Marquette County Health Department

2010 Annual Report

Working To Keep You In Superior Health

• Prevent
• Promote
• Protect
MISSION STATEMENT

To serve people by assessing, promoting and assuring health within our community.

- Assures the quality and accessibility of health services
  - Prevents epidemics and the spread of disease
    - Promotes safe and healthy behaviors
    - Protects against environmental hazards

VISION

Healthy choices for a healthy community.
On behalf of the Marquette County Board of Health, the Board of Commissioners, and staff, I am pleased and honored to present the Marquette County Health Department 2010 Annual Report.

The Health Department is your unit of county government required by law to prevent disease, protect against environmental hazards, promote healthy behavior, and to prolong life. This report summarizes the Department’s activities which were provided in 2010 and is intended to give citizens and other interested parties an update on the health status of our community. We are fortunate to have a highly skilled, industrious, and passionate workforce who is dedicated to the value and benefit of the services we bring you. Likewise, our success would not be possible without the support and collaboration we have with so many community partners, state agencies, and local individuals.

**The Most Notable Highlights for 2010**

- Initiated three new grant funded programs (Action Communities for Health Innovation and Environmental Change, Complete Streets, and WIC Peer Counseling) without any additional local appropriation.
- Signed a seven year agreement with Michigan Community Dental Clinics (MCDC) guaranteeing a significant return on our investment which is then used to fund a school dental education program as well as other community health education services.
- Marquette County was awarded 9th best overall health profiles in Michigan out of 82 total by the “County Health Rankings” and number one for clinical health care.
- Played an active role in helping Michigan become the 38th state to adopt a Smoke-Free Law which included workplaces, bars, restaurants and most public facilities.
- It became the first year regular immunization clinics were held in participating schools which enabled children to get their shots during regular school hours and without parents having to make extra efforts.
- Created and implemented a risk based food inspection policy which reduced inspection frequencies in low risk establishments, improved staff efficiency and resulted in lower licensing fees for 73 percent of establishments.

As a summary, this document can only partially reflect our progress toward achieving the Department’s mission, and the full extent of the accomplishments and dedication of the Department’s staff and volunteers. I would like to recognize the continuing interest, support, and leadership we receive from the Marquette County Board of Health and the Marquette County Board of Commissioners. We look forward to the challenges of the future as we continue our efforts to make Marquette County a safer and healthier place in which to live.

Respectfully submitted,

Fred J. Benzie, MPH, RS, MPA
Health Officer
As the Medical Director of Marquette County Health Department (MCHD), I am interested in the health of the population in Marquette County and those factors that can lead to an unhealthy status. In February of 2010 the University of Wisconsin Population Health Institute (UW PHI) released 2010 County Health Rankings. This is a collection of reports that represents the health of the population in the counties of every state in the nation. Each county within its respective state is ranked comparatively based on many different factors associated with health. These factors are in keeping with the World Health Organizations definition of health which states that health is not merely the absence of disease; rather it is the complete sense of physical, social and mental well being.

Adequately reflecting the health of a population is a complex task and no single measure can successfully do so. The UW PHI created a composite using multiple measures including traditional measurements of length of life (mortality) and quality of life (morbidity), but also included measures categorized by the major determinants of health (health behaviors, clinical care, social and economic factors, and physical environment). Only the fifth major determinant (genetics and biology) is not included.

Importantly, these measures and rankings poignantly show that where we live matters to our health; “geography is destiny.” However, the County Health Rankings model includes the importance and influence of programs and policies. As such, geography is not “fate.” Communities can develop and implement programs and policies to improve population health. Specifically, we in Marquette County can pursue a healthier community and the County Health Rankings give us some indication of the county’s strengths and weaknesses.

Overall, Marquette County fared well in the rankings compared to other counties in Michigan with a ranking of #9 out of 82 (Keewenaw County was not included due to small population numbers). Our ranks ranged from #1 in Clinical care to #40 for alcohol use and #64 for the built environment. The reader is encouraged to go to the County Health Rankings website at http://www.countyhealthrankings.org for more information about the rankings of Michigan and Marquette County. The table above is a depiction of the County Health Rankings model with a summary of the Marquette County rankings for each factor. Together, we can all strive for “healthy choices for a healthy community.”
Under the direction of George Sedlacek, Division Director, the Community Health Division works in the community on many prevention and educational programs (listed on next page). In addition, several new programs have been funded: each one is listed here with a brief description.

