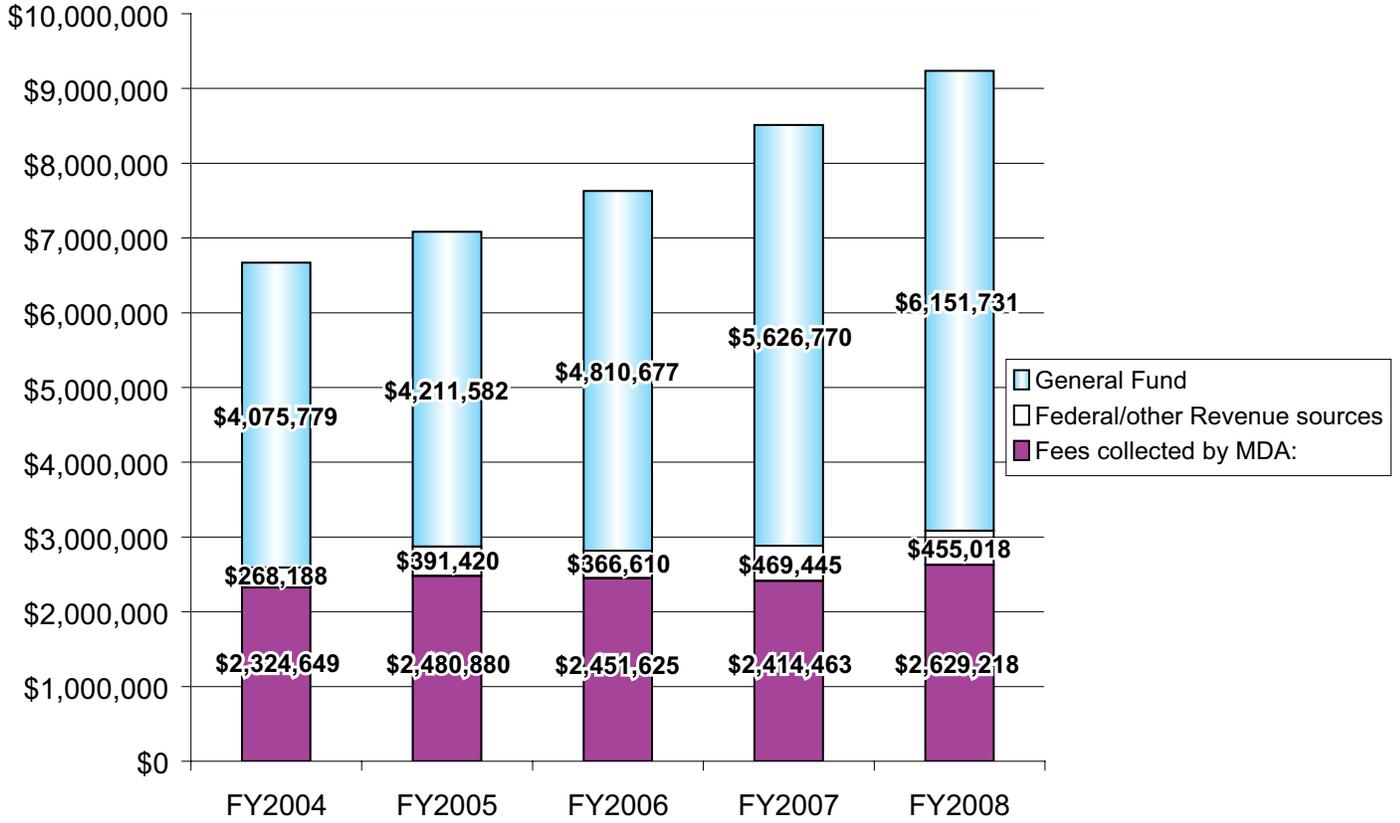


Number of Food Inspections, Five-Year Comparison



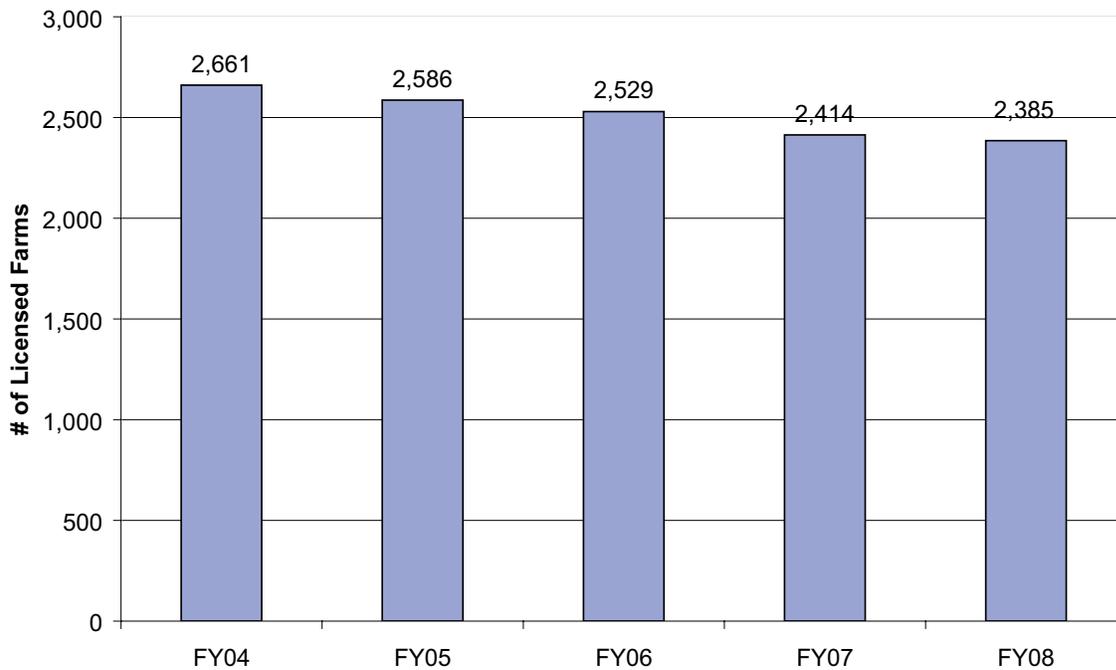
Note: Fair inspections are not included in the food inspection counts for this graph.

