Western Upper Peninsula Health Department 2018 Annual Report



"Leading the community toward better health."

Serving Baraga, Gogebic, Houghton, Keweenaw and Ontonagon Counties, Michigan

www.wuphd.org

From the Health Officer

On behalf of the Western Upper Peninsula Board of Health and staff, I am proud to present our 2018 annual report of services to our communities.

The past year has seen organizational change and many new challenges for our agency. During 2018 we saw the retirement of two long-term division directors and participation in two major emergency response events in our jurisdiction.

I am pleased to introduce our new directors. Tanya Rule, RS, took on the role of Environmental Health Director in January of 2018. Rule has been with the agency for over 15 years and is currently on the Board of Directors for the Michigan Environmental Health Association.

Cari DiGiorgio, BSN, RN, started in April 2018 as our new Director of Public Health. DiGiorgio has also been with the agency over 15 years and works out of our Gogebic County office where she is very active in the community.

Looking ahead to 2019, the agency will be involved in an Upper Peninsula wide community health improvement project. The project goal is to utilize a community based process to review the results of the recent community health needs assessment and define three to five health priorities to attempt to "move the needle" on social determinants of health in our area.



Tanya Rule, RS



Cari DiGiorgio, BSN, RN

Respectfully yours,



Cathryn A. Beer, MPA, CFPH, CPA, CGMA Health Officer/Administrator



From the Medical Director

Vaccination is one of the greatest public health achievements of the 20th century. Before that time, mothers expected to lose children to diseases we now rarely see, such as diphtheria, tetanus, and measles. Thousands of pregnancies ended in miscarriages and newborns suffered congenital deafness, blindness, and brain damage due to rubella.

Before the mid 1960s, when measles vaccine came onto the scene, nearly everyone got measles sometime during childhood. The Centers for Disease Control and Prevention (CDC) estimates that "3 to 4 million people in the United States were infected each year. Also each year, among reported cases, an estimated 400 to 500 people died, 48,000 were hospitalized, and 1,000 suffered encephalitis (swelling of the brain) from measles." After the introduction of measles vaccine, the number of cases per year rapidly dropped by 95% ... an incredible success!

In fact, the CDC declared measles eliminated (defined as the absence of continuous disease transmission for greater than 12 months) from the United States in 2000. This enormous achievement was largely due to a highly successful vaccination program in the United States and other countries in the western hemisphere.

Measles is caused by a virus. It is spread through airborne transmission and is highly contagious. An unvaccinated individual briefly exposed to someone with measles has a 90% chance of becoming infected. Symptoms include cough, congestion, and conjunctivitis (red eyes), as well as high fever. After 3-5 days of illness, a rash breaks out and spreads from head to toe. Children are usually quite miserable during the febrile part of the illness.

Complications of measles include: pneumonia (about 1 in 20), encephalitis that can lead to seizures and permanent brain damage (about 1 in 1,000), an about 1-2 children in every 1,000 children who get measles, will die from it ... even with the best of medical care.



So, if measles was declared "eliminated" in this country, why are we seeing all of these cases in recent years? The answer is that measles is still actively circulating in many parts of the world, and travelers (both Americans and those from other countries) are being exposed and bringing the illness back to the U.S. When the virus arrives here, particularly in areas with large numbers of unvaccinated individuals, it can spread quickly.

Unfortunately, 2019 has been a record-breaking year for measles. As of mid-May, the U.S. has already had more cases of measles than in any year since 1994. Nearly 900 individuals have become infected and about 80 have required hospitalization. Michigan joined 23 other states experiencing outbreaks when cases emerged in the southeast region of the state this spring, after an ill traveler from New York visited extensively in the area while infectious.

Local and state public health department resources in outbreak areas are being trained in trying to identify cases and contacts rapidly so that exposed individuals can be isolated and vaccinated. In order to contain the outbreaks, others in the community who have not yet been exposed, but are unvaccinated, are targeted for vaccinations as well.