**ACHIEVE**
The Active Living Task Force was expanded in 2010 as the result of the Division receiving the Center’s for Disease Control, ACHIEVE (Action Communities for Health, Innovation, and EnVironmental changE) grant. In 2010, the Division awarded over $40,000 in community grants to improve the community environment to support active living. It’s estimated that matching dollars of over $300,000 from state and federal resources were brought into the county partly through the work of this initiative. Funding for nutrition education was also provided to the YMCA of Marquette County, U.P. Children’s Museum, and MSU Extension.

**TOBACCO PREVENTION**
The May 1\textsuperscript{st} implementation of the new smoke-free law went very well due in part to our efforts to educate the public and establishment owners. Staff conducted presentations, media interviews and stories, many phone calls and face-to-face visits. One local bar even held an “Ashtray Shoot-out” with all proceeds going to the American Cancer Society. The Community Health Division collaborated with the Environmental Health Division for follow-up on smoking complaints related to bars and restaurants. The Marquette County Tobacco Free Community Coalition participated in several pre and post studies under the direction of the Michigan Department of Community Health. One study recruited non-smoking bartenders to submit urine samples pre and post law to see their nicotine exposure levels. Another study enlisted volunteers to visit area restaurant and bars to observe if establishments were in compliance with all aspects of the new law. Results will be posted on our website when available.

**SMOKE-FREE APARTMENTS**
We are currently working with subsidized apartments in the county to encourage owners and managers to go smoke-free. The benefits of going to a smoke-free status are to decrease cost per unit, second and third hand smoke, and tobacco fire hazards. Smoke-free apartments will increase rental and re-sale value, provide cleaner air, and tenants will be happier and healthier. With increased awareness that smoke-free policies are legal and with the advantages of smoke-free policies becoming better understood, many owners are adopting a smoke-free policy. For a listing of the current smoke free apartments and homes visit www.smokefreeup.org.

**COMPLETE STREETS**
Complete Streets are roadways planned, designed and constructed to accommodate safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and disabilities must be able to safely move along and across a complete street. The benefits of having a Complete Streets Ordinance is to create a livable community, promote healthy lifestyles, create connected transportation networks, make public transit safe and convenient, and reduce air and water pollution. Staff are working with Marquette Township and City of Marquette to adopt an ordinance for Complete Streets. Both municipalities are in the process of writing a draft ordinance to present to the boards for approval.
The mission of the Community Health Division is to identify community health needs, plan and evaluate appropriate responses, and provide educational services that direct the attention of individuals to their own health behavior.

SAFE ROUTES TO SCHOOL
The Safe Routes to School program encourages and enables students to walk and bike to school on routes that are safe. When routes are safe, walking or biking to and from school are easy ways to ease traffic jams and give students the regular physical activity they need for good health and optimal school performance.

Program staff are currently working with seven schools from the area to make walking and biking to school safe. Birchview Elementary school was awarded funding from MDOT for the Safe Routes to School program in January of 2011 and will move forward with implementing and engineering.

<table>
<thead>
<tr>
<th>COMMUNITY HEALTH STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title III Senior Screening provided at # of Rural Clinics:</strong></td>
</tr>
<tr>
<td>Number of Screens</td>
</tr>
<tr>
<td>Number of Referrals</td>
</tr>
<tr>
<td><strong>Family Health Education—Home visits to high risk families based on referrals:</strong></td>
</tr>
<tr>
<td>Number of Screens</td>
</tr>
<tr>
<td>Number of Clients</td>
</tr>
<tr>
<td><strong>Child Passenger Safety (CPS)—Car seat checks and education:</strong></td>
</tr>
<tr>
<td>Hearing Screens</td>
</tr>
<tr>
<td>Hearing Referrals</td>
</tr>
<tr>
<td>Vision Screens</td>
</tr>
<tr>
<td>Vision Referrals</td>
</tr>
<tr>
<td>Otology Clinic Participants</td>
</tr>
<tr>
<td><strong>Hearing &amp; Vision Screens provided at local schools:</strong></td>
</tr>
<tr>
<td>U.P. CPS Technicians</td>
</tr>
<tr>
<td><strong>Community Meetings</strong></td>
</tr>
<tr>
<td>Conducted</td>
</tr>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>Attended</td>
</tr>
<tr>
<td><strong>Dental Prevention—Fluoride Mouth Rinse Program:</strong></td>
</tr>
<tr>
<td>Number of Participating Schools</td>
</tr>
<tr>
<td>Total number of Participating Students</td>
</tr>
<tr>
<td><strong>Adolescent Health-Services in Powell Township School and North Star Academy:</strong></td>
</tr>
<tr>
<td>Adolescent Contacts</td>
</tr>
<tr>
<td>Referrals</td>
</tr>
<tr>
<td><strong>Educational Programs</strong></td>
</tr>
<tr>
<td>Participants</td>
</tr>
</tbody>
</table>

