



2007 ANNUAL REPORT

MARQUETTE COUNTY HEALTH DEPARTMENT
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To the Honorable Members of the Marquette County Board of Commissioners, the Marquette County Board of Health, and the Residents of Marquette County:

The Marquette County Health Department is pleased to present its 2007 Annual Report. The Department is the unit of county government mandated by state law to maintain the health of county residents, prevent disease, and protect individuals from environmental hazards. This report summarizes the Department's activities during what proved to be another challenging and productive year. It is intended to give citizens and other interested parties an update on the health status of our community and a greater understanding of the Department's function and impact.

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. As always, our achievements would not have been possible without the ongoing support and assistance of many individuals and organizations in the community. In particular, 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 to come as we continue our efforts to make Marquette County a safer and more healthy place in which to live.

Respectfully submitted,

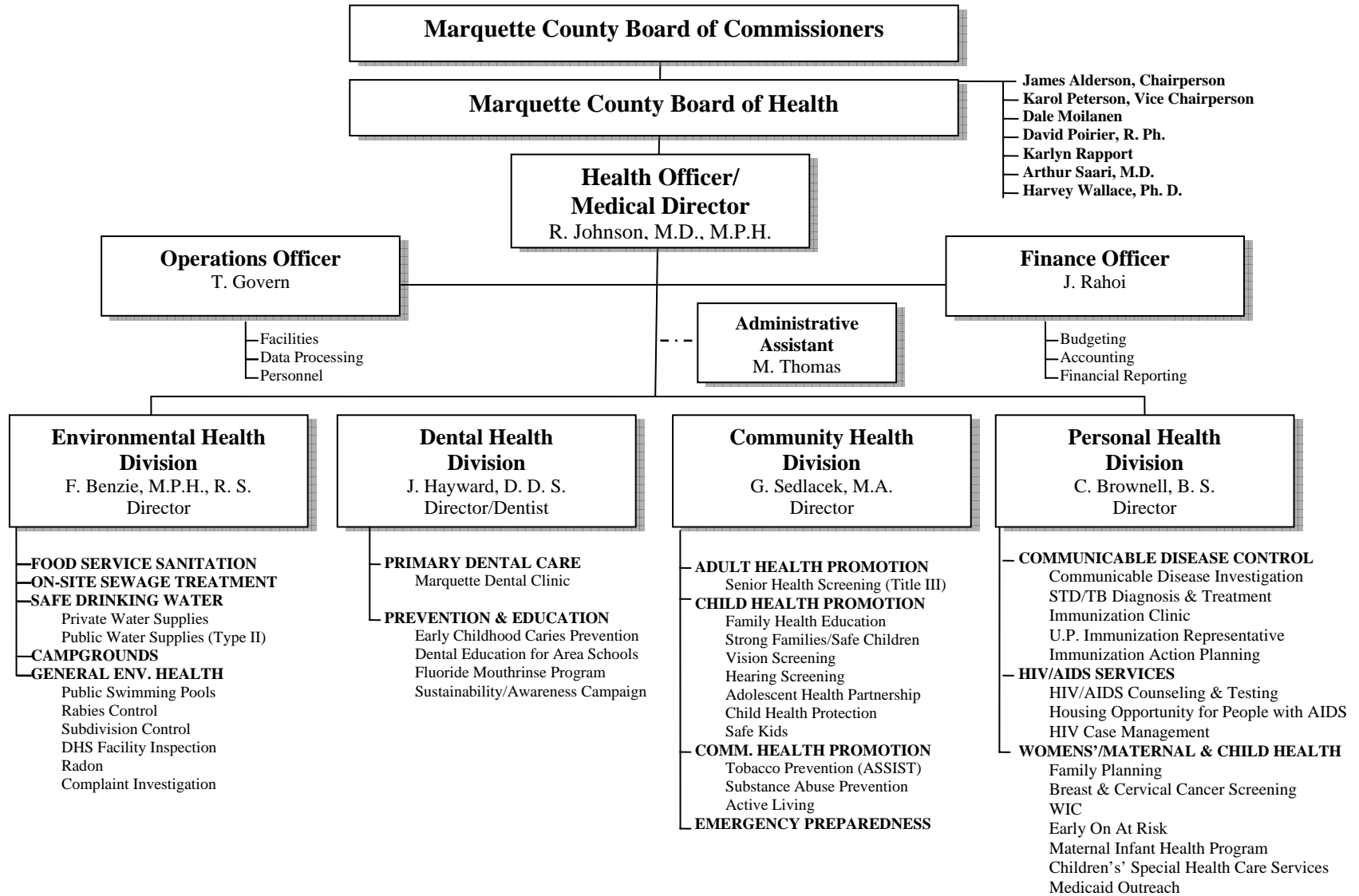
Randall M. Johnson, M.D., M.P.H.
Health Officer/Medical Director

Vision: Healthy choices for a healthy community.

Mission: 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

Marquette County Health Department



ORGANIZATION

The Marquette County Health Department (MCHD) is a branch of county government ultimately responsible to the County Board of Commissioners. The Board of Commissioners appoints the seven member Board of Health which 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. During 2007, Board of Health members included: James Alderson (Chair), Karol Peterson (Vice-Chair), Harvey Wallace, Ph.D. (Board of Commissioners Liaison), Arthur Saari, M.D., Karlyn Rapport, David Poirier R.Ph., and Dale Moilanen.

The Health Department is directed by a Health Officer/Medical Director appointed by the Marquette County Board of Commissioners and approved by the Michigan Department of Community Health (MDCH). During 2007, he was assisted in managing the Department by a Finance Officer, Operations Officer and support staff within the Finance & Administrative Services Division.

Finance & Administrative Services Division 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 during 2007 included Community Health, Environmental Health, Personal Health and Dental Health. Day-to-day activities within each division were managed by a Division Director who reported to the Health Officer/Medical Director. (See Organizational Chart on page 2)

FINANCE AND ADMINISTRATIVE DIVISION

FINANCIAL

Health Department expenditures in 2007 increased by \$102,084 over 2006 levels to \$4,546,297 and revenues increased by \$96,038 to \$4,544,126. The main reasons for these changes were the recording of the Federal Value of Vaccine received and receiving a donation from the Betty Elliott Trust Fund. Included in Other State/Federal Funds is the Federal Vaccine in the amount of \$395,167. The state requires the Health Department to record it as revenue and also as an expense.

STATEMENT OF REVENUES & EXPENDITURES			
	2006	2007	2007
REVENUES			
COUNTY FUNDS	521,506	521,506	11.5%
CIGARETTE TAX	26,946	22,018	0.5%
LICENSES & FEES	246,144	248,995	5.5%
THIRD PARTY REIMBURSEMENT	935,789	1,000,137	22.0%
STATE L.P.H.O. FUNDS	298,286	246,623	5.3%
OTHER STATE/ FED.FUNDS	2,225,164	2,233,902	49.2%
OTHER REVENUES	194,253	270,945	6.0%
TOTAL	\$4,448,088	\$4,544,126	100.0%
EXPENDITURES			
SALARIES & WAGES	2,288,765	2,247,525	49.4%
FRINGE BENEFITS	1,063,861	1,069,073	23.5%
TRAVEL	70,287	68,932	1.5%
CONTRACTUAL SERVICES	240,555	348,361	7.7%
SUPPLIES/MATERIALS	564,694	634,126	14.0%
COMMUNICATIONS	18,577	19,821	0.4%
REPAIRS & MAINT.	47,264	37,377	0.8%
RENT	38,395	36,612	0.8%
INSURANCE & BONDS	36,602	36,178	0.8%
OTHER EXPENSES	62,846	34,204	0.8%
CAPITAL OUTLAY	12,367	14,088	0.3%
TOTAL	\$4,444,213	\$4,546,297	100.0%
FUND BALANCE	\$3,875	(\$2,171)	

Without the Federal Value of Vaccine, the actual State/Federal Funds have decreased from last year's funding of \$1,945,738 to \$1,838,735. The reduction of State and Federal funds, forces us to either reduce expenses or increase local funds. As wages (\$2,247,525) and fringe benefits (\$1,069,073) comprised 73% of total expenditures for the year, reducing expenses is very difficult to do without making reductions in staffing or lay-offs. Likewise, it is hard to increase local funds when the same appropriation (\$521,506) is provided from the County of Marquette as in prior years. Fee increases are the only other means of making up for the reduced State/Federal Funds. Adjustments in fees have been made when possible.

The unaudited 2007 year-end fund balance was a negative (\$2,171). This small deficit will be covered by the positive audited fund equity of \$3,875 from 2006.

PERSONNEL

Staffing levels decreased slightly during 2007. The Health Department budget had 43.88 full time equivalent (FTE) employees at the end of the year compared to 45.58 at the end of 2006. However, at the October Board of Health meeting, a decision was made to close the Dental Clinic as of December 31, 2007. This meant layoffs of Dental Clinic staff members, with some bumping into other health department positions. Most of those laid off were hired by Dental Clinics North, a subsidiary of Michigan Community Dental Clinics, Inc. For more information about the Dental Clinic transition, see the Dental Division report.

