

Marathon County Health Department

Serving Our Community

Promoting Health

Protecting the Environment

Preventing Disease



2008 Annual Report

This report fulfills Chapter 251.06(3) (h) WI STATS

2008 Annual Report Marathon County Health Department

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Judy Burrows, RD, BS, Program Director

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Dale Grosskurth, RS, MPA, Program Director

Family Health & Communicable Disease Control Team

Joan Theurer, RN, MSN, Program Director

Vision

Create and support environments and policies where people can make healthy choices and the public's health is protected.

Mission Statement

To link and empower individuals, families, and systems to promote health, prevent disease, and protect the environment, thereby strengthening our communities.

Core Values

SERVICE is *responsively delivering on our commitments to all of our internal and external customers.*

We know we are living the core value of *SERVICE* when we:

- ◆ Design and provide services based upon individual customer needs and feedback.
- ◆ Commit to being accessible by being flexible and available.
- ◆ Communicate respect for the community, our customers, partners, and co-workers through positive and professional attitude and appearance.
- ◆ Respect time commitments, are prepared for meetings, and meet deadlines. Respond to phone calls, e-mail, and correspondence in a timely manner.
- ◆ Build a strong organizational culture that improves organizational performance.

INTEGRITY is *honesty, openness, and demonstrating mutual respect and trust in others.*

We know we are living the core value of *INTEGRITY* when we:

- ◆ Communicate openly and honestly and listen without personal bias or prejudice.
- ◆ Treat each other and the public with respect and fairness.
- ◆ Model a focused and productive work ethic.
- ◆ Conduct ourselves in a manner that reflects well on the department.
- ◆ Protect confidentiality.
- ◆ Comply with our professional code of ethics, *Principles of the Ethical Practice of Public Health.*

QUALITY *is providing public services that are reflective of “best practices” in the field.*

We know we are living the core value of *QUALITY* when we:

- ◆ Define clear targets of success within our department and with community groups.
- ◆ Evaluate the impact of our services and adapt our practice based on analysis of our performance indicators and feedback from our customers, partners, and staff.
- ◆ Commit to best practice by using national standards to systematically improve and implement our departmental standards (protocols, procedures, and policies) and program plans.
- ◆ Seek opportunities for continuous learning for ourselves and support others in doing the same.
- ◆ Commit together to building and maintaining excellence in all that we do.

DIVERSITY *is actively welcoming and valuing people with different perspectives and experiences.*

We know we are living the core value of *DIVERSITY* when we:

- ◆ Strive for a diverse workforce by recruiting, hiring, and retaining people with a variety of circumstances and abilities...
- ◆ Take responsibility to know and understand other people’s perspectives and cultures through interaction with diverse groups and continuing education.
- ◆ Honor each individual’s worthiness and respect each other’s beliefs, values, and viewpoints.
- ◆ Customize our services to meet individual needs.
- ◆ Provide information about our services to the entire community.

SHARED PURPOSE *is functioning as a team to attain our organizational goals and working collaboratively with our policy makers, departments, employees, and customers.*

We know we are living the core value of *SHARED PURPOSE* when we:

- ◆ Support the success of others and commit to the success of all.
- ◆ Make decisions about our services based on community need and input.
- ◆ Seek opportunities to work with community partners to address community health issues.
- ◆ Contribute our individual expertise to the department to attain our organizational goals.
- ◆ Solve problems in a way that builds good relationships to achieve our common outcomes.

STEWARDSHIP OF RESOURCES *is conserving the human, natural, cultural, and financial resources for current and future generations.*

We know we are living the core value of *STEWARDSHIP OF RESOURCES* when we:

- ◆ Invest in our employees by promoting a positive and safe work environment.
- ◆ Utilize our time, money, technology, material resources, and people in the most cost effective manner to maximize their value and reduce waste.
- ◆ Acknowledge that our public health goals are achieved in collaboration with the contributions of our community partners and citizens.
- ◆ Seek diverse and sustainable funding to assure continued services.
- ◆ Strive to be practical and optimistic in performing our work and deciding on our daily priorities.

Letter from the Health Officer

TO: Marathon County Board of Health
Marathon County Board of Supervisors
Marathon County Administrator Brad Karger
Municipal Officers
State Legislators
Members of the Public

Last year, we reconfigured this report around public health's Ten Essential Services. We hope you found it to be an interesting perspective on how we deliver our services to the Marathon County community. At a national level, the Public Health Accreditation Board recently released standards for a formal public health accreditation process to commence in 2011. And guess what? Those standards are formatted around the Ten Essential Services. We believe that organizing our thinking and our work around this model will not only prepare us for the accreditation process, but make us better public health practitioners, delivering better services to our community.

2008 was a year of "keeping on" and "clarity."

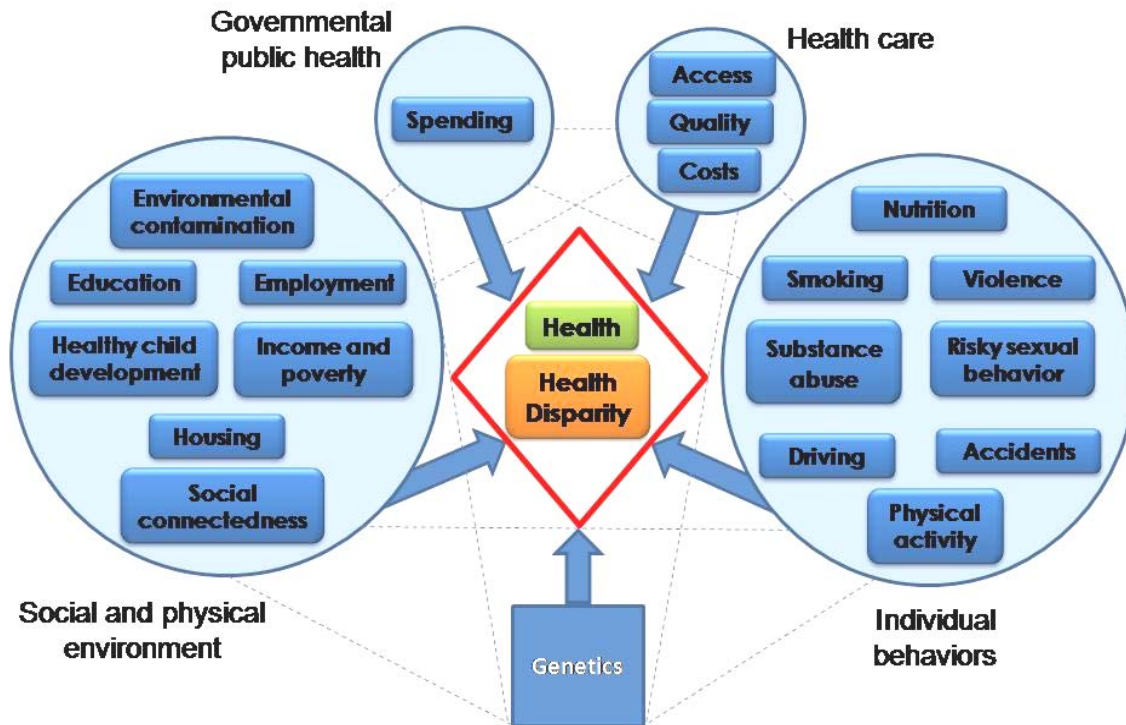
Keeping On....

We diligently continued our work in key public health areas; however, as the national economy floundered, opportunities for additional grant funding to support new programs also became more limited. Working diligently to live the core value of stewardship of resources, we evaluated several major programs (including the Start Right parenting education and support program and the Licensing program) to determine the most efficient and effective methods of delivering services. We delivered a budget to County Administration within the specified 2.0% tax levy increase. To do so, we reorganized our Administrative Support team and eliminated 0.4 FTE through attrition and redistribution of work.

We kept our focus on important public health goals as outlined in our integrated work plan (more about this on page 44). As a result, we saw important strides forward, as outlined in the Executive Summary on page 6.

Clarity....

Working in partnership with the University of Wisconsin's Population Health Institute and the State of Wisconsin's Division of Public Health, we had the opportunity to study models that ground our work. While model development might seem to be a rather esoteric activity, it also has the potential to bring clarity to the day in and day out work of public health. Such is the case with the following model brought to us through the Healthiest State project of the UW Population Health Institute:



What does this model tell us?

- ◆ Creating health takes more than just health care - it requires a focus on social and physical environments and individual behaviors.
- ◆ To be meaningful, public health must work in influencing health care, environments, and behaviors.
- ◆ To be effective, public health must NOT work in isolation, but in close collaboration with multiple partners.

In the pages that follow, I hope you see evidence of this clarity. Of a broad focus. Of partnerships. And of persistently keeping on.

We do this work as servants of the community. We are only able to do it because of the generous support of our customers, the tax payers, allocated to us through our elected officials. We thank each of you for the opportunity you provide to accomplish our ultimate goal - to make Marathon County the healthiest county in Wisconsin. This report is one mechanism to be accountable to you for your investment. On an ongoing basis, please feel free to contact us with your feedback about your investment.

Sincerely,

Julie A. Willems Van Dijk RN PhD
Health Officer

Executive Summary

Highlights from the 2008 Marathon County Health Department Annual Report include the following:

Organizational Highlights

- ◆ An organizational culture survey was conducted in January. Results revealed a strong culture and opportunities to make it even stronger. The Leadership Council designed an action plan focusing on sharpening our focus around goals and objectives, securing more stakeholder feedback, and strengthening our focus on core values.
- ◆ After four outstanding recruitments, we hired four new members of our team - a public health nutritionist (our first!), an environmental health sanitarian, a public health nurse, and a community health worker.
- ◆ We participated in the Multi-state Learning Collaborative, an effort funded by the Robert Wood Johnson Foundation to prepare local health departments for accreditation.
- ◆ In partnership with Children's Service Society of Wisconsin, we conducted a comprehensive review of the Start Right parenting education and support program and prepared a redesign plan for implementation in 2009.
- ◆ The Board of Health conducted a comprehensive analysis of the Licensing Program and after extensive public input, adopted a revised fee structure to assure sustainability in years to come.

Programmatic Highlights

Monitoring, Diagnosing, and Investigating Health Problems

- ◆ Communicable disease surveillance and emergency response systems were strengthened through using and refining the system during the 2008 Measles and Pertussis (whooping cough) outbreaks.
- ◆ The rate of unsafe drinking water samples (9%) and recreational water samples (5%) testing unsafe remained steady in 2008.
- ◆ The immunization rate for children between the ages of 24-36 months dropped from 90% to 82%, largely as a result of a Hib vaccine shortage.
- ◆ Public health preparedness efforts were enhanced through revisions to the emergency plans (including further focus on the Hmong and Amish populations), enhanced training, and exercising of plans.
- ◆ Marshfield Clinic continued to support the Hearing & Vision program and rates of follow up on positive screening remained high.
- ◆ More women were referred and screened for breast and cervical cancer as part of the Wisconsin Well Women's Program.
- ◆ CDC Risk Factor violations by restaurants and retail food establishments decreased in 2008.
- ◆ Lead hazard reduction was completed in six houses.
- ◆ Comprehensive daily Directly Observed Therapy services were provided to two patients with Tuberculosis Disease.

Informing the Public and Creating Partnerships

- ◆ The local print, television, and radio media covered 273 public health stories with the highest coverage of tobacco, healthy living, alcohol and drugs, and communicable disease outbreaks. This represented a 53% increase from 2007.
- ◆ Suicide prevention and healthy eating, active living programs were expanded in the schools.
- ◆ Hazardous waste collection continued at the permanent facility and expanded to rural areas with pharmaceutical collections in Marathon, electronic collection in Edgar, and chemical collection in Stratford.
- ◆ Radon testing doubled in 2008 from 331 tests in 2007 to 626 in 2008. Of these tests, 66% had levels greater than 4 pico curies, the EPA action level for action. 346 properties have lowered radon levels as a result of the installation of radon reduction systems in 2008.

- ◆ Start Right services were provided to all families of newborns and 443 families received long term family visiting services. Of those families who received long term services, 86% increased their parenting knowledge and 95% demonstrated positive parenting behaviors.
- ◆ The Municipal Planning Organization adopted a 20 year facilities plan to create bicycle and pedestrian friendly infrastructures.
- ◆ The Marathon County Asthma Coalition adopted a system to connect children with asthma who are seen in the Emergency Department with a primary care provider, if they do not already have one.
- ◆ Working with the Susan G. Komen Foundation, a World Café was held to identify best strategies to address breast cancer screening and treatment in Marathon County.
- ◆ In response to high rates of infant deaths attributed to co-sleeping, “Cribs for Kids” was implemented to assure all families have access to a crib for their infant. 63 cribs were distributed to low income families in 2008.

Develop and Enforce Policies and Laws

- ◆ The Village of Weston passed a 100% smoke-free ordinance that prohibits smoking in all worksites, restaurants, and bars. The ordinance will be implemented on January 1, 2010.
- ◆ The \$1.00 increase in the tobacco tax resulted in a dramatic increase in calls to the Wisconsin *Quitline*. Similar increases were not seen in the local *Quit Tobacco Now* program and thus the program ended in 2008 due to low participation.
- ◆ The Early Intervention Lead Project was implemented to provide funding for lead hazard reduction in homes BEFORE a child is lead poisoned.
- ◆ The Raising Emotionally Attached Children (REACH) strategic plan was unveiled in September.
- ◆ The Licensing program was evaluated and fee increases were adopted by the Board of Health to assure 100% fee-based funding of the program within the next five years.
- ◆ 92% of retail establishments did NOT sell tobacco to minors.
- ◆ Prevention of and Varicella was strengthened by the implementation of revisions to the state school immunization law requiring booster doses of vaccine for children in grades 6, 9, and 12.
- ◆ 94% of newborns were screened for hearing loss as a result of state legislation passed to assure hearing screening for all. MCHD works with families of infants identified with a hearing loss to ensure follow-up services are obtained.

Link People to Personal Health Services

- ◆ 186 prenatal referrals were received and 91 women received ongoing comprehensive prenatal services, a 15% increase in engagement from 2007.
- ◆ 91% of pregnant women who smoked decreased or stopped smoking during their pregnancy. 62% of women initiated breastfeeding and 51% of those women breastfed 8 weeks or longer. 99% of infants slept on their backs and 88% of infants did not co-sleep with other family members. 37% of women experienced perinatal depression and 60% were referred to mental health services.
- ◆ 19% more vaccines were administered in MCHD immunization clinics in 2008.
- ◆ 73% more people received Sexually Transmitted Disease services in 2008.

Assure a Competent Public Health Workforce

- ◆ A public health nutritionist was hired to provide evidence-based community nutrition consultation.
- ◆ Forums were held to enhance perinatal mood disorder screening to enhance skills for local physicians, nurses, and mental health providers.
- ◆ MCHD continued to serve as a clinical placement site for health professional students.

Evaluate and Research Services

- ◆ A department-wide integrated work plan was developed. Logic models for major program areas were also drafted.
- ◆ In collaboration with the University of Wisconsin-Madison, a study of indoor air quality in restaurants and entertainment sites that allowed smoking and those that did not was conducted.
- ◆ A perinatal depression program that provided in-home therapy for women with perinatal depression was implemented.

These services were provided to Marathon County residents for \$35/person, of which \$20/person was from local tax levy (56%). Other funding sources included Federal taxes (18%), State taxes (6%), Fees (13%), and Private grants (7%).

Essential Service #1

Monitor Health Status to Identify Community Health Problems

One of the distinguishing features of a local public health department is its focus on the whole population. While the medical care system diagnoses and provides care to individuals, the public health system diagnoses and provides interventions to impact the health of the whole community.

Monitoring health status is the beginning point for public health services. The duties of a local health department include:

- Conducting periodic assessments of the community's health status that include a review of vital statistics, health status indicators, health risks, and community assets
- Using appropriate technologies, such as immunization registries, to monitor health status data
- Working with other partners to identify diseases and health events
- Conducting surveillance to identify health problems

Environmental Health & Safety Program

Laboratory

The goal of the Marathon County Public Health Laboratory is to provide convenient, reliable, and reasonably priced water testing services to the citizens of Marathon County and surrounding counties with the goal of safer water supplies. The lab is involved in monitoring public drinking water supplies which include municipal community water systems and those involved in our Department of Natural Resources (DNR) transient non-community water (TNC) systems program. As part of the TNC contract specifies, we conduct well sanitary surveys to assess compliance with DNR codes and risk for contamination, with 36 completed in 2008. Monitoring water quality also includes private drinking water systems and recreational waters, such as swimming pools and beaches. The lab tests for several microbiological and chemical parameters. In addition, lab personnel interpret results for well owners and provide education concerning water safety issues.

