





Year In Review 2012



A summary of the 8 Essential Services



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Public Act 368 of 1978

Public Act 368 of 1978 mandates 8 Essential Local Public Health Services (ELPHS) including food service sanitation, drinking water and public water supply, on-site sewage disposal treatment, vision screenings, hearing screenings, sexually transmitted disease services, immunizations, and communicable disease services. The Public Health Code states these programs will be cost shared between the state and locals; however the present funding distribution is 67% local funds and 33% state funding. It is critical to understand Public Health touches the lives of every Michigan resident multiple times each day. While local health departments (LHD) share common goals of providing safe water, clean air, and protecting the public's health and environment, they individually specialize in implementing strategies that fit the needs of their jurisdiction.

From FY11 to FY12, LHDs took a funding cut of \$2.7 million from the ELPHS. The Executive Director from Michigan Association for Local Public Health, Meghan Swain stated, "Yes, challenging financial times require innovation and creativity, but food, water, environment, and health still need to be protected!" Public health reduces health care costs in often seamless and almost invisible ways. Assuring adequate funding to promote, prevent, and protect your food, water, health, and environment requires a strong and sustainable investment in public health.

Food Service Sanitation

One of the most fundamental responsibilities of public health is the surveillance and monitoring of the food supply from the farm to the table. Both the state and local health departments are responsible for protecting the public through education, licenses, routine inspection of all food service establishments, and the investigation of potential foodborne illnesses. Most of the consultation and field work is performed by the health department and reported to the Michigan Department of Agriculture and Rural Development (MDARD). In FY11, 85,865 food operation inspections were completed by local health departments and a total of 15,767 follow-up inspections were completed to ensure that unmet standards in the initial inspection were corrected.

Local health departments are the last line of defense to ensure that safe and wholesome food reaches the customer and are often the first entities to be contacted to investigate a foodborne outbreak. A total of 92 foodborne illnesses outbreaks were reported in FY11. Through education of food service operators and licensing, local health departments are able to help prevent foodborne illnesses.



	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
Food Operation Inspections (includes temporary)	91,155	85,603
Follow-up Inspections (ALL)	18,106	15,234
Foodborne Illness Outbreaks	148	92



Drinking and Public Water Supply

Availability of a safe water supply is of paramount importance to public health. Water can have biological, chemical, and physical contaminates that can cause immediate or long-term effects following exposure. Local health departments are the principal authority responsible for individual water supplies in areas not served by community systems. Health department programs provide protections to local water supplies typically through inspection and sampling of water systems, specification or approval of well design and well location, well remediation and decontamination, and community and individual education.

If there is a water problem, or perception of a water problem, the local health department is often turned to for advice. As populations increase and more people use private systems, this role will increase in scope and importance.



Drinking Water Supply:

All water wells are governed by the Michigan Groundwater Quality Control Law,
Part 127 of the 1978 Public Act 368. Health departments issue construction permits and final inspections that
assure wells are constructed according to the permit in regards to location, construction standards, depth, and
isolation distance. The Private and Type III Public Water Supply Program at the Michigan Department of Environmnental Quality (DEQ), reported that on a compiled, statewide basis, LHDs achieved 52.7% "final inspec-

tion" rates in 2010 and 53.0% "final inspection" rates in 2011.

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
Permits	12,695	12,140
Finals	6,700	6,418

Public Bathing Beaches and Swimming Pools:

It is necessary to monitor Michigan surface waters that may contain for example, *E.coli* which is a potential human health risk from partial and total body contact. Local health departments voluntarily monitor the beaches in Michigan. The Public Health Code requires that if a local health department tests a public bathing beach that they are to notify the public, local officials, and the DEQ of the results. Owners of the public bathing beaches must post a sign that states whether or not the bathing beach has been tested, and if so where to find the results. The availability of funds increases the number of counties where beaches can be monitored. In 2010, only 59 out of the 83 counties monitored at least one beach within their county.

Public Bathing Beaches

	2010 (Calendar Year)	2011 (Calendar Year)
# of Beaches Monitored in MI	438	410
# of Beach Monitoring Inspections (including follow-up inspections)	5,316	5,844

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DEQ requires a permit when building a public swimming pool. DEQ records indicate that LHDs made 7,777 pool inspections in 2010 and 7,378 in 2011. Multiple inspections for a pool occur from follow-up inspections due to a violation.

Public Swimming Pools

	2010	2011
	(Calendar Year)	(Calendar Year)
Licensed Pools Inspected	5,360	*5,461

^{*}The Public Swimming Pool program runs on Calendar year. Not all inspection reports are received and entered as of Jan. 6, 2012 for the 2011 Calendar Year. This number is the projected total inspections that include pending inspection reports.