The Health Department labor groups, AFSCME Local #1613 and the Michigan Nurses Association, were both in the second year of three year contracts in effect through December 31, 2008.

CAPITAL IMPROVEMENT PROJECTS

The Health Department made two major changes to our computer system late in 2006 by purchasing Open Dental and the Mitchell & McCormick (M&M) software packages. Open Dental utilizes many new features that we previously did not have, such as: electronic scheduling and charting of almost all client information. This was a big transition for our providers (Dentists, Hygienists and Dental Assistants) who previously did not have computers in the operatories. There were also several remaining billing issues to be worked out between the Open Dental system and our accounting system.

Mitchell & McCormick software was purchased in the fall of 2006 to be used for all accounting functions and also for our Personal Health Division for clinic services. Several training sessions were done in November and December of 2006. The scheduled implementation date of January 1, 2007 meant a very busy start to the new year for our clinic and accounting staff, as well as the County MIS support staff. Similar to the Open Dental software, Mitchell and McCormick includes electronic client scheduling and charting, therefore computers are now being utilized in exam rooms and other nursing stations. The use of this new system for our clinic went rather well with M&M staff here during the first week of implementation. There was still much work to be done throughout the year to make sure everything was being done correctly between the M&M clinical section and M&M accounting, as well as, other outside programs (i.e., the Michigan Childhood Immunization Registry).

M&M accounting functions were not implemented on January 1 as planned, therefore, the CMHC system was still used for the first few months. To continue to work out details of the M&M system, a committee of accounting, clinic and MIS staff meets monthly to review both incident reports (current open items that have been submitted to the M&M support team) and consistent internal use of the software.

The Health Department continues to operate the Service Center Building, which is a county building. In 2007, two other departments besides the Health Department utilized space in the building: the County Planning department and MSU Extension. Building repairs and service expenses continued to increase in cost due to the age of the building. The County contributed \$32,885 from the Service Center Fund for the cost of maintaining the building. This amount represents the portion of the cost for MSU Extension and the Planning department.

The Service Center Fund was utilized to purchase a new air conditioning unit for the Service Center Building. The air conditioner serves the portion of the building that was added on to the original building and utilizes one air handler unit for all three floors. The replacement of the unit was put out on bids, with Johnson Controls being awarded the bid for \$18,000. The project was completed in July.

ENVIRONMENTAL HEALTH DIVISION

The Environmental Health Division exists to preserve, protect, and improve the quality of life within Marquette County. Managing our environment allows the control of elements that cause, or have the potential to cause, deleterious effects to our health and well-being. This involves the food and drink, lands, waters, atmosphere, shelter and other resources upon which we are dependent for our existence. Services were provided through the efforts of a Division Director, three full time Sanitarians, one Summer Sanitarian, a full time Environmental Health Technician and additional clerical support, when needed, from a Secretary provided by the County. Three full time employees retired this year: the Lead Secretary with 14 years of service, and two Sanitarian's with 33 years of service each. The Lead Secretary position was upgraded to Environmental Health Technician. Services provided include environmental education, consultation, planning, inspections and regulatory enforcement through several program areas.

Environmental Health Statistical Report				
	INSPECTIONS		HOURS	
	#	%	#	%
GENERAL E.H. PROGRAM	98	5.7%	1,487	12.7%
Swimming Pool Inspections	43			
DHS Inspections (including follow ups)	25			
Other Gen. EH Inspections	30			
FOOD SERVICE PROGRAM	794	45.8%	4,024	34.3%
Plan Reviews Conducted	13			
Plan Reviews Completed	11			
SEWAGE	593	34.2%	3,495	29.8%
TYPE II	12	0.7%	562	4.8%
PRIVATE WATER	221	12.7%	2,023	17.3%
CAMPGROUNDS	16	0.9%	132	1.1%
Permanent Campgrounds Inspected (812 sites)	13			
Temporary Campgrounds Inspected (545 sites)	3			
TOTAL	1,734	100%	11,723	100%

FOOD SERVICE SANITATION

The Division provided all licensing and inspection services to facilities that served food to the public in accordance with Michigan's Food Law of 2000, Act 92, P.A. of 2000 and the Federal Food and Drug Administration: Food Code of 1999. Food-borne illness investigations are conducted to identify the causative agents and practices responsible, and are reported to the Michigan Department of Agriculture (MDA). The primary purpose of the program is the prevention of food-borne illness. Staff time in the food program increased by only 4 hours from last year and amounted to the same 34% of the total available staff time. There were 267 fixed

food service and 116 temporary establishments licensed in Marquette County during 2007. The number of licensed fixed establishments decreased by 27 and the number of temporary licensed events increased by 24. We continued to conduct pre-license inspections of all temporary food events as required by law and MDA program requirements. Sanitarians provided weekend coverage on an overtime basis to license temporary events.

The total number of food inspections decreased 16% from 941 in 2006 to 794 in 2007. This included 457 routine fixed facility inspections, 212 follow-up inspections on critical violations and 116 temporary facility inspections. The Division performed 118 fewer routine inspections and 23% fewer follow-up inspections on critical violations. A total of 13 facility plan reviews for new or extensively remodeled establishments were also performed and of that number 11 were opened in 2007. There were 26 food related complaints, up 100%, and no food-borne illness investigations. Multiple free food service sanitation classes were held for food handlers and employees of county food service establishments. These classes provided basic food service sanitation training.

ON-SITE SEWAGE TREATMENT

The Superior Environmental Health Code requires a permit for the construction or major alteration of all on-site sewage treatment systems. Sanitarians conducted site investigations to determine soil suitability and then specified any special construction practices required before issuing permits. Construction inspections were performed to insure that minimum design specifications were met and that systems will function properly while minimizing risks to public health and the environment. In addition, services were provided upon request to evaluate existing systems for prospective home buyers before their purchase of a previously owned home. Staff also protected public health and the environment by responding to complaints and requiring corrective action where failing on-site sewage systems were identified. Staff time in this program decreased by 69 hours and utilized 30% of the total available staff time. The number of sewage permits issued decreased to 221 and final inspections increased to 212.

PRIVATE WATER SUPPLY

The Superior Environmental Health Code requires a permit for the construction of new water supply systems in accordance with State minimum program requirements. Sanitarians conducted site investigations and consultations to determine appropriate well locations. Special construction practices were specified dependent upon area geology and potential risk to the water supply. Bacteriological and partial chemical samples for analysis of water quality were taken for the homeowner as part of the final inspection. Final inspections help insure a safe water source is being provided and that well drillers are operating within the confines of the law. In addition, services were provided upon request to prospective home buyers to evaluate existing systems before their purchase of a previously owned home. Staff also protected the public health by responding to water quality complaints and investigating water borne illnesses. The Division performed volatile organic hydrocarbon (VOC) sampling through a contract with Michigan Department of Environmental Quality (MDEQ) on residential wells in the Harvey area, Lakewood Lane, and Skandia Township. Results were provided to the homeowners in consultation with MDEQ. Staff time in this program decreased by 202 hours and decreased slightly to 17% of the total available staff time. The number of well permits issued increased by 73 from the previous year and the number of final inspections increased by 55.

TOWNSHIP	SEPTIC PERMITS	SEPTIC FINALS	WELL PERMITS	WELL FINALS
Champion	2	3	2	0
Chocolay	38	38	39	21
Ely	13	15	9	6
Ewing	0	1	0	0
Forsyth	40	33	33	8
Humboldt	8	6	6	2
Ishpeming	10	6	8	5
Marquette	19	18	6	0
Michigamme	6	6	6	1
Negaunee	21	19	26	9
Powell	13	10	10	1
Republic	10	13	9	4
Richmond	2	2	4	0
Sands	18	16	18	3
Skandia	5	5	4	2
Tilden	10	10	4	0
Turin	0	1	1	0
Wells	2	2	4	1
West Branch	4	8	5	1
TOTALS	221	212	194	64

PUBLIC WATER SUPPLY

The Division issued permits for the construction or major alteration of noncommunity public water supplies. Examples include on-site wells serving schools, restaurants, motels, gas stations and other businesses who serve water to the public. We have a contract with the MDEQ in the Noncommunity Public Water Supply Program to perform a sanitary survey on each water supply every five years and to establish bacteriological sampling frequency. A survey determines if well construction, location, and distribution system comply with Michigan's Safe Drinking Water Act, Act 399, P.A. of 1976. During 2007, there were 54 Type II noncommunity supplies in Marquette County. This was up two from the previous year. This program affords reasonable assurance to persons using noncommunity public drinking supplies that they are properly constructed and the water safe to consume.

PUBLIC SWIMMING POOLS & SPAS

The Division inspected all public swimming pools and spas in Marquette County at least once during their operating season. Inspections included reviewing the design, construction, operation and maintenance of the pool or spa. Bacteriologic samples were collected quarterly by staff and

the results reported to owners or operators. In 2007 there were 42 licensed public swimming pools and spas in Marquette County. This was a decrease of one over 2006.

CAMPGROUNDS

The Division inspected all 13 fixed and 4 temporary campgrounds in Marquette County for compliance with Michigan Department of Environmental Quality rules.

