



NORTH SHORE HEALTH DEPARTMENT

Serving the communities of Bayside, Brown Deer, Fox Point,
Glendale, River Hills, Shorewood and Whitefish Bay, Wisconsin

ANNUAL REPORT 2015

MESSAGE FROM THE HEALTH DIRECTOR – NORTH SHORE HEALTH DEPARTMENT

Dear North Shore Residents, Partners and Friends,



I am pleased to present the North Shore Health Department's 2015 Annual Report. This report provides an overview of the many programs and services that protect and promote the health and safety of North

Shore residents. The Health Department's scope extends from our daily work investigating communicable disease cases to our outreach in building partnerships with parents, providers and schools that foster mental health and resiliency among our youth. We are excited to showcase this work and highlight a few of our accomplishments.

Some of these include:

- **Staff Changes:** The Health Department weathered many changes in leadership and staff in 2015. I started as Health Director/Health Officer in February 2015. On behalf of the NSHD, I would like to thank Kathleen Platt, RN for serving as the Interim Health Officer during this transition period. Kathleen was also promoted to Nurse Supervisor and we welcomed Public Health Manager, Lori Ahrenhoerster, PhD, to our team in November.
- **Strategic Plan:** The Health Department revised our Vision, Mission and Values in preparation for the development of our strategic plan.
- **Grants Awarded:** The NSHD was awarded mini-grants in the areas of mass care and dementia-friendly

communities and received funds to support our radon prevention and control program and our beach monitoring program.

- **New Partnerships:** The Health Department developed new partnerships and strengthened existing ones with the Medical College of Wisconsin, the University of Wisconsin-Milwaukee Zilber School of Public Health, Columbia St. Mary's and other local community groups.

As we move into 2016, we are excited about growth opportunities for the NSHD and in the field of public health. We will complete the department's first strategic plan, develop a performance management system to track our outcomes, strengthen our public health emergency preparedness plans, and continue to advance initiatives that support the North Shore's Community Health Improvement Plan.

We look forward to continuing to partner with our residents, business leaders, elected officials and leaders from our schools, faith communities and community groups. If you have any questions, comments or would like to know more about how you can be involved, feel free to contact me. Thank you for your support.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Christiansen". The signature is written in a cursive style.

Ann Christiansen, MPH
Health Director/Health Officer

NORTH SHORE HEALTH DEPARTMENT 2015 ANNUAL REPORT

The mission of the North Shore Health Department (NSHD) is to work in partnership with the communities we serve to assure, promote and protect the health and safety of the people in the North Shore. The NSHD provides public health services for the seven Wisconsin communities of Bayside, Brown Deer, Fox Point, Glendale, River Hills, Shorewood and Whitefish Bay, with a total population of more than 65,000.

The NSHD has two offices, in Brown Deer and Shorewood, and residents can utilize services at either location, as well as at routinely scheduled community-based clinics. The NSHD is advised by a Board of Health with representatives from each of the seven communities in the North Shore, as well as a medical advisor who is on staff. The Village of Brown Deer serves as the fiscal and administrative agent for the NSHD.

The NSHD is guided in its work by the Centers for Disease Control and Prevention's 10 Essential Public Health Services (see list to the right). These services codify the responsibilities of public health agencies in the United States to promote and protect the health of the public to prevent disease and injury. All of the NSHD's program and service areas incorporate the essential public health services.

The Department is also guided by our Strategic Plan and our Community Health Improvement Plan. The Community Health Improvement Plan outlines the health priorities of the Department and residents of the North Shore. These priorities were identified through community listening sessions and by reviewing health data from various sources, including a community health survey.

The current health priorities in the North Shore are communicable disease prevention and control, chronic disease prevention and management, physical activity and mental health.

Centers for Disease Control and Prevention's Public Health Essential Services for Health Departments

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public and personal healthcare workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

NORTH SHORE HEALTH DEPARTMENT PROGRAMS AND SERVICES

The NSHD provides a variety of state-mandated, grant-funded and fee-supported public health services. The NSHD is a Level III health department, which is the highest designation in Wisconsin. A Level III department is required to provide at least 14 programs and services.

The purpose of this annual report is to provide detail regarding the varied programs and services of the Department in 2015 and to share stories about how we make a difference in assuring, promoting and protecting the health and safety of the people in the North Shore.