Decades of experience in developing and manufacturing vaccines, as well as thousands of studies evaluating safety and efficacy, have brought us an incredible tool to control communicable diseases in our communities. A careful read of credible scientific sources such as those found at CDC.gov and American Academy of Pediatrics (AAP.org) leaves no room for reasonable doubt.

Measles vaccine is given at 12-15 months of age and again at 4-6 years. Widespread use of measles vaccine has lead to a greater than 99% reduction in measles cases compared with the pre-vaccine era in this country, but until measles vaccination is robust around the world and accepted in all corners of the U.S., outbreaks can and will occur ... as we are seeing in the U.S. and around the world.

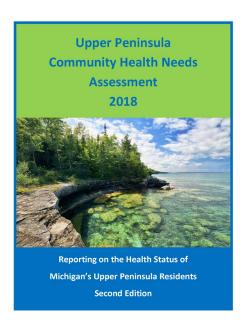
In the end, vaccination is something we do for our own children and families, but more than that, it is something we do for our communities as a whole. When you vaccinate your children, you keep mine safer. It is only right that I do the same for yours.



Teresa Frankovich, MD, MPH, FAAP

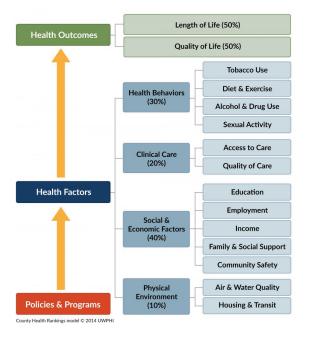
2018 Health Needs Assessment

The Western U. P. Health Department, along with the five other local public health departments in the Upper Peninsula, collaborated with 26 other community partners during the year to complete a bold new initiative to complete a needs assessment across the 15 county region. For the first time, all U.P. Counties have a robust assessment and the ability to look at similarities and differences across the region. The Upper Peninsula Community Health Needs Assessment provides policy makers, stakeholders and residents with a vast pool of data which can serve as a springboard for thoughtful, data-driven Community Health Improvement Plan. The assessment not only provides current data, but it can also serve as a baseline against which to measure the progress made as communities implement program and policy changes. Future on-going CHNA will inform regional efforts for decades to come.



Social Determinants of Health

An important take-away from this historic document is the impact that the conditions of the environments in which we live and work, go to school and age, determine our quality of life and health outcomes. These conditions are called Social Determinants of Health (SDOH), and they explain why some people face a more difficult challenge in achieving and maintaining good health. This diagram, from the 2014 County Health Rankings Model, outlines the key areas of SDOH.



2018 Health Needs Assessment (Cont'd)

Key Assessment Themes

Four key themes emerged from the assessment as areas of interest for our region:

- 1. The impact of an aging population: In the Upper Peninsula, nearly 20 percent of the non-incarcerated population is age 65 or older, compared with 15 percent statewide. In Keweenaw and Ontonagon Counties, greater than 30 percent of the population is 65 years or older. Since the chronic disease burden is higher in older adults, and aging adults have greater needs for home health services, assisted living and nursing home care, the shifting of a community's age distribution toward older cohorts has profound implications on the needs for health care and elder services.
- 2. The importance of prevention: Chronic diseases such as cancer, heart disease, diabetes and stroke are the leading causes of death in the U.P. and across much of the globe. Cancer and heart disease alone account for about half of all U.P. deaths. They are also largely preventable. Curtailing tobacco use, obesity and the abuse of alcohol and other drugs alone would dramatically reduce morbidity and mortality among U.P. residents.
- 3. The powerful correlation between socio-economic status and health: Although the U.P. spans over 16,000 square miles and comprises approximately one third of Michigan's land mass, its residents are more alike than they are different. In fact, the reader will note that income and education, i.e. socioeconomic status, are greater determinants of health status and access than geography in the U.P.
- 4. Health care access under a changing political landscape: Prior to implementation of the Affordable Care Act (ACA) in 2014, 18.5 percent of U.P. residents age 18-64 did not have health insurance. By 2017, that rate had declined to an estimated 7.0 percent due to Michigan's Medicaid expansion and the newly created health insurance marketplace. Regardless of one's view of the ACA, it has clearly succeeded in expanding the pool of individuals with health insurance coverage, hence reducing one of the barriers residents experience in accessing healthcare. The impact of on-going amendments to the ACA remains to be seen.

