

Marathon County Health Department

Serving Our Community

Promoting Health

Protecting the Environment

Preventing Disease



2007 Annual Report

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

2007 Annual Report Marathon County Health Department

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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:

- ◆ Provide and design services based upon customer needs.
- ◆ Make access a priority by being flexible and available.
- ◆ Communicate respect for the community, our partners, and our co-workers through positive and professional attitude and appearance.
- ◆ Meet our commitments by being on time for meetings, appointments, clinics, and work deadlines.
- ◆ Respond to phone calls, e-mail, and correspondence in a timely manner.

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 people 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 through strategic planning.
- ◆ Continuously evaluate the impact of our services and adapt our practice accordingly through feedback from our customers.
- ◆ Commit to best practice through implementing and improving our departmental standards (protocols, procedures, and policies).
- ◆ Seek opportunities for professional growth.
- ◆ Commit 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 hiring people with a variety of experiences, backgrounds, ethnicities, and physical abilities.
- ◆ Take responsibility to know and understand other people’s perspectives and cultures through continuing education and/or interaction with diverse groups.
- ◆ Honor each individual’s worthiness and respect each other’s beliefs/values/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:

- ◆ Seek opportunities to work with community partners to address community health issues.
- ◆ Support the success of others and commit to the success of all.
- ◆ Fully contribute our individual expertise to the team to attain our organizational goals.
- ◆ Make decisions about our services based on community need and input.
- ◆ Solve problems by management and staff working together.

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 continuous learning and a positive work environment.
- ◆ Use our time, money, material resources, and people in the most cost effective manner to maximize their value.
- ◆ Acknowledge the contributions of our co-workers and community partners.
- ◆ Seek diverse and sustainable funding to assure continued services.
- ◆ Consider both present and future needs in our strategic planning.

Letter from the Health Officer

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

For those of you who are regular readers of this report, you will find a different format as you page through the 2007 Marathon County Health Department Annual Report. In 2007, the Board of Health has studied the Ten Essential Services of Public Health, a national public health model, and our staff has arranged our report of the important activities and accomplishments of the year around these services.

So - why would we mess with a format that has worked well for many years?

I'll answer that in three words:

Meaning, Integration, Accountability

Meaning

Too often during my twenty year career in public health, I've been asked, "What is public health anyway? What do you do?" While I've always been able to describe that our work focuses around prevention, population, and partnerships, the Ten Essential Services have given me language to provide further detail and examples of how we do our work. It helps people see the difference between what happens in the hospital or the doctor's office and what happens in the public health system.

Integration

Public health work does not happen in a vacuum. Every public health professional works within a team of internal and external partners. Each of our internal teams relies on each other. Our department relies on the partnership of many community agencies and individuals to make health improvement a reality. By showing how each of our teams contributes to each of the Ten Essential Services, we are able to demonstrate how our services work together.

Recognizing that some of you may be interested in one particular area of the Health Department, we have added an Index in the back of the report to help you quickly identify each area's contribution within the report.

Accountability

The Ten Essential Services are a national model for public health agencies. By studying the services and adapting our practice to assure we are implementing them in a comprehensive manner, we are striving to meet the highest standards for a local public health agency. This is especially important since we anticipate Accreditation of Public Health Agencies will be an expectation in the near future. Currently, our sector is one of the few areas of health care that does not have any type of national accreditation process.

So - sit back and enjoy a new perspective on public health based on local stories of great work!

None of this would be possible without the following:

- ◆ The resources and support provided to us by the taxpayers as allocated by the Board of Health, the County Board of Supervisors, the State of Wisconsin, the Federal government, and private funding partners including: the Judd S. Alexander Foundation, the Aspirus Health Foundation, the Community Foundation of North Central Wisconsin, the Foundation of Saint Clare's Hospital, Marshfield Clinic, the United Way, the Children's Miracle Network, and the UW School of Medicine & Public Health.
- ◆ A visionary, inspired, passionate, and compassionate leadership team.
- ◆ A mission-driven staff who understands and lives the core values of service, integrity, quality, diversity, shared purpose, and stewardship of resources every day.
- ◆ A wealth of community partners who share a common vision about the health of the community and work so hard on our mutual interests that I'm sure some of them should qualify as Marathon County Health Department employees!

We may face challenging social issues, a fragile economy, an increasing pace of change, and many other hurdles to overcome, but this year has demonstrated that together we can. I am truly blessed to lead this department in this community. My gratitude can only be summarized with two words:

THANK YOU!

Sincerely,



Julie A. Willems Van Dijk RN MSN
Health Officer

Executive Summary

The 2007 Marathon County Health Department Annual Report is organized for the first time around the Ten Essential Services of Public Health. Highlights from this year's report include the following:

Organizational Highlights

- ◆ After six outstanding recruitments, we hired six new members of our team - three health educators, one public health nurse, one clerical assistant, and one accountant. Four of their predecessors left for new positions outside of public health, and two retired.
- ◆ Our departmental restructuring was completed in January, 2007 when Carol Roberts assumed the position of Confidential Administrative Specialist and leadership for the Operational Support Team.
- ◆ New funding was secured to enhance smoking cessation, treatment of perinatal depression, physical activity for minority populations, enhancing public health nutrition education, pandemic influenza planning, and providing cribs and/or formula to low income families.
- ◆ Six local funding partners joined together to provide funding in response to the recently released community health assessment. They include Judd S. Alexander Foundation, Aspirus Health Foundation, Community Foundation of North Central Wisconsin, Foundation of Saint Clare's Hospital, Marshfield Clinic, and United Way of Marathon County.

Programmatic Highlights

Monitoring, Diagnosing, and Investigating Health Problems

- ◆ The *2006-2010 Marathon County Community Health Assessment* was released and is available at www.healthymarathoncounty.org.
- ◆ The water laboratory tested 13.3% more drinking water samples (718 samples) and 5% more recreational water samples (93 samples) in 2007 than 2006. The rate of unsafe samples remained steady at 10% of all drinking water samples and 5% of all recreational water samples.
- ◆ In addition to routine communicable disease surveillance work, the Department investigated several outbreaks - Viral Meningitis and Cryptosporidium in summer and Pertussis in the late Fall.
- ◆ The total number of reported sexually transmitted disease declined from 401 in 2006 to 334 in 2007. The largest decreases were seen in Chlamydia and Gonorrhea reporting.
- ◆ We maintained a 90% immunization rate for two-year-olds which is higher than the 2006 state rate of 83% and the national rate of 80%.
- ◆ Marshfield Clinic renewed its funding support of the Hearing and Vision school-based screening program and over 6,000 children were served. 85% of children referred for vision follow-up and 82% of children referred for hearing follow-up followed through with medical evaluation.
- ◆ Environmental health sanitarians identified more CDC risk factor violations - primarily in the "Other" category which focused on food safety knowledge, Certified Food Managers, and employee health.
- ◆ Screening for blood lead poisoning rose from 1,617 tests in 2006 to 1,872 tests in 2007.

Informing the Public and Creating Partnerships

- ◆ The local print, television, and radio media covered 178 public health stories in 2007 with the highest coverage of tobacco, healthy living, and communicable disease and environmental health investigations.
- ◆ New outreach campaigns in the schools were initiated in regard to Suicide Prevention and Methicillin Resistant Staphylococcus Aureus.
- ◆ A pharmaceutical collection was added to the programs of the Hazardous Waste Collection Facility.
- ◆ Start Right family visiting services to parents of newborns resulted in 91% of parents increasing their parenting knowledge.
- ◆ New partnerships resulted in new policies on environmental response to homes where methamphetamines had been manufactured or used and a new program to encourage safe infant sleeping.

Develop and Enforce Policies and Laws

- ◆ All local health care providers joined forces to create and implement a new comprehensive smoking cessation program, *Quit Tobacco Now*.
- ◆ Policies were implemented to offer assistance to landlords and homeowners to address lead hazards in homes prior to children being identified as lead poisoned (when such work becomes mandatory).
- ◆ 84% of retailers complied with banning the sale of tobacco to minors. 100% compliance was achieved in Athens, Edgar, Spencer, and Stratford.

Link People to Personal Health Services

- ◆ 237 prenatal referrals were received and 79 women received ongoing comprehensive prenatal services. Significant outcomes were achieved in smoking reduction or cessation, breastfeeding initiation, access to dental care, and appropriate infant care.
- ◆ 249 individuals received services at the Department's Sexually Transmitted Disease Clinic.

These services were provided to Marathon County residents for \$33/person, of which \$18/person was from local tax levy (54%). Other funding sources included Federal taxes (20%), State taxes (6%), Fees (14%), and Private grants (6%).