On-Site Sewage Treatment Management

To protect and enhance the quality of surface and groundwater resources and to prevent adverse impact upon the public health by reducing sources of water contamination, it is necessary to have management identify system defects and health hazards. Local health departments, through performing site evaluations and inspections, issue permits to both public and commercial facilities. The permits detail the construction of the septic tank to prevent damage to property and injury to plant or animal life and secure remedial actions. Once a septic system is installed, a final inspection is conducted to assure that the system is installed in compliance with the permit. In both FY10 and FY11, almost half of residential and non-residential permits issued resolved failures of existing systems.

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,2011)
Residential Septic Permits	11,609	9,973
Residential Septic Failures Corrected	5,194	4,822
Non-Residential Septic Permits	540	640
Non-Residential Septic Failures Corrected	270	258



Hearing and Vision Screening

The Michigan Public Health Code requires screening during preschool for ages 3-5 and in schools during grades K, 2, and 4 (Hearing) and grades 1, 3, 5, 7, and 9 or in conjunction with driver's training (Vision). The Michigan Department of Community Health (MDCH) Hearing and Vision Program services are provided at no cost (FREE) by local health departments in collaboration with local schools and preschool centers, including Head Start. A total of \$5.125 million was allocated to the MDCH Hearing and Vision programs costing on average in FY11 \$5.58/child for a hearing screening and \$4.17/child for a vision screening.

Hearing

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
Preschool Screenings	93,104	91,616
Preschool Referrals	3,937	3,639
School Screenings	382,199	360,277
School Referrals	12,947	12,513

Vision

	FY10	FY11
	(Oct.1,09-Sept.30,10)	(Oct.1,10-Sept.30,11)
Preschool Screenings	93,119	135,757
Preschool Referrals	6,655	10,448
School Screenings	552,951	470,552
School Referrals	61,683	52,540



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Sexually Transmitted Disease (STD) and Human Immunodeficiency Virus (HIV)

Cases of STDs are required under the Public Health Code to be reported to local health departments to ensure appropriate care is provided and to execute a quick follow-up for priority cases. Patients and their sex partners treated early avoid the high costs associated with managing complications and preventing the spread of infection. All local health departments are mandated to provide STD services to persons presenting for care. Outreach and education are also provided by local health departments through schools and other community settings.

STD:

STDs, including chlamydia, gonorrhea, and syphilis result in excessive morbidity, mortality, and health related costs. In recent years, due to shrinking resources, there have been a decreasing number of STD clients seen in local health department clinics. Local health departments are forced to prioritize their services to those at highest risk from limited capacity which in turn demonstrates a high number of positive rates.

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
*# of Chlamydia Cases	47,416	48,870
*# of Gonorrhea Cases	13,409	12,830
*# of Early Syphilis Cases Reported	319	394
**# of Syphilis Tests (by LHD STD clinic)	40,169	37,552
**# of Gonorrhea and Chlamydia Tests (by LHD STD clinic)	41,780	50,967
Positive Rate for Gonorrhea and Chlamydia Tests (by LHD STD clinic)	19%	14.8%

^{*}The number of cases represents the morbidity within each jurisdiction. This is based on the county of residence of the infected individual. 80% of cases from local health departments come from non-LHD providers (private docs, ERs, urgent care, etc.) Local health departments conduct follow-up on these cases for treatment, risk education, and partner elicitation.

^{**} The number of tests, per jurisdiction, represents the number of clients that were tested in that jurisdiction's STD clinic. It is NOT based on the client's county of residence. It is a reflection of clinic activity.



HIV:

The Centers for Disease Control and Prevention (CDC) "core" funding is the primary source of funding supporting HIV testing in local health departments. CDC has issued a funding formula that cut Michigan HIV Prevention program by \$1.7 million (22%) for FY12. This formula has immediate and serious negative implications for Michigan. By 2014, when the CDC funding formula is fully implemented, Michigan losses will total up to \$2.1 million, which represents a reduction of 33% of our current funding level that covers HIV testing, prevention for positives, health education and risk reduction for high risk negative individuals, and community-level interventions.

Michigan will also lose up to \$883,000 (35%) of the award that supports HIV testing in health care settings in FY12. This award supports the implementation of standard of care HIV testing in health department STD clinics.