GENERAL ENVIRONMENTAL HEALTH

This program involves services/inspections in a variety of areas including insect and rodent control, rabies control, nuisance investigation, indoor air quality, environmental and subdivision planning, and facility inspections for the Michigan Department of Human Services licensed facilities.

There were no rabies cases found in the animal population in 2007. We saw a slight decrease, 3%, in the number of animal bites reported. There were 108 animal bites reported in 2007 as opposed to 111 reported in 2006.

ANIMAL BITES	
Dogs	84
Cats	23
Bats	0
Raccoon	1
TOTAL	108
Rabies Tests: 2 Bats, 2 Raccoons	4
Negative (1 Raccoon & 1 Bat could not be tested)	2
COMPLAINTS	
Sewage	5
Garbage	1
Pests/Rodents	1
Water Problems	0
Food	9
TOTAL	16

Two new site condominium plats regulated by the Land Division Act were submitted for review and were approved. One condominium was reviewed under the Land Division Act Rules and denied due to a lack of information. Consultations were provided with the developers and their consulting engineer during the planning stages and before the sale of individual lots. A field visit and plan review were conducted to determine if adequate water quality and quantity and suitable soil for on-site sewage treatment existed. Restrictive covenants were recorded with the Register of Deeds office identifying any limited potential for on-site water or sewage treatment facilities. The covenants insure that prospective lot buyers are aware of any limitations.

PERSONAL HEALTH DIVISION

The Personal Health Division provides a wide variety of services. Many of the programs are interrelated in order to ensure clients have the easiest possible access to services. Every effort is made to collaborate with all members of the community health care team to provide services. Services of the Personal Health Division are offered by appointment, and by walk-in as available.

FAMILY PLANNING (FP)

The Family Planning program provided a wide array of services associated with reproductive health care.

Voluntary family planning is an important health measure. The legal, political and logistical availability of affordable contraceptive services has an influence on the health of the individual, the relationship, the family and the community. It was therefore our intention to provide cost effective, confidential and accessible services that would assist the individual to prevent an unplanned pregnancy. The primary components of the Family Planning Program were:

- Education (individual, group, community)
- Contraceptive Methods
- Pregnancy Determination
- Reproductive Evaluation, Diagnosis and Treatment
- Referral Network.

Video, verbal, and written education opportunities were offered to every new client seeking contraceptive services so the individual had access to the information needed to make an informed decision when selecting the contraceptive method right for them. Community education programs were provided on request to local school system students, teachers, peer programs, and parents.

Contraceptive methods available and provided through our Family Planning Program included: Natural Family Planning, Abstinence, Condoms, Spermicide, Diaphragms, Hormonal (oral) Contraceptives, Depo-Provera (injectable) contraceptives, Nuva ring, Ortho Evra (patch) and Plan B. Early detection of a pregnancy, planned or unplanned, is paramount in initiating plans and selecting medical services. Clients were referred immediately to Prenatal Care Providers upon detection of pregnancy; additional auxiliary services were also available including WIC, Maternal Infant Health Program and Medicaid enrollment.

Care was not limited to contraception services but included medical evaluation, diagnosis, and treatment of sexually transmitted diseases (STDs) to all clients who requested service. Clients were served regardless of age, race, sex, or financial status for: pap, breast examination, treatment of vaginal infection, STDs, fertility counseling or infertility evaluation.

Some individuals who attended the Family Planning Clinic had needs extending beyond the scope of the services available. As a public agency we offered extended referral for continued medical care intervention and health care promotion. For clients who met financial eligibility, Medicaid assistance was available through the FP/Breast and Cervical Cancer Control Program. This program is explained in more detail in the next section.

Plan First! is a state funded coverage for Family Planning services. This program's eligibility is income based for ages 19 and older. It has now become a state requirement that clients wishing to receive Plan First! must have their birth certificate. This has created a barrier for many young clients wishing to keep their involvement with family planning service confidential. Most of them do not have access to their birth certificate without parental knowledge.

BREAST AND CERVICAL CANCER CONTROL PROGRAM (BCCCP)

Title X federal grant resources continued to be available to support breast and cervical cancer services to women age 40 and over. Due to the success of enrolling many hard-to-reach women through the current delivery system, we continued to maintain clinical screening provisions at the health department, while increasing the percentage of women screened by participating health care providers throughout our area.

Seven local agencies, with multiple physicians, signed contracts to enroll clients and provide services. Five additional contractors agreed to provide services UP-wide. The UP-wide service agreements were a combined effort made by all health departments across the region.

The FP/BCCCP was created to serve women under age 40, who qualified by BCCCP guidelines, with cervical abnormalities. Funding was provided for gynecological consultation and testing for cervical cancer. During this year, 39 women were served by the special project.

PERSONAL HEALTH DIVISION	
AIDS ANTIBODY COUNSELING & TESTING	
TOTAL PRE-TEST COUNSEL VISITS	108
TOTAL POST TEST	105
INDIVIDUALS SERVED IN COC FOR HIV	73
COC CLINIC VISITS	96
BREAST & CERVICAL CANCER SCREENING	
MCHD	221
PRIVATE MD	89
TOTAL	310
ABNORMAL FINDINGS	36
OTHER REFERRALS	29
POSITIVE CASES	1
COMMUNICABLE DISEASES / STD / VD	
INDIVIDUALS SCREENED FOR STD	450
T.B. SKIN TEST GIVEN	249
FAMILY PLANNING	
INDIVIDUALS SERVED	823
TOTAL VISITS	1,839
MATERNAL CHILD HEALTH	
MSS/ISS INITIAL VISITS	47
FOLLOW UP VISITS / RN'S	147
SOCIAL WORK VISITS	92
REGISTERED DIETICIAN VISITS	145
NON-BILLABLE VISITS	1
TOTALS	432
VACCINE DOSES	
VACCINES GIVEN - DPT, OPV, HBCV, MMR	710
FLU VACCINE S GIVEN	1,871
DOSES DISTRIBUTED TO OTHER PROVIDERS	2,361
WIC	
AVERAGE MONTHLY CASELOAD	1,356
NUMBER OF VISITS	6,090

SEXUALLY TRANSMITTED DISEASES (STD)

Sexually Transmitted Disease exams, diagnosis, and treatment were provided free of charge to clients identified as high risk. For clients who do not meet the guidelines for high risk and would like to be tested, they can do so for a minimal charge. Contact was also made with partners of those diagnosed with STDs. Skilled early intervention for medical management of STDs and education is essential to preservation of health and future fertility.

STD education was incorporated into Family Planning and HIV community presentations throughout the year. These presentations were conducted at most area schools and the Great Lakes Recovery Program.

COMMUNICABLE DISEASE CONTROL

Several Public Health Nurses work under the direction of the Medical Director to provide the epidemiological analysis and treatment services needed to address communicable disease. Reportable communicable diseases are investigated following established guidelines. Based on the Center for Disease Control (CDC) guidelines, follow up is made with people who have been exposed to some communicable diseases, such as HIV and chlamydia. Testing and treatment recommendations were explained to them. Tuberculosis (TB) skin testing was provided for a nominal fee.

MATERNAL INFANT HEALTH PROGRAM (MIHP)

The focus of the program was on prevention and control of maternal and child health problems through education, monitoring and referral to appropriate support agencies. The Maternal Infant Health Program is certified through the Michigan Department of Community Health (MDCH) and offers nursing, social work and nutritionist services to high risk pregnant women and infants on Medicaid.

All public health staff within the MIHP program were involved in the Early On Michigan project that provides cooperative services with family involvement for eligible children – ages zero to three. Pathways, the Marquette-Alger Regional Educational Service Agency (MARESA), the Marquette County Health Department and the state Department of Human Services (DHS), worked jointly to determine necessary services through a program called Wrap Around.

CHILDREN'S SPECIAL HEALTH CARE SERVICES (CSHCS)

The Children's Special Health Care Services program was available to children of Marquette County who meet certain medical eligibility requirements. Children's Special Health Care Services is a program that provides financial assistance for medical bills to those individuals who have a chronic or debilitating condition. CSHCS covers from birth to the age of 21, if medically eligible. Medical eligibility is determined at the state level. This is based on the severity of the condition and what medical care and treatment the individual requires. A diagnostic evaluation is used to help determine if a child has a medically qualifying condition. Financial guidelines are based on the gross income of the family and family size. Renewal for CSHCS is done on a yearly basis. Cystic fibrosis and hemophilia are qualifying conditions for the lifetime of the individual.

The CSHCS program continues to provide case management services or care coordination to families in need of hands on services.

WOMEN, INFANTS AND CHILDREN (WIC)

WIC helps correct or prevent malnutrition in low income pregnant and breast-feeding women by providing WIC coupons that can be redeemed at local grocery stores. Women who recently had a baby, infants, and children up to five years old are eligible if there is a health risk or inadequate nutrition. Nutrition education is offered to all WIC participants or their care givers. Common topics include nutrition during pregnancy, encouragement for breast-feeding, and nutrition during childhood and wise food shopping. An added benefit of the WIC program has been screening for health problems and referral to other appropriate agencies and social services. WIC services were available on a weekly basis at Bell Memorial Hospital, the Marquette County Health Department and Lake Superior Village for the majority of the year. In August the clinic at Bell Memorial Hospital was closed and relocated at the health department. Services were also available twice monthly in Gwinn. The WIC program worked closely with the Immunization program and Material Infant Health Program (MIHP). Screening was provided during the WIC clinics for pregnant women to determine eligibility for MIHP services.