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 Marathon County Public Health Laboratory is involved in monitoring public drinking water supplies which include municipal community water systems and those involved in our DNR transient non-community water (TNC) systems program. A part of the TNC contract specifies we conduct well sanitary surveys to assess compliance with DNR codes and risk for contamination, with 53 completed in 2007. 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. A 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.

In 2007, there were 3,299 public drinking water samples and 2,781 private drinking water samples tested in our lab. The total of 6,080 samples represents an increase of 718 samples, largely due to outreach during the March 2007 Groundwater Awareness Week and requirements for garden well sampling. Recreational water samples also increased as new licensed pools were added. The rate of unsafe samples was constant in 2007 with 10% of the drinking water samples and 5% of the recreational water samples testing unsafe and requiring follow-up action.

	2004	2005	2006	2007
DRINKING WATER				
Total number of samples	4987	5330	5362	6080
Bacteriologically safe samples	4448	4553	4548	5156
Bacteriologically unsafe samples	414	433	463	612
Nitrate >10.0 mg/l (unsafe for pregnant women & infants)	102	89	77	86
RECREATIONAL WATER (pools & beaches)				
Total number of samples	1653	1830	1828	1921
Bacteriologically satisfactory samples	1567	1729	1730	1827
Bacteriologically unsatisfactory samples	74	96	92	94

Specifically reviewing those public samples representing facilities under the DNR-TNC contract shows that of the 198 facilities with public water supplies, 187 (95%) tested safe, while 11 (5%) were found unsafe. Four of the eleven 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

Infectious diseases remain the major cause of illness, disability, and death. Local health departments have a responsibility to investigate reportable communicable 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, and schools. On a monthly basis, infection control practitioners from area hospitals receive a report of communicable diseases 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 2007, the most commonly reported disease in Marathon County was Chlamydia with 231 cases, followed by Lyme disease (93 cases), genital Herpes – all types (75 cases), and Cryptosporidium (50 cases). Refer to Table 1 for list of reportable diseases from 2003 to 2007.

In 2007, we saw an increase in the number of cases of Cryptosporidium (50 cases). During a six-week period from mid-August to mid-September, 32 cases of Cryptosporidium were reported. The increase in reports was contributed by people who became ill from swimming at a local swimming pool. Since Cryptosporidium is a reportable disease, the first indication of an outbreak was when Marathon County Health Department was notified of a child with Cryptosporidium who had attended the pool. It was further evident when subsequent cases were reported and disease follow-up identified use of the pool. This prompted a complete investigation and outbreak follow up. Cryptosporidium is caused by a parasite transmitted through the feces of infected people and animals. Those who become ill experience watery diarrhea and abdominal cramping. There is no specific treatment for the illness; however, we were able to stop the spread of the disease by closing the pool and providing public information that you should not swim if you are ill.

During the summer months of 2007, there was an increase in the number of cases of Viral Meningitis (31 cases). Viral Meningitis is not the same as Bacterial Meningitis that often leads to more serious illness and even death. Unlike Bacterial Meningitis, there is no vaccine to prevent Viral Meningitis. Ninety percent of cases are caused by a group of common intestinal viruses called enteroviruses. Infection with one of these enteroviruses may lead to Meningitis, which is an inflammation of the tissue that covers the brain and spinal cord.

Also in 2007, Marathon County saw an increase in Pertussis (whooping cough), with 12 cases reported during the month of December. Pertussis occurs because immunity can wane 5-10 years after the completion of childhood vaccine. Tdap (tetanus, diphtheria, and acellular pertussis) vaccine is a new vaccine that is recommended for adolescents and is anticipated to prevent Pertussis outbreaks in schools. For the fall of 2008, the State of Wisconsin will be requiring children entering Grades 6, 9 and 12 to receive one dose of Tdap vaccine.

	2003	2004	2005	2006	2007
REPORTABLE DISEASES					
Hepatitis B	48	37	42	32	17
Hepatitis C	48	34	40	42	37
AIDS (cumulative)	51	51	53	57	57
HIV	6	4	4	4	2
Tuberculosis	0	8	4	1	1
Lyme Disease	72	63	73	111	93
Meningitis (all types)	8	2	18	6	31
Blastomycosis	7	2	11	47	14
SEXUALLY TRANSMITTED DISEASES					
Chlamydia	282	284	246	285	231
Gonorrhea	59	35	35	42	24
Herpes	58	73	62	71	75
Syphilis	0	4	1	3	4
FOOD & WATERBORNE DISEASES					
Hepatitis A	1	15	1	1	1
Campylobacter	47	41	39	39	42
Cryptosporidium	12	17	25	19	50
E coli O157:H7	2	2	4	9	4
Giardia	26	37	44	21	18
Salmonella	25	24	21	16	20
Shigella	0	0	1	2	2
VACCINE-PREVENTABLE DISEASES					
Pertussis	0	37	35	4	16
Mumps	0	0	0	50	6
Haemophilus	3	0	0	1	1
Others (Measles, Rubella, Tetanus, Diphtheria, Polio)	0	0	0	0	0

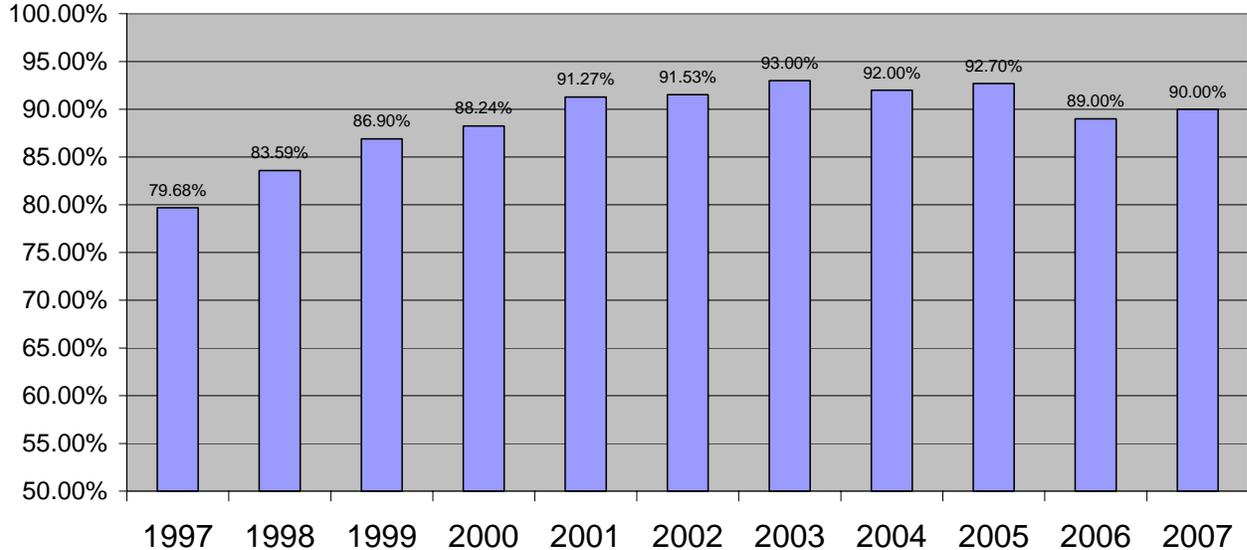
Immunization Registries

Immunizations are considered one of the greatest medical achievements in the 20th century. Vaccines prevent disease in people who receive them and protect those who come in contact with unvaccinated individuals. Before vaccines, many children died from diseases such as polio. Children under two years old are especially vulnerable to childhood diseases.

Marathon County's 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. With RECIN we are able to identify patterns in the utilization of immunizations.

For 2007, 90% of children in Marathon County who turned 2 years of age were up-to-date on their immunizations. By keeping immunization rates high, we will keep the rate of vaccine preventable diseases in Marathon County low.

MARATHON COUNTY IMMUNIZATION RATES



Note: 1997-2005 immunization rates are the percentage of Marathon County children aged 24-35 months old with age appropriate immunizations. Since 2006, the immunization rates are the percentage of Marathon County children at age 24 months with age appropriate immunizations.

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. 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.

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 2007, to assure compliance with the National Incident Management System (NIMS) and to assure we are ready to respond to emergencies, 100% of our public health staff completed 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 table top or full scale exercises.

◆Exercising

Pandemic influenza was the focus of two exercises in 2008.

In August, a table top exercise, based on a model developed by the Rand Corporation, was conducted with community partners to test the pandemic influenza community response plan. Forty-three members of the community attended and provided input on ways to improve the pandemic plan.