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
Positive HIV Tests conducted at LHD	231	229

Immunization

The Centers for Disease Control and Prevention (CDC) declared vaccinations one of the 10 great public health achievements of the twentieth century. Vaccines dramatically reduce infectious disease in Michigan by protecting both an individual and the community. LHDs play a critical role in protecting Michigan's citizens against vaccine-preventable diseases. Provider eduction and consumer education about vaccines are important services of LHDs in Michigan. LHDs work with the state to assure that school and childcare settings are safe from vaccine-preventable diseases.

Michigan distributes over 1 million dollars of federally purchased vaccines to protect eligible populations. LHDs play a critical role in the imlementation and quality assurance of all vaccine programs in Michigan. LHDs provide numerous vaccinations to Michigan's citizens. The following Michigan Care Improvement Registry (MCIR) data provides the number of influenza

vaccine doses administered by all providers in Michigan and doses administered spcifically by LHD during the last two influenza seasons.

	2010-11Seasonal Influenza Vaccine Doses (MCIRData: July 1, 2010 to June 30, 2011)	2011-12 Seasonal Influenza Vaccine Doses (Preliminary MCIR Data:July 1, 2011 to Dec. 27, 2011
Influenza Doses Given (all providers)	1,597,796	1,331,834

Note: During the 2010-2011 flu season, 92% of the seasonal flu doses were entered into MCIR by the end of December.

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Infectious Disease

Reports of infectious diseases from local health departments, physicians, and laboratories are collected and aggregated at the county level to monitor the health of the population and to provide the basis for preventive actions. In fiscal year 2011, there were approximately 84,000 cases of individual reportable diseases and conditions which was slightly higher than the prior fiscal year. These numbers do not include the many nonreportable diseases and conditions such as head lice, strep throat, norovirus, or influenza-like illnesses which are also captured in the Michigan Disease Surveillance System. Notable decreases were seen in FY11 in the

number of chickenpox and whooping cough (pertussis) cases

reported; down 33% and 30% respectively.

Local health departments provide various infectious disease services such as childhood immunization clinics, animal bite consultations, and sexually transmitted disease treatments. In addition, local health departments serve on the frontline of infectious disease outbreak investigation, to minimize the local impact of disease transmission and to implement control measures to prevent future outbreaks. Although individual cases of norovirus were excluded from the yearly totals, the number of norovirus outbreaks reported each year continues



to rise from 96 in FY10 to 228 outbreaks reported in FY11. These outbreaks require a significant investment of time by local health departments to investigate and mitigate.

For a complete list of reportable diseases in Michigan for 2011 as required by the Michigan Public Act 368, go to: http://www.michigan.gov/documents/Reportable_Disease_Chart_2005_122678_7.pdf

	FY10 (Oct.1,09-Sept.30,10)	FY11 (Oct.1,10-Sept.30,11)
Total cases of reportable disease	84,049	84,221

"In today's world, it is shortsighted to think that infectious diseases cannot cross borders." Senator Ron Wyden - Oregon



Tuberculosis (TB):

TB is a contagious bacterial infection that is spread through the air and attacks the lungs, but may spread to other organs. In 2010 (Calendar Year), 184 active TB disease cases were reported by Michigan health departments, and provisional data for 2011 indicates 158 total active cases. The standard of care for treating tuberculosis is directly-observed therapy which involves a LHD staff member meeting in-person with the patient to deliver each dose of medication and watch the patient consume each does.

The average period of treatment for TB is 6 months, although complications such as other concurrent diseases or drug-resistant TB may extend this period up to 24 months. Some TB patients require intensive case management to assure completion of treatment. Examples include patients who are homeless or substance-addicted, where the health department may need to coordinate assistance for housing, food, or substance abuse rehabilitation in order to assure the patient's compliance and completion of therapy.

Because TB is transferred through the air, the LHD must also track the number of "contacts" with whom the TB patient has been in close or frequent contact (e.g. family, friends or coworkers). These contacts require evaluation to determine if they were infected with TB. Identifying and properly managing contacts to TB patients is very time and resource intensive. Patients with active TB disease provide sputum specimens for microbiological testing. One such test is referred to as a "smear," and patients who are sputum-smear positive are more likely to transmit disease than those who are sputum-smear negative. Therefore, contacts to sputum-smear positive patients are given the highest priority for evaluation and follow-up. 2010 preliminary data shows 1,071 people were in contact with a sputum-smear patient.

Types of TB Cases for Investigation 2010 (Calendar Year)

	Active Case: Sputum smear +
Cases for Investigation	59
Number of Contacts	1,071
Evaluated	870
TB Disease	6
Latent TB Infection	140
Started Treatment	103
Completed Treatment	56