In 2008, there were 1,897 public drinking water samples and 2,955 private drinking water samples tested in our lab. The total of 4,852 samples represents a decrease of 1,228 samples, largely due to fewer garden wells requiring sampling and economic influence (i.e. fewer home sales). We again promoted private well water testing during the March 2008 Groundwater Awareness Week. Recreational water samples also increased as new licensed pools were added. The rate of unsafe samples was constant in 2008 with 9% of the drinking water samples and 5% of the recreational water samples testing unsafe and requiring follow-up action.

	2005	2006	2007	2008
DRINKING WATER				
Total number of samples	5330	5362	6080	4852
Bacteriologically safe samples	4553	4548	5156	4098
Bacteriologically unsafe samples	433	463	612	448
Nitrate >10.0 mg/l (unsafe for pregnant women & infants)	89	77	86	88
RECREATIONAL WATER (pools & beaches)				
Total number of samples	1830	1828	1921	2028
Bacteriologically satisfactory samples	1729	1730	1827	1928
Bacteriologically unsatisfactory samples	96	92	94	96

Specifically reviewing those public samples representing facilities under the DNR-TNC contract shows that of the 194 facilities with public water supplies, 190 (98%) tested safe, while 4 (2%) were found unsafe. Two of the four unsafe systems were returned to service within 30 days following chlorination. The remaining unsafe systems required more than 60 days to return to service. These systems were ordered closed until a safe water supply could be identified. Once a water supply system is returned to service, sampling is conducted in the following month to ensure the system remains safe.

The average length of time to identify an unsafe water supply, determine corrective action, order the well replaced if needed, and confirm a safe water supply system through water testing was 60-90 days. This depended on weather conditions, the complexity of well installation, geology, type of violation(s), and availability of contractors.

Family Health & Communicable Disease Control Program

Communicable Disease Reporting

Communicable diseases, sometimes called infectious diseases, are illnesses caused by organisms such as bacteria, viruses, fungi and parasites. Infectious diseases remain the major cause of illness, disability, and death. Local health departments are responsible to investigate and control further spread of infectious diseases. In order to be able to identify patterns and trends of communicable disease occurrences, Marathon County tracks the type and number of reportable diseases, as well as the timeliness of reports received from area health care providers, laboratories, schools, and day care centers. On a weekly basis, infection control practitioners from area hospitals receive a report of communicable disease occurrences in Marathon County.

As part of our communicable disease investigation, we assure individuals receive appropriate treatment and provide health teaching on ways to prevent further spread. In 2008, Marathon County Health Department received 748 case reports of 18 different communicable diseases. The most commonly reported disease in Marathon County was Chlamydia (256 cases), followed by Lyme disease (171 cases). Refer to the table for a list of reportable diseases from 2004 to 2008.

In the spring of 2008, 4 cases of Measles were reported in the southeastern part of Wisconsin. Measles is considered a public health emergency because it spreads easily and rapidly among children and adults who have not previously had the disease or Measles vaccine. There is no treatment for Measles and the complications are serious. Among children with Measles about 10% will develop ear infections, 5% pneumonia, 0.1% (1 per 1000 cases) develop encephalitis (inflammation of the brain that can result in deafness or mental retardation), and about 0.1% to 0.2% (1 to 2 per 1000 cases) die from it. In April, health care providers across the state were alerted as Measles is very infectious and the illness is often misdiagnosed due to its low incidence and few physicians having actually seen Measles in their careers. Local health departments were responsible for assuring timely isolation and post exposure vaccination or prophylaxis of suspect cases and contacts. Six (6) suspect cases of Measles were reported to Marathon County, none of which were confirmed; however, the same protocol for isolation and prophylaxis is employed for suspect and confirmed cases. The incidence of Measles in Wisconsin, strengthened Marathon County's surveillance system, thereby ensuring effective and prompt channels of communication are in place between health care providers, infection control practitioners, and the health department.

In 2008, Marathon County continued to see Pertussis (whooping cough), with 23 cases reported. In recent years, Pertussis has occurred more frequently among school-age children because immunity wanes 5-10 years after the completion of childhood vaccine. Because Infants and young children who are not fully-vaccinated and the elderly with chronic illnesses are more likely to develop complications such as pneumonia and seizures, timely isolation and prophylaxis are conducted by health departments. In addition, to assure infants, young children, and the frail elderly are protected from being exposed to Pertussis, the State of Wisconsin in 2008 began to require children entering grades 6, 9, and 12 to receive one dose of Tdap vaccine.

	2004	2005	2006	2007	2008
REPORTABLE DISEASES					
Hepatitis B	37	42	32	17	22
Hepatitis C	34	40	42	37	35
AIDS (cumulative)	51	53	57	57	60
HIV	4	4	4	2	4
Tuberculosis	8	4	1	1	1
Lyme Disease***	63	73	111	93	171
Meningitis*	2	18	6	31	0
Blastomycosis	2	11	47	14	26
SEXUALLY TRANSMITTED DISEASES					
Chlamydia	284	246	285	231	256
Gonorrhea	35	35	42	24	24
Herpes*	73	62	71	75	NA
Syphilis	4	1	3	4	4
FOOD & WATERBORNE DISEASES					
Hepatitis A	15	1	1	1	0
Campylobacter	41	39	39	42	42
Cryptosporidium	17	25	19	50	33
E coli O157:H7	2	4	9	4	6
Giardia	37	44	21	18	16
Salmonella	24	21	16	20	17
Shigella	0	1	2	2	0
VACCINE-PREVENTABLE DISEASES					
Pertussis	37	35	4	16	23
Mumps	0	0	50	6	0
Haemophilus	0	0	1	1	2
Varicella**	NA	NA	NA	NA	6
Others (Measles, Rubella, Tetanus, Diphtheria, Polio)	0	0	0	0	0

*As of 2008, Viral Meningitis and Herpes infections are no longer reportable. Meningitis counts for 2004-07 include Viral Meningitis. As of 2008, only Bacterial Meningococcal is reported.

**Individual case reports of Varicella began in 2008.

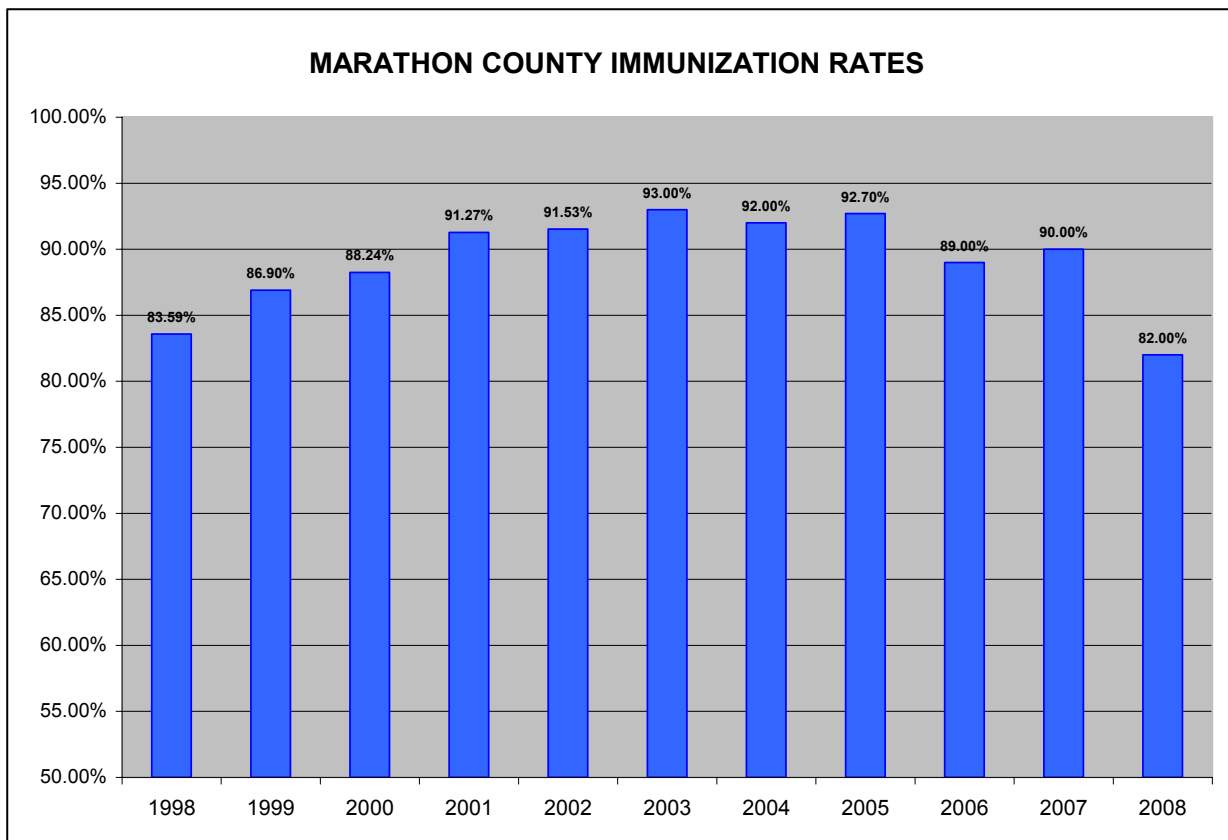
***In 2008, there was a change in the case reporting definition for Lyme disease. Lyme disease case report now includes not only confirmed cases, but also probable and suspect cases.

Immunization Registries

Immunizations are considered one of the greatest public health achievements in the 20th century. Vaccines prevent disease in the people who receive them, providing indirect protection to individuals who are not fully-immunized against infectious diseases like Measles and Pertussis. Before vaccines, many children died from childhood diseases such as Polio, or had life-long health conditions from complications. Children under two years old are especially vulnerable to childhood diseases, as they are not yet fully protected from being immunized.

The national goal is that 90% of children are up-to-date by age two. Many children in Wisconsin receive immunizations from more than one provider. Without access to a child's immunization information, it can be difficult for a provider to know which vaccine a child needs at any particular time. Immunization registries have been developed to assure health care providers and schools have timely access to children's and adults' immunization records. In Marathon County, providers utilize RECIN (Regional Early Childhood Immunization Network) and WIR (Wisconsin Immunization Registry). As part of a county-wide protocol established with area health care providers, Marathon County Health Department is responsible for implementing a monthly recall/reminder system, notifying parents by letter and telephone their child is due for immunization. By keeping immunization rates high, we will keep the rate of vaccine preventable diseases in Marathon County low.

In 2008, we saw a dip in the immunization rates for children between the ages of 24-36 months. This was primarily due to the nationwide Hib vaccine shortage. Since December of 2007, the CDC has recommended all infants complete the primary vaccination series and defer the Hib vaccine booster given at age 12-15 months with the exception of specified high-risk groups. This recommendation is expected to remain in effect until the middle of calendar year 2009. Before the development of Hib vaccines, Hib was the most common cause of bacterial meningitis in children under 5 years of age. For 2008, 82% of children between 24-35 months of age were up-to-date on their immunizations. Taking into account 11% of children are currently overdue for only one vaccine (i.e. Hib), our overall immunization rate would be above 90%.



Note: 1998-2005 immunization rates are the percentage of Marathon County children aged 24-35 months old with age appropriate immunizations. Since 2006 and 2007, the immunization rates are the percentage of Marathon County children at age 24 months with age appropriate immunizations. For 2008, immunization rates are again the

Essential Service #2

Diagnose and Investigate Health Problems and Health Hazards in the Community

Diagnosing and investigating health problems and health hazards is the natural next step to the first essential service of monitoring health conditions. When health problems or hazards are suspected, it is the responsibility of the local health department to obtain appropriate information to fully determine if there is a threat to the public's health and to take appropriate protective actions.

The duties of a local health department include:

- Conducting epidemiological investigations of disease outbreaks, patterns of disease, and environmental hazards
- Following up on health concerns expressed by members of the public
- Providing screening programs to identify health problems
- Maintaining written protocols and plans to respond to public health emergencies (i.e. pandemic influenza, bioterrorist agents, toxic exposures, etc.)

Department Wide Examples

Public Health Preparedness Planning

Marathon County Health Department stands ready to respond to public health emergencies by focusing on planning, training, and exercising.

◆Planning

Marathon County Health Department has specific plans in place that address public health emergency response, mass clinic procedures and protocols, and pandemic influenza response. These plans are reviewed and updated on an annual basis. In 2008, plans were updated to reflect better ways to communicate with the Hmong and Amish communities in the event of an emergency. Because many public health emergencies require a community-based response, our planning efforts are conducted in partnership with other community agencies; such as local hospitals and clinics, law enforcement, fire departments, schools, emergency management, and the Red Cross. Examples of inter-agency work on emergencies in 2008 included work to improve risk communication across agencies and a focus on sheltering and special needs sheltering. Work in these areas will continue in 2009.

Management staff of the department rotates on-call duties to assure there is an appropriate public health response to any emergency on any day or any hour of the year.

◆Training

A true public health emergency requires all hands on deck, so training becomes a key component of our response. In 2008, a competency assessment was completed to assure that all public health employees meet the minimal level of competency to respond to a public health emergency as measured by the Columbia Competencies for Public Health Workers. To reinforce these skills, we conducted a radio training and public health emergency test during our August in-service.

We also remain NIMS compliant with 100% of our public health staff completing Incident Command System (ICS) 100, ICS 200, National Incident Management System (NIMS) 700, and NIMS 800 courses.

In addition, all pertinent plans were reviewed with staff prior to exercises.

◆Exercising

All staff participated in two exercises in 2008. In April, a full scale exercise of our Biohazard Defense System (BDS) response was conducted. BDS is the monitoring system used at post offices to detect anthrax in the

US mail. If the device were to alarm, Marathon County Health Department is responsible for treating all affected people with antibiotics. The test affirmed many parts of the plan that worked well and areas for further improvement.

In November, we administered flu vaccine to county employees to test our ability to provide large numbers of vaccine in a short period of time. Several staff also participated in a table top exercise with multiple other response agencies testing our ability to respond to an alleged anthrax bomb detonation at a local school.

An After Action Report (AAR) is completed for each exercise documenting what went well and what needed improvement. Follow up actions and plan updates are completed to assure improvement in our emergency response.

Chronic Disease Prevention Program

Hearing and Vision Screening

Hearing and vision screening is provided to children in public and private schools in Marathon County. Children are screened in grades kindergarten through grade 3 and grade 5. Beginning in the 2005-06 academic year, we added the screening of four-year-old children entering kindergarten programs. In 2008-09 we screened children in one Mennonite school in Marathon County. The purpose of screening is to detect problems early, refer for interventions when necessary, and prevent learning difficulties in school due to hearing and vision loss. This program is supported by a grant from Marshfield Clinic.

	2004-05	2005-06	2006-07	2007-08	2008-09
Vision Screening					
Students receiving vision screening	5876	6133	6121	6046	5469*
Students receiving referrals for vision care	362	360	395	447	335*
Medical care in process or completed by end of academic year	228 (63%)	239 (76%)	304 (85%)	358 (80%)	*
Hearing Screening					
Students receiving hearing screening	5858	6413	6402	6415	5871*
Students receiving referrals for hearing care	143	122	144	133	86*
Medical care in process or completed by end of school year	92 (64%)	85 (75%)	110 (82%)	112 (84%)	*

* Data is tabulated on the academic year and is not complete for the 2008-09 year.

Wisconsin Well Woman Program (WWWP) Cancer Screening Program

The WWWP is a breast and cervical cancer screening program for women funded by the Centers for Disease Control (CDC) and the State of Wisconsin. The program provides limited health care screening services, referral, follow up, and patient education for women meeting the following criteria:

- Ages 45-64 (emphasis on ages 50-64)
- At or below 250% of the federal poverty level
- Has no health insurance, or insurance which does not cover routine screening, or unable to pay high deductibles or co-payments

MCHD coordinates this program for Lincoln and Marathon counties. The coordinator's role is to determine eligibility and enrollment, provide case management, assist with billing and reimbursement, and report local activity to WWWP. Late in 2008, the program instituted a process for electronic enrollment; a major change for participants, coordinators, providers and billing clerks. While this system will create greater access for clients and efficiency for the program, there have been many problems for both patients and providers since its installation. The coordinator has been instrumental in advocating for solutions with the State of Wisconsin.