Project Fresh was a highlight for WIC again this year. This program offered clients access to fresh season food through an incentive program. The incentive program taught the clients new skills for food preparation and the opportunity to become familiar with other community assets.

The basics of the WIC program were provided to new clients through the educational video that the WIC Coordinator developed last year.

The WIC Coordinator continued to work to screen Medicaid clients for elevated lead levels. As many of those clients were seen in the WIC program it was an open opportunity to evaluate the level of lead for each child to age 36 months who were on Medicaid.

IMMUNIZATIONS

Childhood immunizations and adult boosters were available to all Marquette County residents. Seasonal flu shots and Hepatitis B vaccines were available for a nominal fee.

The Clinic staff again expanded the availability of flu vaccine in the community by taking the drive-thru flu clinics to a larger level than the previous year. A drive-thru flu clinic was held at the MarqTran bus center. This provided an area big enough to have five drive-thru lanes within the setting of a heated garage. A second drive-thru clinic was held in the Gwinn area. This clinic provided service to both walk-in and drive-thru clients. We also had walk-in flu clinics at the Dome, Pamida in Ishpeming, the Marquette Senior Center and at the Courthouse Annex for county employees. Several other private businesses took advantage of providing their employees flu shots through onsite flu clinics provided by the MCHD.

The Marquette County Health Department participated in the Michigan Childhood Immunization Registry (MCIR). MCIR is an electronic statewide childhood immunization registry that is accessible by private and public immunization providers, as well as day care providers and schools. All of Marquette County's immunization providers and schools have access to the

MCIR and have been able to receive immediate access to immunization history information. By receiving reliable information on a child's immunization status, health care providers have been able to decrease the number of missed opportunities for administering immunizations to children and decrease over-immunization as well. Our health department used the MCIR program as the sole source for the computer documentation of immunization records. This was the first year that all flu vaccines were entered into the MICR program for children.

AIDS ANTIBODY COUNSELING AND TESTING (AACT)

AACT services were provided to persons interested in learning about HIV/AIDS and their HIV status. The Michigan Department of Community Health (MDCH) continued its practice of not funding areas of the State which are considered "low incidence" including all of the Upper Peninsula. We continued to make the service available for a flat fee of \$35 per test.

Off site education and testing was provided to residents of the Great Lakes Recovery Program for adults and adolescents in Marquette as part of the Early Intervention Project funded through the MDCH Substance Abuse Services. This population has been identified nationally as a high risk, hard to reach population. This testing uses the Ora Sure Testing system, which is a saliva testing procedure. There were no positive test results at the Great Lakes Recovery Program.

Testing that was court ordered as a result of conviction for criminal sexual assault was also provided. This testing included HIV antibody, STD and Hepatitis B. Court ordered testing was also provided to Alger County as they were unable to have it available through a local provider. They transported their inmates to our facility for testing.

Collaboration between HIV Counseling & Testing and STD testing continued to be implemented on site. Counseling and testing for HIV was an optional test at the time a person was tested for STDs. This eliminated the need for a client to schedule separate appointments for each test and discuss their situation with a multitude of staff members.

Other collaborative efforts included providing clients in the Family Planning program and Breast and Cervical Cancer program with information regarding the transmission of HIV to heterosexual females of child bearing years who are at higher risk for transmission and the availability of counseling and testing at the time of their Family Planning appointment.

HIV educational presentations were conducted for community organizations and at several of the high school health classes. Informational tables were set up at health fairs held at Northern Michigan University and several other community events.

CONTINUUM OF CARE (COC)

The COC program provided case management services throughout the Upper Peninsula to clients infected and affected by HIV/AIDS. Services include emergency financial assistance, support group referrals, patient advocacy, short term housing assistance, dental care and outpatient medical care through a clinic staffed by four infectious disease specialists. Funding sources for these services included Michigan Health Initiative (MHI), Ryan White Title II (RW), and Housing Opportunities for People With AIDS (HOPWA).

DENTAL HEALTH DIVISION

The Dental Health Division seeks to increase the dental health status of low-income and Medicaid eligible youth and adults in Marquette County by providing clinical preventive and restorative dental services and preventive dental education outreach services. Specific objectives toward meeting this goal are to:

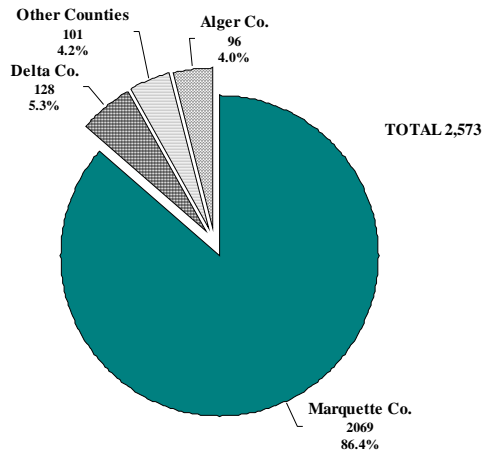
1. reduce the incidence of dental caries through preventive services, education and promotion of use of fluoride supplements;
2. reduce untreated dental caries in primary and permanent teeth;
3. increase access to primary dental health care to target population;
4. increase awareness of youth, families and women of childbearing age of the importance of preventive dental care.

This goal was expanded to include Medicaid eligible youth from outside of Marquette County on a limited basis. Treatment for Medicaid adults in Marquette County was limited to emergency services only. Our program continued to see all Medical Care Access Coalition (MCAC) adult referrals, as well as Marquette County adults and children eligible for treatment under a grant from the state for the uninsured. The Division Director continued to provide advice to the Marquette County Medical Care Facility (MCMCF) dental program and provide some services that couldn't be provided by their contractual dentist.

DENTAL SERVICES		
	Number	Percent
DIAGNOSTICS	6,255	30%
PROPHYLAXIS	5,698	28%
RESTORATION	5,026	24%
SEALANT	1,188	6%
EXTRACTION	964	6%
OTHER	1,263	6%
DENTURE SERVICES	275	1%
TOTAL	20,673	100%

In 2007 the Dental Division operated with clinical services being provided at our 6-chair Marquette Clinic and the operating rooms at Marquette General and Bell Memorial Hospitals. The Marquette Clinic served 2,573 unduplicated patients during 2007. A total of 5,111 appointments were completed. Of these, 82% were for individuals under 21 years of age and 18% for those over age 21. Of all patients, 79% were Medicaid beneficiaries. The remaining 21% had other reimbursement sources, such as MICHild, MCAC, the MDCH Uninsured grant, or private insurance as their primary coverage with Medicaid secondary. The majority of patients, 80%, were from Marquette County, 5% were from Delta County, 4% were from Alger County, and 11% were from other U.P. Counties. During 2007, the Marquette Clinic operated at maximum capacity for the available clinic space and staffing levels.

Hospital based treatment was provided to patients needing treatment in a hospital operating room. These were mostly young children (two to five years old) with extensive early childhood caries. Some were children with mental and/or physical disabilities and a few were disabled adults. For 2007, a total of 78 hospital cases were completed.



DEMOGRAPHICS BY COUNTY

County:	Patients
Alger	96
Baraga	33
Delta	128
Dickinson	53
Gogebic	5
Houghton	54
Iron	19
Keweenaw	4
Luce	7
Mackinaw	4
Marquette	2,069
Menominee	26
Other Counties	36
Schoolcraft	39
	2,573

**DENTAL HEALTH EDUCATION OUTREACH
FLUORIDE MOUTHRINSE PROGRAM**

Five Marquette County elementary schools (*Powell, Lakeview, Wells, Republic-Michigamme, and Aspen Ridge*) participated in the Fluoride Mouthrinse Program (FMP) in the 2006-2007 school year. Elementary schools located in areas with non-fluoridated water supplies were eligible. The FMP is free to all students attending the eligible schools who return a signed parental consent allowing them to participate. A possible 1,316 students were eligible to rinse weekly for the school year. Our records indicate 1,107 students, or 84%, rinsed on a weekly basis. Cherry Creek School did not participate in the 2006-2007 school year, but is participating for the 2007-2008 school year. Central and Birchview elementary schools also participated in the FMP in the 2007-2008 school year as the Fluoride Varnish and Xylitol Programs could not be sustained due to lack of financial support (see below).

FLUORIDE VARNISH AND XYLITOL PROGRAMS

A pilot program was initiated in the fall of 2006 (for the 2006/2007 school year) with the Ishpeming Public School District. Elementary students from Central, Birchview and the Phelps Kindergarten students participated in the Fluoride Varnish and Xylitol Programs.