The complete assessment may be found at: https://www.wupdhd.org/upchna/

Public Health Programs

Public health programs seek to protect the public from communicable disease and vaccine preventable diseases, and provide prevention and screening programs to special populations.

Communicable Disease Reporting

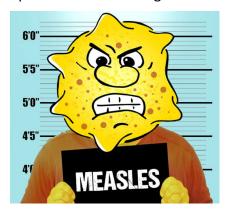
Communicable disease surveillance is a core function of public health. Healthcare providers, facilities, and laboratories are required to report to local public health on over 60 diseases, ranging from common conditions such as influenza to less common ones, like tuberculosis. Reporting is primarily done through the state's electronic system, which is regularly monitored by health department staff. Surveillance work allows us to rapidly identify cases of infectious diseases so that we can help limit their spread within households, schools, facilities, and neighborhoods. A sampling of confirmed cases over a four year period for our jurisdiction is presented below, with the number of confirmed cases in the district per year.

Reportable Condition	2015	2016	2017	2018
Food-Borne Illness	25	36	51	50
Animal Bites	28	81	74	62
Tuberculosis	0	2	1	1
Vector Borne/Lyme Disease	13	16	9	8
Pertussis	4	0	0	0
Hepatitis C (Acute and Chronic)	60	36	27	24
Chlamydia	106	113	121	109
Gonorrhea	12	9	10	11

Public Health Programs (Cont'd)

Immunizations

Recommended immunizations in the United States currently target 17 vaccine-preventable diseases across the lifespan. Ongoing promotion of immunization is foundational and crucial to public health and primary care efforts. Immunizations protect against communicable disease such as influenza, polio, measles, mumps, rubella, tetanus, chickenpox, and pertussis, to name a few. Public Health nurses administered 5,094 vaccinations to 2,208 unduplicated clients during 2018.





International Travel Vaccination Program

The agency also serves international travelers by reviewing their immunization status to determine what vaccinations and medication they may need while traveling outside the United States. 114 people were served under this program in 2018.

Vaccines for Children (VFC) Program

The VFC program is a federal program offering vaccines at no cost for eligible children through VFC-enrolled providers. WUPHD is both an enrolled provider in the program and serves as site reviewer for other providers, ensuring proper vaccine storage and handling. Site reviews were conducted for 12 enrolled VFC providers in 2018.

Tuberculosis Screening

Tuberculosis (TB) screening is an important tool to manage spread of this highly infectious and deadly disease. Screening is provided at each office location. Public health staff screened 437 people for TB during 2018.

Public Health Programs (Cont'd)

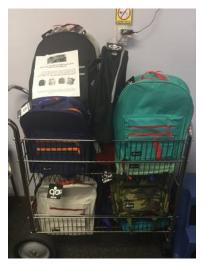
Vaccinate the U. P. Campaign

WUPHD teamed up with the other five health departments in the upper peninsula to develop and implement the vaccinate the U. P. campaign. This immunization campaign sought to increase awareness of the benefits of vaccination and to de-bunk various myths and false information surrounding vaccination.



This project also allowed us to provide school aged children with completed vaccination series with a backpack full of back to school supplies for the new school year. Additional information regarding immunization and the campaign can be found at https://healthyupmi.org/.





Public Health Programs (Cont'd)

Personal Health Services

Family Planning

Family planning is a public health service that helps individuals and families to plan for their desired family size and spacing of children to prevent an unintended pregnancy. Confidential reproductive health services help women and men make well-informed choices about their personal health. Through Federal Title X funding, the agency is able to provide high-quality reproductive health care to clients at low or no-cost. Services include physical exams and contraception dispensing. The program served 413 people in 2018.