Marathon County	2006	2007	2008
Number of women enrolled in WWWP	246	331	433
Number of women screened for cervical cancer	76	114	136
Number of women screened for breast cancer	143	158	279
Unduplicated number of women screened	146	175	194
Annual goal for Marathon County	111	111	117

Environmental Health & Safety Program

Food Safety Program

The Environmental Health and Safety program works to identify and respond to health problems or threats in several capacities including foodborne and waterborne illness. In 2008, investigation of three foodborne illness complaints resulted in confirmation of two separate outbreaks. One involved a catered wedding and the second involved a potluck prepared by parents for a high school sports team banquet. In both outbreaks, food was left over from the meal and lab analysis identified the same organism, *Clostridium perfringens*. Having food for lab analysis is unusual. Positive food cultures, along with positive stool samples from ill individuals, provided a direct link involving food in the outbreak. The investigation also included interviewing the individuals who prepared the food. Again, in both instances, faulty food safety processes were identified and the positive samples confirmed this. Having all these valuable pieces of an investigation allowed us to provide those who prepared the food with definite steps toward preventing an outbreak from happening again. Information gathered from both foodborne and waterborne illnesses is used in conjunction with our facility inspections to inform operators. Our goal is to identify and reduce the risk of illness by providing education, consultation, and regulation.

Activities in the food safety program include education of food service employees; licensing and inspection of food service facilities including 54 schools in the Federal School Lunch/Breakfast Program; enforcing Public Health Regulation 2008; food testing; investigating foodborne outbreaks; and responding to product recalls and consumer complaints. The "Food Thoughts" newsletter is published 2 times each year and is distributed to over 660 food service facilities.

A summary of activities of the Food Safety Program are provided below:

Activity	2003	2004	2005	2006	2007	2008
Foodborne Disease Investigation	11	14	10	4	7	3
Food Establishments Inspected & Follow-up	1,465	1,698	2,077	1,800	1,723	1,466
Consultations, Food Sampling, & Consumer Complaints	2,632	2,224	2,252	2,786	2,032	1,862
Education Classes/Attendees (Media Events)	25/795 (5)	24/463 (6)	20/731 (0)	18/434 (3)	4/135 (3)	7/78 (15)
WEB Site/Food Safety - Rate/yr	474	584	840	767	896	1,337

In 2008, the number of Food Establishments Inspected and having Follow-Up Inspections decreased. Under our agent agreements with the State, we are required to conduct a minimum of one annual inspection, pre-

inspections for compliance prior to issuing a permit, and any necessary follow-up inspections to ensure proper compliance. In 2008, the fee for follow-up inspections was increased and assessed if compliance was not met; however, the fee is not assessed if corrections are completed. The intent of this policy change was to provide incentive to reduce the number of follow-up inspections. Other explanations for the decrease include changes to the method we track data. This involved clarifying activities that had been noted as follow-up inspections in the past. In addition, staff made efforts to use third-party verification of compliance. While not commonly relied upon, an example of third-party verification would be receiving a report from a plumber or dishwasher service that repairs had been completed. Often the staff member will verify compliance when in the area of the facility and may not track this inspection due its short duration.

Consultations have also been on the decrease over time. These may be phone calls or on-site visits to discuss proposed changes to a facility's operation. Many times staff are providing this with a regular inspection and do not track the consultation about a change in facility operation separately from the inspection. Secondly, the number of hits to the Food Safety link on our departmental website has increased as some operators are getting the needed information in this manner.

To assure greater uniformity of inspections, Environmental Public Health Sanitarians in the food safety program completed a food safety standardization and certification process. Standardization is a training and on-site evaluation process, performed by the State Department of Agriculture, Trade, and Consumer Protection and Division of Public Health, requiring demonstration of knowledge and experience in understanding, applying, and interpreting Food Code interventions, foodborne risk factors, hazard and systems analysis, and exhibiting the necessary communication skills in conducting food safety inspections. This process is the driving force for targeting CDC Risk Factor violations during food safety inspections and operator and employee education.

Environmental Public Health Sanitarians use a data system to track six Centers for Disease Control (CDC) Risk Factors, individually or in combination, identified as violations most often responsible for the majority of foodborne outbreaks. Our data provides a method for the analysis of our food safety program, including targeting certain types of violations and ensuring uniformity of inspections.

CDC Risk Factor violations from full-service restaurants and retail food operations with a risk rating of low, moderate, and complex are presented below:

CDC Risk Factors	2007 Violations		2008 Violations	
	Restaurants	Retail	Restaurants	Retail
Unsafe Food Sources	27	7	17	9
Inadequate Cooking Temperatures	15	5	16	1
Improper Holding Temperatures	180	44	170	63
Cross Contamination	185	55	142	51
Personal Hygiene	195	48	137	24
Other CDC Factors	242	69	139	51
TOTALS	844	228	621	202

In 2008, restaurants had a total of 621 CDC Risk Factor violations while retail facilities had 202. This represents a decrease over 2007 data. That total has gone down due to a focus on those violations during inspections and the stronger follow-up compliance policy. Violations in this category would include the lack of a certified food manager; inadequate demonstration of food safety knowledge; and lack of policies and records involving employee health. Experiences from the two foodborne illness investigations, media outreach, and education during inspections and through the Food Thoughts newsletter have been used to help highlight the importance of each of these CDC Risk Factors.

The risk-based inspections performed by sanitarians certified through the standardization process have transformed the inspection process. Future inspections and operator education efforts will be developed in response to the data provided above.

Childhood Lead

Childhood lead poisoning represents another area of highlighting involvement in diagnosis and investigation using a multi-disciplinary approach involving public health nursing and environmental health staff. The public health nursing staff work with the children involved in a lead poisoning and the environmental health staff investigates the buildings and homes to identify the sources of lead. In 2008, eight (8) children were identified as lead poisoned at 10-19 micrograms per deciliter of blood (ug/dl). Additionally, there were two children with elevated blood-lead levels which are two successive blood tests between 15-19 ug/dl level or a single test at 20 ug/dl or more.

The primary factor for a child becoming lead poisoned is residing in a pre-1978 home, with pre-1950 more commonly associated with exposures. Although lead paint was banned in 1978, the health risk to children is still present today. About 84% of the City of Wausau and 71% of the County housing stock was constructed before 1978. Lead exposures occur in the warmer months as children are outside playing in lead contaminated soils; touching deteriorated exterior painted surfaces; and windows are opened. Lead dust is produced as painted window surfaces rub against one another and makes deteriorated paint in window wells accessible to children. Inadequate nutrition from diets lacking calcium-rich foods and traditional medicines are other factors. Each of these risk factors is considered when investigating a lead exposure.

One of the main obstacles to the Environmental Health and Safety's Lead Program is in the area of project funding. Lead hazard reduction expenses for a property associated with a lead poisoned or elevated blood lead (EBL) level child can be expensive causing a delay in completing lead hazard reduction activities. Funding influences the choices for specific activities from permanent solutions, such as siding replacement, to those which require ongoing maintenance, such as repainting the existing siding. In terms of funding, we continue our collaborative relationships with the City of Wausau Inspections Department and Community Development Department to address lead hazards utilizing a window replacement strategy designed to prevent lead poisoning in children in pre-1950 housing units. National statistics indicate that 95% of all childhood lead poisonings are due to children being exposed to lead dust generated by lead-bearing windows and window components. Eligible property owners are identified through face-to-face contact or phone calls and a handout distributed by the City of Wausau Building Inspections Department. We will continue this project in 2009. Additional funding remains available for lead hazard reduction through an internal grant from Marathon County, which makes funding available for properties in and outside the City of Wausau. The funds are available to property owners where a child under age 6 resides and lead hazards are present. The intent of the grant is to provide incentive funds to property owners who are required to reduce lead hazards because an EBL child is an occupant, as well as for those who want to reduce lead hazards voluntarily to prevent lead poisoning from occurring. There are two pathways for property owners. One pathway is designed to assist those with extensive lead hazard reduction utilizing a small grant and a low interest loan. The second pathway is to provide a small voucher for painting supplies necessary for those properties that need less extensive work. Each of these funding efforts has the goal of meeting an important community need - safe housing for families.

Activities	2005	2006	2007	2008
Total Number of Lead Tests	1,647	1,617	1,872	1,739
Tests < 10 ug/dl	1,578	1,574	1,824	1,720
Tests 10 to 19 ug/dl (# of children)	48 (35)	27 (21)	33 (19)	14 (6)
Tests ≥ 20 ug/dl (# of children)	21 (6)	16 (5)	15 (3)	5(2)
Housing Units - Lead Hazard Reduction	7	8	3	6
Lead Inspections	54	36	40	19
Consultations	455	257	153	165
Environmental Samples	171	166	53	45

Family Health & Communicable Disease Control Program

TB and Directly Observed Therapy

Marathon County Health Department's Tuberculosis (TB) prevention and control activities include follow up with people who are infected with TB and people with TB disease.

TB is a disease caused by bacteria called Mycobacterium Tuberculosis. The bacteria can attack any part of the body, but usually the lungs. People who are infected with TB do not feel sick and cannot spread TB. If not treated, infected individuals may develop TB disease. Ten percent of individuals infected with TB who are not treated will develop TB disease. This lifetime risk increases to 30 percent for persons with a chronic health condition such as diabetes.

Individuals identified as being infected with TB are medically evaluated for preventive INH medication. Through the State of Wisconsin TB Program and Marathon County Health Department, individuals can obtain free medication on a monthly basis. The service is designed to assure all individuals infected with TB are treated, thus reducing the risk of developing TB disease. In 2008, 38 individuals infected with M. tuberculosis received INH treatment resulting in a minimum of 1 home and/or office visit per month through the health department.

When a case of TB disease is reported, immediate action is taken to isolate the person with TB disease, initiate appropriate treatment, and conduct a contact investigation. People with TB disease can be treated so not to further spread TB and to be cured. As part of treatment, individuals with disease (and those infected with a health condition that decreases their immune system) receive Directly Observed Therapy (DOT). DOT is the observation of individuals taking anti-tuberculosis medications by a public health nurse or health aide. With the increased number of individuals diagnosed with M. tuberculosis and the presence of drug-resistant disease during the 1990s, DOT has been adopted as a national strategy to assure individuals take their anti-tuberculosis medications as prescribed.

In 2008, 2 individuals with TB disease received DOT. Public health nurses and/or bilingual health aide provided 235 DOT visits. One individual successfully completed a 26-week course of treatment in 2008. In addition to DOT, the public health nurse monitors the effectiveness of treatment, provides ongoing health teaching, and links individuals to needed health care and community resources.

Contact investigations are conducted to identify individuals who were exposed to persons with TB disease. Individuals who were in close contact with the person with TB disease receive a TB skin test to determine if they became infected and, if so, are offered preventive medication. In 2008, Marathon County placed TB skin tests on 29 individuals as a result of source investigations.

Healthy Homes

As part of our services to families with newborns, Marathon County families are offered a home safety assessment. In 2008, 343 families received a home safety assessment by a public health nurse. The assessment addresses common safety concerns for families with newborns and young children including, but not limited to: working smoke alarms and carbon monoxide detectors; safe sleep environment; exposure to secondhand smoke and lead based paint; outlet covers, safety latches, safety gates and blind cord wraps; and safe drinking water for families with private wells. Families are educated on the risks associated with identified hazards and provided safety devices. As a result of a grant through the Children's Miracle Network, Marathon County Health Department provided 1,101 safety devices including smoke alarms, smoke alarm batteries, outlet covers, safety latches, blind cord wraps, safety gates, and firearm trigger locks.

Child Mortality Review Team

The National 2010 goal is to have no more than 4.5 infant (less than 1 year of age) deaths per 1,000 births. From 2003-07, the Infant Mortality Rate in Marathon County was 6.98 per 1,000 births. Refer to the table for Infant Mortality Rate by year and number of deaths contributed to SIDS.

Marathon County is 1 of 16 counties in Wisconsin that has a Child Fatality Review Team. Marathon County assembled a Child Fatality Review Team back in 1997 under the direction of the Medical Examiner. The team is multi-disciplinary, with representatives from health care, law enforcement, child protective services, judicial system, and public health.

The purpose of the Child Fatality Review Team is to review factors involved in a death of an infant and child, to identify trends, and to determine prevention strategies. In addition, the review team provides public education on injury prevention and impacts public policy to reduce childhood fatalities at a local and state level. One of the focus areas of the Review Team is review SIDS related deaths among infants. Sudden infant death syndrome (SIDS) is the unexpected, sudden death of a child under age one in which an autopsy does not show an explainable cause of death. During a 12-month time period between May 2006 and April 2007, 7 infant deaths were attributed to unsafe sleep environments, with co-sleeping a factor in 6 of the 7 deaths.

In light of the number of infant deaths that were due to unsafe sleep practices in 2006 and 2007, "Cribs for Kids" was launched in 2008 as one way of assuring low-income families the provision of a Pack N' Play crib to assure a safe sleeping environment. Refer to page 30 for more information on the "Cribs for Kids" program.

Year	No. of Infant Deaths (< 365 days)	No. of Infant Deaths Due to SIDS	No. of Births	Rate per 1,000 Births
2008	N/A*	1	1,687	N/A*
2007	16	5	1,760	9.09
2006	8	3	1,633	4.90
2005	14	0	1,554	9.01
2004	8	N/A	1,531	5.21
2003	10	N/A	1,541	6.47

Note: N/A* Infant Mortality data for 2008 not available from the State of Wisconsin until the fall of 2009.

Essential Service #3

Inform, Educate, and Empower Individuals and Communities about Health Issues

To achieve our vision of creating and supporting environments and policies where people can make healthy choices, an important public health activity is to provide individuals with the information they need to change their own behavior. Promoting health, preventing disease, and protecting the environment is a partnership. The role of the local health department is to provide the best information to people in a way that encourages and empowers them to make good choices.

The specific duties of a local health department include:

- Creating, communicating, and delivering health information
- Providing the public, policy makers, and stakeholders with information on community health status and needs
- Targeting health information to assist people in lowering risk or changing negative behaviors
- Working with other partners in the community to build systems that facilitate healthy living
- Maintaining positive working relationships with local media outlets to promote health messages
- Training public health staff in risk communication

Department Wide Examples

Communicating through the Media

As a public agency, we do not have a marketing budget. One of the major avenues we do have to communicate health information however is through the local media. We maintain regular contact with the news directors of the three local television stations, two regional radio stations, and three local newspapers. Whenever we have local public health news, a contact to these outlets generally assures news coverage. In return, we are highly responsive to the news media when they contact us about local or national health stories. Here is a summary of local media coverage in 2008:

Topic	Television Coverage	Radio Coverage	Print Coverage
Alcohol & Drugs	2	1	15
Chronic Disease Prevention	0	0	7
Communicable Disease Outbreaks	4	1	11
Community Health Assessment	1	1	5
Environmental Investigations	2	2	12
Family Health	2	1	8
Food Safety	2	0	1
Footprints to Health/Obesity Prevention	0	0	14
Hazardous Waste/Mercury	3	0	7
Health Tips	0	0	47
Oral Health	0	0	3
Public Health Services	2	3	7
Radon	1	1	5
Safe Sleep	0	0	2
Suicide	0	0	1
Tobacco	6	5	80
Vaccines	0	0	7
Vision & Hearing	0	0	1
TOTALS	25	15	233

Chronic Disease Prevention Program

Healthy Eating/Active Living (HEAL)

Healthy Eating/Active Living (HEAL) is a community coalition in Marathon County formed in July 2003 in response to the Marathon County Community Health Assessment. *Its purpose is to develop strategies and interventions to reduce the prevalence of obesity and the sedentary lifestyle of residents of Marathon County.* The HEAL coalition has subcommittees representing spheres of influence within the community including worksites, schools and youth serving organizations, and bike and pedestrian transportation planning. Each subcommittee plans and implements interventions within groups of their respective segment of the community and has received some grant funding support from local and/or state partners. The long range goal is to create environments that give people healthy options and supports healthy decisions in the community.