Fluoride varnish is a protective coating that is painted on teeth to help prevent new cavities and to help stop cavities that have already started. The paint on fluoride varnish is sticky, so it attaches to the teeth easily and makes the outer layer (enamel) of the teeth harder, helping to prevent cavities and remineralize partially decayed enamel. If funding were available, this program would replace the weekly fluoride mouthrinse. The Fluoride Varnish Program could be done in the fall and spring and because a registered Dental Hygienist will also be examining the child's teeth, there is the added benefit of notifying parents of problem areas that need to be treated by a Dentist. The benefits of the fluoride varnish will last for several months. Fluoride varnish should be reapplied every three to four months for the best results. Due to lack of

funding, the fluoride varnish program was discontinued in January 2007. Children who returned a signed parental consent allowing them to participate received one treatment during the school year.

Along with the Fluoride Varnish Program, the children were offered to participate in a Xylitol Lozenges Program. Regular use of xylitol products are an effective means of preventing tooth decay. Research has shown a 70% reduction in the incidence of tooth decay for children using xylitol products on a daily basis. This program is enthusiastically endorsed by the American Dental Association and the Michigan Department of Community Health.

Xylitol decreases dental decay by inhibiting the growth of strep mutans bacteria in the mouth that causes tooth decay. It is an all natural sweetener found in many fruits, vegetables, and birch bark and is also produced by the human body during normal metabolism. It tastes and looks like sugar and is found in products such as gum, mints, toothpaste, rinses, and granules for cooking and baking. Xylitol has been used as a diabetic sweetener since the 1960s. The Food and Drug Administration approved its safety in 1963. The World Health Organization and the Food and Drug Administration's "Joint Expert Committee on Food Additives" confirmed the safety of xylitol in 1983. Babies and small children can safely use xylitol.

Upon enrollment, each child received two xylitol lozenges in the morning at the beginning of the school day and two at noon time, after the lunch/recess break. The lozenges come in fruit flavors so the children enjoy them.

Of the 367 total students in Birchview and Central schools and the Phelps Kindergarten class, 351 students participated in the Xylitol Program (a participation rate of 95.5%) and 296 students participated in the Fluoride Varnish Program (a participation rate of 80%).

To reach very young children with evidence of starting decay the Dental Hygienist also visited AMCAB Early Head Start groups in Marquette, Ishpeming and Gwinn and the MARESA Early On group in Negaunee.

Other efforts to make the community aware of our Fluoride Varnish and Xylitol Programs and the benefits of these products included mailings to area dentists and also to local retail businesses encouraging them to provide products with xylitol. Handouts were given to clients visiting our Marquette Dental Clinic explaining what xylitol is and what products contain therapeutic levels of xylitol.

It was anticipated that the Michigan Department of Community Health would have a grant available in 2007 for fluoride Varnish Outreach in the State of Michigan that, if awarded to MCHD, could have sustained the pilot program and increase services to other schools participating in the Fluoride Mouthrinse Program. Although this grant was offered, the reimbursement provided would not have been enough to cover the cost of the program.

DENTAL HEALTH EDUCATION FOR MARQUETTE COUNTY SCHOOLS

Our Dental Health Educator visited Head Start, elementary, middle school, high school, and Northern Michigan University (NMU) nursing students. Good oral hygiene habits were discussed in a game-like atmosphere. All students received a new toothbrush, stickers, dental handouts and information for their parents. Information was given to school nurses about accessing dental care for students in our Marquette County area. Middle school, high school and NMU nursing students also received information about Early Childhood Caries prevention. For the 2006-07 school year, over 1,364 students enjoyed a dental visit from our Dental Health Educator. The following schools participated:

Gwinn Area Community Schools
Ishpeming Public Schools District
Marquette Area Public Schools
Republic-Michigamme Schools
Marquette County Head Start

Negaunee Public Schools
NICE Community Schools
Powell Township School District
Wells Township School District
Northern Michigan University

EARLY CHILDHOOD CARIES (ECC) PREVENTION CAMPAIGN

Our "Early Childhood Caries Prevention Program", also known as "Baby Bottle Tooth Decay" or "Bottle Rot" is top priority. All 16 U.P. hospitals have a VHS tape about children's dental health and ECC prevention. All Head Start and Marquette County schools received "Sip all Day, Get Decay" posters. Prevention information and toothbrushes were given to expectant mothers and newborn parents at Bell Memorial and Marquette General Hospitals. In addition, information is given to promote using xylitol and the availability of xylitol in over-the-counter products. Prevention information and presentations were given to over 500 participants including:

Lifeskills/Child Development Classes
Project Newborn/Rock n' Read
Licensed Day Care Providers
MCHD WIC clients
MCHD Dental Clinic clients
Marquette General Hospital

Northern Michigan University RN students
American Red Cross Babysitting Classes
Head Start/Early Head Start/Early On
MCHD Family Health Education clients
School Parent Groups
Bell Memorial Hospital

COLLABORATION FOR CHILDREN'S DENTAL HEALTH MONTH

Every February special events are conducted for Children's Dental Health Month. Cecelia Attwell, third grader from Cherry Creek Elementary School took first place with her winning poster design from our "Fight Tooth Decay 24/7" contest. A total of 7,000 place mats of the winning poster design were distributed to ten area restaurants. The Superior District Dental Society (SDDS) purchased B. Dalton gift certificates for all contest winners. The SDDS and the Marquette County Health Department purchased "my tooth boxes" for all area elementary schools - for students who lose a baby tooth during school hours. The SDDS purchased "Transport a



Tooth” kits for all area schools - the kits are to be used if a student has a tooth “knocked out” during school hours.

SUSTAINABILITY AND AWARENESS CAMPAIGN

We created awareness in the community about our dental programs through presentations to local service clubs, businesses, and other agencies; public service announcements and news releases; school newsletters; local health fairs and other conferences. During 2007, it is estimated that at least 2,120 participants from conferences and health fairs have received information about our programs! Since May 1997, we have raised over \$823,337.

DENTAL CLINIC TRANSITION

During development of the Health Department’s preliminary 2008 budget in June of 2007, it became obvious that unless major changes were made the Dental Health Division would require a significantly larger county subsidy in 2008. This was because of dramatic increases in cost (especially staff health insurance premiums), the availability of fewer dental provider hours, and flat third party reimbursement levels. At the July Board of Health meeting, Board of Health members were informed of the possibility of affiliating with Michigan Community Dental Clinics, Inc. (MCDC) and its subsidiary, Dental Clinics North. MCDC’s mission is to stabilize and expand access to dental health services for children and adults on Medicaid and other low-income, uninsured groups. This organization was formed in 1999 as a partnership of six local health departments in northern Lower Michigan and currently operates ten dental clinics. Due to the large size of the organization they have been able to centralize many administrative (e.g. personnel, billing, purchasing, etc.) and clinical quality control functions which results in improved efficiency and an ability to cover all clinic cost with the available reimbursement. The Board of Health authorized further management staff exploration of this possibility.

Over the next several months, extensive discussions and multiple meetings were held to evaluate the pros and cons of an association with MCDC. It was ultimately determined that a relationship between the Health Department and MCDC for the ongoing provision of dental services would be beneficial. In October, the Board of Health adopted a 2008 Health Department budget that assumed the closure of the Department’s Dental Clinic as of December 31, 2007.

Although negotiations were not completed by the end of the year, staff spent much of November and December developing the necessary understandings and formal agreement with MCDC. Under the anticipated agreement, MCDC will hire most of the Health Department’s Dental Division staff, lease the dental clinic facility and equipment from the Health Department, and assume all responsibility for managing the clinic as of January 2, 2008.

COMMUNITY HEALTH DIVISION

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. This mission when put into practice, results in service to the Department as well as programming for the community. Departmental service activities include media relations (news releases/public service announcements), maintaining a health resource library, community and internal planning and evaluation, and grant writing.

Community programming focuses primarily on prevention of chronic disease conditions through risk reduction by providing education as well as developing community health policies which allow individuals to improve or maintain their own health practices.

A variety of preventive initiatives were undertaken to educate the public about risk reduction in 2007. The Division seeks community partnerships to assess and improve the health of area residents. A review of pertinent demographics is an important part of identifying health issues of area residents. Our web site now has several health reports of demographic data and other health indicators for Marquette County residents.

MCHD maintains and updates as necessary, local statistics on health issues. A procedure to have the community prioritize health concerns has been established with the local Marquette Family Coordinating Council, United Way of Marquette County and the Marquette County Board of Health. Access to health care, early childhood health, and substance abuse have been issues that have been addressed for the past ten years. Information regarding these priority issues as well as several other health coalitions is included in our web site (www.mqthealth.org).

Heart disease is the number one cause of death in Marquette County. A lack of fitness is a major contributing factor. In response we have been successful in receiving grant assistance in developing community initiatives to work to prevent heart disease and other chronic diseases such as cancer and diabetes. For example, the Division was instrumental in the development and implementation of the Active Living Task Force. The Division was awarded a grant in 2007 and was successful in obtaining an extension from the Michigan Public Health Institute to conduct a community trial to improve the nutrition and fitness of area residents. The “Active Living” Marquette County project implemented three programs. An interactive web site has been developed for these three programs: www.fitUP.org. The site has had over 70,000 hits during the first three years of this project. The program has been able to work collaboratively with the Lake Superior Community Partnership to begin work on a 50 mile paved bike path through the center of the County from Republic through the cities of Ishpeming, Negaunee, and Marquette to Chocoley Township. A Recreation Authority is also being planned that will allow for a collaborative approach for the application and receipt of several million dollars of state and federal support.

