



# Manitowoc County Health Department

Mission: To Protect and Promote the Health of Manitowoc County in Partnership with our Community

Amy Wergin, Health Officer

Environmental Health • Public Health Nursing • W.I.C. Program

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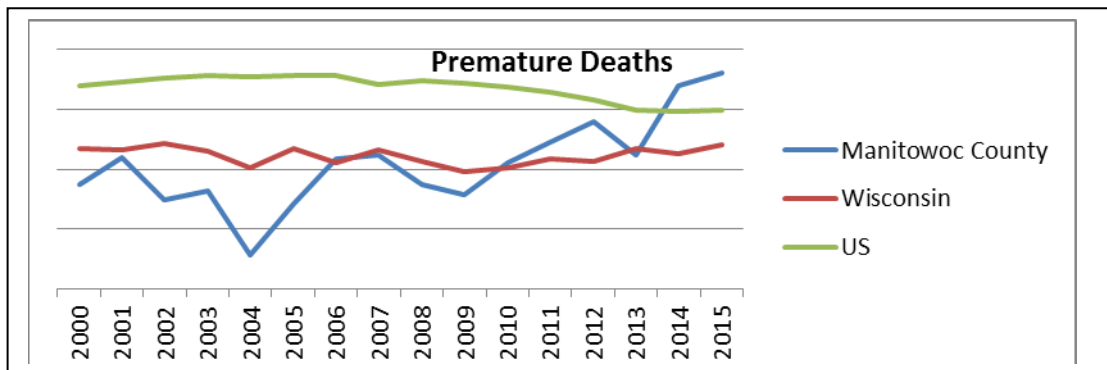
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## 2016 Annual Report

The Manitowoc County Health Department Annual Report provides a snapshot of the Health Status of our community and the work we do to improve the overall health of Manitowoc County. Our work is done in partnership with individuals, families, organizations, and the public focusing on all factors that affect health: Health Behaviors, Social and Economic factors, Clinical Care and Physical Environment. The Core Functions of Public Health and the Ten Essential Public Health Services provide structure to our mission.

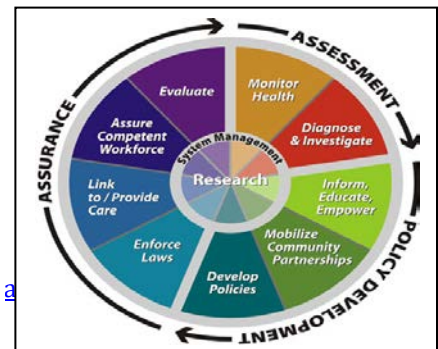
During 2016, we partnered with both Aurora Medical Center Manitowoc County and Holy Family Memorial to complete their required Community Health Needs Assessment and Implementation plan. Both organizations will continue to work with Healthiest Manitowoc County to address the health issues of Activity & Nutrition, Mental Health, and Substance Abuse. An alarming statistic that we will try to address together in the coming years is the increasing number of Premature Deaths in Manitowoc County. Since 2000, Manitowoc County's premature death rate has been rising, while comparable rates in the US and Wisconsin are falling or stable. Length of life is one of the main measures of a community's health.



But there is good news! After many years of ranking highest for deaths from falls in the state, we are no longer in the top 15 counties. In 2016, the death rate per 100,000 for falls was 23.5; less than our stated goal of 25/100,000. Also, by the end of 2016, over 73% of WIC moms started out breast feeding, getting babies off to a very healthy start.

Manitowoc County is well served by the Health Department employees who work every day to Protect and Promote the Health of our residents. Thank you to our partners in both the private and public sector who support the work we do.

Yours in Good Health!  
Amy Wergin, Health Officer



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**Norma Medrano, Bi-lingual Health Aide**

**Jean Welnicke**  
**Yer Kue, Bi-lingual Health Aide**

# Environmental Health

Environmental Health focuses on the protection and promotion of a healthy environment by preventing, assessing, correcting and controlling agents in the environment which could have adverse effects on the health and well-being of individuals and communities of Manitowoc County.

## Inspections and Licensing

The Environmental Health Section of the Manitowoc County Health Department licenses and inspects the following facilities within Manitowoc County through contracts with the following Wisconsin agencies: DHS, DATCP and DSPS:

Manitowoc County Licensed Establishments	License Year 2015-16
Restaurant and Retail Food Facilities	407
School Food Service (non-licensed)	21
Lodging	50
Campgrounds	12
Recreation and Educational Camps	7
Body Art	7
Vending Machines	275
Vending Machine Storage	3
Swimming Pools, Whirlpools and Therapy Pools	32
Mobile Home Parks	14
Non-Profit Food Stand Permits	204
Temporary Restaurants	63
<b>Total</b>	<b>1,095</b>

## Radon Information Center

Environmental Health staff provides radon information and outreach for Brown, Door, Kewaunee, Manitowoc and Calumet Counties in Northeastern Wisconsin through a grant from the State of Wisconsin and EPA.

Radon is a naturally occurring radiological gas that has been linked to lung cancer. We provide information and test kits to citizens. Short term and long term test kits were offered for sale at cost from the Manitowoc County Health Department.