ADDITIONAL 2010 COMMUNITY HEALTH PROGRAMS:
* Medical Care Access Coalition
* Food Stamp Nutrition Education
* Substance Abuse Prevention
* Adolescent Health Partnership
* Hearing
* Strategic Prevention Framework/State Incentive Grant
* Pandemic Flu
* Tobacco Prevention
* Emergency Preparedness
* Senior Screens
* Vision
* Strong Family Safe Children
* Child Health Protection
* Active Living
* Safe Kids
* Dental
Under the direction of Patrick L. Jacuzzo, Environmental Health Coordinator, the Environmental Health Division strives to provide an exceptional level of Environmental Public Health protection within the community, and to improve public service by creating operational efficiencies. Primary program areas include Food Service Sanitation, Private and Public Water Supplies Safety, and On-Site Sewage Treatment. Statistics for these programs and other Environmental Health services are listed on the next page. Several changes were initiated in 2010 in the Food Service program as described below.

**FOOD SERVICE SANITATION**

Environmental Health Sanitarians conduct inspections at restaurants, bars, schools, hospitals and temporary food service establishments. The number of Food Service Program inspections were 346 with an additional 88 follow-up inspections. Engineering and procedural plan reviews were conducted for all proposed new construction or remodeling of food service establishments; 11 such reviews were completed.

A new fee structure was established in 2010 to accommodate a risk based inspection protocol that was developed and implemented in 2009. This new protocol divides all fixed food service establishments into three risk categories. There are 35 low risk (X) establishments, 167 medium risk (Y) establishments and 71 high risk (Z) establishments. The categories are based upon processes and risk factors which occur within the facility, and in accordance with Michigan Department of Agriculture (MDA) program guidance. Each category also has different frequencies of inspections based upon risk, thus creating the different fee structure and creating efficiencies within the division. This program change was well received by food service operators.

Two new hires joined our team of Sanitarians in 2010. One was new to this field and required completion of standardized food training. This training consists of 55 joint/overseen inspections with a Standardized Food Trainer using the risk based inspection protocol and forms, 31 online training modules and a three day Food Code Course conducted in Lansing. The Division Coordinator achieved certification as a Standardized Trainer to assist in completion of this training process.

Food manager certification courses continued to be provided to ensure active managerial control of risk factors known to cause food borne illness in food service establishments. This certification is required by Michigan’s Food Law for all establishment operators. The class participants totaled 32 for 2010.

As reported in the Community Health Division, the new smoke free law went into effect on May 1. Any complaints that came in regarding smoking in licensed food service establishments were investigated by Sanitarians. There were 18 smoking related complaints, of which six were found to be legitimate. Smoking complaints in food service establishments are investigated within five days. Smoking complaints have greatly decreased due to vigilance within the community, digital cameras and assistance from local law enforcement who have been reporting violations. The founded food service complaint fee of $100 has also been instrumental in deterring violations.
The Environmental Health Division strives to prevent illness and protect our environment by eliminating, reducing, or removing those elements in the environment that could lead to human harm. Strategies utilized to reach this goal include education, outreach, regulation and enforcement.