COMMUNITY HEALTH PROMOTION	
HEALTH PROMOTION SCREENING	
SENIOR CITIZENS	120
REFERRALS	89
EDUCATIONAL PROGRAMS	
PROGRAMS	136
PARTICIPANTS	2,385
SCHOOL HEALTH	
HEARING SCREENS	2,884
REFERRALS	121
VISION SCREENS	4,527
REFERRALS	327
ADOLESCENT HEALTH ASSESSMENTS	1,254
REFERRALS	1854
FAMILY HEALTH EDUCATION	
PROGRAM/CLIENT HOURS	3,495
FAMILIES SERVED	95
MOBILE HEALTH VAN	
PROGRAM DAYS	9
PARTICIPANTS	96
COMMUNITY MEETINGS	
CONDUCTED	97
PARTICIPANTS	1,231
ATTENDED	247
NEWS RELEASES	155
INFO REQUESTS	2,988
INFO DISTRIBUTION	31,553

The Department's Mobile Health Van provided a multiplicity of services at ten sites throughout the county, serving 96 people. It helped provide a quiet “off-site” location near schools to be able to conduct the School Hearing Screens in schools that are overcrowded. The Senior Screening project reached a total of 120 seniors with 89 referrals to local physicians for follow up of abnormal screening tests.

The Division's Health Educators conducted 136 educational programs that reached a total of 2,385 residents! These programs ranged from Fitness Education to Smoking Cessation. A goal of the Division is to facilitate community collaboration to reduce or prevent health problems. The Health Educators conducted a total of 97 community meetings that attracted 1,231 community members. In addition, they attended over 247 other community meetings working collaboratively on many community health issues. Newsletters and other forms of communication to educate residents on health issues were sent to nearly 32,000 people! The Division also responded to more than 2,988 requests for health information. A total of 155 news releases were sent to area media.

EMERGENCY PREPAREDNESS

The Emergency Preparedness program in Community Health was involved in a multitude of activities in 2007. Throughout the year the Emergency Preparedness staff attended monthly conference calls or on site conferences with the Office of Public Health Preparedness (OPHP). These meetings addressed issues confronting Health Departments throughout the state. Emergency Preparedness is represented on the Local Emergency Planning Committee along with other local government and private institutions. This committee addresses health and security issues regarding hazardous materials within the County. Additional committee meetings with the hospital Health Resources Services Administration (HRSA) grant project were attended throughout the year. This group coordinates the planning for emergency response activities involving hospitals, ambulance companies, and public health.

A comprehensive All Hazards Response Plan was submitted to the Michigan Department of Community Health (MDCH) as mandated by OPHP in February. This plan addressed the response to biological, radiological, and chemical emergencies. The Centers for Disease Control (CDC) audits the preparedness activities within each state and the All Hazards Plan is evidence that local governments are participating in this program. The plan graded out as one of the top programs in the state.

Numerous activities focusing on Pandemic Influenza were conducted. Response planning was the focus of these meetings to encourage local private and government entities to develop strategies to ensure continuity of operations during an influenza outbreak.

Large scale influenza vaccination clinic was conducted at the Superior Dome and special drive-thru clinics in October and November. This event exercised a number of response components in addition to vaccinating a large group of citizens. Patient tracking, credentialing of response workers, communications capabilities, and media releases were tested and fared very well.

UPPER PENINSULA CHILD PASSENGER SAFETY (CPS) PROJECT

The Health Department obtained a subcontract for a third year from the Marquette County Sheriff Office (MCSO) in September 2007. This contract designates a Health Educator to assist the MCSO Community Safety Coordinator fulfill the objectives of the UP Child Passenger Safety (CPS) Project. The main objectives of this grant are:

- 1) assist UP CPS Technicians with their re-certification process;
- 2) train new CPS technicians;
- 3) assist UP communities with CPS outreach including setting up car seat check events and

- supplying area technician with car seats; and
- 4) work with other State CPS Technician Instructors on achieving the CPS goals for the State.

The grant awarded from the Office of Highway Safety Planning (OHSP) was for \$100,000. CPS funding continues to be available due to national statistics showing 90% of all children riding in cars are not properly restrained.

One of the priorities of the project is to encourage the local CPS technicians to re-certify. CPS technician certification is valid for two years. A database of all known technicians in the Upper Peninsula was maintained throughout the year. Project staff used this to monitor technician status and made contacts when expiration dates were approaching. To re-certify a technician must obtain six CEUs, attend a CPS event, and obtain verification of five seat installations from an instructor. Project staff assisted 32 CPS technicians with this re-certification process. Project staff also attended seat checks events throughout the region to assist with seat check verification. Two CEU Update courses were held in Hancock and Marquette.

A NHTSA Standardized CPS Technician course was held in Marquette in August 2007. All thirteen participants passed the course and are now certified CPS Technicians. The number of technicians in Upper Peninsula CPS is now at 68. This is an increase of 26% over last year. CPS activities occurred in 14 of the 15 Upper Peninsula counties, with no known activity happening in Mackinac County. A total of 38 presentations were made to a variety of community groups throughout the project period. Presentations included updates to the UP Traffic Safety Committee, expectant parents, Head Start groups, play group participants, and law enforcement. A total of 435 children/car seats were checked during the project year and 276 child safety seats were distributed to families throughout the region.

Technicians throughout the U.P. attended 14 CPS inspection events. Replacement seats were available at all events. The fitting station established in FY 2005 at the Marquette Fire Department (MFD) continued operation throughout the year, with services offered one Saturday every month. The fitting station is a collaborative effort between the UP CPS project, the MFD, and Safe Kids – Marquette-Alger.

Two of the seven hospitals in the U.P. with OB units established a CPS discharge policy during this grant period. Birthing class CPS presentations regularly occur now at the following hospitals: Portage Health, Keweenaw Memorial, Marquette General Hospital, and Bell Memorial Hospital.

SCHOOL HEARING AND VISION SCREENING PROGRAM

The mission of the Hearing and Vision Screening Program is to identify hearing or vision loss in children as early as possible, reduce preventable hearing or vision loss and disease, and provide support and resources for children identified as at-risk for these losses. The Health Department works with local schools to provide this service to area children. Certified technicians carried out 2,884 Hearing screenings with 121 referrals (4%), and 4,527 Vision Screenings with 327 referrals (7%). Otolaryngology clinics are also held with area Ear, Nose and Throat specialists, free of charge to parents. The importance of early detection of school hearing/vision problems is evident when considering the fact that 448 children were referred for further treatment.

SUBSTANCE ABUSE PREVENTION

Marquette County Substance Abuse Prevention Coalition (MC2) participated in a County wide assessment as part of the Strategic Prevention Framework/State Incentive Grant (SPF/SIG) to determine substance abuse prevention needs. Substance abuse in Marquette County was identified as a critical health issue. Binge drinking behaviors are exhibited by over 28% of the adult population. Binge drinking leads to a host of health problems including domestic violence, damage to the heart and liver, injuries, and traffic crashes. We are above the state average for deaths due to drinking drivers. New funding from SPF/SIG will hopefully be given to address these issues in 2008.

The Marquette County Substance Abuse and Violence Prevention Coalition is staffed by the Community Health Division. Meetings are held the first Tuesday of each month. The coalition continues to maintain a leadership role in bringing organizations together on a variety of issues. Fifteen coalition members on average, representing a wide variety of groups, have attended meetings. MC2 membership has increased by 15 members in 2007.

The coalition has refined the goals and objectives in the community. New goals and objectives include:

- 1) increased retailer compliance with Marquette County laws and ordinances for tobacco and alcohol;
- 2) increased parents skills and knowledge in alcohol, tobacco and other drug (ATOD) use resulting in less access for youth;
- 3) increase the number of alternative activities for youth by 10% each year for the next five years;
- 4) increased enforcement of drinking and driving laws;
- 5) significantly increase Native American Youth contact with non-using peers;
- 6) increased collaborate prevention efforts within Marquette County;
- 7) promote programming that helps to identify and refer persons at risk for ATOD and violence;
- 8) expand membership and involvement of MC2 by a minimum of 25% by 2010; and
- 9) recognize businesses and other organizations which promote the prevention of ATOD issues.

The web site (www.upprevent.org) for the coalition has been enhanced to include national and local data on substance abuse trends as well as free information such as fact sheets. The coalition has also served as our community voice around issues related to setting community policies. Schools are regularly updated with current resources that are given to appropriate teachers. Resource packets are sent free of charge. We are working with and partnering with the media to air more drug prevention ads which will change the cultural acceptability of binge drinking and heavy drinking. The Coalition received a "Drug Free Coalition" grant from the Federal Government of \$100,000. At least 75% of the funds will be granted out to other community organizations to assist the Coalition in reducing substance abuse. As part of this we are also promoting the 0-0-1-3 policy to service clubs and Marquette County municipalities to restrict alcohol use at community events to no more than 3 drinks.

The fall youth conference at Northern Michigan University was very successful attracting more than five hundred youth. Participants gained knowledge in successful programs they can implement in their communities and schools.