Test Kits Distributed	2009	2010	2011	2012	2013	2014	2015	2016
Short Term Test Kits	277	460	320	144	170	161	175	160
Long Term Test Kits	35	34	12	4	13	19	22	14

## Radiation Protection

Through a contract with the State of Wisconsin, environmental health staff collects environmental samples, such as air, milk, and water, around the area of the nuclear plants. Three staff members serve on the State Emergency Response Team which train yearly. We participate in the nuclear exercises with a field team, in the EOC and nurses staffing the congregate care facilities.

## Safe Drinking Water

The Manitowoc County Health Department is involved in 2 aspects of monitoring and testing drinking water in Manitowoc County.

**Transient Non-Community Well Program:** The Environmental Health Section has a contract with the Wisconsin DNR for the purpose of assuring compliance with the Safe Drinking Water code as it applies to public transient non-community water systems. TNC water systems include rural churches, restaurants, parks and taverns and other businesses that serve over 25 different people 60 days or more per year. Work includes collecting drinking water samples, issuing all required enforcement letters and inspecting each well system every 5 years.

Number of TNC Systems tested for bacteria and nitrates and inspected annually	92
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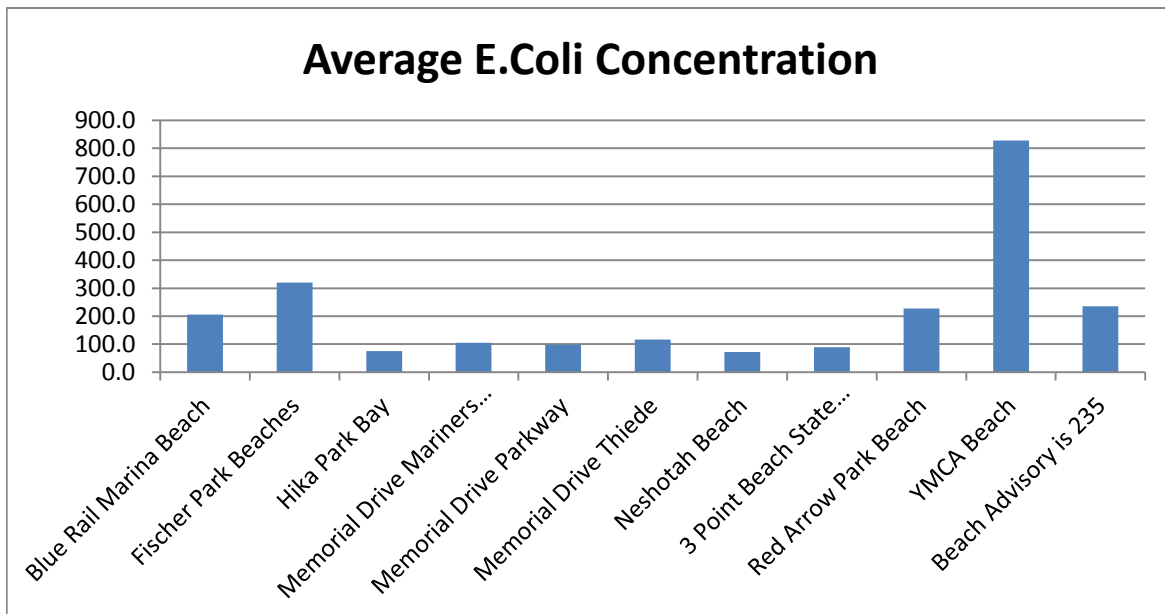
**Free Well Water Testing for Houses with Pregnant Women and Infants**

Manitowoc County Health Department provides free well water testing for coliform bacteria, nitrates, fluoride and metals for households with pregnant women and infants (up to 12 months old). The information provides information on the general drinking water quality from a metals perspective. Wells with abnormal results were retested after discussing possible parameters that may have contributed to the unsafe reading.

<b>Wells tested</b>	15
<b>Unsafe coliform test</b>	1
<b>Elevated nitrate test</b>	2

## Beach Water Monitoring Program

During 2016, a total of 12 Manitowoc County beaches on Lake Michigan were monitored according to EPA standards for water quality and safety. Beach water samples are routinely collected and analyzed total and fecal coliform bacteria. The beach monitoring program was performed through a cooperative effort between by UW-Oshkosh, the Manitowoc County Health Department, the City of Manitowoc, the City of Two Rivers and the Wisconsin DNR. This program was funded through an EPA grant administered by the DNR. Results were posted both to the Wisconsin Beach Health website and signage was provided at the beaches indicating to the public the most current available water conditions and any risks associated with swimming in contaminated surface water. Any level over 235 is an advisory, over 1000—closure. The average E.coli concentration was much lower in 2016 than 2015 with the exception of the YMCA Beach, which was higher.



## Safe Housing, Indoor Air and Human Health Hazards

The Environmental Health Section receives complaints regarding poor plumbing, insects, indoor air, toxic chemicals, garbage and refuse, mold, health hazards, lack of heat, and generally unfit dwellings. State Statute requires that the local health officer orders the abatement or removal of human health hazards and if the order is not complied with, arranges for the hazard to be abated. We also work with local building inspectors, police, Planning and Zoning, Aging Resource Center and Human Services Departments to identify and correct poor living conditions.

