



2016 Annual Report



Health
Department

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Letter from the Director

On behalf of the Macomb County Health Department staff, I am pleased to present our 2016 Annual Report. This report highlights some of the accomplishments our dedicated, compassionate and resourceful professional public health staff have made towards improving the health and well-being of residents and communities in Macomb County. As we approach our 70th anniversary as a local health department, we will take time to acknowledge the progress we’ve made and the thousands of residents served since Dr. Oscar Stryker, our first Health Director, opened the doors to the Health Department on July 10th, 1947. Whether it was preparing and responding to Polio or Tuberculosis that were department priorities in 1947, to taking action to address today’s emerging public health threats like Zika Virus and the opioid/heroin addiction epidemic, our Health Department staff continues to collaborate and lead efforts to promote and protect community health.

In 2016 the department completed a Community Health Assessment and developed a Community Health Improvement Plan (CHIP) that highlights four priority areas for community action and implementation in 2017. The CHIP, which can be found on our web site, will help streamline our strategic plan and guide our programming and services in the community.

As 2017 begins, we look forward to transitioning our dental clinic to a new community partner, My Community Dental Centers, and the implementation of the Nurse Family Partnership home visitation program for first-time mothers. We will continually strive in the new year to improve as a valuable public health department to serve the health and community needs of all those who live, work, and play in Macomb County.



*William Ridella, M.P.H., M.B.A.
Director/Health Officer*

Department Highlights

In 2016, MCHD continued to deliver quality, efficient and award winning programs and services to the residents of Macomb County. The Emergency Preparedness Program was recognized by the National Association of County and City Health Officials (NACCHO) for its ability to plan for, respond to, and recover from public health emergencies. MCHD met 283 benchmarks required for recognition as a Project Public Health Ready (PPHR) health department. MCHD is the first health department in southeastern Michigan and one of only 400 local health departments nationwide which have been distinguished for excellence in preparedness through PPHR. In addition, MCHD received 3 National Association of Counties Achievement awards in 2016 for Advancing Health Communication, Family Support Services through Children's Special Health Care Services and Immunization Improvements through Health Level Seven Registry.

The department hosted its first ever Women's Wellness Day in October in partnership with more than 50 local vendors at our Thompson Family Resource Center. Utilizing funding from the St. John Mission Fund and Michigan Department of Health and Human Services the department renovated the kitchen at the Thompson Family Resource Center and now hosts cooking classes and demonstrations for local families.