Communicable Disease Prevention and Control

A communicable disease, also known as an infectious disease, is an illness transmitted through direct contact with an infected individual or animal – or indirectly through contact with a vector such as a mosquito, tick or plant, with blood or bodily fluids, or by breathing in an airborne virus or bacteria. As part of Wisconsin State Statute, 252 – Communicable Diseases, the NSHD is required to follow up and respond to all Category I and II diseases and conditions considered to have significant public health impact.

Category I diseases require immediate reporting by providers to the local health department, while Category II diseases must be reported within 72 hours. In 2015, the NSHD responded to more than 460 suspect and probable disease incidents and conditions, with all but one of these being Category II diseases. Almost 400 of these cases were confirmed cases of communicable disease.

Table 1: Confirmed communicable diseases in North Shore, 2013-2015

Type of Disease	2013 Cases	2014 Cases	2015 Cases
Food/Waterborne	59	23	32
Hepatitis A, B, C	22	17	34
Chicken Pox	5	8	0
Lyme Disease	7	5	<5
Pertussis	17	23	12
Sexually Transmitted Infections	218	181	236
Tuberculosis (TB) Active	0	<5	<5
TB Latent	6	<5	10
Mycobacterium (Non-TB)	30	26	32
Influenza Hospitalizations	22	64	27
Strep (A,B, Pneumonia)	13	5	9
Vector Born (Ehrlichiosis, West Nile)	0	<5	<5
Other	5	<5	<5
Total	404	356	399
Rate per 10,000	62.4	55	61.5

Disease Investigations

The NSHD participated in three major foodborne outbreak disease investigations in 2015. In an outbreak investigation, the NSHD is responsible for identifying the source of the illness and working with facilities to implement control measures to prevent further spread of the virus or bacteria.

NSHD personnel conduct interviews with confirmed, probable and suspect cases; coordinate the collection and testing of laboratory specimens; inspect affected facilities; provide education to impacted individuals and healthcare providers caring for individuals; and relay information to the public. The NSHD dedicated almost 300 person-hours managing and responding to investigations in 2015.

As part of our Perinatal Hepatitis B program, NSHD Public Health nurses manage investigations of infants exposed in utero to mothers with Hepatitis B. In 2015, the NSHD managed nine infant investigations.

In 2015, the NSHD had the added responsibility of monitoring travelers returning from the Ebola-affected countries of Sierra Leone, Guinea and Liberia. Local health departments were required to monitor for a 21-day period and coordinate access to health care for travelers with any Ebola and non-Ebola medical needs. The NSHD monitored people returning from eight trips (four people x one trip and two people x two trips), which equaled 126 days of active monitoring in late 2014 and throughout 2015. None of these travelers were confirmed to have Ebola; however, NSHD provided assistance to monitored travelers needing access to healthcare for their non-Ebola medical needs.

Tuberculosis Program

Tuberculosis, or TB, is a Category I disease caused by the *Mycobacterium tuberculosis* bacteria. The bacteria is usually present in the lungs, but can spread to any part of the body. Not everyone infected with TB bacteria becomes sick. People can have latent TB infection, which means the bacteria stays dormant in the body and the individual does not exhibit illness. People with latent TB are not infectious; however, if untreated, the bacteria can become active, making the person sick with TB disease and possibly infectious. Drug treatment for both latent and active TB typically lasts between three and nine months, and potentially several years.

The NSHD provides case management to residents with latent and active TB. This includes assurance that residents adhere to their treatment regimen by providing directly observed therapy (DOT). DOT means that someone from the NSHD watches the person swallow every dose of a prescribed drug. In 2015, public health staff spent more than 270 person-hours managing active and latent TB cases.