	2014	2015	2016
<b>Total number of complaints received</b>	69	85	65

## Rabies Control

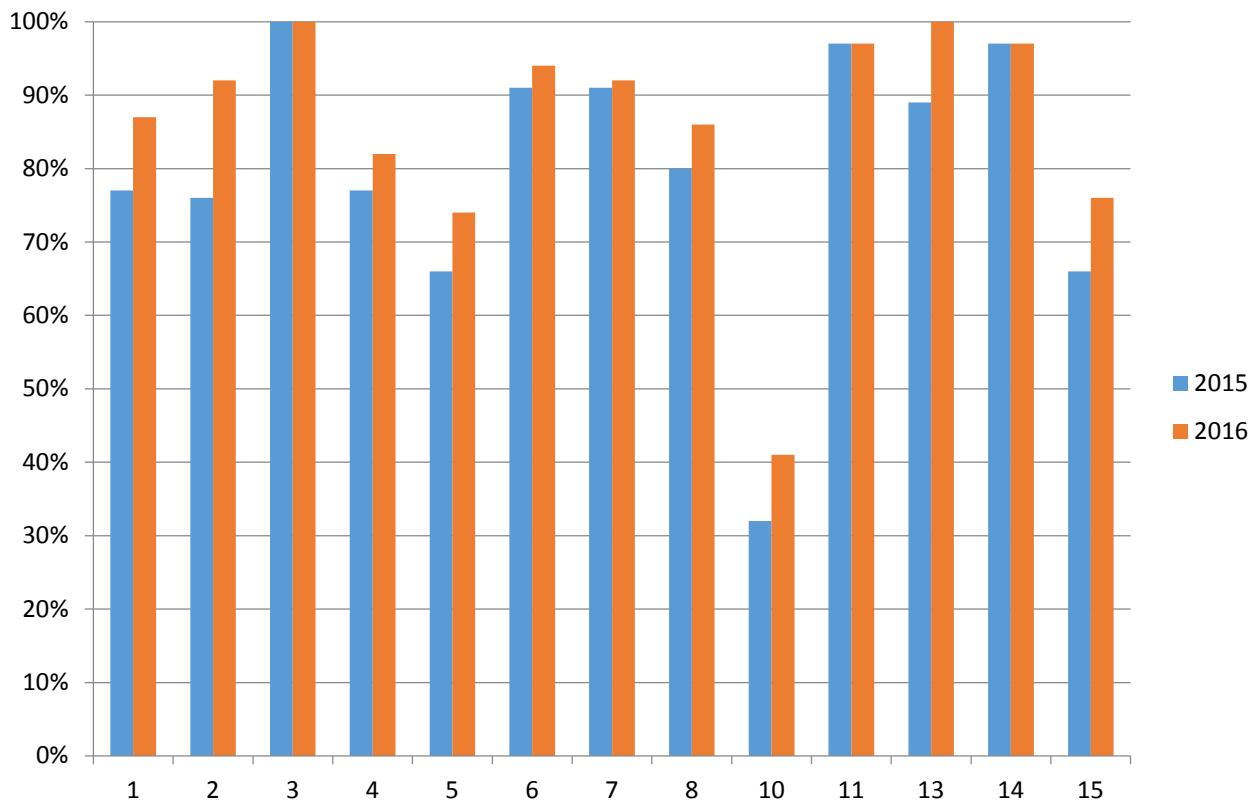
Wisconsin law requires that all dogs and cats, without current rabies vaccine, that bite or scratch a human must be impounded for 10 days under surveillance of a veterinarian. Domestic animals with current rabies vaccinations are required to be home quarantined for 10 days and observed by a veterinarian 3 times throughout the quarantine. Quarantine orders are issued by local law enforcement officials and the Manitowoc County Health Department. The Manitowoc County Health Department also serves as the primary source of rabies information for local physicians, law enforcement officials and veterinarians. Domestic animals that have been exposed to wild animals that have tested positive for rabies or that are not available for testing requires a special quarantine. These quarantine orders are issued by the Manitowoc County Health Department.

<b>Animal Bites Reported</b>	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dog	131	149	170	136	150	140	137	144	131
Cat	42	44	70	44	43	57	57	52	47
Wild Animal (always tested for rabies)	14	10	12	12	10	18	11	9	15
Other Domestic Animal	3	1	2	0	1	1	2	1	1
<b>Animal Bites (total)</b>	<b>190</b>	<b>204</b>	<b>254</b>	<b>192</b>	<b>204</b>	<b>216</b>	<b>207</b>	<b>206</b>	<b>194</b>
<b>WSLH Rabies Tests</b>									
Dogs	9	9	12	11	7	10	5	9	6
Cats	16	33	14	13	10	8	10	10	6
Wild Animals and Other Domestic Animals			12	12	10	18	14	11	16
<b>Total Animals Tested</b>	<b>42</b>	<b>52</b>	<b>40</b>	<b>36</b>	<b>27</b>	<b>36</b>	<b>29</b>	<b>30</b>	<b>28</b>
<b>Quarantine Order for Domestic Animals</b>			<b>4</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>2</b>	<b>4</b>

# Public Health Emergency Preparedness

Manitowoc County is prepared to respond to all emergencies with a detailed plan of action and a system of communication with community responders. This response includes **detecting** disease outbreaks; **investigating** to determine what the risks are to the public and who may have been exposed; **informing** the public and professionals of the specific disease threats and how to protect themselves and others; **managing** infected persons; **isolating or quarantining** affected individuals as appropriate; **providing medications or vaccinations** to people at risk in the population. The PHEP grant requires the department to increase our capabilities over the 5 year grant period, which will end in 2017.