The Footprints to Health program includes goals to inform, educate, and empower individuals, families, and the community about the importance of increasing physical activity and fruit and vegetable consumption. The following is a brief summary of 2008 activities and events sponsored by Footprints to Health:

- Assisting the school wellness committees with event planning and implementation
- Providing resources for school events (Parent/teacher nights, Fun Days, Walking clubs, etc.)
- Providing health information for school newsletters and health fairs
- Promoting the Active Family Challenge with the Wausau/Marathon County Park, Recreation, and Forestry Department
- Assessing community environment for implementation for the Safe Routes to School program
- Participation in the Wausau Area Municipal Planning Organizations, Bike and Pedestrian subcommittee
- Create, produce, and distribute the *Active Recreation Guide* for the area
- Partners with other youth serving organizations to enhance what is offered on nutrition and physical activities in existing summer programs
- Assist worksites with utilizing the Worksite Wellness Toolkit, a guide for assessing and creating a supportive environment for healthy behaviors

Suicide Prevention

The Marathon County Health Department, in cooperation with the **Marathon County Suicide Prevention Task Force**, was awarded funding for a three-year suicide prevention program from Mental Health America of Wisconsin. The program objectives are to: create awareness of suicide prevention; provide education and identify resources available to middle and high school aged children; provide training for school staff and parents and incorporate suicide prevention curriculum into schools; and update school suicide (prevention) policies and procedures. The following objectives were accomplished in 2008:

- Provided Question Persuade Refer (QPR) trainings for physical education, special education, and counseling staff at DCE Sr. High; all Marathon school district staff; all Athens school district staff; and 8th graders at Mosinee.
- Implemented the Signs of Suicide (SOS) program at DCE Jr. High, Mosinee High School, Wausau West, and Edgar Middle School. This year SOS was implemented for the first time with Marathon 9th grade students.
- DCE Jr. High completed the update of their crisis plan. Marathon and Athens districts have nearly completed the update process on their crisis plans.
- Signs of Suicide (SOS) and Crisis Line information placed in student daily planners in Mosinee and Marathon high schools.
- Signs of Suicide and Crisis Line information placed in the Wausau Warriors newspaper (Wausau West).

Environmental Health & Safety Program

Hazardous Waste

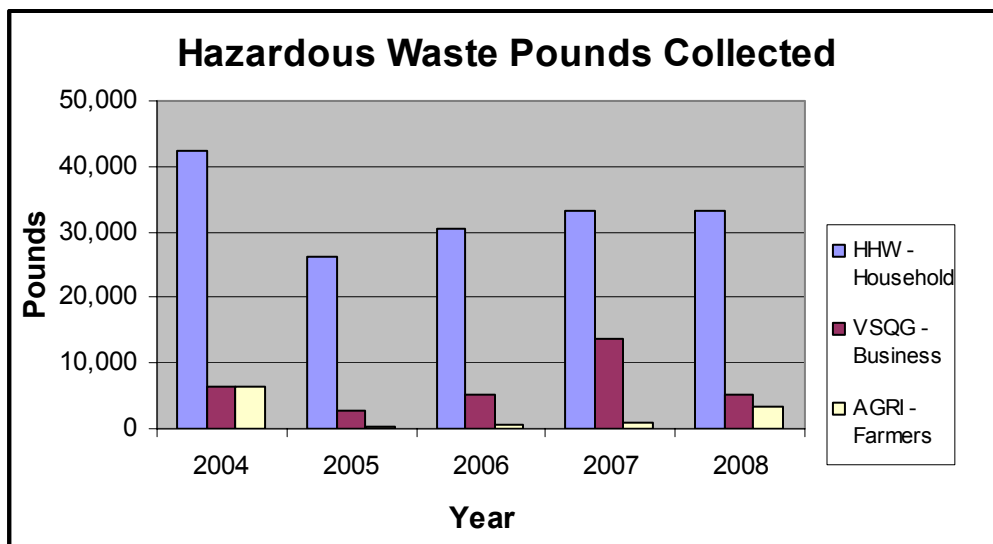
The Hazardous Waste program regularly informs the public regarding the best method of disposing of batteries, fluorescent lights, paint, antifreeze, and other hazardous waste in order to protect the environment through proper disposal of these materials. Improper disposal of chemicals or hazardous products jeopardizes environmental quality. To provide a means of proper disposal, we direct people to the Hazardous Waste Facility which provides individuals with satisfaction through environmental stewardship. The operation and maintenance of a permanent hazardous waste collection facility represents collaboration with the Department of Natural Resources, Marathon County Solid Waste Department, Department of Health Services, and the Marathon County Hazardous Waste Corporation.

Outreach includes our website which had 1,811 hits in 2008; a bi-annual business newsletter which is mailed to over 900 recipients; 6 media contacts; and 902 consultations to inform and educate on the proper disposal of hazardous waste. Over the years, Marathon County has developed a number of brochures and fliers to make the public aware of our services and the options available to help individuals and businesses reduce the amount of hazardous waste which they produce. We also offer tours of the collection facility and on-site presentations to school groups and service and business organizations. Hazardous Waste Corporation representatives have participated in numerous school career days and Earth Day celebrations over the years.

A summary of hazardous waste activities is provided below:

Activity	Service			
	2005	2006	2007	2008
Media Events	21	2	5	6
Education & Outreach Services (participants)	7(146)	1 (15)	6 (320)	1 (24)
Requests for Assistance	761	905	1,286	902
Participants of Hazardous Materials Collection	505	616	743	778
Web Site	704	913	1,345	1,811

In 2008, the Hazardous Waste Facility was utilized by 778 participants who disposed of 33,264 pounds of household hazardous waste; Very Small Quantity Generators (VSQGs) who disposed of 5,121 pounds; and Agriculture sources who disposed of 3,247 pounds of waste for a total of 41,632 pounds compared to over 47,000 pounds in 2007. Also this year, 6,599 mercury containing light bulbs were collected, which is up from the 912 in 2007 and 2,418 pounds of batteries (Lead acid, Alkaline, NiCad, Lithium and Mercury) were collected, which is fewer than the 4,033 pounds in 2007. A chemical Clean Sweep was held in Stratford this year with 28 participants disposing of approximately 1,000 pounds of chemicals in the one-day collection. Additionally in 2008, 163 handouts on alternatives to chemicals were provided to interested collection participants, with the hope of reducing reliance on many chemicals for different uses, as well as reducing the potential for accidental poisonings. As in the past, individuals were encouraged to utilize the Exchange Room to find products that remain in good condition and can be used by others.



In September, Marathon County held its 9th annual Computer Roundup at the Marathon County Hazardous Waste Collection Facility. It was a cooperative effort involving the Marathon County Health and Solid Waste Departments, Industrial Recyclers of Wisconsin, 5R Processors, the Wisconsin Department of Natural Resources, and the Marathon County Hazardous Waste Corporation. This event is a truly unique example of public and private cooperation. This year more than 25,000 pounds of electronic waste was collected at the Collection Facility event. The collection of almost 13 tons of material, which would probably have ended up in area landfills, is significant. This total is about half of 2007's total of 49,205. The decrease in collection is attributed to efforts through Good News, a local interfaith group, which has a monthly computer collection. New this year was a second electronic collection held in Edgar resulting in over 9,500 pounds from more than 50 participants. The material collected during Marathon County's events is taken to 5R Processors in Glen Flora, WI where over 99% of the material is recycled or reused. Since 1999, over 288 tons of electronic waste has been collected and detoured from landfills. In addition, each year after expenses have been covered, a monetary donation is made to a local charity. This year's donation was divided between the Neighbor's Place and the Get the Lead Out Program.

◆Pharmaceuticals

In 2008, four pharmaceutical collections were held with two at the Hazardous Waste Facility and two in Marathon City. Collections were held in June and September on the same dates for both locations allowing 228 residents to properly dispose of 415 pounds of prescriptions and personal care products. Controlled substances were collected and turned over to law enforcement. The collections provide an environmentally safe alternative to flushing into the waste treatment or private septic systems which cannot properly treat pharmaceuticals.

◆Mercury

Early in 2005, the department signed a 5-year Memorandum of Agreement with the Rib Mountain Metropolitan Sewerage District and Wausau Water Works to implement a Mercury Reduction Program within their respective sewer service boundaries. The purpose of the mercury reduction project is to implement a community-wide education program to reduce the potential mercury waste stream through prevention activities and prevent potential exposure to toxins, specifically mercury, in the environment. Work projects include:

- Initiating a community-wide outreach to the general population
- Implementing follow-up on a completed dental provider survey and analysis
- Continuing a community-wide thermometer exchange project in each sewer service area
- Providing a means of mercury collection and disposal
- Providing targeted outreach and technical assistance to heating, ventilation, and air conditioning contractors and manufacturing/commercial businesses

Our partners in this program included the Wisconsin Dental Association, several municipalities in the metropolitan area, Marathon County Solid Waste Department, and the Marathon County Hazardous Waste Corporation.

Public Service announcements were published in area newspapers; articles were included in municipal newsletters; interviews were conducted on local radio and television stations; and flyers were available at the Health Department, the Hazardous Waste Collection Facility, and other municipal offices. Outreach focused on the impact mercury has on human health and the environment, encouraged recycling and proper disposal, and encouraged the use of alternative mercury-free devices. This year, 83 pounds of mercury were collected compared to 101 pounds in 2007. Mercury Reduction Program fact sheets were once again provided to individuals through local municipal buildings. In addition, a mercury thermometer exchange program was held in several municipalities over a seven-month period which allowed participants to turn in mercury-containing thermometers for proper disposal in exchange for a new digital thermometer. There were 182 digital thermometers distributed in 2008.

Radon

Radon gas is a naturally occurring radioactive product that results from the decay of uranium found in soil, particularly our granite rich areas, and is identified as the second leading cause of lung cancer following tobacco exposure. Our staff operates the regional Northcentral Radon Information Center (RIC), a 12-county consortium to educate individuals and promote testing for radon. The counties in the RIC include Florence, Forest, Langlade, Marathon, Marinette, Menominee, Oconto, Oneida, Shawano, Vilas, Wood, and Waupaca. The RIC provides radon information and test kits to individuals, private businesses, and government agencies. In 2008, staff made presentations to realty firms and schools, provided regional support to health departments in the RIC area, and responded to consultations by phone or e-mail. We have continued to host and attend training opportunities which also allow local businesses involved in radon testing and mitigation to meet continuing education requirements.

In coordination with the nation-wide Environmental Protection Agency efforts, we conduct our own radon testing promotion during Radon Action Month through media press releases in English and Hmong resulting in four media interviews in January 2008. During this time, we receive many inquiries about testing and radon mitigation, as well as health effects of radon exposure. In 2008, there was an increase in radon testing throughout the RIC as compared to previous years. While testing is up, the percentage of test results that are elevated has remained consistent for the RIC counties and Marathon County, where more than two-thirds of the test results are elevated. This data emphasizes the need for individuals to conduct radon testing and consider mitigation efforts to effectively reduce radon levels.

Radon Activities	2006			2007			2008		
	Test Results	Elevated Tests	Percent Elevated	Test Results	Elevated Tests	Percent Elevated	Test Results	Elevated Tests	Percent Elevated
Tests in RIC	668	368	55%	522	304	58%	732	405	55%
Tests in Marathon County	381	255	67%	318	210	66%	406	272	67%
Mitigations Reported	199			309			346		
Website Hits	803			723			872		

Rabies Control Program

In 2008, the rabies control staff continued its presentation of educational programs for 2nd grade elementary school children. The programs emphasize safe behavior around all animals aimed at reducing bite incidents in this vulnerable population and include a representative from the Kennel Club, with dog, at each presentation. In 2008, safety programs were made at 11 schools in Marathon County reaching 520 students. In 2007, programs were held at 19 schools throughout Marathon County for approximately 800 students.

The goal of the rabies control program is to prevent humans from contracting rabies. We accomplish this through routine reporting of animal bites by hospitals, clinics, and law enforcement agencies; investigation of bite incidents; consistent use of quarantine; and laboratory testing of animals when appropriate.

Year	Human Exposures	Specimens Sent To State Lab	# Positive For Rabies	Prophylaxis Recommended
2000	264	20	1	3
2001	272	23	1	2
2002	232	20	1	11
2003	242	10	1	8
2004	218	18	0	8
2005	205	29	1 (equivocal results)	16
2006	100	13	0	2
2007	140	23	0	2
2008	171	26	2 (equivocal results)	2

Rabies prophylaxis is recommended when tests indicate the biting animal is positive for rabies, or when the bite is from a stray and we are unsuccessful in locating it. Because rabies is always fatal, if we cannot locate and ascertain the rabies status of the stray animal, we recommend prophylaxis for the bite victim.

Family Health & Communicable Disease Control Program

Start Right Program

Marathon County Health Department in partnership with Children's Service Society of Wisconsin provides "Start Right", a program that provides parenting education and support services to improve the health of infants and young children. The mission of Start Right is to empower parents in Marathon County to find the parenting information and support they need to raise healthy, productive children so that:

- Children will experience the most fulfilling and nurturing relationship possible with parents
- Children will be healthy
- Children will be safe in their homes
- Children will be "school ready" when they begin school

Start Right has three components under the "umbrella of services" that include: outreach to families with newborns; family visitor services for parents and their children birth to 3 years of age; and Family Resource Centers.

◆Outreach to Families with Newborns

In 2008, there were 1,687 births to residents of Marathon County. All families with newborns receive outreach by a public health nurse. Outreach can consist of a home visit, telephone visit, and/or newborn packet. In 2008, a total of 453 home visits and 342 telephone visits were made.

Core services provided to families with newborns include health teaching, information, and referral. Health teaching topics are: infant safety, including safe sleep environments; nutrition for infant and mother, supporting breastfeeding; parent-child interaction, promoting social-emotional development of the infant; tobacco and substance use, including the effects of secondhand smoke; postpartum depression; and preventive health services, insuring families have a primary care provider for well-child exams and immunizations. The public health nurse provides information on community resources available to families with young children and assists with referrals as needed. In addition, parents are encouraged to link to Start Right's Family Visiting Services and Family Resource Centers.

◆Family Visitor Services

As part of public health nurses outreach to families with newborns, parents are informed of the benefits of receiving Family Visitor Services and utilizing their area Family Resource Center. In 2008, 143 new families accepted Family Visitor Services, adding to families continuing service, for a total of 443 families who received services this year. Family visitors provide comprehensive parenting services to families with particular emphasis on parent-child interaction, development and early learning, as well as assuring linkages to preventive health services and community resources. The aim of Family Visitor Services is to strengthen parenting from birth to 3 years of age, thereby preventing child abuse and neglect. **In 2008, a total of 4,882 home visits were made by Family Visitors.**

The following impacts were realized for families who received Start Right services:

Children will be Healthy	2007	2008
Percent of families who have a primary medical home/provider	98%	99%
Percent of children on schedule for their well child exams	94%	90%
Percent of children who are up-to-date on immunizations at 24 months of age	99%	100%

Children will be Safe in their Family Home		
Percent of parents who scored 80% or higher on post parenting knowledge test	91%	86%
Percent of families who scored middle half or higher on the HOME assessment that assesses the home environment of infants/toddlers	93%	95%

Children will be School Ready		
Percent of children identified for a potential developmental delay	21%	16%
Percent of children with a potential developmental delay referred & accepted services	86%	80%
Percent of children enrolled in a group-based early childhood program at age 3	N/A*	47%

*Note: Data on the percentage of children enrolled in a group-based early childhood program at age 3 was first collected in 2008.

◆Family Resource Centers

Marathon County has eight Family Resource Centers located in the communities of Athens, Edgar, Hatley, Marathon, Mosinee, Spencer, Stratford, and Wausau. Marathon County funds three of the eight Family Resource Centers. The Family Resource Centers provide a place for families to obtain parenting information and support through their libraries, educational programs, family events, and drop in playtime. Parents are encouraged to call the Family Resource Center's Warmline when they have specific parenting questions or need support.

For the 3 county funded centers, the Family Resource Centers held 682 programs, workshops, or events. A total of 415 adults and 771 children utilized one or more of the three centers' programs, library resources, and Warmlines. For all 8 centers, a total of 1,275 adults and 1,513 children utilized one or more of the centers' 1,950 programs, library resources, and Warmlines in 2008.

In 2008, Start Right managers and staff under the direction of the Start Right Program Board developed a redesign plan to incorporate the evidence-based and promising practices identified through the 2007 program review. Start Right was created in 1994 as a public-private partnership between two agencies, the Children's Service Society of Wisconsin and Marathon County Health Department. The program was initially started in the Athens area and expanded county-wide by October 2000. The Start Right Program has had a number of programmatic reviews and evaluations, with the last comprehensive review done in 2001. The 2009 Start Right redesign will provide seamless education and support services for families, prenatal until the child reaches school-age, which is tailored to each family's interest and needs. Program services will vary in intensity, empowering families to enter and re-enter services based upon the life stressors they are experiencing. The goal of the redesign is to maximize the funds invested in the program to yield the best results for the families in greatest need.