In November, a full scale exercise was conducted to test our mass clinic plan and specifically, our ability to provide vaccines to a large number of people in a short period of time. Influenza vaccine was provided to 425 Marathon County employees and their families during a four hour clinic period. Overall, the exercise went very well. An after action report was completed and we continue to work on ways to improve our response capability.

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 2007-08 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
Vision Screening				
Students receiving vision screening	5876	6133	6121	5771*
Students receiving referrals for vision care	362	360	395	344*
Medical care in process or completed by end of academic year	228 (63%)	239 (76%)	304 (85%)	*
Hearing Screening				
Students receiving hearing screening	5858	6413	6402	6017*
Students receiving referrals for hearing care	143	122	144	93*
Medical care in process or completed by end of school year	92 (64%)	85 (75%)	110 (82%)	*

* Data is tabulated on the academic year and is not complete for the 2007-08 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 WI. 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

Marathon County Health Department 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.

Marathon County	2007 Actual	2007 Goal
Number of women enrolled in WWWP	331	
Number of women screened for cervical cancer	114	
Number of women screened for breast cancer	158	
Unduplicated number of women screened	175	111

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 2007, investigation of seven foodborne illness complaints did not result in the identification of an outbreak related to food. 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 55 schools in the Federal School Lunch/Breakfast Program; enforcing Public Health Regulation 2001; 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	2002	2003	2004	2005	2006	2007
Foodborne Disease Investigation	6	11	14	10	4	7
Food Establishments Inspected & Follow-up	1,292	1,465	1,698	2,077	1,800	1,723
Consultations, Food Sampling, & Consumer Complaints	2,685	2,632	2,224	2,252	2,786	2,032
Education Classes/Attendees (Media Events)	22/84 3	25/795 (5)	24/463 (6)	20/731 (0)	18/434 (3)	4/135 (3)
WEB Site/Food Safety - Rate/yr	693	474	584	840	767	896

To assure greater uniformity of inspections, four Environmental Public Health Sanitarians in the food safety program completed a food safety standardization and certification process and were re-standardized in 2007. Standardization is a training and on-site evaluation process performed by the State Department of Agriculture, Trade, and Consumer Protection and Department of Public Health. It requires our staff to demonstrate their knowledge and experience in understanding, applying, and interpreting Food Code interventions, foodborne risk factors, hazard and systems analysis, and exhibit 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. The standardization process is performed annually.

In 2007, a data system tracked six Centers for Disease Control (CDC) Risk Factors identified as violations most often responsible for the majority of foodborne outbreaks, individually or in combination. Our baseline data will provide 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	2006 Violations		2007 Violations	
	Restaurants	Retail	Restaurants	Retail
Unsafe Food Sources	3	3	27	7
Inadequate Cooking Temperatures	12	3	15	5
Improper Holding Temperatures	136	61	180	44
Cross Contamination	185	64	185	55
Personal Hygiene	163	35	195	48
Other CDC Factors	99	23	242	69
TOTALS	598	189	844	228

In 2007, restaurants had a total of 844 CDC Risk Factor violations while retail facilities had 228. In part, the increase in violations is from recording violations that had not been Risk Factors in the past. We became aware of these changes during Standardization training. Much of the increase in violations is in the area of Other CDC Factors for both restaurants and retail facilities. 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.

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 involvement where diagnosis and investigation can be highlighted. This is a multi-disciplinary effort 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 and safety staff work investigating the buildings and homes to identify the sources of the lead. In 2007, there were 19 children who were identified as lead poisoned at 10-19 micrograms per deciliter of blood (ug/dl). Additionally, there were three children with elevated blood-lead levels which are successive blood tests at the 15-19 ug/dl level or one test at 20 ug/dl or more.

There are several risk factors for a child becoming lead poisoned. The primary factor is residing in a pre-1978 home, with pre-1950 more often identified as being a risk factor. More cases of lead poisoning occur in the warmer months as children are outside playing in lead contaminated soils and windows are opened, which can produce lead dust when window surfaces rub against one another and access is made available for children to deteriorated paint in window wells. Other factors include poor nutrition lacking calcium providing foods and traditional medicines. Each of these risk factors is investigated when a child is identified as being lead poisoned or having an elevated blood-lead level.

We continue our collaborative relationships with the City of Wausau Inspections Department and Community Development Department to address lead hazards.

We will continue to employ the window replacement strategy designed to prevent lead poisoning in children in pre-1950 housing units. Windows and window components containing lead paint were replaced prior to detecting an elevated blood lead child in the home. 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. MARATHON COUNTY HEALTH DEPARTMENT continued to implement this project in partnership with the City of Wausau Community Development Department which provides funding. Eligible property owners were 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 2008.

Activities	2004	2005	2006	2007
Total Number of Lead Tests	1,819	1,647	1,617	1,872
Tests < 10 ug/dl	1,762	1,578	1,574	1,824
Tests 10 to 19 ug/dl (# of children)	49 (33)	48 (35)	27 (21)	33 (19)
Tests ≥ 20 ug/dl (# of children)	8 (5)	21 (6)	16 (5)	15 (3)
Housing Units - Lead Hazard Reduction	11	7	8	3
Lead Inspections	56	54	36	40
Consultations	409	455	257	153
Environmental Samples	179	171	166	53

Family Health & Communicable Disease Control Program

M. tuberculosis and Directly Observed Therapy

In 2007, Marathon County conducted a contact investigation as a result of a community member being diagnosed with active M. tuberculosis disease. Sixty individuals were skin tested to determine if they became infected as a result of being exposed to M. tuberculosis. None were infected. Marathon County's Tuberculosis program not only assists in the identification of individuals with M. tuberculosis disease or infection, but we work with health care providers to assure proper treatment.

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 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 2007, 3 individuals with active M. tuberculosis disease received DOT. Public health nurses and/or bilingual health aide provided 391 DOT visits. Two individuals successfully completed an 18-month course of treatment in 2007. Along with DOT, the public health nurse monitors the effectiveness of treatment and provides ongoing health teaching.

As part of Tuberculosis prevention and control activities, Marathon County Health Department provides preventive INH medication to individuals infected with M. tuberculosis, but not active disease, on a monthly basis for no fee. The service is designed to assure all individuals infected are treated, thus reducing the likelihood of developing disease. In 2007, 29 individuals infected with M. tuberculosis received INH treatment thru the Health Department.

Healthy Homes

As part of our outreach to families with newborns, Marathon County families are offered a home safety assessment. In 2007, 332 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 second-hand 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 from the Children's Miracle Network, Marathon County Health Department provided 1,170 safety devices consisting of smoke alarms, batteries, outlet covers, safety latches, blind cord wraps, safety gates, and firearm trigger locks.

Child Mortality Review Team

Marathon County Health Department is a member of Marathon County's Child Mortality Review Team. The team, made up of the Medical Examiner, law enforcement, area hospital personnel, and a representative from the Infant Death Center of Wisconsin meets to review factors involved in a death of a child. The work of the Child Mortality Review Team identified an increase in the number of deaths among infants under the age of one related to co-sleeping in 2006-2007. During the time period from June 2006 to April 2007, 7 infants died in Marathon County due to unsafe sleep environments, having co-sleeping a contributing factor in 6 of the 7 deaths. In light of the number of infant deaths due to unsafe sleep practices, Healthy Babies for Marathon County expanded efforts to address safe sleep environments for infants. Refer to Essential Service No. 4 for more information on the safe sleep initiative.

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 2007:

Topic	Television Coverage	Radio Coverage	Print Coverage
Alcohol & Drugs	0	0	4
Breastfeeding	0	0	4
Childhood Lead Poisoning	2	0	3
Communicable Disease Outbreaks	4	0	13
Community Health Assessment	1	2	2
Environmental Investigations	3	2	6
Family Health	1	1	4
Food Safety	2	0	2
Footprints to Health	0	0	12
Hazardous Waste/Mercury	4	1	7
Health Tips	0	0	35
Public Health Preparedness	3	2	1
Public Health Services	0	1	5
Radon	1	1	1
Safe Sleep	0	0	2
Suicide	0	0	2
Tobacco	6	2	21
Vaccines	4	0	1
Water & Pool Safety	1	0	2
Water Testing	1	1	5
TOTALS	33	13	132

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 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, bike and pedestrian transportation planning, and healthcare. Each subcommittee plans and implements interventions within their respective segment of the community. Each committee 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.