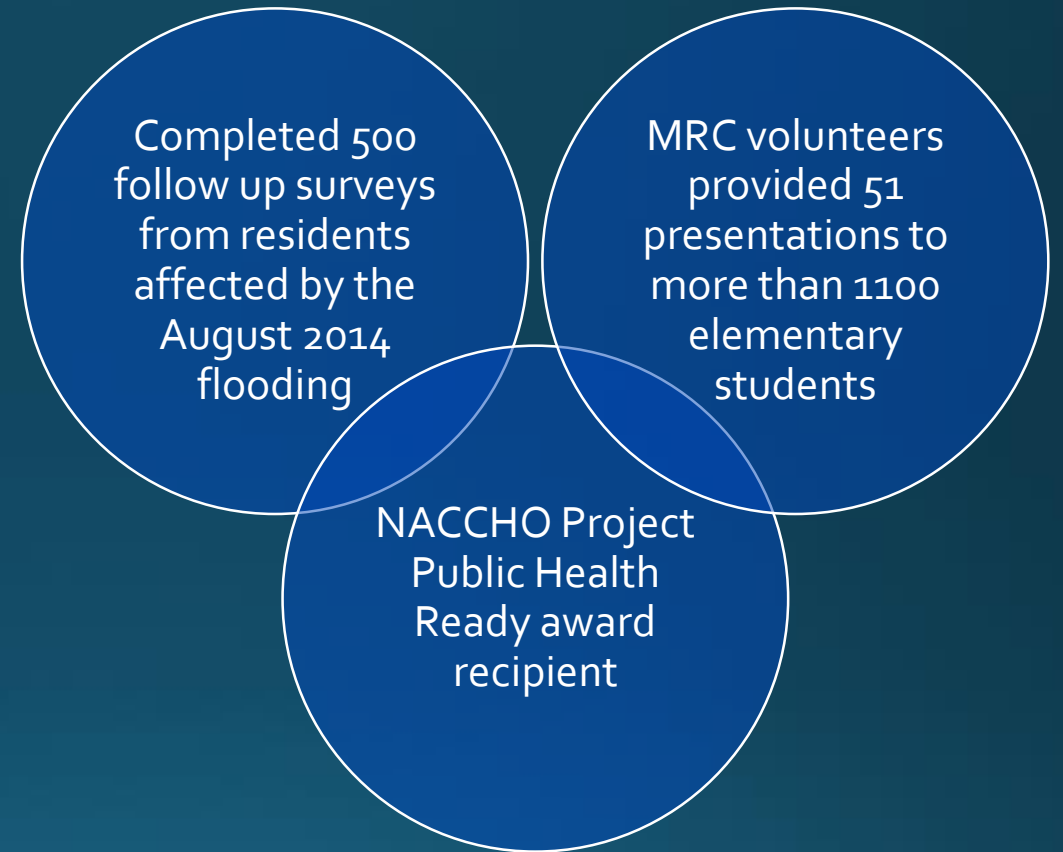


Emergency Preparedness Program

Preparing for a public health emergency is an ongoing project that never reaches completion. Threats and challenges to the public are constantly changing and evolving. The Macomb County Health Department has a dedicated team on staff leading efforts to protect our residents.

In 2016, the EPP team and their dedicated Medical Reserve Corps volunteers conducted 500 surveys to residents affected by the flooding in 2014. Their responses will help staff understand the long term effects and what we can do to be more prepared.

Through the years EPP has built a partnership with Macomb County libraries and received a NACo award (Community Resiliency Through Intergovernmental and Library Partnerships) for its Closed POD and First Responder POD program. Staff presented the program at the National Health Care Coalition Preparedness Conference in Washington D.C. in December.



Environmental Health Division

The Macomb County Health Department provides environmental health services designed to ensure a healthy and safe environment for all residents.

The EH division provides a wide array of services in Macomb County. A few examples of how our Environmentalists help keep our county clean and healthy include:

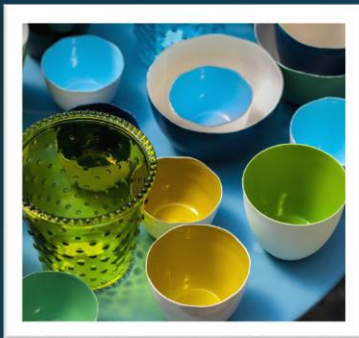
- Food establishment inspections, new and remodeled facility plan review and complaint investigations
- Public swimming pools inspections
- Collection of household hazardous waste
- Radon test kits
- Lead testing, investigation and abatement
- Beach water testing
- Well and septic system inspections and evaluations

The chart illustrates just a few of the many services staff in Environmental Health provided in 2016.

2016 Service Activities	
EMRAP	
Household hazardous waste collected (lbs.)	147,915
Radon test kits distributed	1233
Food Service/Sanitation	
Food establishment inspections (fixed, mobile, vending)	4323
Food establishment re-inspections	1697
Temporary inspections	195
Food complaints	303
Plan reviews approved	107
Public Swimming Pools	
Inspections	299
Well and Septic	
Septic inspection requests	586
Septic permits issued	102
Well inspection requests	195
Well permits issued	44