Immunization Program

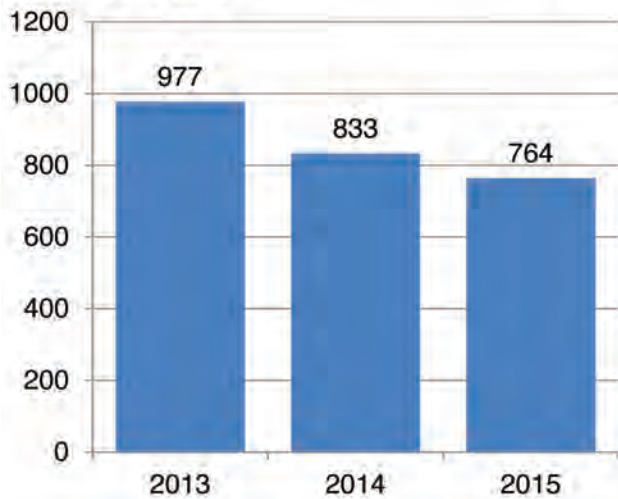
The NSHD maintains an immunization program to prevent and control vaccine-preventable diseases. Under this program, the NSHD provides immunizations to residents without medical insurance, to those with Medicare and to private payers. The NSHD offers five immunization clinics each month for residents. Additionally, the NSHD works with families, schools and daycare providers to ensure enrolled children are up-to-date on their immunizations and compliant with the Wisconsin Student Immunization Law. As part of our effort to prevent influenza, the NSHD provides flu immunizations through our scheduled flu clinics for homebound residents, and during our regular immunization clinics.

Additionally, the NSHD provides education and outreach to residents, healthcare providers, school nurses, the media and others on the epidemiology of the vaccine-preventable diseases and current vaccine recommendations. In 2015, the NSHD offered 60 immunization clinics and 13 flu clinics. Seventy-three percent of our total immunizations in 2015 were for influenza (558 flu shots provided). See figure 1 on the next page.

Chronic Disease Prevention and Control

Chronic diseases are illnesses that last three months or longer, are rarely cured and are often progressive. Common chronic diseases include heart disease, stroke, diabetes, hypertension, cancer, arthritis and osteoporosis. Health behaviors such as tobacco use, lack of physical activity and poor eating habits are leading risk factors for many chronic diseases. In 2015, heart disease and cancer were the leading causes of death for residents in the North Shore (see table 2).

Figure 1: Immunizations Provided by North Shore Health Department, 2013-2015



Clinical Services

The NSHD offers a number of opportunities for residents to manage their health through our various clinics. The NSHD offers five different wellness clinics each month at our Brown Deer and Shorewood offices, at the North

Shore Library in Glendale and at the Lydell Community Center in Whitefish Bay. These clinics provide free blood pressure screenings and affordable adult health screenings, including a blood analysis for cholesterol, glucose and triglycerides, blood pressure, weight check and a nurse consultation. In 2015, the NSHD provided 22 adult health screenings and 206 blood pressure checks.

Elder Referral Program

NSHD staff follow up on referrals we receive regarding health issues of older adults. The NSHD works in partnership with the Milwaukee County Department on Aging and/or North Shore Fire/Rescue to conduct home visits. These referrals often result in linking older adult residents to other resources in the area to maximize their independence and protect their health and safety. In 2015, Public Health nurses responded to 27 elder referrals from the Department on Aging, North Shore Fire/Rescue, police departments and concerned residents.

Table 2: Leading Causes of Death, North Shore, 2014 and 2015	2014 WI Rate per 10,000	2014 NS Rate per 10,000	Number	2015 NS Rate per 10,000	Number
Heart Disease	19.3	17.6	114	18.1	117
Cancer	19.6	18.8	122	16.1	104
Unintentional Injuries	5.1	4.5	29	5.1	33
Respiratory Diseases	4.8	4.3	28	4.3	28
Cerebrovascular/Stroke	4.3	4.2	27	4.6	30
Alzheimer's Disease	3.2	3.6	23	4.0	26
Diabetes Mellitus	2.3	1.9	12	2.6	17
Influenza and Pneumonia	1.7	1.4	9	1.5	10
Parkinson's Disease	1.1	1.2	8	0.9	6
Nephritis	1.7	1.1	7	1.3	9
Hypertension	0.8	0.8	5	1.2	8
Other causes of death, combined	23.0	21.0	136	20.9	135
Total Deaths	87.2	80.3	520	80.8	523

Farmers' Markets

The NSHD supports and promotes the various farmers' markets in the North Shore. In addition, staff members serve on the planning committee for the Brown Deer Farmers' Market. In 2015, staff attended the markets in Fox Point, Whitefish Bay and Brown Deer, where they provided educational information on nutrition and medication safety, sold North Shore cookbooks and radon test kits, and gave away Health Department promotional items.

Environmental Health

The NSHD's environmental health program focuses on the assessment, management,

control and prevention of environmental factors that may adversely affect the health, comfort, safety or well-being of our residents. The NSHD provides these services as part of Wisconsin State Statute, Chapter 254-Environmental Health.