Methicillin Resistant Staphylococcus Aureus

In March 2007, Marshfield Clinic Research Foundation subcontracted with Marathon County Health Department (MCHD) to conduct an educational campaign regarding Community-Associated Methicillin Resistant Staphylococcus aureus (CA-MRSA). The target population included athletes, faculty, coaching staff, parents, custodians, and school nursing staff in eleven Marathon County high schools. The areas of focus were a description of MRSA, risk factors, prevalence, and prevention. MCHD staff met with high school athletic directors and other appropriate staff to conduct assessments and complete actions plans based on the individual school needs.

Educational interventions included distribution of nearly 3000 informational handouts distributed to athletes, parents and/or coaching staff, and 46 posters from the Centers for Disease Control displayed in the locker rooms and restrooms. Two schools created a MRSA policy for their school district. In total, 17 educational presentations were given: five to parents and students, seven to school staff, three to school nursing staff, and two to school custodians. Two schools have draft policies, and four schools are incorporating information regarding MRSA into their yearly pre-season sports meetings.

In collaboration with WSAW-TV, a public service announcement was developed and aired featuring Edgar High School football players and sponsored Marshfield Clinic.

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 2007:

- Implemented the Signs of Suicide prevention curriculum for the first time at Spencer High School, Edgar Middle School, and Mosinee High School
- Provided Question Persuade Refer (QPR) trainings for staff, parents and the community in Edgar and Spencer
- Provided Question Persuade Refer (QPR) trainings for staff at DC Everest Jr. High School
- Began revision of the crisis policy and procedure for DC Everest Jr. High, Athens, and Marathon
- Supported school staff training for professional staff from five school districts

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 & Family Services, and the Marathon County Hazardous Waste Corporation.

Outreach includes our website which had 1,345 hits in 2007; a bi-annual business newsletter which is mailed to over 900 recipients; 5 media contacts; and 1,286 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			
	2004	2005	2006	2007
Media Events	24	21	2	5
Education & Outreach Services (participants)	3(99)	7(146)	1 (15)	6 (320)
Requests for Assistance	944	761	905	1,286
Participants of Hazardous Materials Collection	961	505	616	743
Web Site	584	704	913	1,345

In 2007, the Hazardous Waste Facility was utilized by 743 participants who disposed of 33,132 pounds of household hazardous waste, Very Small Quantity Generators (VSQGs) disposed of 13,576 pounds, and Agriculture sources disposed of 793 pounds of waste for a total of 47,501 pounds. This year 912 mercury containing light bulbs were collected. In addition, 4,033 pounds of batteries (Lead acid, Alkaline, NiCad, Lithium and Mercury) were collected. In 2006, over 36,000 pounds of hazardous waste was collected and diverted from the landfill or illegal dumping, as well as 2,207 pounds of batteries.



In September of 2007 Marathon County held its 8th 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 289 participants dropped off 49,205 pounds (24.6 tons) of electronic waste. The collection of almost 25 tons of material which would probably have ended up in area landfills is significant. This total is similar to last year's total of 50,345. The material collected during Marathon County's annual event is taken to 5R Processors in Glen Flora, WI where over 99% of the material is recycled or reused. Since 1999 over 542,000 pounds 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 donations went to The Neighbor's Place, to be used for a compost demonstration project, and to The Women's Community Center.

◆Pharmaceuticals

Outreach promotion for our first pharmaceutical collection included television interviews, radio spots, and an appearance on a radio talk show. Collection was held on May 5, 2007 and 68 participants representing 80 households disposed of 151 pounds of prescriptions and personal care products at the one day event. Additionally, 18 pounds of controlled substances were collected and turned over to law enforcement.

◆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, one-hundred and one pounds of mercury were collected compared to two hundred and forty-five pounds in 2006. 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. Over 1,036 mercury-containing thermometers were collected and properly disposed of and 288 digital thermometers were distributed.

New in 2008, we will be offering handouts on "green" alternatives to chemicals that we hope will reduce dependence on many chemicals for different uses, as well as reduce the potential for accidental poisonings. As in the past, individuals are encouraged to utilize the Exchange Room to find products that remain in good condition and can be used by others.

Radon

Our staff operates the Northcentral Radon Information Center (RIC), an 11-county consortium to educate individuals and promote testing on radon. The Center provides radon information and test kits to individuals, private businesses, and government agencies. Our January Radon Action month included press releases in English and Hmong. The result was that in 2007, staff fielded 585 consultations on health effects, testing, interpreting test results, and mitigation. There were 501 radon tests sold in our RIC with 331 in Marathon County alone. In terms of mitigation, 309 properties have lowered radon levels as a result of the radon reduction systems installed by region contractors. Our staff has made presentations to realty firms and

schools, conducted 5 media interviews, and provided support to health departments in the RIC area. In addition, the radon webpage received 723 hits in 2007. We have continued to host and attend training opportunities to allow businesses involved in radon testing and mitigation to meet continuing education requirements.

Rabies Control Program

In 2007, 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 2007, safety programs were made at 19 schools in Marathon County reaching 801 students. In 2006, programs were held at 14 schools throughout Marathon County for approximately 600 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
1999	289	25	0	9
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

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 safe in their homes.
- Children will be healthy.
- 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 2007, there were 1,758 births to residents of Marathon County. This is an 8% increase compared to 2006 (1,632 births), with a continued increase in the number of births over the past two years. All families with newborns receive outreach by public health nurse. Outreach can consist of home visit, telephone visit, and/or newborn packet. In 2007, a total of 435 home visits and 417 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 second-hand 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 2007, 152 new families accepted Family Visitor Services, bringing the total to 440 families who receive services. 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 2007, a total of 6,297 home visits were made by Family Visitors.



For families who received Start Right services, the following impacts were realized:

- 98% of families identified a primary medical home/provider
- 94% of children were on schedule for their well child exams
- 96% of children at 12 months were up-to-date on their immunizations and 99% at 24 months of age
- 91% of parents scored 80% or higher on post parenting knowledge testing provided through the Growing Great Kids curriculum
- 93% of families scored middle half or higher on the HOME assessment to assess the home environment of the infant/toddler
- 14% of children were identified for developmental delay, linking families to early intervention services such as the Birth to 3 Program

◆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 three county funded centers, the Family Resource Centers held 1,055 programs, workshops, or events having 203 adults and 469 children attend the center for the first time. A total of 2,567 adults and 3,692 children utilized one or more of the three centers' programs, library resources, and Warmlines. For all eight centers, a total of 7,108 adults and 7,951 children utilized one or more of the centers' 2,297 programs, library resources, and Warmlines in 2007.

In 2007, Start Right managers and staff under the direction of the Start Right Program Board conducted a program review of the program. 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 purpose of the review is to ensure that the Start Right program model and operations successfully support families with young children.

As a result of the review, the Start Right program services will be retooled in 2008 to ensure the following:

- Parenting education and support services are tailored to each family's interests and needs, based upon available program and community resources.
- Program services are seamless for families, prenatal until their child reaches school-age.
- Program services are flexible and vary in intensity, empowering families to enter and re-enter services based upon the life stressors they are experiencing.

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 2007, 22 children and their families received program services.

Provider Education on Vaccine Preventable Diseases

Marathon County Health Department and area health care providers' immunization practices are shaped by the recommendations from the Centers for Disease Control (CDC) and through the State of Wisconsin Immunization Program. On an annual basis, CDC sponsors an educational course via the web on vaccine preventable diseases targeted to health care providers across the nation. The health department outreaches to area providers to inform them of the course offering and encourage representatives from area clinics to view the web cast. In 2007, a clinic nurse from each area clinic joins public health nursing staff to watch the four part educational sessions.

Essential Service #4

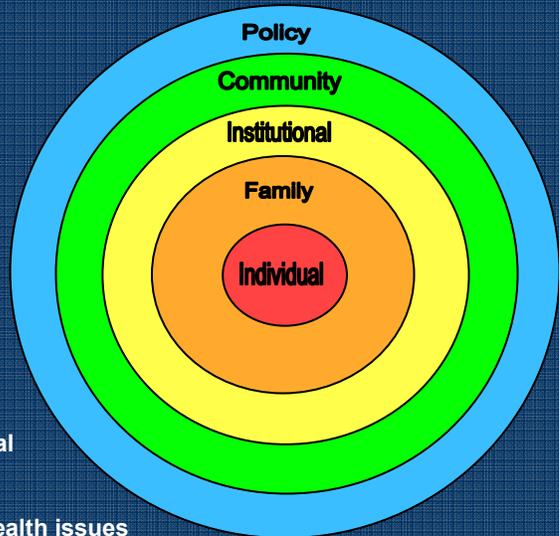
Mobilize Community Partnerships to Identify and Solve Health Problems

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
- 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.