Public Health in Action: Lead Testing and Abatement

Lead is a known neurotoxic element that has been used for years in many different products. It persists in the environment and to date it continues to poison children and adults. In 2016 Macomb County Health Department received 156 referrals from the State of Michigan about cases of children with positive result of capillary Blood Lead Level (BLL) screening. Children under age 6 should be screened for elevated (BLL) by their physicians. Once the result of screening comes up positive, the results are sent to the Michigan Department of Health and Human Services (MDHHS). MDHHS refers the cases to the health department where the children reside. 83 of those cases referred to Macomb County were confirmed by a venous blood drawing, and 35 were above 5 micrograms per deciliter ($\mu\text{g}/\text{dl}$), the reference level at which CDC recommends public health actions be initiated. Educating the parents to identify the potential sources of lead in a house (paint, dust and contaminated items) along with cleaning instructions and behavioral change recommendations by the department would reduce the blood lead levels to acceptable levels. However, there are some cases that these interventions are not sufficient and the child's blood lead level continues to persist at a high level and poses a permanent damage to the nervous system, which causes physical, behavioral and mental damage. In these cases home visit and environmental investigation on the source (s) of lead is performed by certified staff. An X-Ray detection machine, XRF, is used to detect the presence and amount of lead in every painted surface throughout the house.



In 2016 there were some unusual cases of lead poisoning in Macomb County. The first was a referral for a resident with a very high blood lead level that needed hospitalization and chelation therapy. After months of investigation and testing everything in and around the house, finally a homeopathic remedy used was found to contain high levels of lead and to be the source of poisoning. A second case, an adult was diagnosed with severe lead poisoning after a visit to a local emergency room for stomach pain. A thorough investigation of the house and a history of other family members did not reveal any source of lead, until some household items were tested. Some of the mugs and cups that were imported from Mexico and used regularly, contained high levels of lead and repeated use of them for drinking acidic beverages (coffee) was the source of lead poisoning.

Finally, MCHD investigated two cases that all family members were lead poisoned. These cases required cooperation with the Michigan Department of Agriculture and Rural Development (MDARD), and Food and Drug Administration (FDA) in order to complete the investigation. After a complete investigation of two separate cases by MCHD and lack of source of lead that could affect all family members, a connection was made that based on the similar ethnicity of the two families the source of poisoning must be in the food. MDARD agreed to test all the spices in both houses, which showed turmeric and chili powder to be contaminated with lead. FDA confirmed the results. This multi-agency investigation initiated an alert in the State of Michigan on the importance of spices to be source of poisoning, especially those purchased at ethnic stores.

Family Health Services Division

The Macomb County Health Department's Family Health Services division provides a wide variety of personal health services for residents.

Programming and services target health and wellness throughout the lifespan. Some examples of Family Health Services programming include:

- Home visits by public health nurses to at-risk infants and children
- Outreach services at community events
- Reproductive health education and examinations in Family Planning
- Immunizations
- Dental clinic services

2016 FHS Service Activities	
Maternal Child Health	
Home visits by Public Health Nurses	1088
Case management on lead poisoned children	160
Community Outreach Program	
Outreach events attended	467
Adults enrolled in Medicaid	457
Children enrolled in Medicaid/MI Child	554
Family Planning	
Number of unique clients	1580
Total clinic visits	2974
Immunization Program	
Number of adults who received vaccines	8544
Number of children who received vaccines	10671
Number of flu shots administered	8236

Public Health in Action: Immunization Outreach and Education

In an effort to reduce, eliminate, or maintain elimination of cases of vaccine-preventable diseases in Macomb County, the Health Department's Immunization Program operates two clinics per day where clients can receive all the adult and childhood ACIP (Advisory Committee on Immunization Practices) recommended vaccines. In an effort to increase vaccination rates, decrease barriers and increase access to care, the Immunization Program also offers all recommended childhood vaccines to clients who are seeking services in the Health Department's WIC clinics. Immunization services in these WIC clinics are offered daily at select locations. The Vaccines for Children (VFC) Program helps provide vaccines to children whose parents or guardians may not be able to afford them. This helps ensure that all children have a better chance of getting their recommended vaccinations on schedule.