Food Safety and Recreational Licensing

The NSHD oversees the North Shore Environmental Health Consortium (NSEHC), which serves as an agent of the Wisconsin Department of Health Services and the Wisconsin Department of Agriculture, Trade, and Consumer Protection. The NSEHC protects the public's health through enforcement of sanitary regulations and fostering sanitary practices in certain public establishments. The NSEHC provides licensing and inspection services for restaurants, pools and hotels in the communities of Bayside, Brown Deer, Fox Point, River Hills, Shorewood and Whitefish Bay. In 2015, the NSEHC issued the licenses listed in Table 3 and inspected 98% of the licensed facilities.

The NSEHC also responds to consumer complaints for licensed food establishments, hotels and pools. In 2015, we responded to food and sanitary complaints in six restaurants, one school cafeteria and one pool. Staff

conducted a survey in 2015 to help the Consortium improve the quality of our inspection services. All 40 respondents rated the inspection and evaluation services provided by the NSEHC either excellent or good.

“The inspection helps the employees understand the role they play every day.”

– NSEHC survey respondent

“Keep up the good work. Sometimes we don’t want to hear the things we think are small, but it is nice catching things when they are small.”

– NSEHC survey respondent

Toxic Substances – Lead Hazard Control

The NSHD’s lead hazard control program prevents and reduces the impact of lead poisoning among children in the North Shore. The NSHD automatically receives test results from the State of Wisconsin for all children tested for the presence of lead in any of the seven communities in the North Shore. A Public Health nurse reviews test results and contacts families with children whose initial blood lead level result is $\geq 5\mu\text{g}/\text{dL}$. For children with a confirmed elevated blood lead level, the nurse will initiate an investigation, which may include a visit to inspect the home for the presence of

environmental conditions that might be contributing to the lead poisoning.

Table 4 (on the next page) shows the number of initial cases of blood lead levels that have been $\geq 5\mu\text{g}/\text{dL}$ for the past three years. After confirmatory testing, a number of these cases did not meet the criteria for elevated blood lead and thus, no further investigation was warranted. Our data indicate

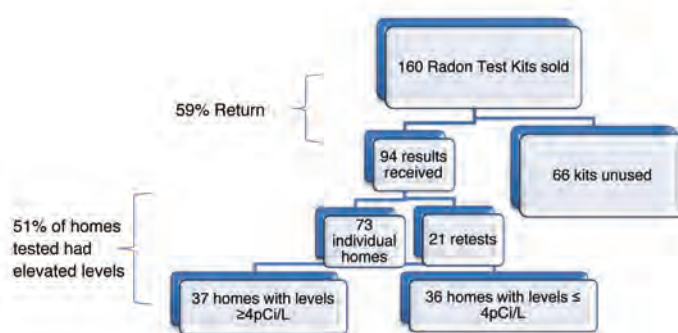
Table 3: Recreational Food Safety and Licensing, North Shore Environmental Health Consortium, 2013-2015	2013	2014	2015
Restaurant Licenses Issued	99	117	111
Retail Food Establishment Licenses Issued	88	84	84
Farmers Markets and Temporary Event Licenses	86	86	104
Pool Licenses	48	49	50
Hotel Licenses	4	5	5
Re-inspections	87	129	74
Complaints	14	8	8

Table 4: Blood Lead Level Results, North Shore, 2013-2015	2013	2014	2015
Blood lead level results received	835	658	405
Initial Elevated Blood Lead Levels of $\geq 5 \mu\text{g/dL}$	22 2.6%	17 2.6%	17 4.2%
Home visits made by nurse with confirmed elevated levels	0	5	3

Radon Outreach and Testing Program

The NSHD reactivated its radon outreach and testing program in 2015. Staff completed the EPA radon measurement and mitigation training and educated North Shore residents on the impact of radon exposure through display boards at the libraries, in newsletters, at farmers' markets and through outreach to local real estate companies. Staff also promoted testing, offered

Figure 2: 2015 Radon Test Results, North Shore



that roughly half of children are currently being tested at or around their one year check-up. The NSHD recommends parents insist on their children being screened for elevated blood lead levels at or around their first birthday. (Please see lead poisoning success story below.)