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

Chronic Disease Prevention Program

Pedestrian Bicycle Subcommittee

A unique partnership between the Marathon County Health Department (HEAL Coalition) and the Marathon County Conservation, Planning, and Zoning (CPZ) department was created in 2007. HEAL members had a desire to create a community that was more friendly to walker, 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 Pedestrian Bicycle Subcommittee of the Municipal Planning Organization (MPO). This group has secured funding and 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 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 WI 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 to 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 with successfully managing their disease.

Environmental Health & Safety Program

Methamphetamine House Response

While much of the work and collaboration occurred in 2007, it actually began in November 2006 with a call from the Marathon County Sheriffs Department informing us a rental home had been the site of a possible methamphetamine laboratory. This initiated the collaborative effort involving City of Wausau, Marathon County, and the States of Wisconsin and Minnesota to resolve. The City of Wausau Police and Attorney Departments assisted with enforcement on violations of city ordinances. The City Community Development Department was available as a possible funding source for remediation and the Public Works Department provided assistance with the removal of contaminated large furniture items, carpeting, and mattresses as part of the Spring Large Item Clean-Up, which helped to keep disposal costs lower for the property owner.

The Marathon County Sheriffs Department was a partner throughout the process and County Corporation Counsel provided oversight on Health Department enforcement. State agencies also contributed. The State of Wisconsin Division of Public Health provided guidance regarding remediation procedures to the property and direction on procedures including identifying a laboratory through the Minnesota Department of Health to obtain methamphetamine sampling supplies and analysis which was valuable in verifying the extent of the remediation. This collaboration was valuable in understanding, identifying, developing plans, and enforcing the plans necessary to remediate this property into a safe housing environment for future occupants.

Family Health & Communicable Disease Control Program

Safe Sleep Initiative

In light of the number of infant deaths due to unsafe sleep practices, 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. The “Cribs for Kids” program is expected to launch in 2008, making it possible for low income families to obtain a crib for their newborn. Health care and community based providers who serve low-income families will be 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. It is estimated that 100-150 families living in Marathon County are in need of an affordable crib for their infant each year.



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 second-hand 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

In response to the *2006-2010 Marathon County Community Health Assessment*, six community funding partners pooled \$105,000 to award grants to organizations working on the priorities outlined in the plan. These six partners are:

- Judd S. Alexander Foundation
- Aspirus Health Foundation
- Community Foundation of North Central Wisconsin
- Foundation of Saint Clare's Hospital
- Marshfield Clinic
- United Way of Marathon County

Six projects were selected for funding:

- American Red Cross Marathon County Chapter
Community Health Screenings / \$18,500 - Promotion of health and wellness through regularly scheduled, free screenings for hypertension and diabetes.
- Building Responsible Alcohol Values and Options (BRAVO) and The Marathon County Alcohol and Other Drugs Partnership Council, Inc.
Bravo for Youth! Preventing Underage Drinking: A Social Norms Campaign / \$10,200 - To decrease underage drinking and decrease the perception of underage drinking by the youth and adults in the community through development of a social norms campaign.
- Healthy Babies for Marathon County
Back to Crib, Back to Sleep / \$10,000 - Implementation of a local chapter of "Cribs for Kids," a safe-sleep education program for low-income families to help reduce the risk of injury and death of infants due to unsafe sleep environments.
- Healthy Eating Active Living (HEAL) Coalition
Footprints to Health – Nutrition Program / \$28,500 - Expansion of education and technical assistance on nutrition related issues to support entities that are not a part of the Healthy Eating Active Living (HEAL) Footprints to Health (FTH) program.
- Marathon County Tobacco Free Coalition
Quit Tobacco Now / \$6,000 - Community based, collaborative, comprehensive, and cost effective group concept adult tobacco treatment program in Marathon County to increase the number of individuals who successfully quit using tobacco.

- Suicide Prevention Action Team
Suicide Prevention / \$10,400 - Reduction of suicides, identification of those at risk, and raising awareness of risk factors through information, community awareness, and trainings.

These funds represent new resources devoted to impacting these important health issues in our community.

Chronic Disease Prevention Program

Smoke-Free Air and Tobacco Cessation

The guidance document, *Best Practices for Comprehensive Tobacco Control Programs (2007)* provides recommended strategies and funding levels for effective tobacco prevention and control programs. This planning document is evidence based and has shaped the state and local plans to reduce the burden of tobacco.

Locally, leaders from Aspirus Wausau Hospital, Marshfield Clinic, St Clare's Hospital, and the Marathon County Health Department are working together to educate community leaders and residents on the benefits of enacting comprehensive local and/or statewide smoke-free air laws. This initiative began in response to the 2006 Surgeon General's Report on *The Health Consequences of Involuntary Exposure to Tobacco Smoke*, which concluded there is no safe level of exposure to secondhand smoke. Educational efforts regarding these results are a necessary step to create the supportive environment for policy action to occur. Educational presentations, participation in health fairs, and local media were components of the educational plan. In 2007, the state legislature attempted to pass a statewide smoking ban in 100% of all workplaces (including all restaurants and taverns). This policy would eliminate most exposure to secondhand smoke. Locally, the Marathon County Board, the Town of Rib Mountain, and the Village of Weston adopted resolutions in support of the policy.

Additional policy efforts included the \$1 excise tax increase on cigarettes. This policy has created a dramatic increase in the number of individuals who desire to quit smoking. The Tobacco Treatment (Cessation) subcommittee of the Marathon County Tobacco Free Coalition has reshaped the manner in which tobacco cessation programs will be provided in the community. A collaborative effort by the Health Department, Saint Clare's Hospital, the Diagnostic and Treatment Center, Marshfield Clinic, Aspirus Wausau Hospital, North Central Technical College, Bridge Community Clinic, North Central Health Care, Premier Recovery Services, and the Center for Tobacco Research and Intervention, has resulted in the creation of a new program, **Quit Tobacco Now**.

Quit Tobacco Now is a comprehensive ongoing tobacco cessation program offered weekly enabling participants to join when they are ready. It is a blend of an educational approach with a behavior modification approach - the format based in the substance abuse treatment model. Education and facilitation is being provided by most of the partners listed above. In addition, a grant from the Ministry Foundation has supported the development and promotion of the new program and materials.

Environmental Health & Safety Program

Early Lead Intervention Project

It is said that good policies must precede good legislation. In that vein, the Environmental Health and Safety Team determined to implement good policy in terms of our involvement with properties associated with a lead-poisoned child or with both lead hazards and children present in a property. A child 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 Elevated Blood Lead (EBL) level criteria, no environmental intervention is required by law. Wisconsin State Statute 254 directs environmental intervention when a child has a blood lead test meeting the established criteria for an EBL. An EBL is established 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 more. These EBL results lead to 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 as directed in our orders. Statutes require the work to 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 the 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, which is especially important since funding may not be easily available. Often the work scope can be targeted to areas of a home with the greatest risk and often is accomplished in a much shorter time frame than occurs when the property is under EBL orders.

Since the Early Intervention project has been in effect, only one child residing in the 26 assessed properties developed into an EBL. This effort supports individual health efforts for the child indirectly by identifying steps parents or property owners can take to address problems and puts the focus back on protecting the child. From a community standpoint, engaging in intervention earlier 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.

REACH hosted a symposium on April 26, 2007. The purpose of the symposium was to “call to action” community partners who have an investment in assuring all infants and children develop physical and emotional health. Over one hundred professionals from health care, childcare, education, and human services attended the event. Four action teams were launched as a result of the symposium. The action teams during the summer and fall of 2007 developed a plan of action for Marathon County. The plan has four focus areas including: screening for social and emotional development among infants and young children; increasing professionals understanding of the importance of social and emotional development; improving access to prevention and treatment services for families with infants and young children; and raising awareness among the general public of the link between social and emotional development and future success as an adult. The plan will be unveiled to the community in 2008.



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 clear 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. Those clerks who do not sell are rewarded. Education is offered to businesses that need assistance with training retail clerks. In 2007, 226 compliance investigations were conducted and citations are issued by law enforcement when necessary.

Retail Compliance of Tobacco Sales to Minors 2007		
Community	# of Compliance Checks Completed	Current Compliance Rate (%)
Athens	12	100
Colby/Abbotsford	14	90
Edgar	4	100
Marathon City	8	62
Mosinee	19	62
Spencer	7	100
Stratford	8	100
Marathon County (including Rib Mountain)	39	76
Wausau	75	86
Schofield/Weston	25	90
Rothschild	15	83
Wausau/Schofield/Weston/Rothschild	115	87
All other Marathon County municipalities	111	81
Marathon County	226	84

Smoke-Free Air Laws Protect the Public's Health

July 2007 marked the 2-year anniversary of the Wausau smoke-free restaurant ordinance. Restaurant operators in Wausau are informed of the ordinance when licenses are issued and are offered signs to post to assist in maintaining compliance. Complaints are handled by law enforcement and there are few violations or citations.

