

2013 Year In Review



A Summary of the 8 Essential Services





Food Protection Drinking Water On-Site Sewage Hearing Screening Vision Services STD Immunization Infectious Disease



Special acknowledgement and support in preparation of this document:

Shannon Briggs PhD Cristi Carlton MPH LaRonda Chastang MSW Jennifer Dakers MA CCC-A Peter Davidson PhD Dana DeBruyn REHS Jay Fiedler MS Kristine Judd BSPH Siobhan Kent BS Dale Ladouceur RS Bridgette Ma MPH Katie Macomber MPH Jim McEwan RS MS Mark Miller MBA Carrie Monosmith BSPH ASCP Carrie Oleszkowicz MPH Roger Racine MS Rachel Schumann PhD RN Paul Sisson BS Danielle Smith MPH Meghan Swain BBA Patricia Vranesich RN BSN

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 FY12 to FY13, LHDs remained flat 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 FY12, 85,586 food operation inspections were completed by local health departments and a total of 15,795 follow-up inspections 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 109 foodborne illnesses outbreaks were reported in FY12. Through education of food service operators and licensing, local health departments are able to help prevent foodborne illnesses.



	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,12)
Food Operation Inspections (includes temporary)	85,603	85,586
Follow-up Inspections (ALL)	15,234	15,795
Foodborne Illness Outbreaks	92	109

Drinking Water and Public Water Supply

Drinking Water Supply:

The availability of safe drinking water is a basic principle of public health. Water can contain biological, chemical, radiological, or physical components that can cause detrimental acute or chronic health effects, following consumption. To reduce the public's exposure to these potentially harmful agents, local health departments administer Drinking Water Protection Programs that regulate and monitor single family residential water systems and over 9,600 non-community public water supply systems. These programs provide public health protection through inspection and sampling of water supply systems, specification or approval of well design and location, contaminated well rehabilitation, administration of abandoned well plugging requirements, and by providing the public with educational materials related to safe water supply maintenance.



Currently, publicly-owned and private water wells provide drinking water for about 50% of Michigan's residents.

Local health departments administer the Private and Type III Public Water Supply Program under the provisions of Part 127 of Act 368 P.A. 1978, the Michigan Groundwater Quality Control Rules. They issue permits, review drilling and plugging records, and conduct final inspections to assure wells are installed in conformance with construction and location standards and that abandoned wells are properly plugged. The Michigan Department of Environmental Quality (DEQ) reported that in 2012, on a compiled, state-wide basis, LHDs achieved a final well inspection rate of 47.4 percent, and documented the plugging of 5,992 abandoned wells.

Private & Type III Public Water Supply Program	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,12)
Permits Issued	12,140	13,171
Final Well Inspections Conducted	6,418	6,237
Abandoned Wells Plugged	6,000	5,992

Local health departments administer the Noncommunity Public Water Supply (NCWS) Program under the provisions of Act 399 P.A. 1976, the Michigan Safe Drinking Water Act. LHDs issue permits for new NCWS wells, which includes ensuring proper isolation to protect from potential contamination, conduct sanitary surveys of NCWS and oversee and enforce federal and state drinking water monitoring and reporting requirements. In 2011, The DEQ reports 90 percent of Michigan's noncommunity drinking water systems were in compliance, by meeting water quality monitoring and reporting requirements and not experiencing a Maximum Contaminant Level Exceedance.

ELPHS Year In Review

Noncommunity Public Water Supply Systems	FY10 (Calender Year)	FY11 (Calender Year)
Total Number of Regulated Systems	9916	9753
Total Number of Systems with a Violation*	1806	1008
Percent of Systems with a Violation	18.5%	10.5%

*Calender year data is from the Annual Report on Michigan Public Water Systems Violations report. This report is not yet available for 2013.

Public Bathing Beaches and Swimming Pools

Public Bathing Beaches:

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 2012, only 57 out of the 83 counties monitored at least one beach within their county.

	2011 (Calender Year)	2012 (Calender Year)
The Number of Beaches Monitored in Michigan	410	418
The Number of Beach Monitoring Inspections (including follow-up inspections)	4,844	5,609





Public Swimming Pools:

DEQ requires a permit when building a public swimming pool. DEQ records indicate that LHDs made 7,625 pool inspections in 2011 and 7,522 in 2012. Multiple inspections for a pool occur from follow-up inspections due to a violation.