The Macomb County Health Department not only participates in the VFC Program, but also provides oversight for 83 medical providers in the County that also participate in the program. Along with many other responsibilities, this oversight requires that Local Health Departments conduct VFC Provider site visits within their jurisdiction to assure vaccine storage and handling requirements are being followed and appropriate standards for immunization practices are being met.

In 2016, the Immunization Clinic staff:

- Provided vaccines to 8,544 adults
- Provided vaccines to 10,671 children
- Administered 8,236 flu shots
- Hosted two well attended VFC provider meetings
- In collaboration with the American Cancer Society and local hospital groups, implemented the Colorectal Cancer FluFit Campaign by providing education and distribution of colorectal screening kits to qualifying individuals.
- Conducted 11 offsite flu clinics

Healthy people in healthy communities.



Health Promotion Disease Control

The goal of the Health Promotion/Disease Control Division is to reduce the occurrence and impact of communicable and chronic disease on Macomb County residents. The HPDC programs provide clinical and educational services for residents to make lasting changes to their personal or family health.

Health promotion and disease control programming includes:

- Children’s Special Health Care Services
- Communicable Disease
- HIV and STD Testing and Counseling
- Tuberculosis Control
- Hearing and Vision Screening
- Healthy Communities
- Women, Infants and Children’s Supplemental Nutrition Program

2016 HPDC Service Activities	
Children’s Special Health Care Services	
Care Coordination Plans (level I and II), and Case Management	1624
Disease Control Services	
Communicable disease investigations	4664
Tuberculosis control clients evaluated	124
HIV counseling and testing	1647
STD clinic attendance	2260
Healthy Communities Services	
Educational presentations and programs	645
Attendees at presentations and programs	14,171
Car seat inspections	287
Hearing and Vision Program	
Hearing screenings	41,251
Vision screenings	58,686
Women Infants and Children Supplemental Nutrition Program	
Women, infants and children screened and enrolled in WIC	22,642
Breastfeeding classes and support groups hosted	108
Participants who received high-risk nutrition care plans	947

Health Promotion/Disease Control in Action: Women's Wellness Day

The Healthy Communities Program led a partnership and planning process with several additional MCHD programs to deliver a new event in one of our most economically disadvantaged communities: Women's Wellness Day. Women's Wellness Day 2016 was held Saturday, October 15th at the Max Thompson Family Resource Center in Warren, Michigan. The event was the first of its kind in Macomb County with the main goal of showcasing the facility and it's wealth of services to surrounding residents in the 48089 zip code. The event captured 195 registrants and offered information and services from 50 different local vendors, including each agency that has an office inside of the Thompson Center. In addition to vendors that offered information we coordinated additional help from Macomb County Health Department staff, the Macomb County Medical Reserve Corp. and Girl Scout Troop #74273.

In addition to showcasing the building, the event aimed to provide a day for the women of Macomb County to put their personal health first and have a one stop place to receive valuable health screenings and services (mobile mammograms, on-site pap smears and pregnancy tests, blood pressure screening and flu shots), a free lunch, educational sessions (self-defense with County Executive Mark Hackel, Zumba with Anytime Fitness, dancing from Arthur Murray and Jazzercise) and some special "feel-good" services (facial, manicure, haircut, acupuncture, caricature artist and massage).



Public Health in Action: Enhanced Hepatitis C Surveillance and Prevention



Along with the current national and local heroin and opioid epidemic, Macomb County experienced a significant increase in the number of reported Hepatitis C virus (HCV) disease in young adults 18 to 29 years of age. As limited resources are available for follow-up with chronic HCV infected persons, and injection drug use is a risk factor for contracting HCV, there was a need for more comprehensive data and follow-up on reported cases. Macomb County Health Department implemented an initiative to address this severe gap by supporting a part-time public health nursing position. The nurse focused on enhanced surveillance by conducting follow-up investigations on 120 chronic cases of HCV in young adults to obtain more comprehensive epidemiological information from physicians and cases to inform intervention efforts. These follow-up investigations provided an opportunity to locate the case, identify contacts, and provide education.