## PHEP Capabilities % Complete

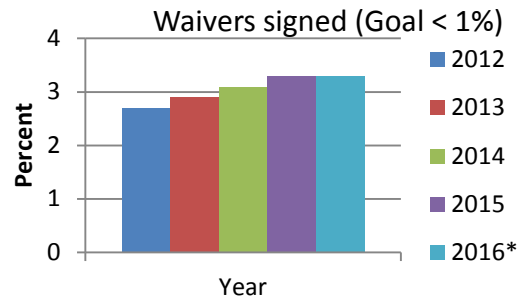
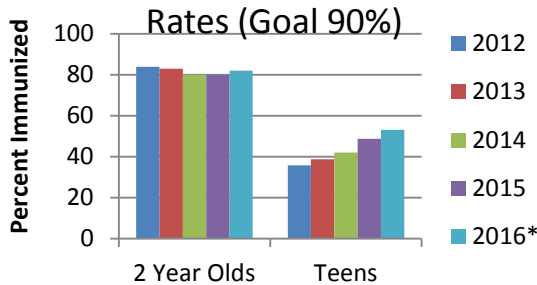


2012-13 Year 1	2013-14 Year 2	2014-15 Year 3	2015-16 Year 4	2016-17 Year 5
Emergency Operations Coordination (3)	Community Preparedness (1)	Community Recovery (2)	Medical Surge (10)	
Emergency Public Information and Warning (4)	Responder Safety and Health (14)	Mass Care (7)		Non-Pharmaceutical Interventions (11)
Information Sharing (6)	Fatality Management (5)		Volunteer Management (15)	
Medical Countermeasure Dispensing (8)				
Public Health Surveillance and Epidemiological Investigation (13)				

# COMMUNICABLE DISEASE

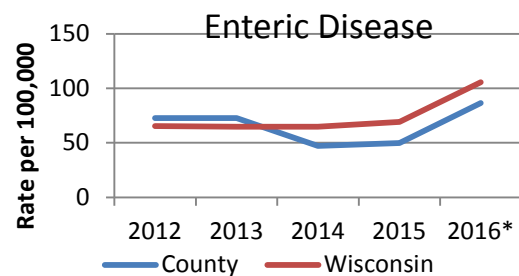
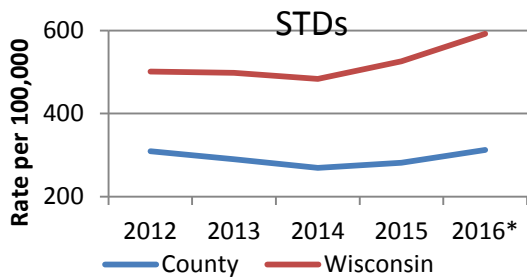
Statutorily required program prevent, suppress and control the spread of communicable disease through immunizations, reporting, contact follow up, and assurance of appropriate treatment and community interventions through department surveillance

The goal of immunizing 90% of children is to protect a critical portion of the community against a contagious disease resulting in less opportunity for an outbreak. The Department continues to send reminder recall notices to children under 2 years of age to increase immunization compliance. Teen vaccination efforts consist of a public campaign to promote the HPV vaccine along with school mass vaccination clinics.

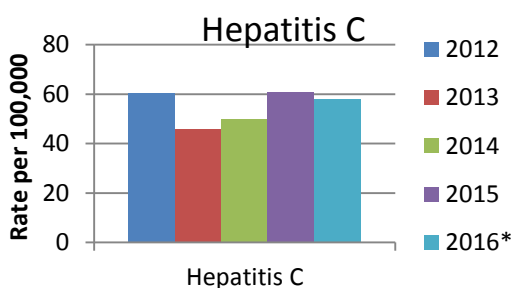


Sexually Transmitted Disease (STD) rates for Manitowoc County have remained stable in the past 5 years; however, the number of cases of Gonorrhoea in Manitowoc County has risen significantly. Follow up on STDs include contact with the individual to assure proper treatment and education as well as obtaining the names of partners to prevent spread.

The rates of enteric diseases such as Salmonella and E. coli increased in 2017; however, laboratories have added different and additional tests which may have accounted for most of the increase. In addition to the individuals cases reported, 6 enteric outbreaks reported and after investigation, follow up and testing, 3 were identified as Norovirus and 3 not identified. Follow up on individual cases includes a source investigation and education to prevent the spread.



The Hepatitis C rates have remained steady over the past 2 years. Surveillance efforts continue in the jail setting on a voluntary basis. An effort is made to obtain risk factors and identify any partners to prevent further spread. Follow up also includes re-testing if necessary and education as well as referral to treatment.



Respiratory Diseases such as Tuberculosis (TB) and Blastomycosis are reported to the health department and the cases are investigated and followed up as necessary. The majority of the reported contagious bacterial respiratory diseases are suspect TB. There were no cases of active TB reported in 2016 and 13 individuals were treated with medication to prevent active TB.

Over the past several years, TB has become a more complex disease to manage. Nursing staff coordinated a Regional Northeast WI TB Summit to provide education and resources for providers and health departments. The summit was successful as 139 individuals attended.

\*Preliminary Data

# PUBLIC HEALTH INTERVENTIONS

Public health nurses use their extensive knowledge of the community to organize community resources to collaboratively meet the health needs of families and individuals.