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 2007, the Environmental Health and Safety program staff was contacted many times by 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. Most of the time the concerns identified do not reach the level necessary to be considered a human health hazard. When they do, we investigate the situation and will issue orders to address the hazard. This work often includes working with Local and State agencies as well.

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 more than 950 licenses in 2007 and provides enforcement on those permits through different means. First, we make operators aware of the regulation and providing assistance or guidance on meeting the regulation. We provide documents in picture and verbal format for use to the operator in educating staff. Regular inspections serve as a means to ensure the regulations are being followed and when necessary, re-inspections to address violations are made to ensure compliance. Lastly, enforcement can involve orders to comply and may include the suspension or revocation of a permit. Of course, inherent in such measures is the assurance of due process through appeal. In 2007, staff identified 30 circumstances that warranted specific enforcement procedures.

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 2007, staff conducted 53 well water inspections and collected 403 water samples 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 2007, Marathon County Health Department isolated two individuals suspected and/or confirmed as having infectious M. Tuberculosis disease. While both individuals voluntarily agreed to isolation, difficulties arose in securing a place for them to stay. The cases demonstrated the need to secure community based isolation facilities that have negative pressure capability, in order to enable individuals to live in a least restrictive setting during their confinement period. As a result of these two cases, arrangements have been made to utilize North Central Health Care's isolation room in the future.

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. 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, works closely with Aspirus New Beginnings, 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 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
New Rentals	44	61	52	69	62	60
Total number of families served	101	106	91	129	121	113
Additional car seat inspections and education at community events	60	75	51	45	41	25

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 2007, Marathon County Health Department received 237 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 101 women during the year, having 79 receive ongoing, comprehensive services prenatal thru 60 days postpartum. Impacts of the program included:

- 39% women reported to use tobacco, having 94% of women who used tobacco decrease or stop using tobacco during their pregnancy.
- 71% women initiated breastfeeding, having 42% breastfed 8 weeks or longer.
- 84% reported having a dental provider, having 30 referrals made to link women to a dental provider.
- 38% of women experienced either prenatal or postpartum depression, having all women linked to services. Nine referrals made to mental health services.
- 97% of infants were reported to sleep on their backs.
- 87% of mothers or caregivers reported not co-sleeping with their infants.
- 100% of infants had a primary care provider and had either been seen or scheduled for a well-child appointment.
- 89% of women had a plan for spacing future pregnancies, having 15 referrals made to assist women in their choice.

Sexually Transmitted Diseases

Marathon County Health Department's STD clinic is an example of how working in partnership and gaps in preventive health care can be bridged. 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. The STD clinic is located at UW-Health Family Medicine, providing two clinics per week. Public health nurses working under the supervision of UW-Health Family Practice physicians, screen individuals for STDs/HIV and provide treatment. In 2007, 249 individuals received services through our STD clinic. 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.

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. In 2007, 1,865 residents received immunizations through the health department. One hundred and twelve (112) clinics were held in Marathon County communities of Athens, Edgar, Hatley, Mosinee, Stratford, Spencer, and Wausau. A total of 3,562 vaccines were given.

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, or 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 2007, the following institutions placed students at MCHD:

- UW Green Bay School of Nursing (40 hours/student) – 3 students
- UW Eau Claire School of Nursing (16 hours/student) – 6 students
- Viterbo School of Nursing (48 hours/student) – 1 student
- UW Oshkosh College of Nursing(60 hours/student) – 2 students
- UW School of Medicine and Public Health - (1 day/student) – 6 students

Chronic Disease Prevention Program

Footprints to Health

One of the major objectives of the Footprints to Health program is to increase the knowledge and use of the Clinical Practice Guidelines of the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults (National Institutes of Health, NHLBI 2000) and Prevention of Pediatric Overweight and Obesity (AAP 2003) by primary care providers. Assuring health care providers are aware and familiar with this information is essential to providing proper treatment of overweight and obesity.

Local health care providers were surveyed regarding their knowledge and practice as it relates to the practice guidelines. The survey responses indicated that almost all providers (85%) assess weight status of adults at “every” or “most” visits, yet 60% are not aware of the practice guidelines. Those results were used to create a learning opportunity for providers titled “*Breaking the Stride of Overweight and Obesity*”. The goals of the conference were:

- Discuss magnitude of the obesity crisis
- Define clinical practice guidelines as they apply to adults and children
- Determine strategies to address readiness for behavior changes in healthy eating and active living
- Understand environmental changes occurring over time that have influenced obesity rates
- Describe strategies and tools to assist patients in limiting sedentary time and increasing physical activity
- Compare medications and define surgical treatments



Family Health & Communicable Disease Control Program

Collaboration with Social Workers and School Nurses

To gain a better understanding of each other's roles and responsibilities in supporting families, Marathon County Health Department's public health nursing staff and the Department of Social Services' Agency Access Child Protection staff met in the fall of 2007. As a result of the two-part meeting, public health nursing staff increased their knowledge on the requirements for reporting of child maltreatment and the criteria that is used to open a case for investigation. Likewise, staff from the Department of Social Services increased their knowledge of the programs and services the health department provides for families with young children. Overall the meeting resulted in an enhanced working relationship between both departments.

With the beginning of the school year, Marathon County Health Department hosted 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: the school immunization law, reporting requirements for communicable diseases, prenatal care coordination program, children with special health care needs, hearing and vision screening, suicide prevention efforts, healthy eating and active living initiatives, and community acquired MRSA (multi resistant staph aureus). 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.

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

Community Health Assessment

Working with partners throughout the community, Marathon County Health Department conducts a thorough assessment of the community's health every three to five years. The last community health assessment was completed in 2006 and presented to the public in January, 2007. A copy of the full report, *Marathon County Community Health Assessment 2006-2010*, is available at www.healthymarathoncounty.org

This report not only reviewed quantitative data to assess the health priorities of the community, but it also included a survey of 976 residents and key informant interviews with 43 local experts in health. Data from the 2006 community survey that asked people about their satisfaction with local health care in the areas of access, quality, and cost revealed the following:

	Access	Cost	Quality
Very Satisfied	56%	12%	43%
Somewhat Satisfied	33%	28%	45%
Somewhat Dissatisfied	6%	30%	9%
Very Dissatisfied	5%	30%	3%

In addition to these quantitative data, survey respondents were asked an open-ended question that asked what was the top health concern of their family and one out of four respondents mentioned something related to the cost of health care.

As a result of this assessment, a new health priority - Concerns with the Cost of Health care - along with a new action team were formed to address this growing area of community concern. This action team joined the six existing teams that were created in response to the 2003 Community Health Assessment to address community concerns. Those action teams focused on Alcohol Misuse, Health Care for the Elderly, Obesity, Suicide, Tobacco, and Utilization of Prenatal Care.

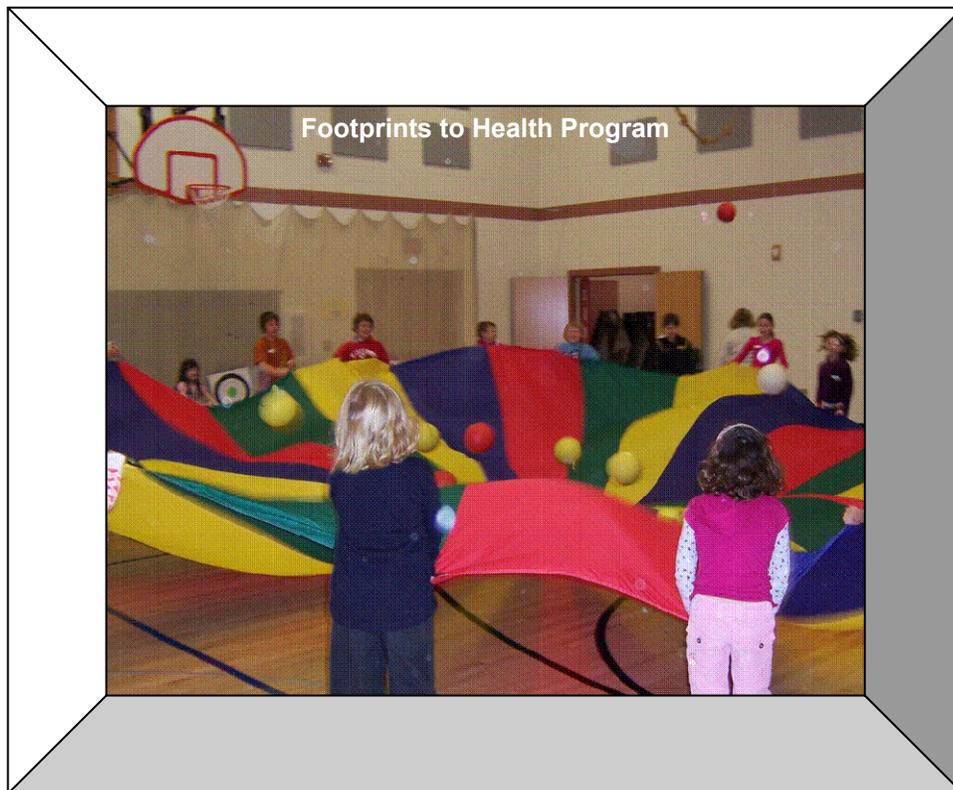
The next community health assessment will be conducted in 2010. Between now and then, action teams will be taking action towards specific goals to decrease negative health impacts in our community. In January, 2009, a mid-term report will be presented to the community describing our progress to date on key indicators.