The resulting enhanced HCV surveillance data and expanded testing provided opportunities to improve collaboration with community partners, identified new cases, and increased awareness of HCV risk factors. Expanded testing in the STD clinic resulted in identifying new cases of Hepatitis C by offering testing to this population. Of those that agreed to test (2139), 2% (33) had positive laboratory results and did not previously know their status. The program supported additional knowledge about the epidemiology and needs of persons infected with HCV in the county, informed better connections to needed services, and increased awareness in other sectors of the community.

Medical Examiner

In 2016 the Medical Examiner's Office examined more cases than in any previous year, with a 3.2% increase from the number of cases seen in 2015. The total number of forensic investigations increased by 6.9% when compared to 2015. The number of cremation permits issued by the office increased for the 12th year in a row and showed a 2.2% increase from 2015. As has been the trend over the past several years, it is anticipated that the workload will continue to rise for the foreseeable future.

The Medical Examiner's Office investigated 2,612 deaths, performed 686 forensic examinations and issued 4,064 cremation permits. Additionally, 2,234 hospice deaths were reported to the Medical Examiner's Office. In 2016, there was a 2.8% increase in the number of deaths related to natural disease, an 18.1% increase in the total number of accidents, a 12.8% decrease in the total number of suicides, and a 43.5% decrease in the total number of homicides.

Drug-related deaths have been at an all-time high for the past few years. Abuse of prescription medications along with heroin and cocaine continue to be major concerns in Macomb County. In 2016 there were 124 deaths related to heroin (heroin alone or heroin in combination with other drugs). This represents a 9% decrease in heroin related deaths from 2015. However, in 2016 the number of fentanyl-related deaths increased by 221%.

2016 Service Activities	
Cremation permits issued	4064
Medical Examiner cases	2612
Forensic examinations	686
Toxicology assessments performed	676