MDA Food Funding Sources, Five-Year Comparison

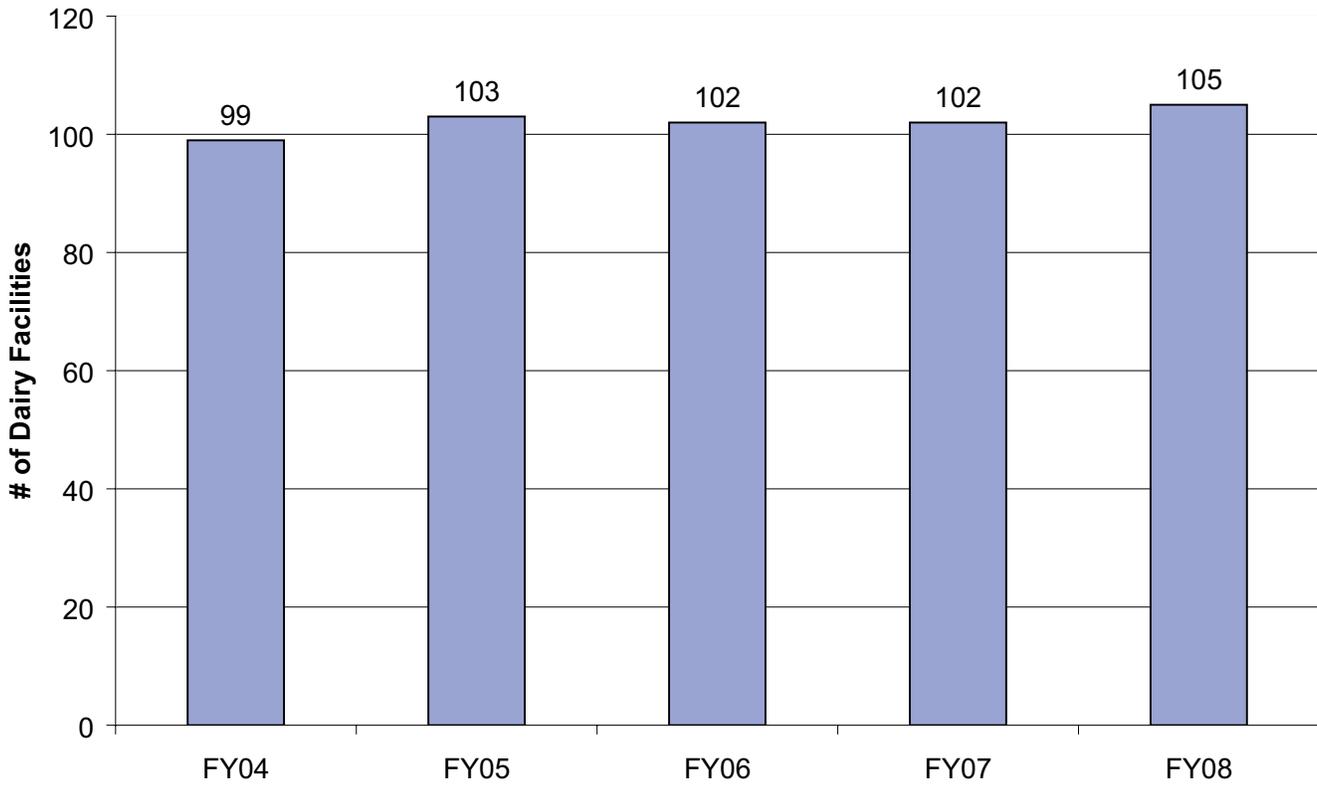


MDA Dairy Section

Licensed Dairy Farms, Five-Year Comparison

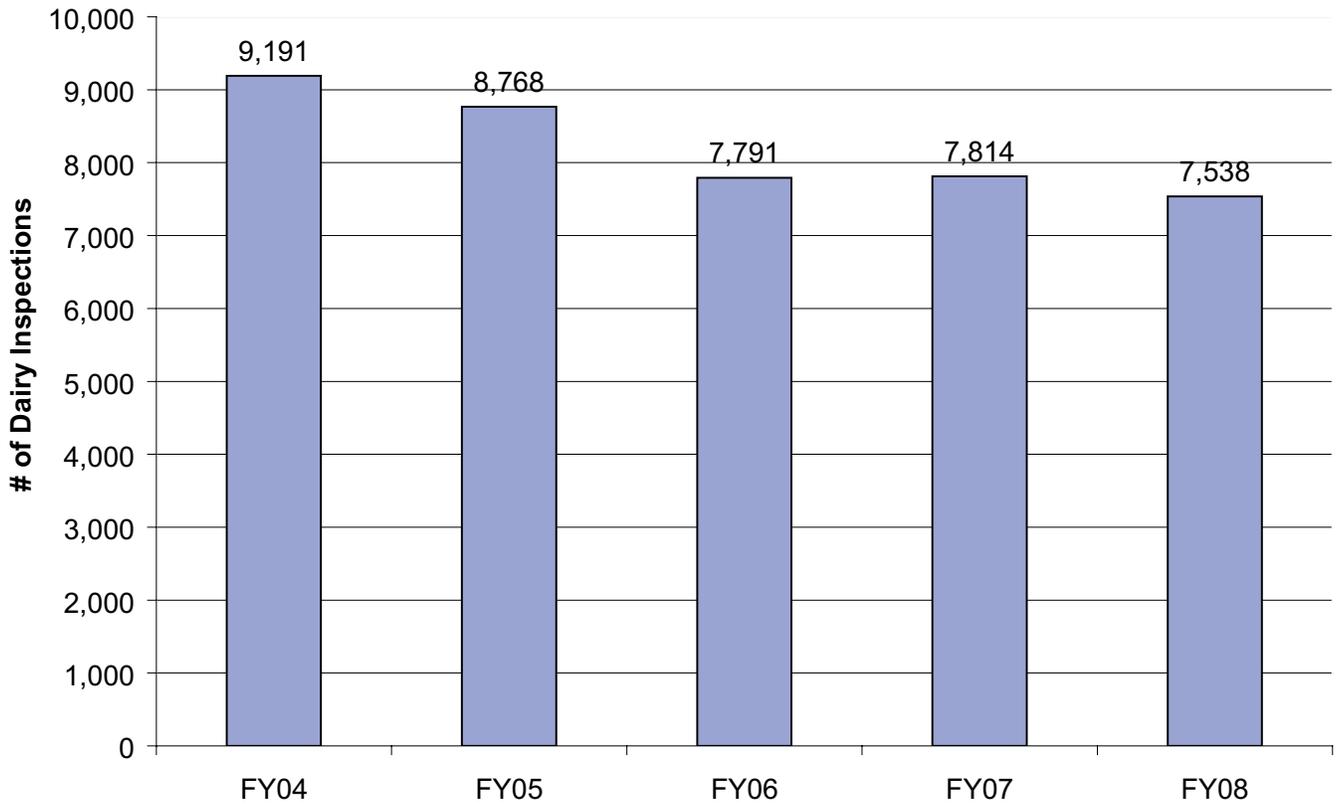


Licensed Dairy Facilities, Five-Year Comparison