Children and Youth with Special Health Care Needs (CYSHCN) Program

A child with a special health care need is defined as a child having an illness or condition that is severe enough to restrict growth and development, is likely to persist for 12 months or longer, and requires specialized health care. Some examples of children with special health needs include children with asthma, diabetes, lead poisoning, autism, and developmental disabilities. As part of Marathon County Health Department's CYSHCN Program, public health nurses provide health information and referral and follow-up services to parents on resources and services available to support their family and child. In addition, for children with complex needs, public health nurses will work closely with parents to empower them to obtain needed services. In 2008, 23 children and their families received program services.

Essential Service #4

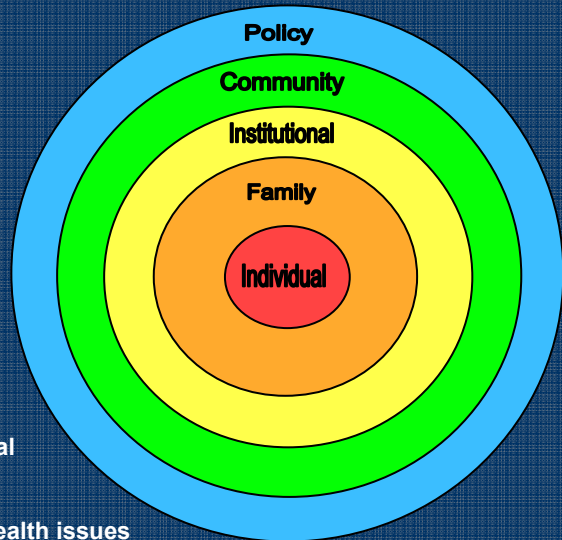
Mobilize Community Partnerships to Identify and Solve Health Problems

Our local health department employs 48 people to serve 135,000 Marathon County residents. Clearly, it is impossible for us to create a healthy community without extensive partnerships. We work within the social ecological model to create change.

This model shows that change in health happens as a result of change at all levels - individual, family, institutional, community, and policy levels. To create this type of change requires partnerships with each of these groups of people.

The specific duties of a local health department include:

- Identifying key stakeholders interested in working on health issues, including hospitals, medical providers, social service providers, local businesses, community organizations, faith-based organizations, public safety and emergency response agencies, educational institutions, elected officials, other governmental agencies, and members of the public
- Facilitating community partnerships to network, coordinate, cooperate, and collaborate on key health issues



Department Wide Examples

Healthy Marathon County (HMC) is a community catalyst to impact Marathon County residents' health through individual, organizational, and community involvement. The HMC Board, working in partnership with the Marathon County Health Department (MCHD), consists of community members taking the lead role in forming partnerships, gathering health-related data, determining priority health issues, identifying resources, planning community health initiatives, and evaluating progress. HMC accomplishes its purpose through action teams focused on priority health issues identified in the *2006-2010 Community Health Assessment* that was released in January, 2007. Those action teams include:

- Building Responsible Alcohol Values and Options (BRAVO)
- Concerns About the Cost of Health Care (CATCH)
- Healthy Eating Active Living (HEAL)
- Healthy Babies of Marathon County
- Marathon County Tobacco Free Coalition (MCTFC)
- Partnership for Healthy Aging (PHA)
- Suicide Prevention Task Force

The membership of HMC and its action teams represents over 150 individuals from over 50 community organizations working on a community-wide level to impact these important health issues. Staff from MCHD serves on all seven HMC action teams and, in many cases, play key leadership roles. Each team focuses on multiple levels within the Social Ecological model to create a healthier community.

Key accomplishments in 2008 include the following:

- Continued the social norms campaign to change youth attitudes about drinking
- Provided education on alcoholic beverage serving size to encourage responsible drinking
- Advocated for public policy to raise the beer tax and require keg registration
- Created educational materials to help consumers understand their health insurance products
- Promoted first trimester prenatal care to young women

- Promoted access to Badger Care for pregnant women
- Formed a “Cribs for Kids” chapter and provided 63 cribs to low income families
- Provided assistance to wellness councils in seven area schools
- Promoted the Active Family Challenge
- Encouraged walking and biking to school through Safe Routes to School
- Expanded community nutritional consultation
- Assisted in creating the Wausau Area Metropolitan Planning Commissions Bike and Pedestrian plan
- Advocated for smoke-free indoor air policies
- Connected people with the Wisconsin Quit Line for smoking cessation
- Promoted home safety, physical mobility, community safety, and medication management to prevent falls in the elderly
- Conducted Question, Persuade, Refer (QPR) sessions to equip citizens to deal with mental health issues
- Conducted suicide reviews to identify patterns and risk factors for suicide and intervene where possible

For more information on HMC action teams, please visit www.healthymarathoncounty.org



BRAVO display at the Healthy Marathon County Community Health Forum on January 7, 2009.

Chronic Disease Prevention Program

Bicycle/Pedestrian Subcommittee

A unique partnership between the Health Department (Healthy Eating Active Living Coalition) and the Conservation, Planning, and Zoning (CPZ) department was created in 2007. HEAL members had a desire to create a community that was more friendly to walkers, runners, and bicyclists, and CPZ had the desire to create a transportation plan for pedestrians and bicyclists to enhance the current transportation plan. The result was the formation of the **Bicycle/Pedestrian Subcommittee** of the Municipal Planning Organization (MPO). This group has subcontracted with experts to develop a comprehensive plan which will guide the development of pedestrian and bike facilities into the existing transportation plan. The Committee represents many stakeholders including individuals from different levels of government, businesses, school districts, and citizens who care about this matter. The twenty-year facilities plan was adopted by the MPO in 2008 and some projects are already in the planning stage. Education, encouragement, and a shift in community norms about sharing the road are included in the future plans. The long term outcome is to develop and maintain a pedestrian and bike friendly transportation system that is safe, increases physical activity and recreational options, and is an economic assist to the community.

Marathon County Asthma Coalition

The Marathon County Asthma Coalition (MCAC) was created in 2003 and is enhanced by the support and structure of the Wisconsin Asthma Coalition (WAC). The MCAC has developed and is implementing an action plan based on the framework and goals of the state plan. The WAC supports the MCAC with mini-grants to solve health problems.

In 2006-07, the MCAC goal was to increase the number of individuals screened. However, without adequate follow up the screening results were of limited value. The result was the identified need for a systems change for asthma care improvement. In 2007-08, the coalition is targeting a change in the health care referral system to ultimately increase the number of individuals who have been seen by emergency departments for asthma and link them to a health care provider for appropriate asthma management.

The strength of this project lies in the developing partnership between the hospital emergency departments and the Marathon County Health Department. The goal is to create a referral system for asthmatic patients that present to the emergency department and do not have a primary health care physician. Public health nurses will accept these referrals and work to link these asthmatic patients with a physician or resource. The long term outcome will be an improvement in the number of asthmatics who successfully manage their disease.

Susan G. Komen Foundation - Breast Cancer

The Central Wisconsin Affiliate of the Susan G. Komen foundation was officially formed in December 2006. A dedicated group of local leaders formed the affiliate which serves seven counties in north central Wisconsin. In 2008, the local Komen Foundation Board invited MCHD staff to partner with them to host a forum on breast health. The purpose of the forum was *to bring together people representing those affected by or impacting breast cancer, to learn, engage, inform, and connect and become a catalyst for action in the 7 county region*. A subcommittee of key stakeholders and Komen board members was created and chaired by the MCHD Chronic Disease Program Director. The World Café methodology was used to discuss the following:

- What the best care for breast health in the community would look like
- How our community currently embraces and supports breast care
- What we need to build together to fight breast cancer

Sixty-three people from north central Wisconsin attended and the evaluations were very positive. The results were summarized by the Wisconsin Institute for Public Policy and Service. The Board will use this information in their 2009 community profile and to set priorities for distribution of grant funds and community activities.

Environmental Health & Safety Program

Hazardous Waste Corporation

The Marathon County Hazardous Waste Corporation initially began in 1991 as a coalition and incorporated in 1996. It continues as a unique assembly of representatives from private industry and local government. Industry representatives currently include individuals from paper manufacturing, engineering, automotive, and medical waste disposal sectors. Local government representation includes city, village, and county individuals. The objectives of the Corporation are to promote communication between public and private sectors; increase community awareness of the permanent Hazardous Waste Collection Facility; and offer information, education, technical assistance, and innovative solutions with a mission of providing economical and environmentally responsible approaches to hazardous waste management. Proper disposal and recycling of waste protects our environment, individuals and public health, and extends the capacity of the Marathon County Landfill near Ringle. The Hazardous Waste Corporation representatives advise the Marathon County Health and Solid Waste Departments in hazardous waste collection activities and serve as liaisons with the private sector for responsible hazardous waste management.

Family Health & Communicable Disease Control Program

“Cribs for Kids”

In light of the number of infant deaths due to unsafe sleep practices that occurred in 2007, Healthy Babies for Marathon County expanded the focus of its work to address safe sleep environments for infants. Healthy Babies for Marathon County is made up of twelve organizations representing perinatal health care and community based organizations. Marathon County Health Department, as a member of Healthy Babies for Marathon County, wrote for and was awarded a grant from the Healthy Marathon County Funding Partners to start a “Cribs for Kids” chapter in Marathon County. “Cribs for Kids” is a national program that provides safe-sleep education and low-cost Graco Pack N’ Play cribs to local chapters.

In January of 2008, Marathon County Health Department became a chapter of the national program “Cribs for Kids”. Working closely with Healthy Babies for Marathon County member organizations, referral guidelines and a safe-sleep curriculum was developed. The program was launched in the spring which dove-tailed with Aspirus Wausau Hospital Kohl’s Care for Kids “Safe Sleep for Baby” initiative that featured radio spots and educational flyers. Health care and community based providers who serve low-income families are able to refer families in need of a crib through one of the Start Right programs housed at Marathon County Health Department and Children’s Service Society of WI. In 2008, 63 infants were provided a Pack N’ Play with their parents receiving safe sleep educational messages.

Essential Service #5

Develop Policies and Plans that Support Individual and Community Health Efforts

The social ecological model (see Essential Service #4) notes that policy is an important force in creating positive health behavior change. Individuals are able to make healthier choices when institutional and community policies support health behavior. For example, seat belt laws encourage more people to make this safety choice. Smoke-free public places protect people from secondhand smoke and encourage current smokers to smoke less.

The specific duties of a local health department include:

- Maintaining an effective local public health department
- Developing policies to protect the health of the public and to guide the practice of public health
- Creating community-wide plans for health improvement and public health emergency response
- Aligning community resources to achieve the outcomes outlined in the community health improvement plan

Department Wide Examples

Public Health Council

The Marathon County Health Officer serves on the State Public Health Council. The Council advises the Department of Health Services, the governor, and the legislature on public health issues. In 2008, the Council focused on several policy issues, including the following:

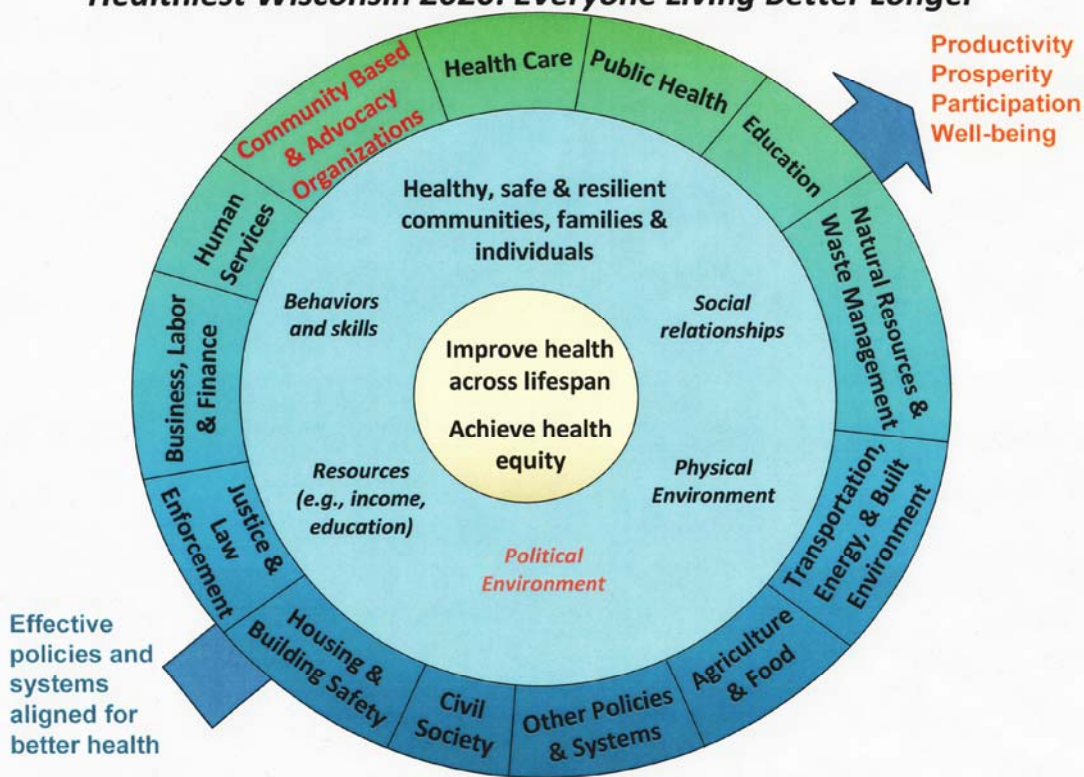
- Promoted increased funding for governmental public health
- Supported a statewide smoking ban
- Supported an increase in the beer tax
- Advocated for the Department of Children, but also advocated to keep the Women Infant and Children program in the Division of Health Services
- Supported enhanced Medicaid funding for reproductive health services

Healthiest WI 2020

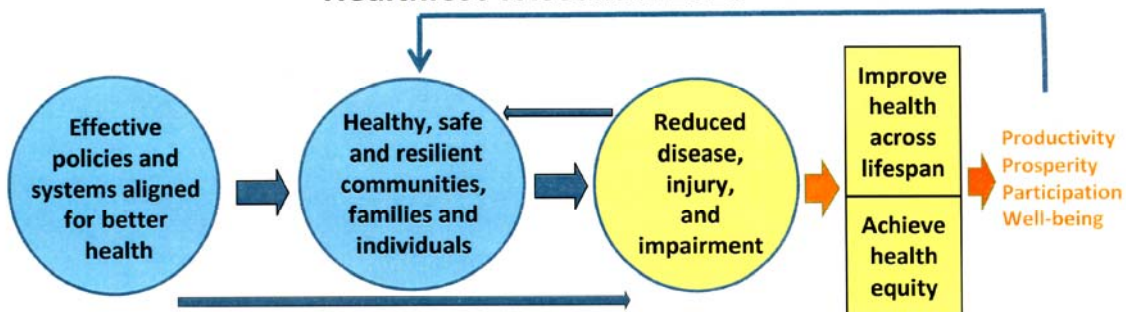
Every decade, the State of Wisconsin creates a ten year health plan. In 2008, a Strategic Leadership Team was appointed by Department of Health Services Secretary Karen Timberlake to lead the process of creating the 2020 health plan. The Health Officer also sits on this committee.

While the plan is still under construction, the model that is being proposed is as follows:

Healthiest Wisconsin 2020: Everyone Living Better Longer



Healthiest Wisconsin 2020



Overarching Focus Areas
Social, economic, and educational factors
(including health literacy)
Health disparities

- Infrastructure Focus Areas
- Access to quality health services
 - Collaborative partnerships for community health improvement
 - Diverse, sufficient, competent workforce that promotes and protects health
 - Equitable, adequate, stable public health funding
 - Public health capacity and quality
 - Public health research and evaluation
 - Systems to manage and share health information and knowledge

- Health Focus Areas
- Adequate, appropriate, and safe food and nutrition
 - Chronic disease prevention and management
 - Communicable disease prevention and control
 - Environmental and occupational health
 - Healthy growth and development
 - Mental health
 - Oral health
 - Physical activity
 - Reproductive and sexual health
 - Tobacco use and exposure
 - Unhealthy alcohol and drug use
 - Violence and injury prevention

- Intermediate Targets
Metrics to be Determined
- (short-term / intermediate)
- Disease, injury, disability rates
 - Others, e.g., birthweight

- Long Term Goals
Metrics to be determined
- Length of life, e.g., average life expectancy, infant mortality (by race/ethnicity)
 - Quality of life
 - Health equity

Working at a state-wide level assures a local voice in state priorities.