A successful program that involves the giving of mini grants to coalition member organizations was maintained. More than \$140,000 was granted to more than 25 different youth serving organizations. Mini-grants in Marquette county were given out to programs such as the Sheriff's Department mentor program in Ishpeming and Westwood schools, parenting programs at Lake Superior Village Youth Programs, Marquette Schools Parenting Programs, Child and Family Services, Big Brothers/Big Sisters, Project WEAVE, Red Ribbon Campaign at the Westwood Mall, and North Star Academy. The Marquette County Health Department was instrumental in resubmitting a proposal for Pathways to receive a \$155,000 prevention grant. The "State Incentive Grant" works to expand the activities of the coalition to other areas in the Central and Eastern U.P. The Upper Peninsula Community Coalitions for Substance Abuse Prevention Project is a three year project to reduce the health problems caused by high risk drinking.

TOBACCO PROGRAMS

The Tobacco Free Community Coalition continued to be a leader in the state in its creativity and ability to positively influence public health policy. Our efforts to create more smoke-free apartments have been overwhelmingly positive. Marquette, Ishpeming and Negaunee Housing Commissions all passed smoke-free policies this year! We now have over 600 smoke-free housing units in Marquette County. We continue to enforce the Marquette County Smoke-free Regulation. Last year there were 8 complaints all handled through educating the business owners. Marquette County received a media grant from Blue Cross Blue Shield of Michigan and continues to work on a mass media campaign to highlight the effects of secondhand smoke and the deception tobacco companies use to hook new customers. We have led other UP health departments and organized a UP wide media campaign with 25 billboards and over 9,000 ads. The media networks in Upper Peninsula matched a minimum dollar for dollar in in-kind support. Teens Against Tobacco Use program has been implemented at North Star Academy and Negaunee schools. Students are focusing on presentations to middle school students and recognizing businesses that go smoke-free. Ten new smoke-free restaurants were recruited in Marquette County increasing the total of smoke-free restaurants to 75. Many of these now include restaurant/bar combinations. The Lake Superior Shore Run continued to increase in participation and sponsorship. Over \$10,000 in free advertising was given to the event by the local media. This led to registering more than 300 participants, making it the largest event so far. The Santa Quits Smoking Reading Program with assistance from Commission on Aging volunteers remains popular.

The web site for the coalition (www.smokefreeup.org) has grown in popularity and had over 5,000 hits last year. Tobacco retailer education continues to be a focus for the program. Forty tobacco retailers in the County were provided with a Tobacco Retailer Kit. Tobacco sales to minors are very low in Marquette County. A check in the summer showed no sales to minors from the retailers checked!

FAMILY HEALTH

Family Health Educators provided in-home services to high risk families referred by the Children's Services Unit and the Family Support Program of Department of Human Services (currently DHS referrals are received only from Children's Services), and by the Early On Screening Committee under contracts with the Department of Human Services (DHS), an Early On collaborative contract, and the Strong Families Safe Children project. Stress management, parenting skills, communication, and money management are some of the issues addressed with the families. The primary purpose of the program is to provide quality education services to high risk parents in order for them to raise their children in a healthy family environment. The Family Health Educators delivered 3,140 hours of family health education services to clients in Marquette County in 2007.

The Strong Families/Safe Children funded project for Pregnant and Parenting Teens is completing its ninth year. This case management and mentoring program for teens continues to have as its goal the removal of roadblocks so that pregnant or parenting teens can obtain their GED or high school diploma. So far, nearly 80 teens have accomplished this goal. It is expected that this project will have over a 90% success rate in not having any parents/children referred to DHS/Protective Services.

ADOLESCENT HEALTH PROGRAM

Adolescent Health Services at North Star Academy High School, Polaris Middle School and Powell Township School continued during 2007. Services offered through our non-clinical Child & Adolescent Health Center partnerships are targeted to address primary care services to children/youth in the Marquette County area. These services cover many topics, such as asthma, pregnancy prevention, obesity/nutrition/physical activity, tobacco cessation/prevention, and several different aspects of Medicaid outreach.

Other areas addressed through the Adolescent Health program were: student/staff/agency mediation services; advocacy for students in their interactions with parents and area service providers, referral for DHS services and to other community agencies; referral to Health Department programs and services; and continuing to provide access and referral to community resources for parents, students, and families associated with each of our partner schools. Over 1,778 adolescent contacts were made for a wide variety of issues related to adolescent health services and programming. A total of 2,573 referrals for services were made to teens assessed through the program.

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 2006 because of a six month delay in vital statistics reporting and tabulation.

The live birth rate in Marquette County increased slightly from 2005 to 2006 (from 9.3 to 9.8 births/1,000 residents). In 1980, Marquette County's live birth rate was 17% higher than the state as a whole (18.4 births/1000 residents in Marquette County vs. 15.7 births/1000 residents statewide). In 2006 it was approximately 92% of the state's live birth rate (9.8 births/1,000 residents in Marquette County vs. 10.6 births/1,000 residents statewide). This long-term reduction is primarily due to the gradual shift toward an older population accentuated by the closure of K.I. Sawyer AFB which resulted in the relocation of many young families out of Marquette County.

VITAL STATISTICS	MARQUETTE COUNTY						STATE OF MICHIGAN
	2001	2002	2003	2004	2005	2006	2006
POPULATION (1)	64,383	64,342	64,616	64,874	64,760	64,765	10,095,643
LIVE BIRTHS	613	607	647	615	600	636	127,537
LIVE BIRTH RATE (2)	9.8	9.4	10.0	9.5	9.3	9.8	10.6
# OF LOW WT LIVE BIRTHS (3)	32	37	39	42	36	40	10,720
% LOW BIRTHWEIGHT INFANTS	5.2	8.0	6.0	6.8	6.0	6.3	8.4
% PRETERM INFANTS	10.3	8.9	9.4	8.3	10.2	7.4	9.6
% OF BIRTHS TO TEENS (< 20 YRS)	9.5	7.7	6.6	4.7	6.3	5.8	9.8
EST. TEEN PREGNANCY RATE (4)	33.4	29.3	23.3	17.2	22.5	19.7	54.0
DEATHS	635	629	648	616	640	586	85,945
AGE-ADJUSTED DEATH RATE (5)	1005.8	1007.1	885.9	815.7	845.6	759.4	812.8
INFANT DEATHS	4	5	1	0	3	4	940
ANNUAL INFANT MORTALITY RATE (6)	6.5	8.2	1.5	-	5.0	6.3	7.4
AVERAGE INFANT MORTALITY RATE (7)	5.6	6.6	5.4	3.2	2.1	3.8	7.6
MARRIAGES	459	495	449	456	458	464	59,400
DIVORCES	262	242	188	225	209	215	35,022
(1) Estimated by U.S. Census Bureau		(4) Rate Per 1,000 FEMALES AGE 10-19					
(2) Rate Per 1,000 Population		(5) Rate Per 100,000 Population					
(3) Weight Below 2500 Grams		(6) Rate Per 1,000 Live Births					

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.

During 2006, Marquette County had 4 infant deaths for a single year infant mortality rate of 6.3 infant deaths per 1,000 live births. During the same year there were 940 infant deaths in the state

as a whole for an annual statewide infant mortality rate of 7.4 infant deaths/1,000 live births. However, since relatively few births occurred in Marquette County, it is more meaningful to compare data from several years.

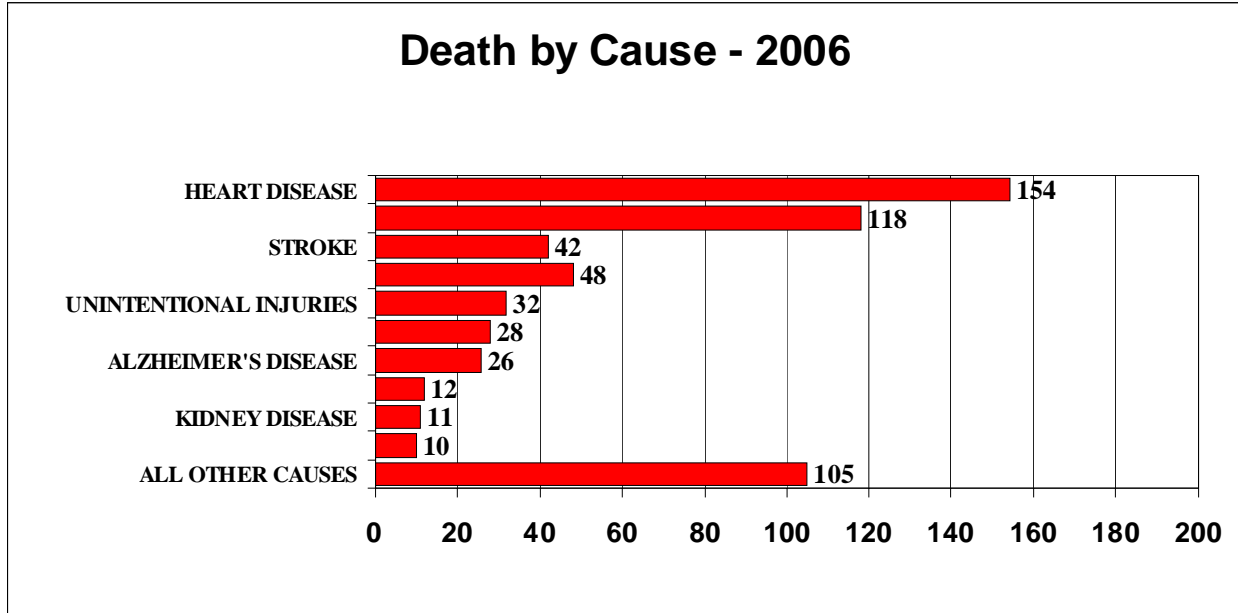
For example, during the three-year period from 2004-2006, Marquette County had an average infant mortality rate of 3.8 deaths/1,000 live births. This compares to an average statewide rate of 7.6 deaths/1,000 live births for the same period.