	2011 (Calendar Year)	2012 (Calendar Year)
Licensed Pools Inspected	5,482	*5,373

*The Public Swimming Pool program runs on Calendar year. Not all inspection reports were received and entered as of Jan. 6, 2013 for the 2012 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 FY11 and FY12, almost half of residential and non-residential permits issued resolved failures of existing systems.

	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,2012)
Residential Septic Permits	9.973	10,742
Residential Septic Failures Corrected	4,822	4,655
Non-Residential Septic Permits	640	563
Non-Residential Septic Failures Corrected	258	218

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 FY12 \$5.58/child for a hearing screening and \$4.17/child for a vision screening.

Hearing

	FY11	FY12
	(Oct.1,10-Sept.30,11)	(Oct.1,11-Sept.30,12)
*Preschool Screenings	91,616	81,531
*Preschool Referrals	3,639	2,911
*School Screenings	360,277	332,250
*School Referrals	12,513	11,976

Vision

	FY11	FY12
	(Oct.1,10-Sept.30,11)	(Oct.1,11-Sept.30,12)
*Preschool Screenings	135,757	89,735
*Preschool Referrals	10,448	5,955
*School Screenings	470,552	474,284
*School Referrals	52,540	51,388

* Not all hearing and vision screening and referral reports were received and entered as of March 21, 2013 for the 2012 Calendar Year.





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.

	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,12)
*# of Chlamydia Cases	48,870	47,939
*# of Gonorrhea Cases	12,830	12,587
*# of Early Syphilis Cases Reported	394	411
**# of Syphilis Tests (by LHD STD clinic)	37,552	34,864
**# of Gonorrhea and Chlamydia Tests (by LHD STD clinic)	50,967	42,739
Positive Rate for Gonorrhea and Chlamydia Tests (by LHD STD clinic)	14.8%	14.0%

*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.



ELPHS Year In Review

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.

	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,12)
New Cases of HIV diagnosed at	146	131
HIV Tests Conducted at LDH	47,412	41,627

Immunization

Vaccinations are considered one of the 10 great public health achievements of the twentieth century. Vaccines dramatically reduce infectious disease in Michigan by protecting both the individual and the community. LHDs play a critical role in protecting Michigan's citizens against vaccine-preventable diseases. LHDs worked with the Division of Immunization to process over \$86 million in Vaccines for Children (VFC) and public funds and helped to monitor the distribution of this vaccine to VFC providers serving underinsured and uninsured children and adults in Michigan. In addition to providing vaccines to the most vulnerable, LHDs also play a significant role in healthcare provider immunization service delivery systems and consumer education about vaccines. LHDs provide VFC compliance visits, quality assurance visits through the Assessment, Feedback, Incentives, and eXchange (AFIX) program and office education for physicians, nurses and medical assistants through Immunization Nurse Education (INE) trainings.



The following 2012 data points illustrate the instrumental role LHDs play in the prevention of vaccinepreventable diseases in Michigan:

	2012
Public Vaccine Management and Oversight	\$86 million (1,780,540 doses of vaccine)
VFC Compliance Visits	1,088
Provider (AFIX) Quality Assurance Visits	1,016
Education (INE) Visits	492
Doses Administered by LHDs in MCIR	487,990



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 2012, there were approximately 83,500 cases of individual reportable diseases and conditions, which was about one thousand fewer than the prior fiscal year. These numbers do not include the many non-reportable diseases and conditions such as head lice, strep throat, stomach flu, or influenza-like illnesses which are also captured in the Michigan Disease Surveillance System. Notable decreases were seen in FY12 in the number of West Nile Virus and Shingles cases reported down 82% and 35% respectively.

Local health departments provide various communicable 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 communicable disease outbreak investigations, to minimize the local impact of disease transmission and to implement control measures to prevent future outbreaks.

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



	FY11 (Oct.1,10-Sept.30,11)	FY12 (Oct.1,11-Sept.30,12)
Total cases of reportable disease	84,245	83,462

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

ELPHS Year In Review

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 2011 (Calendar Year), 170 active TB disease cases were reported by Michigan health departments, and provisional data for 2012 indicates 149 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 dose.

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. 2011 preliminary data shows 706 people were in contact with a sputum-smear patient.

	2010 (Calender Year) Active Case: Sputum smear +	2011 (Calender Year) Active Case: Sputum smear +
Cases for Investigation	59	53
Number of Contacts	1,071	706
Evaluated	870	619
TB Disease	6	11
Latent TB Infection	140	122
Started Treatment	103	101
Completed Treatment	56	68

Types of TB Cases for Investigation