### 2010 ENVIRONMENTAL HEALTH STATISTICS

<table>
<thead>
<tr>
<th>Food</th>
<th>Public Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Food Inspections</td>
<td>346 Surveys Conducted</td>
</tr>
<tr>
<td>Follow-Up Inspections</td>
<td>88 Follow-Up Inspections</td>
</tr>
<tr>
<td>Temporary Food Inspections</td>
<td>97 Private Water &amp; Type III</td>
</tr>
<tr>
<td>Plan Reviews Conducted</td>
<td>12 Predrilling Inspections</td>
</tr>
<tr>
<td>Complaints Received/Investigated</td>
<td>19 Permits Issued</td>
</tr>
<tr>
<td>Enforcement Actions</td>
<td>8 Well Finals Conducted</td>
</tr>
<tr>
<td>Sewage: Residential</td>
<td>Abandoned Plugging Records Received</td>
</tr>
<tr>
<td>Number of Parcels Evaluated</td>
<td>164 Swimming Pools</td>
</tr>
<tr>
<td>Number of Permits Issued</td>
<td>147 Inspections</td>
</tr>
<tr>
<td>Failed System Investigations</td>
<td>30 Samples Collected</td>
</tr>
<tr>
<td>All Other Inspections</td>
<td>25 General Environmental Health*</td>
</tr>
<tr>
<td>Complaints Received/Investigated</td>
<td>8 DHS Inspections</td>
</tr>
<tr>
<td>Sewage: Non-Residential</td>
<td>DHS Follow-Up Inspections</td>
</tr>
<tr>
<td>Number of Parcels Evaluated</td>
<td>7 Tattoo Parlor Inspections</td>
</tr>
<tr>
<td>Number of Permits Issued</td>
<td>8 Campground Inspections</td>
</tr>
<tr>
<td>Failed System Investigations</td>
<td>2 Number of Campground Sites</td>
</tr>
<tr>
<td>Septage Site &amp; Truck Inspections</td>
<td>11 Home Loan Inspections</td>
</tr>
</tbody>
</table>

*GENERAL ENVIRONMENTAL HEALTH*

Several responsibilities fall in the category of General Environmental Health services. Inspections are performed for Michigan Department of Human Services that may include childcare centers, daycare homes, foster care homes, group homes, children’s and foster care camps, and child caring institutions.

Rabies surveillance is conducted for animal bites and bat exposures as reported by medical care providers, law enforcement and private citizens. Animal statistics include 73 dog bites, 12 cat bites and four bat bites. Of these 89 bites, ten lab tests were run to determine rabies risk; all tests were negative.

Marquette County has six state licensed body art facilities. Body art facilities are licensed to conduct tattooing, body piercing, micro-dermal implants, and permanent make-up application. Sanitarians conduct annual inspections at these businesses to ensure that proper facilities, procedures, equipment, training, documentation, record keeping, immunizations and sterilization procedures are in place. Engineering reviews of plans, specifications and procedures are conducted prior to the construction and licensing of any newly proposed body art facilities.
PERSONAL HEALTH DIVISION

The mission of the Personal Health Division is to provide high quality prevention, testing, education, care and treatment services. The focus of this mission is to provide these services to the underserved populations of Marquette County who may have limited options to receive assistance anywhere else.

Under the direction of Corrine Brownell, Division Director, the Personal Health Division has many programs, most of which are provided in our on-site clinic. The clinic operates Monday through Friday, 8:00 a.m. until 5:00 p.m. with Monday night clinic hours until 7:00 p.m. offered approximately once per month. Off-site clinics are available monthly for WIC. Specialty off-site clinics are arranged as requested by the community. Services provided in our clinic include: Immunizations, Communicable Disease Control, STD testing and treatment, Family Planning services, Breast and Cervical Cancer Prevention, HIV/AIDS care and treatment, Maternal Infant Health Program, WIC, and Children’s Special Health Care Services (CSHCS). See the following table for statistics on many of our programs.