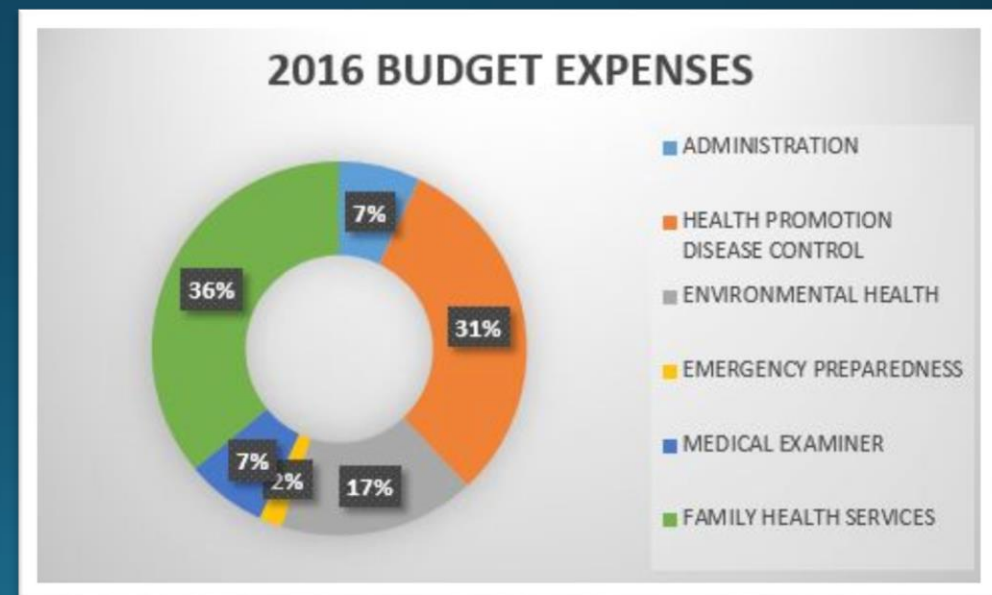
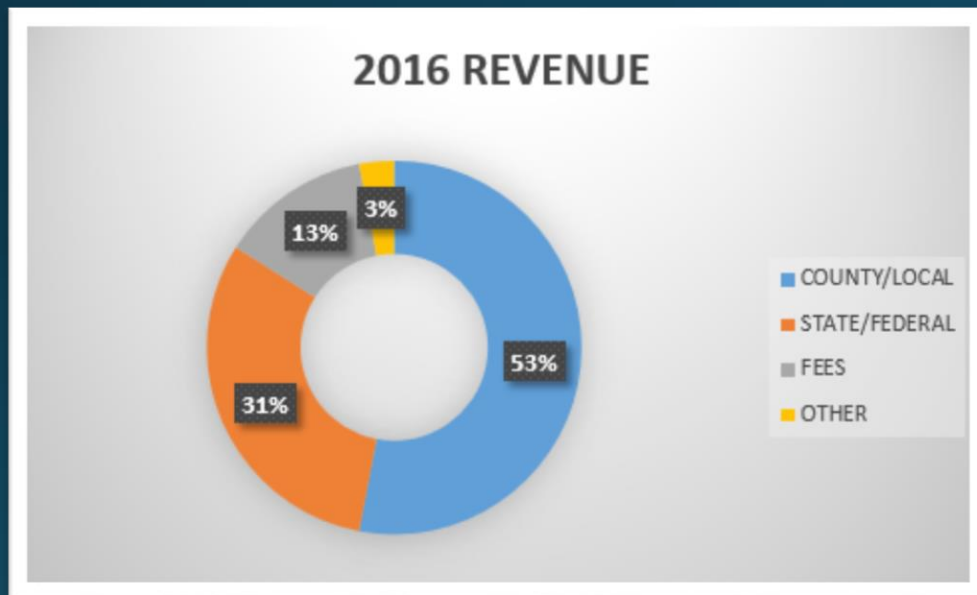


ABMDI
American Board of
Medicolegal Death Investigators



Budget Revenue and Expenses

In 2016, the Macomb County Health Department had an operating budget of \$24,672,281.00. The sources of revenue and expenses and the percentage of the total are as follows:



Leadership Team

Macomb County Health Department
Director/Health Officer
William Ridella, MPH, MBA

Medical Director
Kevin Lokar, MD, MPH

Deputy Health Officer
Krista Willette, RN, MSA

Chief Medical Examiner
Daniel Spitz, MD

Environmental Health Division Director
Andrew Cox, REHS

Family Health Division Director
Cheryl Woods, RN, BSN

Health Promotion/Disease Control Division
Director
Natalie Dean-Wood, FACHE

Planning and Quality Assurance Manager,
Whitney Litzner, MPH

Financial Services Manager
Patrick DeTine

Offices/Locations



Office location (left to right):

CENTRAL HEALTH SERVICE CENTER - MOUNT CLEMENS
43525 Elizabeth Road
Mt. Clemens, Michigan 48043

MACOMB COUNTY MEDICAL EXAMINER'S OFFICE
43585 Elizabeth Rd
Mt. Clemens, MI 48043

SOUTHEAST FAMILY RESOURCE CENTER - ST. CLAIR SHORES
25401 Harper Avenue
St. Clair Shores, Michigan, 48081

Office location (left to right):

SOUTHWEST HEALTH CENTER - WARREN
27690 Van Dyke
Warren, MI 48093

MAX THOMPSON FAMILY RESOURCE CENTER
11370 Hupp Avenue
Warren, Michigan 48089

VERKUILEN BUILDING
21885 Dunham Road
Clinton Township, MI 48036