LEAD POISONING SUCCESS STORY

In August, we were notified of a child with a venous blood lead level of $10 \mu\text{g/dL}$, far in excess of the $5 \mu\text{g/dL}$ action level. Annie was 12 months old and her parents were renting a lower level of an older duplex. A Public Health nurse called her parents and discussed ways they could immediately intervene to reduce Annie's lead exposure. These included increasing iron and calcium in her diet, wiping her hands frequently to remove lead dust, damp mopping and damp wiping surfaces, using only cold water for drinking and cooking, and running water from the tap before using it in the morning. A home visit was set up by one of the Public Health nurses, who took our HEPA vacuum for the parents to use and reviewed possible sources of lead.

During the visit, Annie was observed "cruising" on her newfound land legs along a low windowsill in the attached sunporch. Her parents said that they frequently have the windows up for fresh air but close them at night when it gets cool. When Annie reached the end of the line of windows, she sat down on the floor, proud of herself for

her walking skills and then put her hands into her mouth while she smiled and giggled. A LeadCheck swab used on the window sill indicated the presence of lead. Opening and closing the windows may have caused fine lead dust to settle on the windowsill which Annie used to support herself while learning to walk. There were no areas of paint peeling or chipping and neither parent worked in any field that would increase lead levels in the home.

The parents used the HEPA vacuum, damp-wiped the windowsill, damp mopped the floors and diligently wiped Annie's hands often. These measures, along with changes in diet and tap water use were continued by Annie's parents. In October, Annie, now 14 months old, had a repeat venous blood lead level drawn with a result of $3.0 \mu\text{g/dL}$ --well below the level of concern identified by the CDC.

Rapid intervention, education and diligent work by the parents brought Annie's venous blood lead level down to an acceptable level in less than 2 months!

test kits, and mapped radon prevalence in the area. Figure 2 provides information on the number of test kits distributed and the average radon levels for those who completed the test.

Animal Bite and Rabies Control

The NSHD works with police departments in the North Shore to promptly investigate animal bites for potential rabies exposure. The Health Department is responsible for ensuring that the biting animal is appropriately and legally observed or tested for rabies. The NSHD conducted 32 animal bite investigations. None of these investigations resulted in a rabies case.

Human Health Hazard and Public Health Nuisance Investigations

Per Wisconsin State Statute, Chapter 254.59, local health departments are required to respond to the presence of human health hazards. Human health hazards are substances, activities, or conditions that are known to have the potential to cause acute or chronic illness, injury or death if exposure is not stopped. Local municipal ordinances also give the NSHD authority to investigate and respond to public health nuisance complaints. In 2015, the NSHD responded to five complaints regarding air quality and 42 other human health hazard/public health nuisance investigations. Investigations centered on issues such as sanitary conditions, solid waste, animal waste, noxious odors, garbage and refuse, and stagnant water.

Beach Testing and Monitoring

The NSHD assures safe water conditions for wading or swimming at Atwater, Klode and Doctors Park beaches by routinely testing water for harmful levels of bacteria and posting signs to communicate water safety to the public during the summer swimming

season. The NSHD works with the Shorewood Department of Public Works to test the water at each of these beaches at least twice a week from Memorial Day through Labor Day. Sampling results are provided to the Wisconsin Department of Natural Resources and are posted on www.wibeaches.us. In 2015, we collected 90 beach water test samples. We issued two advisories at each of the three beaches due to either elevated coliform bacteria or heavy rain. None of the beaches were closed in 2015.

Injury Prevention

Unintentional and intentional injuries are a leading cause of emergency department visits, hospital inpatient admissions, and fatalities in Wisconsin and the North Shore.

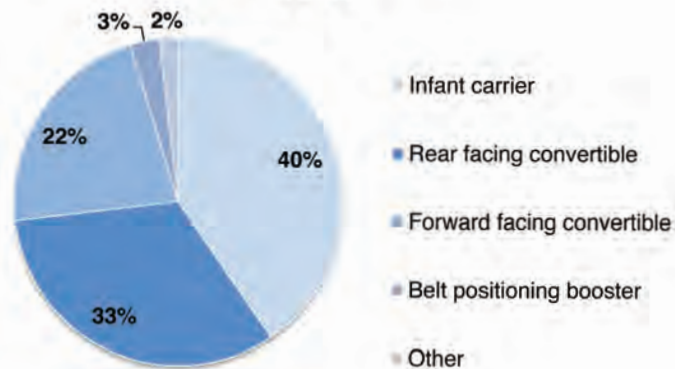
Childhood Injury Prevention

The NSHD has an active partnership with Safe Kids of Southeast Wisconsin to prevent childhood injuries. The NSHD has two certified child passenger safety technicians. We work with North Shore Fire/Rescue to respond to requests from residents to have their car seats checked to make sure they are installed correctly.