<table>
<thead>
<tr>
<th>PERSONAL HEALTH</th>
<th>Immunizations</th>
<th>Maternal Infant Health Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccines Given</td>
<td>1,637 Initial Visits</td>
<td>3 MIHP Screens 71</td>
</tr>
<tr>
<td>Flu Shots Given</td>
<td>3,022 Clinic Visits</td>
<td>46 Total Visits 362</td>
</tr>
<tr>
<td>Pneumovax Given</td>
<td>51 Individuals Served</td>
<td>61 Infant Support Services</td>
</tr>
<tr>
<td>Pregnancy Testing</td>
<td>Units of Service</td>
<td>1,757 Total Visits 430</td>
</tr>
<tr>
<td>Number of Tests Given</td>
<td>72 WIC</td>
<td>CSHCS</td>
</tr>
<tr>
<td>Number of Positive Tests</td>
<td>19 Average Monthly Caseload</td>
<td>1,470 Care Coordination Level 1 14</td>
</tr>
<tr>
<td>STD Visits</td>
<td>478 Number of Visits</td>
<td>5,662 Care Coordination Level 2 21</td>
</tr>
<tr>
<td>Communicable Disease Cases</td>
<td>Family Planning</td>
<td>Diagnostics 1</td>
</tr>
<tr>
<td>Cases Reported</td>
<td>190 Initial Medicals</td>
<td>168 CSHCS Annual Updates 126</td>
</tr>
<tr>
<td>TB Skin Tests</td>
<td>318 Annual Medicals</td>
<td>358 Breast &amp; Cervical Cancer</td>
</tr>
<tr>
<td>HIV (AACT)</td>
<td>Medical Revisits</td>
<td>351 Total Prevention Screenings 251</td>
</tr>
<tr>
<td>Pretests</td>
<td>137 Total Visits</td>
<td>877 Abnormal Findings 28</td>
</tr>
<tr>
<td>Post Test</td>
<td>96 Supply Pickups (Pills &amp; Misc.)</td>
<td>554 Other Referrals 26</td>
</tr>
<tr>
<td>Positive HIV</td>
<td>0 Ortho Evra Patch</td>
<td>18 Positive Cases 3</td>
</tr>
<tr>
<td></td>
<td>NuvaRing</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Depo Provera</td>
<td>104</td>
</tr>
</tbody>
</table>

PEER COUNSELORS ADDED TO WIC PROGRAM

In October of 2010, the WIC clinic assembled a team of Breastfeeding Peer Counselors. The Peer Counselors are available to meet with women during their pregnancies as well as through the postpartum period in order to offer breastfeeding support and information. The combination of peer counseling and the WIC program has the potential to make a positive impact on breastfeeding rates among WIC participants in Marquette County.
COMMUNICABLE DISEASE CONTROL

All Michigan physicians and health care providers are required by state law to report cases of certain communicable diseases to their local health department. These “reportable communicable diseases” are those which require a public health investigation and response in order to identify additional cases and to limit the further spread of disease.

REPORTABLE COMMUNICABLE DISEASES IN MARQUETTE COUNTY RESIDENTS

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.I.D.S</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HIV Positives</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Blastomycosis</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Campylobacter Enteritis</td>
<td>7</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>E COLI.0157:H7</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hepatitis (Total)</td>
<td>22</td>
<td>25</td>
<td>43</td>
<td>53</td>
<td>34</td>
</tr>
<tr>
<td>Type A</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Type B (Chronic)</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Type C (Chronic)</td>
<td>18</td>
<td>22</td>
<td>39</td>
<td>51</td>
<td>33</td>
</tr>
<tr>
<td>Listeriosis</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Measles (Rubeola)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Meningitis (Total)</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Aseptic/Viral</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Bacterial</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Meningococcal Septicemia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mumps</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pertussis</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Rubella</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SEXUALLY TRANSMITTED DISEASES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlamydia, Genital</td>
<td>110</td>
<td>114</td>
<td>85</td>
<td>118</td>
<td>115</td>
</tr>
<tr>
<td>Syphilis</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Cases of reportable communicable diseases were investigated by Public Health Nurses from the Personal Health Division—primarily the Communicable Disease Control Nurse. This follow-up included confirmation of the diagnosis, evaluation of case information, assuring appropriate contact identification and notification, and the institution of other appropriate measures to control the further transmission of disease.
During calendar year 2010, three (3) cases of gonorrhea and 115 cases of genital chlamydia were reported in Marquette County. As both gonorrhea and chlamydia are often asymptomatic in females, the identification of most of these cases probably reflects the impact of widespread screening of asymptomatic “high risk” females and improved contact follow-up.

<table>
<thead>
<tr>
<th>Reporting Source</th>
<th>CHLAMYDIA</th>
<th>GONORRHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Physician</td>
<td>48</td>
<td>2</td>
</tr>
<tr>
<td>NMU Health Center</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Emergency Room, MGH/AMH</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Health Department</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>Planned Parenthood</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>CHLAMYDIA</th>
<th>GONORRHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 &amp; Under</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>20-25</td>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>26 &amp; Over</td>
<td>22</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEX</th>
<th>CHLAMYDIA</th>
<th>GONORRHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>3</td>
</tr>
</tbody>
</table>

**2010 VITAL STATISTICS**

Vital statistics partially reflect the health status of Marquette County residents. When reviewed along with communicable disease statistics, such information can reveal important trends. The last year for which complete statistics are available is 2009. Many other statistics and critical health indicators can be found on our website. A few are listed on the following page. For several health indicators, Marquette County rates are better than the state average.