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.

Death statistics have a serious limitation in that they only present information concerning the end stage of the disease continuum. In addition to mortality data, information on incidence, prevalence and resultant human and economic impact of various diseases and conditions would be helpful. Unfortunately, this information is not generally available.

Death by Cause - 2006				
Cause of Death	Michigan		Marquette Co	
	#	Rate*	#	Rate*
1. HEART DISEASE	24,223	226.7	154	189.0
2. CANCER	20,166	190.8	118	156.4
3. STROKE	4,746	44.7	42	54.0
4. CHRONIC LOWER RESPIRATORY DISEASE	4,471	42.9	48	62.4
5 UNINTENTIONAL INJURIES	3,557	34.5	32	47.6
6. DIABETES	2,823	26.7	28	38.1
7 ALZHEIMER'S DISEASE	2,331	21.7	26	31.4
8 PNEUMONIA & INFLUENZA	1,673	15.7	12	**
9. KIDNEY DISEASE	1,594	15.0	11	**
10. SUICIDE	1,132	11.0	10	**
11. ALL OTHER CAUSES	19,229	183.0	105	137.4
ALL CAUSES	85,945	812.7	586	759.4
* Age-adjusted deaths per 100,000 population				
** 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.				



COMMUNICABLE DISEASE CONTROL GENERAL

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/or limit the further spread of disease.

Reportable communicable disease statistics are difficult to interpret for two reasons. First, the natural variation in disease incidence which occurs from year to year makes interpretation of apparent trends hazardous. Such a trend must continue over the course of several years before it can be considered significant.

Secondly, some cases of reportable communicable disease produce minimal symptoms which do not result in a physician visit or laboratory testing. Therefore the diagnosis is never made even though the individual may be infectious to others. While recognizing the inherent limitations of the statistics available to us, they can be useful in providing crude impressions for year-to-year comparison purposes.

A long term objective of the Department’s activity in communicable disease control is the elimination of diseases that are preventable through administration of the classic childhood vaccines (i.e. Measles/ Mumps/Rubella, Diphtheria/Pertussis/Tetanus, and Inactivated Polio). In 2007 there were four cases of these major vaccine preventable diseases (three cases of pertussis and one case of mumps) reported in the county. Other routinely administered vaccines include: Hepatitis B, Haemophilus influenza type b, Varicella (chickenpox), Pneumococcal and Influenza.

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. A total of two hundred and eight (208) cases of reportable communicable disease were reported and investigated in 2007.

REPORTABLE COMMUNICABLE DISEASES IN MARQUETTE COUNTY RESIDENTS														
DISEASE	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
A.I.D.S.	0	2	0	1	1	0	0	0	0	0	0	0	0	0
HIV POSITIVES		1	2	0	1	0	1	1	0	4	2	0	0	0
BLASTOMYCOSIS	0	0	1	1	0	0	0	0	0	0	0	1	1	0
CAMPYLOBACTER ENTERITIS	18	11	9	18	9	8	18	8	11	6	11	3	7	18
GIARDIASIS	16	16	9	27	12	5	12	6	24	10	16	11	2	5
CRYPTOSPORIDIOSIS	1	0	0	0	0	0	0	1	1	0	1	0	2	0
E COLI. 0157:H7	0	2	4	1	2	*15	4	0	0	0	0	0	0	1
HEPATITIS (TOTAL)	4	2	0	0	0	1	1	22	36	23	26	15	22	25
TYPE A	2	1	0	0	0	1	1	1	2	0	0	0	0	1
TYPE B (CHRONIC)	0	0	0	0	0	0	0	3	2	3	3	2	4	2
TYPE C (CHRONIC)	2	1	0	0	0	0	0	18	32	20	23	13	18	22
LISTERIOSIS	1	1	0	0	0	0	0	1	0	0	0	0	1	0
LYME DISEASE	4	0	1	0	1	0	0	0	1	0	0	0	0	1
MEASLES (RUBEOLA)	0	5	0	0	0	0	0	0	0	0	0	0	0	0
MENINGITIS (TOTAL)	5	6	4	1	10	1	3	3	3	5	7	3	4	0
ASEPTIC/VIRAL	3	6	3	1	9	1	3	3	2	4	4	3	4	7
MENINGOCOCCAL	0	0	1	0	1	0	0	0	1	0	2	0	0	0
OTHER BACTERIAL	2	0	0	0	0	0	0	0	0	1	1	0	0	0
MENINGOCOCCAL SEPTICEMIA	0	2	1	2	1	0	0	1	1	0	0	2	0	0
MUMPS	0	0	1	0	0	0	0	0	0	0	0	1	1	1
PERTUSSIS	0	0	0	0	0	0	1	2	5	4	6	12	7	3
RUBELLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SALMONELLOSIS	15	10	15	5	11	4	12	14	6	5	24	8	5	7
SHIGELLOSIS	1	1	1	0	1	1	0	0	0	0	0	0	0	0
TUBERCULOSIS	4	2	1	1	0	0	1	4	0	0	0	0	1	1
VENEREAL DISEASES														
CHLAMYDIA, GENITAL	104	155	77	49	91	68	94	86	105	71	116	136	110	114
SYPHILIS	0	0	0	1	0	0	0	0	0	0	0	0	1	0
GONORRHEA	12	4	7	0	9	8	15	9	11	10	5	10	5	7

* DAY CARE OUTBREAK

TUBERCULOSIS (TB)

The general public is under the impression that tuberculosis is a disease that we do not have to be concerned about any longer. In fact, during 2007, there was no new active case of tuberculosis reported in Marquette County. However, this apparent good local control does not mean that tuberculosis can be forgotten because tuberculosis is still prevalent in the state and across the nation.

TB disproportionately affects racial/ethnic minorities and the case rate for foreign-born individuals is from four to six times higher than that for U.S.-born persons. Active TB is also more prevalent in individuals with depressed immunity secondary to infection with the Human

Immunodeficiency Virus (HIV) - the causative agent of AIDS. In addition, the emergence of drug-resistant strains of TB is a serious public health concern. It is therefore important to continue actively searching for individuals infected with the TB bacteria and to provide adequate preventive therapy when indicated.

The health department continued to offer TB skin testing through its Personal Health Division. During 2007, there were 249 TB skin tests given. Local hospitals and nursing homes also routinely skin tested employees and high risk patients.

Individuals found to have positive skin tests were either seen by their private physician or referred to the health department for appropriate follow-up including a medical evaluation, chest X-rays, skin testing of close contacts, and preventive chemotherapy where indicated.

There was one individual on preventive therapy at the beginning of 2007. This person completed his course during the year. No new individuals began preventive therapy during 2007.

SEXUALLY TRANSMITTED DISEASES

During calendar year 2007, seven (7) cases of gonorrhea and 114 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. The resulting identification, treatment and follow-up of previously undetected infections are most likely responsible for the observed dramatic reduction in the total number of reported cases of gonorrhea over the last 15 years. Hopefully a similar reduction in the number of reported cases of chlamydia will be observed as expanded testing and contact follow-up continues.

There were no cases of syphilis reported in Marquette County during 2007.

YEAR	CHLAMYDIA							GONORRHEA						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
TOTAL CASES	86	105	71	116	136	111	114	9	11	10	5	10	5	7
REPORTING SOURCE:														
PRIVATE PHYSICIAN	27	35	33	35	44	37	47	2	3	5	2	1	1	2
NMU HEALTH CENTER	16	13	11	10	12	14	14	0	0	1	0	3	1	0
EMERGENCY ROOM, MGH/BMH	13	8	9	12	8	14	17	4	4	3	2	4	2	4
HEALTH DEPT	16	29	5	17	28	19	21	2	2	1	0	1	1	0
PLANNED PARENTHOOD	13	19	12	41	43	26	15	1	2	0	1	1	0	1
OTHER	1	1	1	1	1	1	0	0	0	0	0	0	0	0
AGE:														
19 & UNDER	30	31	19	41	41	35	27	4	3	4	2	2	2	0
20-25	39	62	38	58	79	52	61	3	5	6	2	5	2	3
26 & OVER	17	12	10	17	16	24	26	2	3	0	1	3	1	4
UNKNOWN	0	0	4	0	0	0	0	0	0	0	0	0	0	0
SEX:														
MALE	19	26	14	23	35	20	28	5	3	4	2	6	4	3
FEMALE	67	79	57	93	101	91	87	4	8	6	3	4	1	4