Interventions are the core of public health nurse activities which nurses carry out on behalf of individuals, families, systems, and communities to improve or protect health status.

Interventions	No. of Clients	Activities
Referral and Follow Up	151	215
Health Teaching	227	248
Case Management	102	270
Delegated Functions	71	112
Screening	28	57

The goal of individual and family interventions is to change the knowledge, attitudes, beliefs, practices, and behaviors of individuals. The public health nurses served 579 individuals and/or families with various interventions. The most common 5 interventions utilized are listed on the table along with the number of clients and activities.

## Referral & Follow Up

Referral Type	Clients	# of Activities
BadgerCare	82	98
Medical Provider	57	61
WIC	58	59
Oral Health	13	13

Public health nurses determine the most appropriate referral based on the need and the availability of effective strategies and resources in the community. Most of the referrals were made to BadgerCare and medical providers.

## Health Teaching

Topic	Clients	# of Activities
Access to Care	29	29
Car Seat	46	47
Infant Care	73	74
Oral Health	23	23
Pregnancy	46	47

Health Teaching was the most utilized intervention in 2016. The public health nurses are a strong advocate for individuals and families and provide health education, disease prevention and health promotion to improve outcomes.

Pregnancy, car seats and infant care were the most common health teaching topics. Home visits are offered based on referrals received from doctors, hospitals, birth certificate reviews, social workers and other agencies.



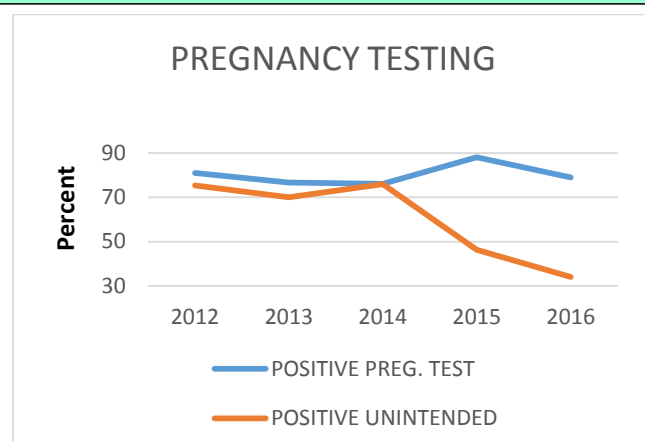
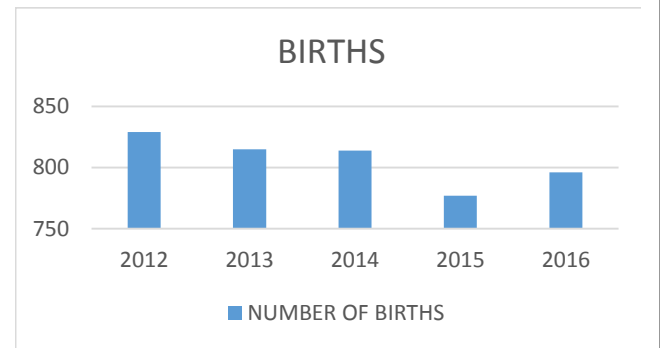
# MATERNAL AND CHILD HEALTH

Healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential.

The screenings offered that effect the maternal and child health populations are pregnancy testing and child blood lead testing. These screenings contribute to healthy birth and early childhood development outcomes.

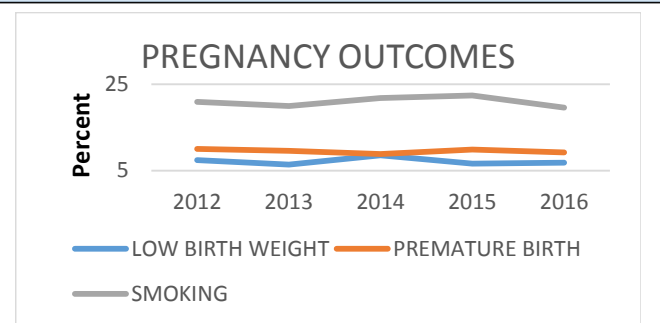
Healthy outcomes will be increased by providing parents of all children born in Manitowoc County with age appropriate information. Public Health Nurses provide home visits based on birth certificate review and referrals.

Free pregnancy tests and referral to appropriate services are provided early in pregnancy to assure healthy outcomes. Follow up includes case management for referral to medical and social services along with health education and counseling. In 2015 & 2016, the number of positive unintended pregnancies declined as the number of positive pregnancy tests remained stable.

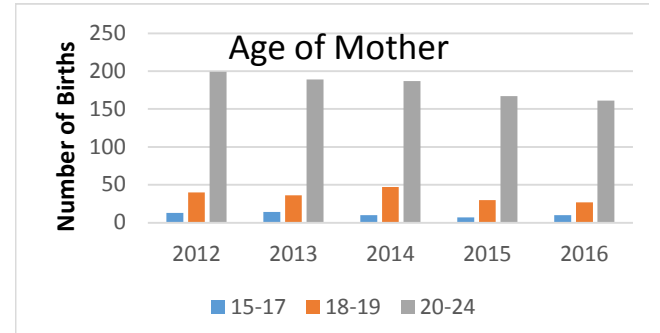
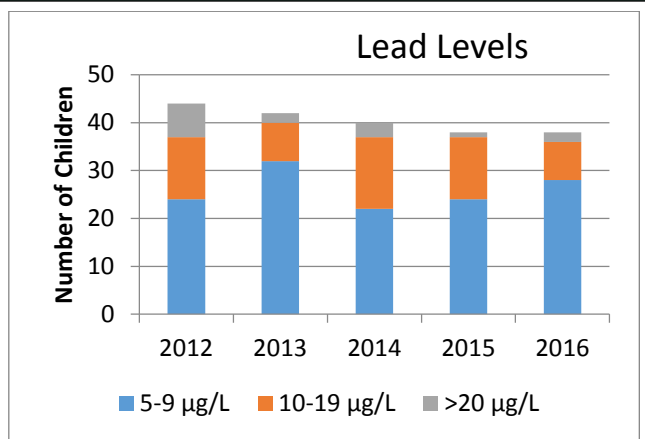