An infant death is defined as a death occurring in a child during the first year of life. The Infant Mortality Rate for an area is calculated by dividing the number of infant deaths by the total number of live births and multiplying by 1000. A community’s infant mortality rate is one of the most important indicators of the health status of that community. Marquette County has a consistently lower Infant Mortality Rate than Michigan. Infant mortality rates are closely associated with the incidence of low weight live births (largely due to prematurity), lack of prenatal care, and teenage pregnancy. Many health department programs are designed to address these problem areas (i.e. Family Planning, WIC and Maternal Infant Health Program).

Examination of Death by Cause statistics shows that most deaths continue to be due to chronic diseases. This information highlights the need for continuing efforts to improve chronic disease prevention and control services.
### VITAL STATISTICS—MARQUETTE COUNTY

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (1)</th>
<th>Live Births</th>
<th>Live Birth Rate *</th>
<th># of Low Weight Live Births (2)</th>
<th>% Low Birth Weight Infants</th>
<th>% Preterm Infants</th>
<th>% Of Births To Teens (&lt;20 Yrs)</th>
<th>Est. Teen Pregnancy Rate *</th>
<th>Deaths</th>
<th>Age-Adjusted Death Rate (3)</th>
<th>Infant Deaths</th>
<th>Annual Infant Mortality Rate (4)</th>
<th>Average Infant Mortality Rate (5)</th>
<th>Marriages</th>
<th>Divorces</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>64,874</td>
<td>615</td>
<td>9.5</td>
<td>42</td>
<td>6.8</td>
<td>8.3</td>
<td>4.7</td>
<td>17.2</td>
<td>616</td>
<td>815.7</td>
<td>0</td>
<td>-</td>
<td>3.2</td>
<td>456</td>
<td>225</td>
</tr>
<tr>
<td>2005</td>
<td>64,760</td>
<td>600</td>
<td>9.3</td>
<td>36</td>
<td>6.0</td>
<td>10.2</td>
<td>6.3</td>
<td>22.5</td>
<td>640</td>
<td>845.6</td>
<td>3</td>
<td>5.0</td>
<td>2.1</td>
<td>458</td>
<td>209</td>
</tr>
<tr>
<td>2006</td>
<td>64,675</td>
<td>636</td>
<td>9.8</td>
<td>40</td>
<td>6.3</td>
<td>7.4</td>
<td>5.8</td>
<td>19.7</td>
<td>586</td>
<td>759.4</td>
<td>4</td>
<td>6.3</td>
<td>3.8</td>
<td>464</td>
<td>215</td>
</tr>
<tr>
<td>2007</td>
<td>65,216</td>
<td>712</td>
<td>10.9</td>
<td>46</td>
<td>6.5</td>
<td>8.7</td>
<td>5.8</td>
<td>15.3</td>
<td>579</td>
<td>727.9</td>
<td>2</td>
<td>2.8</td>
<td>4.6</td>
<td>483</td>
<td>206</td>
</tr>
<tr>
<td>2008</td>
<td>65,492</td>
<td>641</td>
<td>9.8</td>
<td>53</td>
<td>8.3</td>
<td>11.4</td>
<td>7.2</td>
<td>20.6</td>
<td>592</td>
<td>769.4</td>
<td>4</td>
<td>4.7</td>
<td>4.5</td>
<td>484</td>
<td>195</td>
</tr>
<tr>
<td>2009</td>
<td>65,703</td>
<td>697</td>
<td>10.6</td>
<td>44</td>
<td>6.3</td>
<td>8.6</td>
<td>6.4</td>
<td>17.5</td>
<td>612</td>
<td>794.5</td>
<td>8</td>
<td>**</td>
<td>4.4</td>
<td>472</td>
<td>217</td>
</tr>
<tr>
<td></td>
<td>9,969,727</td>
<td>111,7309</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>784.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Estimated by U.S. Census Bureau  
(2) Weight Below 2500 Grams  
(3) Rate Per 100,000 Population  
* Per 1,000  
** Indicates that data does not meet the standards of precision or reliability.