In 2015, the NSHD completed 104 child passenger safety inspections. Figure 3 (on the following page) shows the majority of these were inspections or initial installations of infant carriers. For those car seats already installed prior to the inspection, 65% of those were incorrectly installed and needed to be re-installed.

In addition to working to reduce injuries from motor vehicle crashes, the NSHD's public health nurses also participated in several bicycle helmet-fitting events. Additionally, the NSHD sends letters to all of the families with babies born in the North Shore where we provide general information on immunizations, growth

Figure 3: 2015 Child Passenger Safety Inspections, NSHD, n = 104



and developmental milestones, and offer a home visit by a nurse and/or certified lactation counselor. We send a second letter to families when the babies are around nine months to provide education on safety and injury prevention. We sent letters to 680 families in 2015.

Older Adult Fall Prevention

The NSHD partners with North Shore Fire/Rescue (NSFR) on several fall prevention initiatives. Both agencies jointly offer the Remembering When program for senior groups around the North Shore. This program was developed by the Centers for Disease Control and Prevention and the National Fire Protection Association to help older adults live safely at home by addressing both fire and fall prevention. To date, the NSHD and NSFR have partnered to present the Remembering When program to 12 senior groups with a total of 221 older adult participants. Fall risk concerns and prevention strategies are also addressed during our elder referral visits.

Mental Health and Resiliency

The NSHD is an active member in REDgen, a North Shore coalition dedicated to promoting balance and resiliency for kids and teenagers. REGgen sponsors events in the area to contribute to the discussion about what it means to live a healthy, balanced life. REDgen also sponsors the Question, Persuade, and Refer (QPR)

suicide prevention program. QPR trains individuals to recognize the warning signs and risk factors of suicide, ask questions and refer someone to help.

Public Health Emergency Preparedness

Health threats from infectious disease outbreaks, bioterrorism events and natural disaster events require a coordinated response from multiple government agencies to save lives. Local health departments, including the NSHD, are recognized as essential partners in emergency response situations because of our capacity to identify, communicate and respond to everyday public health threats such as communicable diseases and human health hazards.

The NSHD, as part of the Milwaukee/Waukesha County Consortium is recognized by the National Association of County and City Health Officials as meeting the standards for possessing and updating a written all-hazards response plan based on the principles of the Incident Command System. The NSHD also conducts quality improvement through participation in local and regional exercises and real events. In 2015, the NSHD participated in a regional exercise to test plans for dispensing medical countermeasures such as vaccines, antiviral drugs or antibiotics in support of treatment or prophylaxis for a disease or agent.

In Summary

The NSHD is committed to improving our communities' health, preventing disease and injury, minimizing the health impact of emergencies, and safeguarding the environment. This is done through an organized, collaborative process that includes assessment, policy development, and assurance. Our ultimate goal is to make the North Shore a healthier place to live, work and play.



NORTH SHORE HEALTH DEPARTMENT

**Serving the communities of Bayside, Brown Deer,
Fox Point, Glendale, River Hills, Shorewood
and Whitefish Bay**

STAFF

The Health Department employs a health officer, nurse supervisor, Public Health manager, administrative assistant, three Public Health nurses, a sanitarian and a medical advisor, totaling 7.2 full-time equivalents.

BOARD OF HEALTH

The Board, with representatives from each of the seven communities, helps direct the Health Department's activities. In addition, a medical advisor serves on the Board of Health.

Jennifer Evertsen, MS-Bayside
Barbara Bechtel, RN, BSN-Brown Deer
William Warner-Fox Point
Debesh Mazumdar, MD-Glendale
Claudia Altman, MD-River Hills
Mary Jo Baisch, PhD, RN-Shorewood
Christopher Simenz, PhD-Whitefish Bay
Gary Lewis, MD-Medical Advisor/Chair

TWO LOCATIONS

Brown Deer Office

4800 W. Green Brook Dr. • Brown Deer, WI 53223

Shorewood Office

2010 E. Shorewood Blvd. • Shorewood, WI 53211

**Main Phone Line: 414.371.2980 • nshealthdept.org
Hours: Monday-Friday 8 a.m.-4:30 p.m.**



NORTH SHORE
HEALTH DEPARTMENT

nshealthdept.org • (414) 371-2980