Smoking rates negatively impact premature birth and low birth weight. The number of women who smoked during pregnancy continues to remain steady but is higher than the state average. Nurses offer referral to tobacco cessation resources as well as the WIC and PNCC programs.

No safe blood lead level in children has been identified. Because lead exposure often occurs with no obvious symptoms, it frequently goes unrecognized and can effect neurological development of the child. Lead screening is provided along with follow up and case management in children with blood lead levels  $\geq 5$   $\mu\text{g}/\text{dL}$  with intensive services in children that have levels  $> 20$   $\mu\text{g}/\text{dL}$ . About 25% of all lead screening in the county is provided through the health department. The total number of all provider screenings per year ranges from 1100 to 1300.



Young pregnant women are at a much higher risk of having serious medical complications. Nurses refer sexually active women to providers to prevent unplanned pregnancies and refer high risk pregnant individuals for appropriate case management to resources such as WIC and PNCC. The number of young women delivering babies continues to decline.

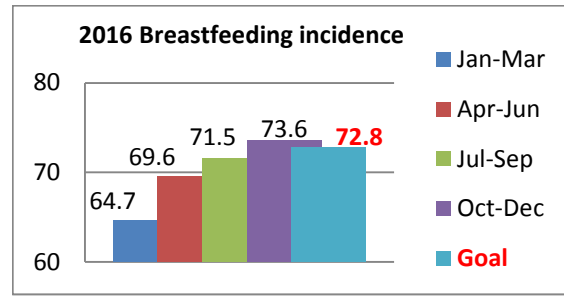
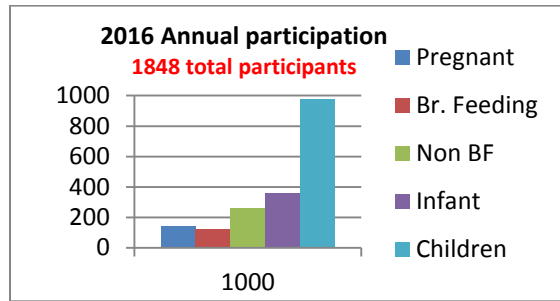


# Women, Infants and Children

Women, Infants and Children (WIC) and Prenatal Care Coordination (PNCC) are the public health cornerstone for building healthier women, infants, children, families and communities.

Goal: To improve the health of pregnant, postpartum, and breastfeeding Women, Infants and Children up to age 5

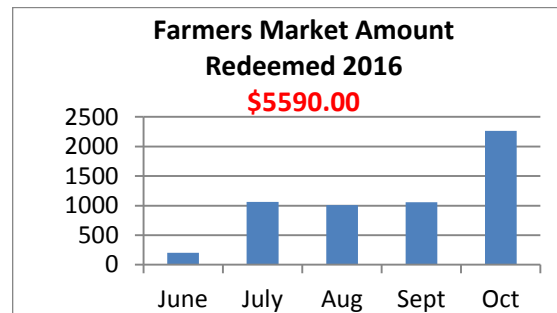
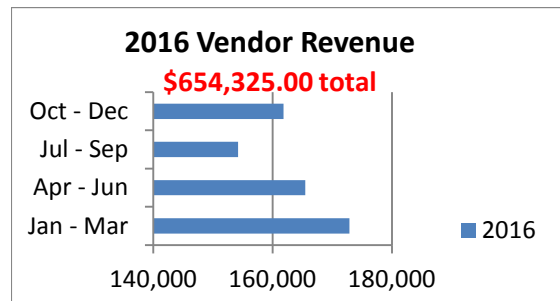
Goal: greater than 72.8% OF BABIES START OUT BREASTFEEDING



WIC and PNCC provide support for breastfeeding mothers with a team of nutritionists and nurses who both prenatally and post-delivery provide breastfeeding education and support.

WIC approved vendors are located throughout Manitowoc County. There are eleven WIC approved locations at grocery stores and pharmacies available to our participants.

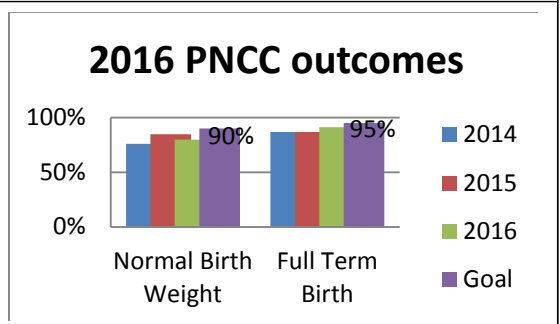
The WIC Farmers Market program offers eligible WIC families checks to buy fresh produce from June through October at approved locations.