Chronic Disease Prevention Program

Smoke-free Air and Tobacco Cessation

The 2006 Surgeon General's Report on *The Health Consequences of Involuntary Exposure to Tobacco Smoke* concluded there is no safe level of exposure to secondhand smoke. Educational efforts regarding these results have been implemented to create the supportive environment for policy action to occur.

In 2008, the Wisconsin state legislature attempted to pass a bill that would make all places 100% smoke-free and protect the public from the dangers of secondhand smoke. When the bill did not pass and the state legislative session ended, the Village of Weston polled its residents and determined most residents favored a law that would prohibit smoking in public places. Then the Weston Village Board created an Ad Hoc committee to explore the development of a smoke-free workplace ordinance. The committee met four times to: discuss the response to the Weston newsletter survey results and the health risks of being exposed to secondhand smoke; hear the opinion of restaurant and bar owners; review other smoke-free workplace ordinances from Appleton and Middleton; and draft their own legislation. In December, the Board unanimously passed an ordinance that makes all worksites, restaurants, bars, and bowling alleys smoke-free as of January 1, 2010. This policy will protect over 10,000 citizens from the dangers of secondhand smoke and is a model for other communities.

Environmental Health & Safety Program

Early Lead Intervention Project

Research shows that children exposed to lead can develop behavioral and developmental problems interfering with ability to learn and success in school. These problems result in children who do not reach their learning or occupational potential as adults. A child is considered lead poisoned when a test result is 10 ug/dl or greater; however until the result meets the statutorily defined Elevated Blood Lead (EBL) level criteria, no environmental intervention is currently required by law. Wisconsin State Statute 254 defines an EBL as when a child has two consecutive blood lead tests with the results 15-19 micrograms per deciliter (ug/dl) or one test result of 20 ug/dl or greater. These EBL results require a process of investigation to determine the source of the lead exposure which is often associated with the home the child resides in or visits regularly. Statutes require lead hazards be eliminated and the property made lead safe and the work be completed by certified lead abatement contractors to ensure additional hazards are not created during the renovation process.

The Early Intervention Project is aimed at offering an environmental assessment of a property when a child is not an EBL. This may occur when the first blood test result is 10-19ug/dl or even when a blood test has not yet occurred but lead hazards exist in a home. The intent is to intervene in addressing lead hazards to protect the health of a child from ongoing exposure. This policy has other benefits. Property owners or others are able to perform some remediation work with specific guidance to protect the health of the child and those performing the work. In the absence of an EBL there can be a significant cost savings through targeted remediation activities, which is especially important since funding may not be easily available and often is accomplished in a much shorter time frame than occurs when the property is under EBL orders.

Funding for lead hazard reduction is a barrier to success for the Early Intervention Project. A huge step in resolving funding is through a grant from Marathon County for lead hazard reduction along with low interest loans through the City of Wausau Community Development Department. After establishing program procedures in 2008, we have a number of property owners who are interested in this effort for 2009 who were identified by Public Health Nurses during their home visits with expectant parents or those with newborns. From a community standpoint, engaging in intervention earlier and/or when not mandated to do so, meets a community health objective by limiting the impact of lead to the child. Lead exposure costs the community in terms of associated behavioral and learning issues that can lead to problems in school and home.

Family Health & Communicable Disease Control Program

REACH

REACH (Raising Emotionally Attached Children) is an interagency collaboration taskforce to promote infant and early childhood mental health in Marathon County. Marathon County Health Department sits on the taskforce. REACH was formed in response to a national and state movement to increase awareness of infant and early childhood mental health.

Infant mental health is synonymous with social and emotional development of our youngest children. Social and emotional development involves skills such as self-confidence, curiosity, motivation, persistence, self-control, and trust. These are important skills that affect future learning, growth, and success for a child. Research indicates that children who start behind in their social and emotional development tend to stay behind. These children are at a higher risk for school problems and juvenile delinquency.

In 2008, REACH Task Force published "REACH - A Plan to Guide Organizational and Community Action". The 15-page plan outlines goals and strategies for Marathon County's community to advance initiatives that support the social and emotional development of young children. The goals of the plan include:

GOALS	Raise public awareness about the importance of social and emotional health for children's future success.	Enhance the service delivery system to address infant and young children's mental health needs.
	Strengthen the early identification and intervention system within Marathon County.	Support public health policies that invest in the social and emotional development of children.

The plan was unveiled to the community in September 2008 at a breakfast meeting. Sixty-three (63) members attended representing 23 agencies from early childhood education, child care, early intervention programs, mental health, health care, business, community based organizations, and government. The local newspaper featured an article on REACH and the importance of communities investing in the social and emotional development of children.



Essential Service #6

Enforce Laws & Regulations that Protect Health and Ensure Safety

While most of the essential services focus on activities that are voluntary and done in partnership with others, there are times that it is necessary to use formal laws and regulations to assure conditions that protect the public's health. The local public health agency must be familiar with federal, state, and local laws, regulations, and ordinances that are relevant to public health.

The duties of a local health department include:

- Reviewing, revising, and evaluating laws, regulations, and ordinances
- Educating persons obligated to comply with such laws
- Enforcing such laws at a local level

Examples of public health laws include protection of drinking water, inspection, investigation and protection against human health hazards, enforcement of clean air standards, emergency response, including isolation and quarantine, regulation of licensed facilities, enforcement of laws governing the sale of tobacco or alcohol to minors, seat belt and child safety seat usage, and school immunization laws.

Chronic Disease Prevention Program

WI WINS Retail Compliance Check Program

Youth access to tobacco is an indicator of the youth smoking rate. Youth access is monitored by the implementation of the WI WINS Retail Compliance Check Program. Enforcement of the laws prohibiting the sale of tobacco to minors (under age 18) is done in partnership with all of the law enforcement agencies in Marathon County. Compliance investigations are conducted with youth volunteers who attempt to purchase tobacco products and, if they are successful, law enforcement will issue citations for illegal sales to a minor. Education is offered to businesses that need assistance with training retail clerks. In 2008, 205 compliance investigations were conducted and citations are issued by law enforcement when necessary. This is a decrease from previous years, due to the reduced number of retail license holders in Marathon County.

Retail Compliance of Tobacco Sales to Minors 2008		
Community	# of Compliance Checks Completed	Current Compliance Rate (%)
Athens	11	91
Colby/Abbotsford	11	91
Edgar	6	83
Marathon City	8	75
Mosinee	18	94
Spencer	6	100
Stratford	8	100
Marathon County (including Rib Mountain)	40	90
Wausau	61	89
Schofield/Weston	22	100
Rothschild	12	100
Wausau/Schofield/Weston/Rothschild	95	93
All other Marathon County municipalities	108	91
Marathon County	205	92

Environmental Health & Safety Program

Human Health Hazards

Human health hazard refers to a condition that can cause illness if the condition is not corrected. In 2008, the Environmental Health and Safety program staff provided consultation to citizens with concerns about health hazards. Topics included asbestos, mold, lead, blastomycosis, blue-green algae, methamphetamine drugs, manure, and mercury. Housing concerns, such as a lack of heat or water and failing to maintain the property at a level of sanitation conducive to health, can be considered human health hazards. When conditions warrant, we investigate the situation and will issue orders to address the hazard. Most often, the concerns identified do not reach the threshold necessary to be considered a human health hazard and can be resolved with guidance. Those that are nuisances and not human health hazards often receive follow-up as well to resolve a condition. Success in this work often includes involving local and state agencies.

Licensing Codes

Enforcing laws and regulations represents the cornerstone of the Environmental Health and Safety program and provides an important role in the protection of public health in our community. The licensing program issued 1,009 licenses in 2008, compared to 956 in 2007, and provides enforcement on those permits through different means. First, we make operators aware of the regulation and provide assistance or guidance on meeting the regulation. We provide documents in picture and verbal format for use in educating staff. Regular inspections serve as a means to ensure the regulations are being followed and, when necessary, re-inspections to address significant violations are also made to ensure compliance. Voluntary closures are sought to address significant critical violations such as overall sanitation or lack of available water. On rare occasions, when a voluntary compliance cannot be achieved, we will issue orders to suspend all or a portion of the facility's operations until compliance is reached. Inherent in such measures is the assurance of due process through appeal. In 2008, staff identified 48 circumstances that warranted enforcement procedures beyond the regular inspection.

We also have a contract with the Department of Natural Resources (DNR) for the Transient Non-Community (TNC) well program to enforce DNR codes addressing public facilities using wells to provide water for service to the public. The TNC program requires inspections of the well water systems at least once every five years verifying requirements of the well code are met in regard to construction and samples annually. This serves to ensure safe water for the users of the public facility and to protect our groundwater resource. In 2008, staff conducted 36 well water inspections at public facilities.

Family Health & Communicable Disease Control Program

Isolation and Quarantine

To prevent the spread of disease, health officers have the power to issue isolation or confinement orders. State statute empowers local health departments to order involuntary treatment, including directly observed therapy for persons with infectious or high-risk M. Tuberculosis disease who are unable or unwilling to adhere to their prescribed treatment.

In 2008, Marathon County Health Department used isolation to prevent the spread of diseases for individuals suspected and confirmed as having infectious TB disease, individuals suspected of having, and for individuals suspected and confirmed of having.

School Immunization Law

The Wisconsin Student Immunization Law passed in 1975 established required doses of vaccines for children in all Wisconsin schools and licensed day care centers. The law is one measure to protect children from vaccine preventable diseases by ensuring adequate coverage rates. Parents are able to sign a waiver for religious, health reasons, or personal conviction. As part of the Student Immunization Law, licensed day care centers and schools are required to submit an immunization report to their local health department on an annual basis in the fall. The report is reviewed and forwarded to the State's Immunization program. For children who are not up-to-date on their immunizations, schools and day care centers are required to notify

our local district attorney. Legal notices are sent out to parents and the district attorney can petition the court to order compliance or possible fine.

To provide greater protection in the community from Pertussis (whooping cough) and Varicella (chicken-pox), the Wisconsin Student Immunization Law was changed in the 2008-09 school year requiring a dose of Tdap vaccine for students entering grades 6, 9, and 12 and a second dose of Varicella vaccine for students entering grades K, 6, and 12. In response to the change in the immunization requirements, Marathon County Health Department offered school-based immunization clinics to school districts in the Wausau metro area in the spring, as well as providing additional public clinics during the summer and fall of 2008.

Childhood immunization coverage rates in Marathon County continue to be above 90%. As a result of high coverage rates, many childhood diseases are becoming rare in Marathon County and the United States.

Universal Newborn Hearing Screening

Hearing loss is the most common birth disorder in newborns. About 1 out of every 300 babies is born with severe hearing loss. For Marathon County that is approximately 5-6 babies born each year. Without a newborn hearing screen, the average age of detection of hearing loss is between 2 and 3 years of age. Hearing loss that goes untreated may lead to speech and language delays, as well as delays in school. With the passing of state legislation, 94% of infants born in Wisconsin in 2005 were screened for hearing loss. Marathon County Health Department as a partner organization in Marathon County's Early Hearing Detection and Intervention Program, continues to work closely with Aspirus Women's Health Birth Center, Birth to 3, and Saint Clare's Hospital to ensure infants who fail the initial hearing screen done in the hospital receive follow-up services with an audiologist.

Essential Service #7

Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable

While direct clinical services is not a major focus of a local public health agency, connecting people with health services and providing specific prevention-oriented health services are both important components of this essential service. Helping identify vulnerable populations and their barriers to care and then working to reduce those barriers is also an important component of this service. A major Marathon County Health Department service is helping people with questions when they do not know where to turn. Many calls to the Health Department are for questions that are not within our direct jurisdiction, but as part of this essential service, our staff help people find the person or agency that can assist them. Every day, a staff member is assigned to Assessment, Information, & Referral (AIR) duty to respond to members of the public.

In addition to providing information and referral, local health department duties also include:

- Identifying populations with barriers
- Working with community partners to decrease barriers and expand access to care
- Linking people to the services they need, including assisting people with Medicaid enrollment, interpreter, and transportation services
- Providing direct services that are prevention oriented and unavailable through other community agencies

Chronic Disease Prevention Program

Car Seat Rental Program

Passenger safety and injury prevention efforts are maximized by our involvement with the Wausau Area Safe Kids Coalition. The Coalition coordinates community events promoting safety for children including car seat inspections and bike helmet sales. The Coalition also sponsors Child Passenger Safety Technician training in the Community. This has contributed to the increase in the number of certified technicians and decreased our need to staff community events. The Car Seat Rental Program enhances the education activities by providing safe infant/toddler car seats to families who can't afford to purchase a safe seat or need a second seat for a short period of time.

Toddler Seat Rental Program	2002	2003	2004	2005	2006	2007	2008
New Rentals	44	61	52	69	62	60	58
Total number of families served	101	106	91	129	121	113	122
Additional car seat inspections and education at community events	60	75	51	45	41	25	28

Quit Tobacco Now (QTN), Quitline, and Cigarette Tax Increase

On January 1, 2008, a new \$1 state tax was added to the price of each pack of cigarettes. The tax was implemented to reduce the rate of youth initiation of tobacco use, encourage adults to stop using tobacco, and generate revenue to offset the costs of healthcare to the Medicaid program.

While it is too soon to determine the impact on youth initiation, the tax increase has had a dramatic impact on the number of individuals seeking help with quitting smoking. The Wisconsin *Quit Line* received more calls in January, 2008, than they did in all of 2007. Five-hundred seventy (570) Marathon County callers received help from the *Quit Line* in 2008. The service is free to callers and provides telephonic and web-based education and counseling.

The Marathon County Tobacco Free Coalition implemented the *Quit Tobacco Now* (QTN) program in 2007-08. It was a community based, collaborative, comprehensive, adult tobacco treatment program. It was designed, created, and delivered by a collaborative group of individuals representing health care and non-profit organizations. The program's long-term goal was to increase the number of individuals (adults) who successfully quit using tobacco. The program was a low-cost education and support group. After one year of service the program had served twelve participants. While recent changes in tobacco taxes have resulted in huge numbers of smokers calling the *Quit Line*, the QTN program did not experience an increase in demand. The low participation was the indicator used to determine that QTN does not meet the needs of those who are trying to quit. It was the decision of the Governance Committee (members of the Coalition) to discontinue the program. The Committee will continue to assess the community needs and determine better ways of delivering support and education to people who are ready to quit using tobacco.

Family Health & Communicable Disease Control Program

Prenatal Care Coordination

Prenatal Care Coordination is designed to provide health teaching and care coordination services to pregnant women, thereby increasing the likelihood of having a healthy baby. While the program was originally designed to be a Medicaid benefit, Marathon County Health Department offers the program to any pregnant woman who could benefit from such services. Public health nurses work closely with the woman's physician and other providers to address health, psychosocial, and economic issues impacting the woman and her family.

Recent research has demonstrated the link between social and economic stressors of women who are pregnant with poor birth outcomes. Health teaching and counseling interventions are focused on early and continuous prenatal care, substance use, tobacco use, mental health issues including perinatal depression, domestic violence, nutrition, breastfeeding, and safe sleep environment. In addition, women are linked to community resources such as Medicaid, medical and dental care, mental health and domestic violence services, transportation, Job Center, and WIC. In many cases, public health nurses identify barriers for women to receive community services and assist women and their families to access needed services.

In 2008, Marathon County Health Department received 186 prenatal referrals. Referral sources included: WIC, Bridge Community Health Clinic, Baby Fairs at area hospitals, clinics, hospitals, Department of Social Services, and self-referrals. Care coordination and health teaching services were provided to 107 women during the year, with 91 women receive ongoing, comprehensive services prenatal through 60 days postpartum. The following tables are the impacts the program made for the 91 women who received comprehensive services.

Babies will be Healthy	2007	2008
Percent of women who reported smoking during their pregnancy	39%	48%
Percent of women who reported smoking who stopped or decreased smoking	94%	91%
Percent of homes and cars that are smoke-free	N/A*	91%
Percent of women who reported drinking at all during their pregnancy	N/A*	35%
Percent of women who reported drinking at all during their pregnancy who stopped completely	N/A*	96%
Percent of women who reported having a dental provider	84%	84%
Percent of women referred for dental care	38%	42%
Percent of women who initiated breastfeeding	71%	62%
Percent of women who initiated breastfeeding who breastfed 8 weeks or longer	42%	51%

Percent of women who reported having a plan for future spacing of children	89%	91%
Percent of women referred for contraceptive services	19%	24%
Percent of infants who had a primary care provider	100%	100%

Children will be Safe in their Family Home

Percent of infants who sleep on their back	97%	99%
Percent of women and caregivers who do not co-sleep with their infants	87%	88%
Percent of infants who have a crib	N/A*	99%
Percent of women referred to “Cribs for Kids”	N/A*	23%

Children will Experience Nurturing Relationship with their Parents

Percent of women experiencing perinatal depression	38%	37%
Percent of women experiencing perinatal depression referred to mental health services	30%	60%

Note: N/A notes data was first collected in 2008.