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

We are in various stages of formalizing logic models in more program areas.



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

For over two years the Marathon County Healthy Eating Active Living (HEAL) Coalition has worked in partnership with The Wisconsin Department of Health and Family Services, Nutrition and Physical Activity Program staff 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 two positive findings which show significance. The first significant finding is that parents perceived that their children have increased their physical activity from 2006 to 2007. The second is related to the perceived increase in the amount of fruits and vegetables eaten by the male respondents. The results and lessons learned were utilized in 2007 when the program was expanded to include four additional schools. They are Weston 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 WI, School of Medicine and Public Health is making this program expansion possible.



Environmental Health & Safety Program

Internal Grant Process

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 and cost is a factor causing a delay in the amount of time it can take to complete reduction activities. Cost is also a factor in the types of lead hazard reduction conducted. This results in less costly activities being implemented to reduce lead hazards in the short term when other more

expensive activities would have had a long-term impact to the property and the children living there. Funding sources no longer available assisted with lead hazard reduction in the past. 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.

In the fall of 2007, Marathon County Health Department made application to funds offered by Marathon County for departments willing to be innovative in creating new or enhanced programs that supported implementation of the County's Strategic Plan. Our application was to enhance our existing lead program with the funds obtained to provide incentives to property owners who are required to reduce lead hazards because an EBL child is an occupant or for those who want to reduce lead hazards voluntarily. 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. Our goal is to ensure lead hazard reduction in 25 housing units by June 30, 2009. Our application satisfied the County's Strategic Plan in that it is built upon the collaborative efforts of the City of Wausau Community Development Department and the Health Department to coordinate available resources toward meeting an important community need, safe housing for families.

Communicating Messages to the Public

In 2007, the Environmental Health and Safety Team made a concerted effort to utilize our partners in the media to get important environmental health messages to the public. In the past year, we've had at least 32 interviews with TV, print, and radio on topics including lead, pharmaceutical collection, blue-green algae, radon, food safety at temporary food events, foodborne illness, dog bites and animal safety, well water testing, public swimming pools, cryptosporidium, mercury and the thermometer exchange, manure incinerators, meth labs, hazardous waste, and electronic recycling. The messages we get to our citizens through our media resources are valuable in providing citizens with current information on environmental health topics important to them for staying informed and making healthy choices.

Family Health & Communicable Disease Control Program

Quit for Baby Blog

In Marathon County, 81% of women who smoke during their pregnancy are under the age of 30. Pregnant women who have received prenatal care coordination and First Breath services through the health department, 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, such as the local Quit Smoking Now program due to the stigma associated with smoking during pregnancy. In addition, barriers such as travel, childcare, and balancing work demands make attending such classes difficult.

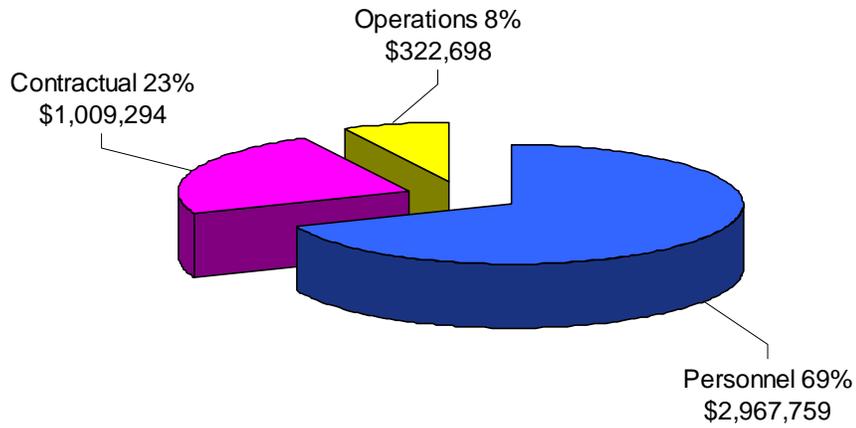
A review of the literature indicated the use of a weblog might be a promising approach to support individuals making health behavior changes. In November of 2007, Quit for Baby weblog was launched. The blog is being complimented with monthly face-to-face cessation support meetings that will be held at the Wausau Family Resource Center beginning in 2008. During the month of December, the blog had 96 first-time visitors and 18 return visitors.

Given 320 pregnant women smoke in Marathon County last year, this promising approach will be complimenting our First Breath program and the state's Quit Line. A data evaluation system has been set up to determine what impact the smoking cessation support blog will have on a woman's ability to quit smoking and remain smoke-free. Evaluation measures include: the number of women enrolled in First Breath who utilized the blog; the number of women who participate in a blog support group; the number of women who utilized more than one intervention to quit smoking and remain smoke-free; and the number of women who report the blog helpful in reducing, quitting, or staying quit. Data collected will determine if the blog with monthly support groups is effective and whether funding should be sought to support the program beyond the one-year grant period.

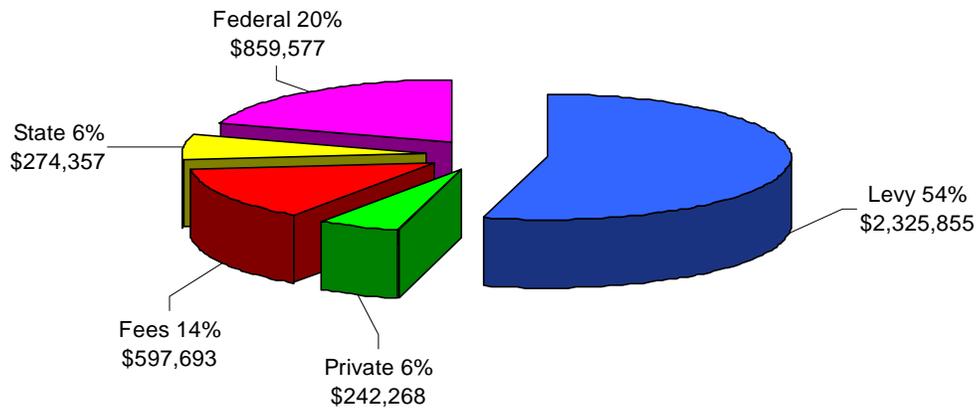
2007 ANNUAL REPORT FINANCIAL SUMMARIES (unaudited)