## Prenatal Care Coordination Outcomes

Prenatal Care Coordination is a Medicaid benefit that helps pregnant women get the support and services they need to have a healthy baby. In 2016, 74 women received PNCC services.

The WIC Program provides supplemental nutritious foods, nutrition and breastfeeding information, and referrals to other health services. Breastfeeding education includes how to breastfeed, tools to help return to work or school and continue breastfeeding, and how to obtain and use a breast pump.



In 2016 WIC participants were introduced to Wisconsin MyWIC App. This smartphone tool works in conjunction with their eWIC card. The app can be used to search for WIC approved foods, view their benefit balance and find WIC stores. The eWIC card is the term used for WIC Electronic Benefits Transfer. The WIC family's monthly food benefits are loaded on the eWIC card at the WIC office while the family participates in their education session.

# Healthiest Manitowoc County

## 2016 Report on Progress

A Community Collaboration dedicated to improving the health of all who live, work and play in Manitowoc County

Activity & Nutrition, Early Growth & Development, Health Literacy, Injury Prevention, Mental Wellness and Substance Abuse Prevention

The Health Department works in partnership with other organizations and community members on identified Health Priorities to improve the overall health of Manitowoc County. We can do more to improve health in collaboration than alone. Each of the coalitions, under the guidance of the steering committee, identify measures of improvement and implement community health improvement processes to meet their target. During 2016, Healthiest Manitowoc County assisted Holy Family Memorial and Aurora Medical Center Manitowoc County in the completion of their required community health needs assessment and improvement plan. It was determined that we will focus most of our energy on Activity, Nutrition, Mental Health & Substance Abuse. In early 2017, we will refocus our activities associated the Health Improvement, focusing on the increase in Premature Deaths.

### Activity and Nutrition Coalition

The ANC has chosen the following evidence based efforts to increase activity and improve nutrition for Manitowoc County children and adults:

Physically Active Classrooms	Complete Streets
Safe Routes to School	Community Fitness Programs
Bike & Pedestrian Master Plans	Winter Market
Worksite Obesity Prevention Interventions	Farm to Plate
EBT at Farmer's Market	Community Garden
WIC & Senior's Farmers' Market Nutrition Program	Healthy School Lunch
School Breakfast	

The ANC implemented the Winter Market in November of 2016, open every other Saturday through the end of January 2017. Over \$18,000 of locally produced food was sold.

Goal	Baseline 2010/11	Most Recent 2015/16	Trend
53% of adults will report engaging in moderate or vigorous physical activity for 60 minutes daily, five days per week.	49%	51%	Better
53% of high school students will report being physically active five or more days per week for at least 60 minutes daily.	50%	47.5%	Worse
50% of the food vendors at Farmer's Markets in Manitowoc County will accept Food Share payment using Electronic Benefit Transfer (EBT) cards.	0	90%	Met
25% percent of high school students will report eating two or more servings of fruit daily	22.8%	25.2%	Met
20% of high school students will report eating two or more servings of vegetables daily	16.1%	21.4%	Met
70% of adults will report eating two or more fruits per day	65%	62%	Worse
30% of adults will report eating three or more vegetables per day	23%	26%	Better
Healthiest Manitowoc County in partnership with Manitowoc County Employers will achieve Well County designation from the Wellness Councils of America (WELCOA)	On hold		

Youth data from Manitowoc County YRBS 2011 & 2015; Adult Data from Manitowoc County Community Health Survey 2010 & 2016

# Healthiest Manitowoc County

## 2016 Report on Progress

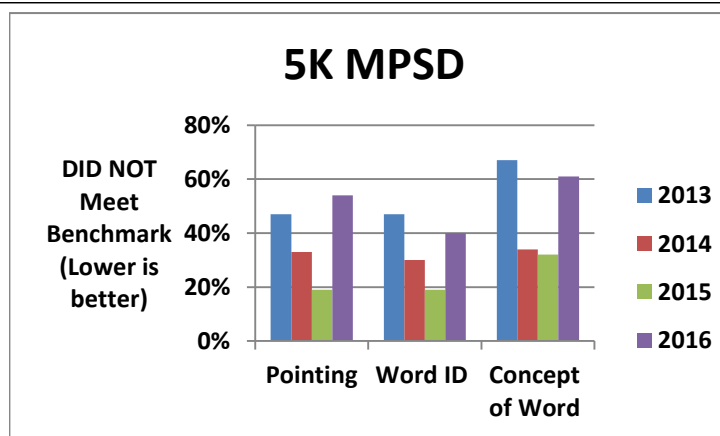
A Community Collaboration dedicated to improving the health of all who live, work and play in Manitowoc County

### Healthy Growth & Development “Investing Early”

Investing Early is working to build an integrated system that promotes optimal physical, social-emotional, and developmental health of children and their families. The goal of Investing Early is that children will enter school ready to learn. This goal will be measured by improving Manitowoc Public School District 5K PALS Early Literacy scores.