Quit for Baby Blog

From 2002-2006, 17.9% of pregnant women reported smoking during their pregnancy. In 2007, 17% of pregnant women smoked during their pregnancy. The National 2010 goal is no more than 1% of women smoke during their pregnancy. For women who smoke during their pregnancy, over 80% are under the age of 30. Pregnant women who receive prenatal care coordination and First Breath services through the health department, have indicated value in being able to network with other women who are attempting to quit or stay quit. Women have also expressed their discomfort in seeking out formal classes, due to barriers such as travel, childcare, and balancing work demands.

Quit for Baby weblog was launched in November of 2007, to provide support for women who are attempting to quit smoking or stay quit. Outreach materials including prescription pads for physician offices were distributed in early 2008. The weblog is updated and monitored by an area Tobacco Treatment Specialist who has been trained to provide counseling in tobacco cessation. During 2008, the blog had 588 first-time visitors and 106 return visitors. Approximate location of blog users were: 76% United States having 34% from Wisconsin. Given the limitation of the weblog data, it is unknown what percentage of users from Wisconsin are Marathon County.



Immunizations

One of the ways Marathon County Health Department assures that children are fully immunized is to provide immunization to residents at a minimal cost. Marathon County continues to see an increase in the utilization of immunization clinics in past two years, having additional clinics added in 2008 to meet the demand. In 2008, 2,620 children and adults received immunizations through the health department. 144 clinics were held in Marathon County communities of Athens, Edgar, Hatley, Mosinee, Stratford, Spencer, and Wausau. A total of 4,756 vaccines were given. The following table looks at trends in the use of immunization clinics:

Year	No. of Clinics Held	No. of Children & Adults	No. of Vaccines Given
2008	144	2,620	4,756
2007	112	2,290	3,987
2006	118	1,457	2,680
2005	109	1,801	3,414
2004	Not Available	1,836	3,617

Sexually Transmitted Diseases

Marathon County Health Department's STD clinic is an example of how working in partnership can bridge gaps in preventive health care. In partnership with UW-Health Family Medicine, Marathon County Health Department is able to assure all individuals have access to treatment for sexually transmitted diseases and receive pregnancy testing. STD services are provided at two sites; UW-Health Family Medicine twice per week and at the Marathon County Jail once per week.

Public health nurses working under the supervision of UW-Health Family Practice physicians, screen individuals for STDs/HIV, and provide treatment and vaccines. All individuals seen through the clinic are counseled on risk-reduction behaviors. Partners are identified and counseled to seek treatment with their primary care provider. As a result of the clinic, individuals who may not seek care due to barriers such as cost and/or not having a health care provider are screened and treated, thereby reducing further transmission of STDs/HIV in the community.

In 2008, a total of 432 individuals received STD services, 272 at UW-Health Family Medicine and 160 at Marathon County Jail. The gold standard in the prevention of STDs and AIDS is to encourage all individuals presenting for STD services to be screened for STDs and HIV. Refer to table below for a closer look at 2008 STD clinic services:

Site	Total Clients	No. Females	No. Males	No. Screened STD	No. Screened HIV	No. Vaccines Given
UW-Health	272	46	226	174	135	32
Jail	160	50	110	75	56	43
Total	432	96	336	249	191	75

Essential Service #8

Assure a Competent Public and Personal Health Care Workforce

While everyone who comes to work at Marathon County Health Department (MCHD) has professional expertise, many have never worked specifically in the arena of public health. Therefore, initial orientation and ongoing continuing education are important components of our work together. In addition to assuring the ongoing development of our own staff, MCHD also functions as an important student learning site for health profession students in nursing, health education, environmental health, and public administration. By serving as such a site, we contribute to developing the public health work force of the future.

The specific duties of a local health department include:

- Assures compliance with all licensing and certification requirements for public health professionals
- Assesses public health competencies and provides training and ongoing support for continuous enhancement of these skills
- Develops, uses, and reviews job standards and position descriptions
- Conducts annual performance appraisals of employees
- Provides opportunities for employees to pursue ongoing education and training
- Serves as learning site for academic institutions
- Provides opportunities for public health leadership development

Department Wide Examples

Marathon County Health Department (MCHD) employs public health professionals who must maintain various licensure and certification requirements. Systems are in place to assure appropriate qualifications are maintained and to provide ongoing education to support these certifications. Examples include licensure as a Registered Nurse, Registered Dietician, Registered Sanitarian, Certification as a Health Educator, and skill specific certifications such as Cardiopulmonary Resuscitation, Lead Inspector, Lead Assessor, etc.

Job descriptions are maintained and reviewed for each position within the health department. Annual performance appraisal and planning are conducted. For the past five years, public health professionals have used a planning and appraisal tool that is modeled after the Council on Linkages Public Health Competencies.

Continuing education is provided by the department on a wide variety of topics. Training may be provided internally or through local, regional, state, or national conferences. The State of Wisconsin provides many training opportunities at low or no charge to local public health agencies. Competency assessment has directed training needs in the areas of public health preparedness and epidemiology. Competency assessments in other areas of public health practice are being developed.

MCHD also serves as a clinical placement site for a number of health professions including nurses, physicians, health educators, administrators, and environmental health specialists. As more and more baccalaureate and internet based programs develop, the requests for clinical placement at MCHD continue to increase. In 2008, the following institutions placed students at MCHD:

- UW Eau Claire School of Nursing (16 hours) - 1 student
- UW Oshkosh College of Nursing (60 hours) - 3 students
- UW School of Medicine and Public Health - (1 day) – 3 students

Chronic Disease Prevention Program

Public Health Nutritionist

A new position of Public Health Nutritionist was added to the Chronic Disease Prevention Team. The role is to serve community programs and agencies with relevant and accurate information to assist educators in

providing sound nutrition information in their programs. One of the qualifications of the position is the person must be a Registered Dietitian (RD). Registered dietitians are credentialed by the Commission on Dietetic Registration, the credentialing agency for the American Dietetic Association. RDs are *the* food and nutrition experts, translating the science of nutrition into practical solutions for healthy living. They are able to separate facts from fads and translate nutritional science into useable information. The expertise, training and credentials that back a registered dietitian are vital for promoting positive lifestyle choices.

Family Health & Communicable Disease Control Program

Collaboration with School Nurses

With the beginning of the school year, Marathon County Health Department on an annual basis host a meeting with area school nurses. The meeting is an opportunity for health department staff to meet school nurses, and for school nurses to learn about our programs and services that support families with school-age children. Topics covered this year were: changes in the school immunization law for 2008-09, reporting requirements for communicable diseases, prenatal care coordination program, children with special health care needs, hearing and vision screening, along with healthy eating and active living initiatives. School nurses are encouraged to contact and consult with public health staff throughout the school year to answer questions on communicable disease, immunizations and other health topics.

Perinatal Mood Disorders

In the past year, Marathon County Health Department along with other partnering organizations that make up Healthy Babies for Marathon County expanded efforts to increase awareness of perinatal mood disorders as well as improve the identification and care of women who are experiencing what is more commonly known as perinatal depression. Perinatal mood disorders impacts between 8-15% of all women during pregnancy and after childbirth, and is more severe than the “baby blues” which affects 80% of women and goes away within a couple of weeks. Depression is known to affect how a mother relates to her newborn, linking a mother’s depressed mood to a child’s risk for cognitive and language delays and behavioral problems. A recent study done by the Centers for Disease Control identified the following risk factors associated with increase likelihood for postpartum depression: tobacco use during the last 3 months of pregnancy; physical abuse before or during pregnancy; partner-related stress during pregnancy; traumatic stress during pregnancy; and financial stress during pregnancy. For women living in poverty, it has been estimated that up to 28% of women will be affected. Refer to Essential Service No. 10 to learn more about promising pilot project to reach women experiencing perinatal depression who do not present for outpatient therapy services.

◆ Perinatal Mood Disorders Forum

In October 2008, a Perinatal Mood Disorders forum was held with 40 area health care and community based providers attending to learn more about perinatal mood disorders and discuss ways to improve our system of care and treatment. The forum was sponsored by Aspirus Health Foundation, Aspirus Women’s Health, and Healthy Babies for Marathon County.

◆ Screening for Perinatal Depression

In the spring of 2008, Start Right public health nurses and family visitors received an in-service on perinatal depression from the In-Home Perinatal Depression Therapy Services counselor. The purpose of the in-service was to increase Start Right staff’s understanding of effective therapy and treatment approaches to address perinatal depression. Beginning in 2006, all women who receive prenatal and postpartum services are screened for perinatal depression using the Wisconsin Association for Perinatal Care (WAPC) recommended screening tools. For women who are identified as experiencing perinatal depression, their primary care physician is notified and appropriate counseling and treatment referrals are made.

Essential Service #9

Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Health Services

State Statute 251 charges local public health departments and boards of health with the responsibility to assess the community's health, establish priorities, and assure services are in place to meet those needs. To accomplish this goal, the health department must regularly evaluate the accessibility, quality, and effectiveness of population-based health services, personal health services, and the local public health system.

The duties of a local health department include:

- Evaluate services against established criteria for performance
- Assess community satisfaction with health services
- Identify gaps in health services
- Use evaluation findings to modify the strategic and operational plans of the local health system

Department Wide Examples

Integrated Work Plans

In 2008, an integrated work plan was created that focused the Department's work around the health priorities in the *Healthiest Wisconsin 2010* state health plan. The plan includes goals, activities, key parties that are responsible, and performance indicators to measure success. The table below is a summary of the goals outlined in the work plan:

State Priority	Goals
Tobacco	Decrease initiation of tobacco use
	Increase the number of adults who successfully quit using tobacco
	Increase clean indoor air by reducing exposure to second-hand smoke
Access to Primary Care	Assure all pregnant women have a primary care provider
	Assure all newborns to three-year-olds have a primary care provider
	Increase the number of women who have access to cervical and breast cancer screening
	Identify hearing & vision deficits in school-age children & refer for evaluation and treatment
	Assure comprehensive care for children and youth with special health care needs
Adequate & Appropriate Nutrition	Increase the number of infants who are breastfed and the duration of breastfeeding
	Increase the number of people who make healthy food choices

Alcohol & Other Substance Use & Addiction	Decrease teen drinking
	Decrease negative consequences of adult alcohol use
Environmental & Occupational Health Hazards	Preserve quality drinking water by protecting groundwater from contamination
	Reduce exposure to hazardous materials
	Increase the percent of Marathon County private well owners who test their water annually
	Reduce the number of children who are blood lead poisoned
	Reduce indoor exposure to radon
	Reduce, or eliminate, human exposure to environmental health hazards
	Decrease exposure to waterborne diseases (Also links with Existing, Emerging, & Re-emerging CD)
	Decrease the incidence of foodborne disease (Also links with Existing, Emerging, & Re-emerging CD)
	Decrease exposure to vector-borne disease (Also links with Existing, Emerging, & Re-emerging CD)
Existing, Emerging, & Re-emerging Communicable Diseases	At least 90% of two-year-olds will be fully immunized and 99% of school age children will be in compliance with the school immunization law
	Identify, fully treat, and minimize the spread of Tuberculosis
	Respond promptly with appropriate actions to all reports of communicable diseases
High Risk Sexual Behavior	Reduce the transmission of sexually transmitted diseases (Links with High Risk Sexual Activity)
Intentional & Unintentional Injuries & Violence	Decrease injuries within the home setting
	Reduce the incidence of intentional injury in Marathon County, including child abuse & neglect and domestic violence
Mental Health & Mental Disorders	Reduce the incidence of suicide
	Increase the identification of postpartum depression and connect women with appropriate treatment
Overweight, Obesity, & Lack of Physical Activity	Increase the number of Marathon County residents who regularly participate in physical activity
	Improve the built environment of Marathon County to make physical activity more accessible
Integrated Data Systems	Create and maintain integrated data systems that will link public health activities with public health outcomes
	Create and maintain data collection systems that will track all key business elements of delivering public health services
Community Health Improvement Processes	Assure assessment and monitoring of the community's health and catalyze action around health improvement
Sufficient, Competent Workforce	Support the education of new public health professionals
	Support the continuing education needs of MCHD staff
	Assure community health partners have the most current information about public health issues

Departmental Logic Models

Marathon County has established a program of outcome measurement to inspire departments to be clear in the goals they are striving to achieve and selection of performance indicators that will assist them in knowing if they are achieving their goals. Each key program within the Health Department is creating a logic model that identifies the short, medium, and long term goals of the programs, performance indicators, and key activities and resources needed to achieve the goals. To date, we have written logic models for the following programs:

- Start Right Parenting Education and Support Program
- Tobacco Control Program
- Childhood Lead Poisoning Prevention Program
- Hazardous Waste Program
- Food Safety Program

In 2009, the following logic models will be created:

- Groundwater & Recreational Water (Hazardous Waste, Lab, Rabies)
- Injury Prevention
- Alcohol
- Access to Care (Hearing/Vision, WWWP)
- Mental Health
- Preparedness
- Other Child Health Areas
- Partnership Logic Model and our role in supporting community coalitions

In 2009, a clear evaluation and monitoring plan will be created and implemented to track our progress towards achieving each of the goals outlined in the logic models and work plan.

Essential Service #10

Research for New Insights and Innovative Solutions to Health Problems

To produce the best results with the investment of public resources, we must always be searching for the most effective and innovative strategies to achieve health outcomes. This can be done by learning from the research of others and from evaluating our own programs, so that we can learn what's working and what could use improvement.

Specific duties of local health departments include:

- Create and implement innovative solutions to health issues
- Research and implement best practices identified by others
- Conduct program evaluation and, when appropriate, formal research to measure the impact of local services
- Encourage linkages with academic institutions to conduct collaborative research and evaluation projects
- Disseminates findings from evaluation and research projects to others

Chronic Disease Prevention Program

Footprints to Health

This year marks the end of a three-year pilot program with the Wisconsin Department of Health Services, Nutrition and Physical Activity Program and the Marathon County Healthy Eating, Active Living (HEAL) Coalition on a pilot program named **Footprints to Health**. The original program was provided in the Franklin Elementary School neighborhood. Those families participated in a survey process to help us collect data and measure which of our individual, family, and organizational strategies made an impact.

The goals of these initiatives are to increase fruit and vegetable consumption and increase physical activity. Our surveys have revealed an increase in knowledge and behavior regarding physical activity among the families in the Franklin School neighborhood. Other lessons learned are the value of strong partnerships, clearly defined roles, importance of formative assessment in the planning process, and experience using the Social Ecological Model. The results and lessons learned are being utilized by the Department of Health Services for their CDC Cooperative Services grant and shared with community coalitions across the State.

The program has since been expanded to six additional schools. They are Schofield Elementary, Weston Elementary, St. Anne's Elementary, Lincoln Elementary, South Mountain Elementary, and Stettin Elementary. Program components include school-based activities and events and the Safe Routes to School Program. Funding provided from the University of Wisconsin School of Medicine and Public Health is making this program expansion possible into 2009.



HEAL display at the Healthy Marathon County Community Health Forum on January 7, 2009.

Smoke-Free Air

For the past several years the Marathon County Tobacco Free Coalition and the Marathon County Health Department have been educating the community on the dangers of secondhand smoke. Recent changes in local policies created an opportunity to study the differences in air quality in neighboring communities with different standards for allowing tobacco smoke. Indoor air quality was tested in ten eating and drinking establishments in Wausau and four in Marshfield in July, 2008. The city of Wausau has an ordinance that prohibits smoking in restaurants that have alcohol sales less than 50% of their sales receipts. The city of Marshfield has a comprehensive smoke-free ordinance that covers all restaurants, bars, bowling alleys and other worksites and public buildings. The concentration of fine particle air pollution, PM_{2.5}, was measured.

Tobacco smoke is the biggest contributing factor to the amount of small particulate matter indoors that is smaller than 2.5 microns in diameter. This small size allows particles to penetrate deep into lung tissue and the walls of arteries. The results in the study are compared to the Wisconsin Department of Natural Resources Ambient Air Quality Standards for outdoor air.