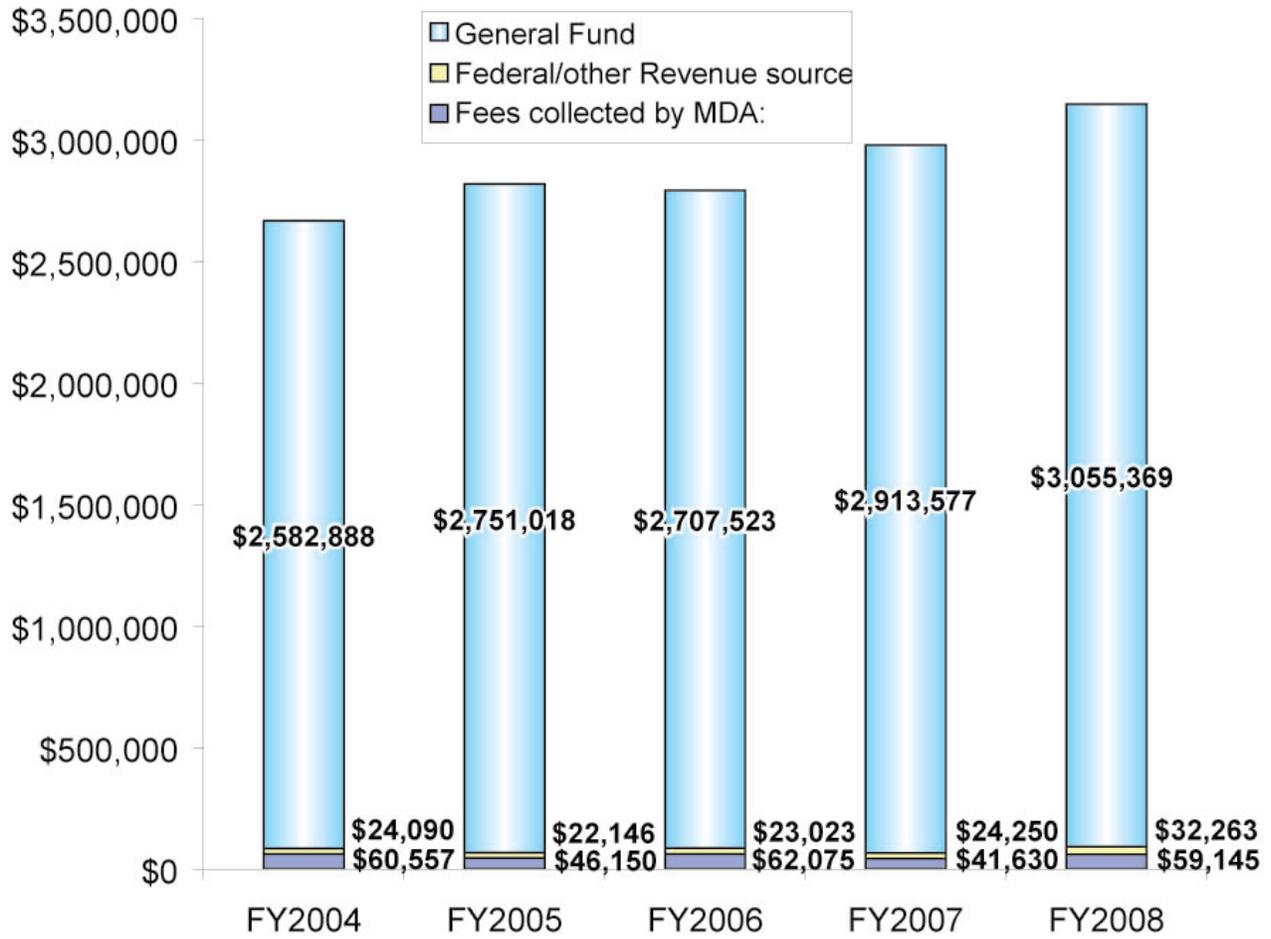
Licensed Facilities Includes: Grade A Plants, Manufacturing Plants, Grade A Milk Distributors, Grade A Transfer Stations/Receiving Stations/Tank Truck Cleaning and Grade A Single Service.

Dairy Inspections, Five-Year Comparison



Inspections Include: Farm, Plant, Hauler/Sampler/Tanker, Pasteurization, USDA Survey and Grade A Survey.

MDA Dairy Funding Sources, Five-Year Comparison





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