Evidence based projects of Investing Early include:

- Universal Developmental Screening
- Reach out and Read
- Home Visitation
- Breastfeeding Education & Support



### Health Literacy

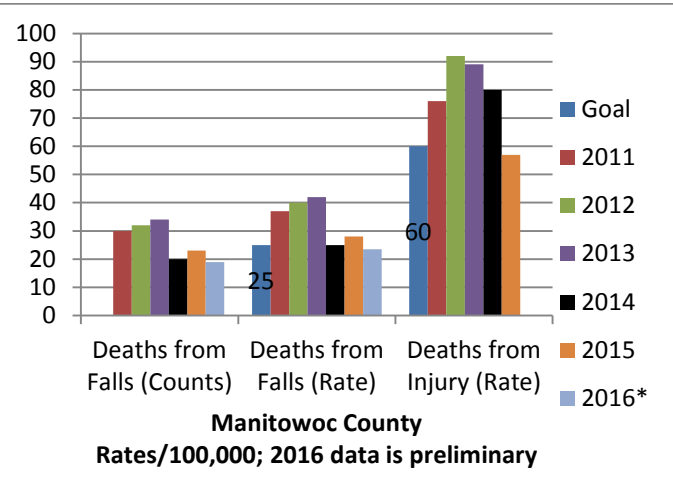
“Better Health through Better Communication” is the vision of this coalition. Health Literacy is the degree to which individuals have the capacity to obtain, process and understand basic health information and services to make appropriate health decisions. The current focus is increasing local capacity for patient skill building. The programs they are using are “Let’s talk about medicine” and “Navigating the Health Care System”

### Injury Prevention (Falls)

Manitowoc County’s death rate from falls in recent years has been at least twice as high as the state average. The Falls Prevention Coalition has implemented the following evidenced based projects:

- Fall Risk Assessment & Individual Plans
- Chronic Disease self-management programs
- Stepping on
- Multi-component Fall Prevention Interventions
- Activity Programs for older adults including Tai Chi

We are making progress on meeting our goals related to preventing deaths from falls and injuries.



# Healthiest Manitowoc County

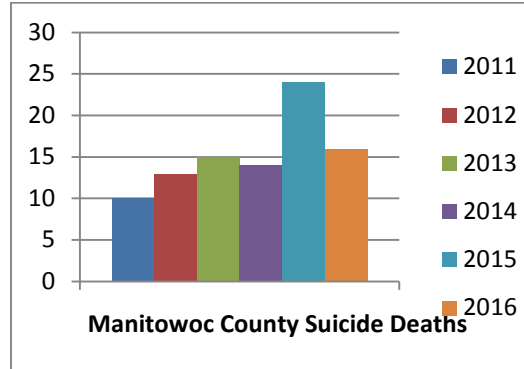
## 2016 Report on Progress

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### Mental Wellness

The Mental Wellness Coalition's current goal is to decrease suicide rates in Manitowoc County by 10% by 2020. We are working to achieve this goal by addressing mental wellness in three main areas: Access, Education, and Advocacy. Evidence based projects being implemented includes:

- Peer Counsellors
- Cell phone based support programs (Text: Hope-line)
- Medically Assisted Therapy Treatment for addiction
- Services Gap Analysis

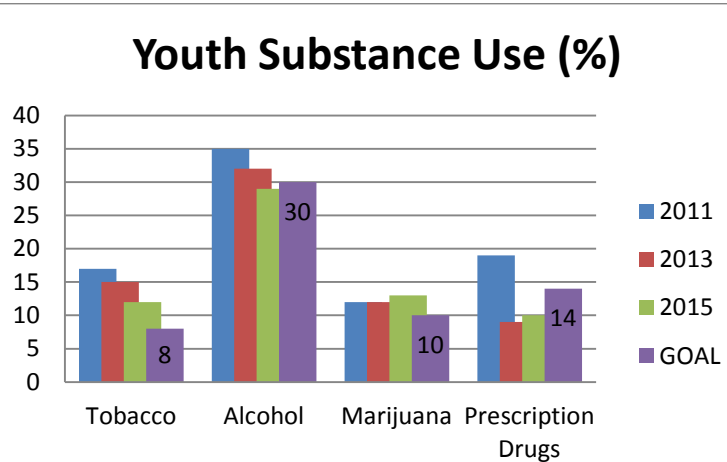


### Substance Abuse Prevention

SAP focuses on preventing the use of addictive substances including Alcohol, Opiates, Marijuana, and Tobacco; focusing the majority of their efforts on youth prevention.

Evidence Based efforts of the SAP Coalition include:

- Enhanced Enforcement of Laws prohibiting alcohol sales to minors
- Prescription Drug Monitoring Program (PDMP)
- Proper Drug Disposal program
- Social Host Ordinances
- Universal School based programs: alcohol misuse & impaired driving
- Dose of Reality
- Youth Leadership



Leading up to 2015, Healthiest Manitowoc County, along with many others in our community identified addiction as a rapidly emerging health priority in our community. Updated information in 2016 included:

- Adult Binge Drinking increased to 40%; up from 23% in 2010
- Overdose Deaths were 5 or less each year between 2000 and 2004; in 2015 there were 15 deaths.
- Manitowoc County was identified as having the 5<sup>th</sup> highest rate of babies born addicted to narcotics
- During 2016, Manitowoc County is in the top 15 counties for controlled substances doses dispensed according to PDMP.

**Evidence-based efforts to reduce and treat addiction in Manitowoc County include:**

- Increase access to Medical Assisted Therapy (Vivitrol, Suboxone or Methadone)
- Criminal Justice Coordinating Council
- Services Gap Analysis