### CAUSES OF DEATH—2009

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>Rate*</td>
<td>#</td>
<td>Rate*</td>
<td>#</td>
</tr>
<tr>
<td>1. Heart Disease</td>
<td>23,044</td>
<td>206.5</td>
<td>147</td>
<td>186.9</td>
</tr>
<tr>
<td>2. Cancer</td>
<td>20,174</td>
<td>181.9</td>
<td>149</td>
<td>187.4</td>
</tr>
<tr>
<td>3. Chronic Lower Respiratory Disease</td>
<td>4,941</td>
<td>45.1</td>
<td>43</td>
<td>54.9</td>
</tr>
<tr>
<td>4. Stroke</td>
<td>4,415</td>
<td>39.9</td>
<td>36</td>
<td>45.5</td>
</tr>
<tr>
<td>5. Unintentional Injuries</td>
<td>3,671</td>
<td>35.4</td>
<td>24</td>
<td>37.7</td>
</tr>
<tr>
<td>6. Diabetes</td>
<td>2,689</td>
<td>24.3</td>
<td>16</td>
<td>**</td>
</tr>
</tbody>
</table>

* Per 1,000  
** Indicates that data does not meet the standards of precision or reliability.  
*** A rate is not calculated when there are fewer than 20 deaths because the width of the confidence interval would negate any usefulness for comparative purposes.
The Health Department is directed by an Administrative Health Officer, Fred Benzie. During 2010, he was assisted in managing the Department by an Administrator, Finance Officer, Community Health Division Director, Personal Health Division Director, Environmental Health Coordinator and support staff within the Finance & Administrative Services Division. A part-time Medical Director oversees medical operations and provides assistance to the Health Officer. The seven member Board of Health is responsible for establishing policies, setting department priorities, overseeing activities, approving monthly expenditures, and ensuring that the public health needs of the community are adequately addressed. Board of Health members are listed at the end of this report.

Finance & Administrative Services staff performed or supervised agency-wide activities such as budgeting, financial management, human resources management, data processing, facilities management, planning, evaluation and resource development. These activities supported the programmatic divisions in their efforts to serve clients as effectively and efficiently as possible. The Department’s programmatic divisions included Community Health, Environmental Health, and Personal Health (see Organizational Chart on page 4).

FINANCIAL

Health Department expenditures in 2010 increased by $622,564 from 2009 levels to $3,830,454 and revenues increased by $761,675 to $4,047,990. As in the previous year, the Federal Value of Vaccine (in the amount of $341,026) is included in State/Federal Funds as revenue and Supplies/Materials as an expense due to State of Michigan requirements.

The unaudited 2010 year-end fund balance was a positive $217,536. A large portion of the fund balance, $151,500 is due to the reimbursement received for the Medicaid Cost-Reimbursement Program from 2009. The Centers for Medicare and Medicaid Services previously questioned the Michigan Department of Community Health and state-wide audit findings but this issue is now resolved.

PERSONNEL

Staffing levels increased slightly to 31.00 full time equivalent (FTE) employees at the end of 2010, compared to 28.85 and 28.59 for the previous two years.

The Health Department has two organized labor groups, AFSCME Local #1613 and the Michigan Nurses Association (MNA). The AFSCME group was in the second year of a three year contract, with a re-opener on wages and insurance each year. The MNA contract was in effect through June 30, 2010. In July, MNA employees agreed to the extension of the contract for an additional six months through the end of 2010.
YEAR-END FINANCIAL SUMMARY

Total Revenues: $4,047,990

Total Expenditures: $3,830,454

Revenues:
- Other Revenues: $65,981 (1.6%)
- County Funds: $521,506 (12.9%)
- Licenses & Fees: $235,853 (5.8%)
- Third Party Reimbursement: $957,540 (23.8%)
- State L.P.H.O. Funds: $281,122 (7%)
- Cigarette Tax: $7,532 (0.2%)
- State/Fed. Funds: $2,578,456 (63.7%)

Expenditures:
- Salaries & Wages: $1,545,976 (40.4%)
- Fringe Benefits: $1,048,654 (27.4%)
- Rent: $76,918 (2%)
- Other Expenses: $128,372 (3.3%)
- Repair & Maintenance: $231,6 (5.6%)
- Communications: $138,339 (0.4%)
- Supplies/Materials: $524,045 (14%)
- Contractual Services: $34,241 (10%)
- Travel: $74,508 (1.9%)