<u>LEVY FUNDED</u>	<u>Budgeted</u> <u>Levy</u>	<u>Actual</u> <u>Levy</u>	<u>Budgeted</u> <u>Revenue</u>	<u>Actual</u> <u>Revenue</u>
General Public Health	\$1,945,925	\$1,494,952	\$325,300	\$365,828
Start Right	\$929,463	\$830,904	\$100,000	\$100,000
Total Levy Funded	\$2,875,388	\$2,325,855	\$425,300	\$465,828
<u>PROGRAMS FUNDED FROM OTHER SOURCES</u>				
Regional Programs				
Children & Youth with Special Health Care Needs	\$128,345			
Regional Bioterrorism (Northwoods Consortium)	\$353,922			
Total Regional Programs		\$482,267		
Family Health/Communicable Disease				
Immunizations & Vaccinations (2)	\$32,824			
Local Children & Youth with Special Health Care Needs	\$6,494			
Maternal/Child Health (2)	\$67,990			
MRSA Prevention	\$22,039			
Pandemic Influenza (2)	\$60,648			
Prenatal Care Coordination (3)	\$69,318			
Prevention of Child Abuse and Neglect (POCAN) (2)	\$157,696			
Targeted Case Management	\$25,841			
TB Dispensary (2)	\$4,819			
Total Family Health/Communicable Disease			\$447,668	
Environmental Health				
Hazardous Waste (2)	\$43,610			
Lab	\$92,170			
Lead	\$19,506			
Mercury/DNR	\$7,745			
Radon (2)	\$19,988			
Total Environmental Health			\$183,019	
Chronic Disease Prevention				
Asthma Coalition (2)	\$4,390			
Footprints to Health	\$93,925			
Healthy Eating, Active Living	\$26,112			
Healthy Lifestyles	\$4,000			
Hearing & Vision Screening	\$33,295			
Injury Prevention (2)	\$5,527			
Suicide Prevention-Mental Health Association (2)	\$7,902			
Tobacco Control Grants (7)	\$75,027			
WI Well Women's Program (2)	\$55,484			
Total Chronic Disease Prevention			\$305,662	
Departmental				
Local Bioterrorism	\$80,215			
Community Health Worker Training	\$6,500			
Healthy Marathon County Website	\$2,492			
Total Departmental			\$89,207	
TOTAL PROGRAMS FUNDED FROM OTHER SOURCES			\$1,507,823	
TOTAL ALL FUNDS				\$4,299,507
	<u>Total</u> <u>Funds</u>	<u>2006</u> <u>Population</u> <u>Estimated</u>	<u>Per</u> <u>Capita</u> <u>Funds</u>	
Levy Funded	\$2,325,855	130,223	\$18	
Non-Levy Funded	\$1,973,651	130,223	\$15	
Total	\$4,299,507	130,223	\$33	

2007 Expenditures



2007 Revenue Sources



Children and Youth with Special Health Care Needs Northern Regional Center

The Northern Regional Children and Youth with Special Health Care Needs (CYSHCN) Center 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.

The 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.

2007 Activities

Inform, Educate, & Empower

- Provided information and referral, parent support and educational services
- Conducted outreach activities throughout the northern region to inform parents and providers of services and other related issues
- Maintained toll free confidential phone and website information systems
- Conducted two sessions of community support trainings for 36 parents/providers
- Provided consultation and financial help to 8 parent support groups
- Linked parents to leadership and training opportunities to increase their role in decision making
- Provided workshop presentations or displays on issues related to special health care needs at statewide conferences

Mobilize Community Partnerships

- Funded a Local Capacity Grant in Langlade County to support the implementation of Medical Home concepts related to early childhood developmental screening
- Contracted with 12 of 15 local health departments to provide direct services to children
- Participation on community coalitions throughout the northern region

Develop Policies and Plans

- Participated in development and distribution of resources to include health goals into a child's Individualized Educational Plan
- Worked with primary care providers and community service providers to implement quality improvement strategies for health care using the Medical Home model
- Developed an outreach and partnership plan with key partners to address priority health issues

Link people to health services

- Contacts with more than 307 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

Assure a competent public health and personal health workforce

- Met regularly with 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. The Northwoods Consortium is composed of fifteen counties and three tribal health centers, reflecting the addition of Ashland, Iron, and Sawyer Counties in 2007.

2007 Activities

Monitor health status to identify community health problems

- Developed standards for collection and analysis of local school absenteeism surveillance systems
- Assisted in the development of worksite absenteeism and emergency room surveillance systems
- Assisted in the development and evaluation of a system to alert local health care providers of a public health emergency

Diagnose and investigate health problems and health hazards in the community

- Provided consultation on preparing for implementation of WEDSS (Wisconsin Electronic Disease Surveillance System)

Inform, educate, and empower people about health issues

- Wrote and distributed to members a quarterly newsletter for local partner agencies and community leaders
- Created PowerPoint presentations for local agencies to use in educating members of the public

Mobilize community partnerships to identify and solve health problems

- Met regularly with hospital preparedness representatives to coordinate efforts and collaborate on projects

Develop policies and plans that support individual and community health efforts

- Wrote a template local Isolation/Quarantine Policy and Procedure
- Created and distributed a new Public Health Emergency Plan (PHEP) and Mass Clinic Plan
- Created a Volunteer Management Plan as part of the PHEP
- Wrote a new local template Pandemic Plan, including a specific section for Community Containment (isolation, quarantine, school closure, etc.)
- Created a checklist for Environmental Health staff inspecting an emergency shelter

Assure a competent public health and personal health care workforce

- Provided or hosted training on: Human Health Hazards, Applied Epidemiology for Nursing, ICS (Incident Command System), Excel, Message Mapping, Isolation and Quarantine Legal Issues, and Team Building/Empowerment/Leadership
- Created a tool for assessing staff epidemiology competency

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

- Wrote, facilitated, and/or evaluated exercises on: Mass Clinic for distribution of the Interim Pharmaceutical Stockpile (IPS); public health role in emergency sheltering; use of ICS forms and procedures; activation of the IPS; and Command Caller emergency alerts
- Created an evaluation plan for local school absenteeism surveillance systems

Research

- Worked with four local agencies to present local epidemiology studies at the Wisconsin Public Health Association annual conference
- Wrote guidelines for developing and evaluating an epidemiology study



Marathon County Health Department Staff

As Of December 31, 2007

Yrs. Of
Service

Julie Willems Van Dijk	Health Officer	18
Ruth Marx	Epidemiologist/Public Health Preparedness Coordinator	16
Season Welle	Accountant (P.T.)	<1

Chronic Disease Prevention Team

Judy Burrows	Director	15
Amanda Drennen	Health Educator	<1
Dorothy Kalmon	Health Educator	<1
Amanda Ostrowski	Health Educator	<1
Edie Peterson	Vision/Hearing Screening Coordinator (P.T.)	3
Libbe Slavin	Health Educator (P.T.)	2
Renee Trowbridge	Health Educator	7

Environmental Health & Safety Team

Dale Grosskurth	Director	7
Adam Anderson	Environmental Health/Lab Technician	2
Lindsay Benaszkeski	Environmental Health/Lab Technician (P.T.)	1.5
Jackie Bethel	Environmental Public Health Sanitarian II	27
Sara Brown	Environmental Public Health Sanitarian II	6
Kristal Knapp	Environmental Public Health Sanitarian II	32
Russell Mech	Environmental Public Health Sanitarian II	11
Mary Myszka	Environmental Public Health Sanitarian II	23
John Schlicher	Hazardous Waste Coordinator	8
Michelle Schwoch	Environmental Public Health Sanitarian II (P.T.)	9

Family Health & Communicable Disease Control Team

Joan Theurer	Director	1.5
Heather Busig	Public Health Nurse	1.5
Vicki Chrapkowski	Public Health Nurse (P.T.)	14
Mary Hackel	Public Health Nurse	5
Jean Kaatz	Public Health Nurse	24
Carol Capelle Mills	Public Health Nurse (P.T.)	13
Rebecca Mroczenski	Public Health Nurse	<1
Tara Patridge	Public Health Nurse (P.T.)	6
Ann Peters	Public Health Nurse	7
Tiffany Pietrowski	Public Health Nurse (P.T.)	6
Carrie Sickler	Public Health Nurse (P.T.)	3
Peggy Stalheim	Public Health Nurse (P.T.)	10
Dawn Van Den Heuvel	Public Health Nurse	3
Susan Weith	Public Health Nurse (P.T.)	5
Colleen Yaatenen	Public Health Nurse (P.T.)	7

Operational Support Team

Carol Roberts	Confidential Administrative Specialist	14
Bonita Buchberger	Administrative Specialist	37
Pang Moua	Bilingual Health Aide	10
Renee Oakes	Clerical Assistant I	3
Lisa Olund	Clerical Assistant II	<1
Patti Poverski	Clerical Assistant II	18
Janet Werner	Clerical Assistant II	28
John Kasten	Senior Aide	3

Northwoods Public Health Preparedness Consortium

Julie Hladky	Program Manager (P.T.)	4
Nancy Anderson	Clerical Assistant II (P.T.)	3
Mary Texidor	Health Educator	2
Chris Dobbe	Epidemiologist	3

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

Julia Stavran	Program Manager	20
Jill Nelson	Community Health Worker (P.T.)	1.5

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Marathon County Demographics

2006 Population (Est.)	130,223	
2005 Population (Est.)	127,080	
Gender		
Male	64,751	49.7%
Female	65,472	50.3%
Age		
Under 5 years	7,944	6.1%
18 years and older	106,522	81.8%
65 years and older	17,189	13.2%
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	\$50,443	
Families Below Poverty Level		4.9%
Individuals Below 125% Poverty Level		10.2%