Key findings of the study included:

- 100% of Wausau establishments tested that allow smoking had air quality that was at a minimum **Unhealthy for Sensitive Individuals**.
- Of the Wausau establishments tested that allow smoking, three had **Unhealthy Air Quality**, one had **Very Unhealthy Air Quality**, and four had **Hazardous Air Quality**.
- One establishment tested had four times the **Hazardous Air Quality**.
- The four establishments tested in Marshfield, all completely smoke-free by city ordinance, had **Good Air Quality**.

The air quality in these eating and drinking places that allow smoking present a serious health risk for patrons and employees because there is no safe level of exposure to environmental tobacco smoke. This data was shared with Village of Weston Board members during the development of their smoke-free air policy. It is part of the ever growing evidence of the need for comprehensive smoke-free air policy standards.

This data analysis was made possible by our partnership with the Paul P. Carbone Comprehensive Cancer Center, University of Wisconsin-Madison.

Environmental Health & Safety Program

County Swimming Beach Signs

Summer for many of our residents includes trips to one of the county beaches. While beach water quality sampling can be done, the results obtained have limited value. The results reveal conditions only at the time of sampling, not conditions on the next day or weekend. Rain, water flow, and other factors can change water quality and late summer can foster conditions for blue-green algae growth. With Marathon County's size, the expense in regularly obtaining samples and in posting warnings at distant beaches is prohibitive. Yet residents want the ability to make an assessment regarding the safety of swimming on any day. In an attempt to address that need, Environmental Health Staff felt an informative sign would help and researched practices at other health departments across the nation for those who have used such signs. A part of the research was to identify possible language informing beach users of the factors to consider before swimming, including water appearance or recent rain and advises beach users not to swim under those conditions. In cooperation with the Marathon County Parks, Forestry, and Recreation (PFR) Department, we used the information from our research to design a sign to be posted at county park beaches that can now assist beach users in making an informed healthy choice.

Family Health & Communicable Disease Control Program

In-Home Perinatal Depression Therapy Services

In January of 2008, an in-home therapy model of care for women experiencing perinatal depression was launched as a result of Healthy Babies for Marathon County being awarded a Ministry Health Care Fund grant. The reasoning behind the pilot project was that a number of women who experience perinatal depression do not receive treatment due to the perceived and actual barriers encountered in seeking services. National estimates indicate that between 8-15% of women during pregnancy and after childbirth experience perinatal depression, increasing to 28% for women who have or are experiencing poverty, partner stress, and abuse.

In-home therapy services were provided by a licensed professional counselor through a contract with Marathon County Health Department. Thirty-five (35) women experiencing depression either prenatally and/or postpartum were referred for in-home therapy services who otherwise refused to seek traditional outpatient services. The majority of women referred for services had current or previous history of violence and/or family abuse, alcohol and/or other drug abuse and mental health issues. Barriers identified in not seeking traditional outpatient services included: childcare, transportation, stigma associated with seeking services, lack of energy, and work schedule.

In-home therapy is seen as a promising approach to reaching women who may not present for care in the community, with the ultimate goal of linking women who could benefit from long-term care to outpatient services. Within the first year, the pilot has illustrated there is a segment of women who experience perinatal depression who will not seek out traditional outpatient therapy services; however, they will accept someone coming into their home. The goal of the pilot project is to secure stable ongoing funding beyond the current grant funds and have this service added to the “umbrella” of Start Right program services.

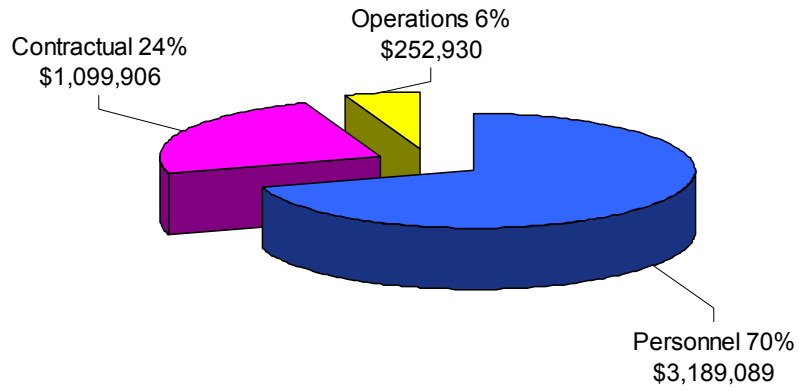


Healthy Babies for Marathon County display at the Healthy Marathon County Community Health Forum on January 7, 2009.

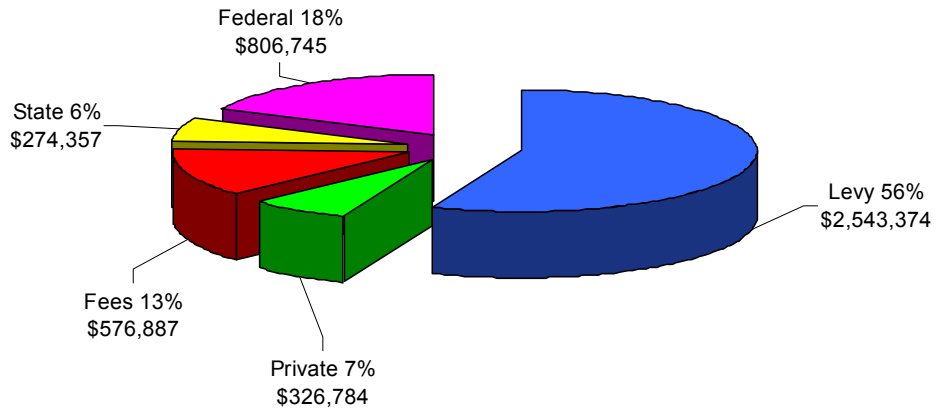
2008 ANNUAL REPORT FINANCIAL SUMMARIES (unaudited)

<u>LEVY FUNDED</u>	<u>Budgeted Levy</u>	<u>Actual Levy</u>	<u>Budgeted Revenue</u>	<u>Actual Revenue</u>
General Public Health	\$1,660,571	\$1,611,525	\$343,550	\$362,530
Start Right	\$878,494	\$873,350	\$101,188	\$101,188
Internal Lead Grant	\$66,500	\$58,500	\$	\$
Total Levy Funded	\$2,605,565	\$2,543,375	\$444,738	\$463,718
<u>PROGRAMS FUNDED FROM OTHER SOURCES</u>				
Regional Programs				
Children & Youth with Special Health Care Needs	\$146,272			
Regional Bioterrorism (Northwoods Consortium)	\$333,756			
Total Regional Programs		\$480,028		
Family Health/Communicable Disease				
Immunizations & Vaccinations (2)	\$30,512			
Local Children & Youth with Special Health Care Needs	\$2,050			
Maternal/Child Health (3)	\$60,248			
Pandemic Influenza	\$13,018			
Prenatal Care Coordination (5)	\$101,897			
Prevention of Child Abuse and Neglect (POCAN)	\$157,629			
Targeted Case Management	\$7,524			
TB Dispensary (3)	\$7,626			
Total Family Health/Communicable Disease		\$380,504		
Environmental Health				
Hazardous Waste (2)	\$40,548			
Lab	\$82,633			
Lead	\$16,394			
Mercury/DNR (2)	\$19,693			
Radon (2)	\$22,135			
Total Environmental Health		\$181,403		
Chronic Disease Prevention				
Asthma Coalition (3)	\$11,127			
Footprints to Health (2)	\$120,361			
Healthy Eating, Active Living (4)	\$46,295			
Hearing & Vision Screening	\$34,900			
Injury Prevention (2)	\$4,398			
Social Norms	\$4,800			
Suicide Prevention-Mental Health Association (2)	\$16,399			
Tobacco Control Grants (6)	\$68,197			
WI Well Women's Program (2)	\$65,449			
Total Chronic Disease Prevention		\$371,925		
Departmental				
Local Bioterrorism	\$116,602			
Public Health Accreditation	\$70			
Healthy Marathon County Website	\$4,300			
Total Departmental		\$120,972		
TOTAL PROGRAMS FUNDED FROM OTHER SOURCES			\$1,534,831	
TOTAL ALL FUNDS				\$4,541,924
	<u>Total Funds</u>	<u>2007 Population Estimated</u>	<u>Per Capita Funds</u>	
Levy Funded	\$2,543,375	129958	\$20	
Non-Levy Funded	\$1,998,549	129958	\$15	
Total	\$4,541,924	129958	\$35	

2008 Expenditures



2008 Revenue Sources



Children and Youth with Special Health Care Needs Northern Regional Center

The Children and Youth with Special Health Care Needs (CYSHCN) Program serves children and youth from birth to 21 years old, who have a chronic health condition that requires specialized health or educational services. These chronic conditions may be physical, emotional, developmental, or behavioral. The Northern Regional Center for CYSHCN is one of 5 regional centers in Wisconsin that provide free and confidential assistance to families and providers. The northern service region consists of the 15 counties of Ashland, Bayfield, Florence, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Portage, Price, Sawyer, Taylor, Vilas, and Wood County.

2008 Activities of the Northern Regional Center

Inform, Educate, & Empower

- Provided ongoing information and referral, parent support, and educational services
- Conducted outreach activities to inform parents and providers of center services
- Maintained toll free confidential phone and website information systems
- Sponsored two series of community support trainings for 37 parents/providers
- Linked parents to leadership and training opportunities to strengthen their role in decision making at all levels
- Provided workshop presentations or displays on issues related to special health care needs at local and statewide conferences
- Conducted trainings on the Ages and Stages Developmental Screening tools for 49 professionals

Mobilize Community Partnerships

- Funded a Medical Home Local Capacity Grant to support the implementation of childhood social and emotional screening in primary care pediatric practices
- Contracted with 13 of 15 local health departments to provide direct services to 158 children
- Participated on coalitions to improve quality of care through coordination of systems
- Initiated new strategies funded by a federal grant to the State of Wisconsin to improve regional infrastructure of services to children with Autism Spectrum Disorders

Develop Policies and Plans

- Worked with primary care providers and community service providers to implement quality improvement strategies for health care using the Medical Home model
- Addressed priority health issues for children and youth in partnership with regional partners with state and national policy makers

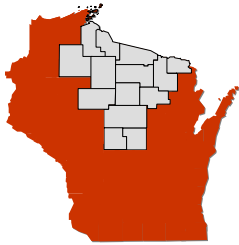
Link People to Health Services

- Served over 430 families and providers to provide referral and follow up or consultation services to assure that families were connected to services in their local community for health care, financial, educational, and emotional support needs
- Provided consultation on private and public health care benefits to assure adequate coverage of special health care needs services
- Became a registered Community ACCESS point for BadgerCare Plus enrollment help

Assure a Competent Public Health and Personal Health Workforce

- Provided technical assistance to staff from local public health, human services, primary care clinics, educational, and early intervention services
- Participated in ongoing training and networking with the CYSHCN collaborating agencies

Public Health Emergency Preparedness Northwoods Consortium



Overview

Marathon County serves as the fiscal agent for this Consortium, employing Consortium staff and managing the operating funds on behalf of the member agencies. In 2008, the Northwoods Consortium was composed of fourteen counties and three tribal health centers.

2008 Accomplishments

Diagnose and investigate health problems and health hazards in the community

- Tested every health department's ability to effectively investigate a serious public health threat based on CDC performance standards.

Inform, educate, and empower people about health issues

- Tested every health department's ability to rapidly and effectively give guidance to the public on a serious public health threat.

Mobilize community partnerships to identify and solve health problems

- Assisted in planning and facilitating community meetings regarding antiviral distribution during an influenza pandemic.
- Produced a quarterly newsletter for local partners on issues and accomplishments in public health preparedness.
- Tested every health department's ability to rapidly notify partners of a serious public health threat.

Develop policies and plans that support individual and community health efforts

- Delivered a new Public Health Emergency Plan (PHEP) to each local health department and assisting in finalizing it for local use.
- Conducted an assessment of every health department's compliance with CDC standards for delivery of the Strategic National Stockpile through mass clinics.



Enforce laws and regulations that protect health and ensure safety

- Tested every health department's ability to contain a serious public health threat through use of isolation and quarantine policy and procedure and other community containment measures.

Assure a competent public health and personal health care workforce



- Assured all local public health staff met the Columbia University Emergency Preparedness Core Competencies.
- Developed training packet on pandemic influenza and infection control for area EMS providers.
- Provided training on: ICS (Incident Command System), HAN (Health Alert Network), Time Management, Coalition Building, Risk Communication, Facilitation, WI-Track, and NEXS (National Exercise Schedule).

Evaluate effectiveness, accessibility, and quality of personal and population-based services

- Evaluated multi-agency school surveillance system.

Marathon County Health Department Staff

As Of December 31, 2008

Yrs. Of
Service

Julie Willems Van Dijk	Health Officer	19
Ruth Marx	Epidemiologist/Public Health Preparedness Coordinator	17
Season Welle	Accountant (P.T.)	1

Chronic Disease Prevention Team

Judy Burrows	Director	16
Marla Hill	Public Health Nutritionist	<1
Dorothy Kalmon	Health Educator	1
Amanda Myszka	Health Educator	2
Amanda Ostrowski	Health Educator	2
Edie Peterson	Vision/Hearing Screening Coordinator (P.T.)	4
Renee Trowbridge	Health Educator	8

Environmental Health & Safety Team

Dale Grosskurth	Director	8
Adam Anderson	Environmental Health/Lab Technician	3
Keith Baine	Environmental Public Health Sanitarian II	<1
Lindsay Benaszkeski	Environmental Health/Lab Technician (P.T.)	2
Jackie Bethel	Environmental Public Health Sanitarian II	28
Sara Brown	Environmental Public Health Sanitarian II	7
Kristal Knapp	Environmental Public Health Sanitarian II	33
Russell Mech	Environmental Public Health Sanitarian II	12
John Schlicher	Hazardous Waste Coordinator	9
Michelle Schwoch	Environmental Public Health Sanitarian II (P.T.)	10

Family Health & Communicable Disease Control Team

Joan Theurer	Director	2
Heather Busig	Public Health Nurse	2
Vicki Chrapkowski	Public Health Nurse	15
Mary Hackel	Public Health Nurse	6
Jennifer Juneau	Public Health Nurse (P.T.)	<1
Jean Kaatz	Public Health Nurse	25
Carol Capelle Mills	Public Health Nurse (P.T.)	14
Rebecca Mroczewski	Public Health Nurse	1
Ann Peters	Public Health Nurse	8
Tiffany Pietrowski	Public Health Nurse (P.T.)	7
Carrie Sickler	Public Health Nurse (P.T.)	4
Peggy Stalheim	Public Health Nurse (P.T.)	11
Susan Weith	Public Health Nurse (P.T.)	6
Colleen Yaatenen	Public Health Nurse (P.T.)	8
Vacant	Public Health Nurse	

Operational Support Team

Carol Roberts	Confidential Administrative Specialist	15
Nancy Anderson	Clerical Assistant II (P.T.)	4
Bonita Buchberger	Clerical Assistant II	38
Pang Moua	Bilingual Health Aide	11
Renee Oakes	Clerical Assistant II	4
Patti Poverski	Clerical Assistant II	19
Janet Werner	Clerical Assistant II	29
John Kasten	Senior Aide	4
Carolyn Samson	Senior Aide	<1

Northwoods Public Health Preparedness Consortium

Julie Hladky	Program Manager (P.T.)	5
Mary Texidor	Health Educator	3
Chris Dobbe	Epidemiologist	4

Northern Region Center For Children & Youth With Special Health Care Needs

Julia Stavran	Program Manager	21
Celena Wanca-Netzow	Community Health Worker (P.T.)	<1

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Marathon County Demographics

2007 Population (Est.)	129,958	
2006 Population (Est.)	130,223	
Gender		
Male	64,751	49.7%
Female	65,472	50.3%
Age		
5 years and older	7,797	6.0%
18 years and older	98,508	75.8%
65 years and older	17,284	13.3%
Race & Ethnicity		
White	121,695	93.5%
African American	519	0.4%
American Indian	214	0.2%
Asian	6,044	4.6%
Other race	461	0.4%
Two or more races	1,290	1.0%
Hispanic/Latino	1,373	1.1%
Geography		
Square Miles	1,584	
Population Density		82.2 persons/sq mile
Economics		
Median Household Income	\$52,241	
Families Below Poverty Level		4.9%
Individuals Below 125% Poverty Level		10.2%