Sexually Transmitted Diseases (STD/STI)

According to the Centers for Disease Control, there are approximately 20 million new STD infections each year. STIs can have harmful results that are often long-term health issues such as: reproductive health issues, fetal and perinatal health problems, cancer, and the facilitation of the sexual transmission of HIV. The prevention and control of sexually transmitted disease is becoming increasingly challenging as new antibiotic-resistant strains are emerging. During 2018, the agency has made an effort to promote healthy sexual behaviors, increase partner notification, and improve access to care by offering increased STD/STI screening for Family Planning program participants. During 2018, 894 STD/STI tests were performed.

HIV Outreach and Prevention

The agency has continued to receive additional funding for services related to HIV outreach and prevention from the State of Michigan since 2016. The funding enabled agency nurses to attend trainings on HIV prevention, case management, and testing. We provide free, rapid testing for HIV at all locations, allowing clients to receive test results in 20 minutes. Clients also receive education and counseling during this time. During 2018, 135 HIV screenings were completed.

Unique factors place youth at risk for STIs



Insufficient Screening
Many young women
don't receive the chlamydia
screening CDC recommends



Confidentiality Concerns
Many are reluctant
to disclose risk behaviors
to doctors



BiologyYoung women's bodies
are biologically more
susceptible to STIs



Lack of Access to Healthcare
Youth often lack insurance
or transportation needed
to access prevention services



Multiple Sex Partners
Many young people have
multiple partners,
which increases STI risk

Maternal and Child Health Programs

Maternal and Infant Health Program (MIHP)

This program provides home visitation support and care coordination for pregnant women and infants on Medicaid. Services through MIHP are intended to supplement regular prenatal and infant care and to assist healthcare providers in managing the beneficiary's health and well-being. The program promotes healthy pregnancies, positive birth outcomes, and healthy infant growth and development. Standardized, evidence-based practices are followed per statewide guidelines. The program encompasses nursing, nutrition, and social work services. Public health professionals provided families with 740 home and office visits in 2018.

Healthy Families America

This program supports families who are overburdened and are at-risk for adverse childhood experiences, including child maltreatment. Staff work with families who have histories of trauma, intimate partner violence, mental health, and/or substance abuse issues. Healthy Families America is a collaborative of all health departments in the Upper Peninsula. In 2018, 24 families were served by this program.

Women, Infant, and Children Nutrition Program (WIC)

WIC improves the health of low to moderate income pregnant women, infants, and children under the age of 5. The program provides nutritional food, nutrition education, breastfeeding support, and screening and referral to health care services. In 2018, the agency served 2,024 unduplicated clients.

Children's Special Health Care Services (CSHCS)

CSHCS helps families with a child who has a chronic medical condition by paying for specialty medical care, equipment, and travel and lodging for medical appointments. 236 children were served by this program in 2018.

Maternal and Child Health Programs (Cont'd)

Fluoride Varnish Program

Tooth decay is one of the most common preventable diseases in children. Children as young as 12-18 months can get cavities. In 2018, 131 young children received free fluoride varnish at health department clinics to help prevent tooth decay through the MDCH Varnish! Michigan program.

Blood Lead Screening

Exposure to lead can damage nervous, blood, and kidney systems, and is particularly harmful to the developing nervous systems of fetuses and children under 6 years of age. The principle sources of lead exposure for children are house dust contaminated by lead paint, soil contaminated by lead paint, or decades of industrial and motor vehicle emissions. During 2018, 268 children received blood lead screening.

Hearing and Vision Screening

A trained technician screens children at area preschools and schools, to identify hearing and vision problems that can affect learning. Hearing screenings are conducted once between the ages of 3 and 5, and for school-aged children in kindergarten. Screenings are repeated in grades 2 and 4. Vision screenings are conducted once between the ages of 3 and 5 for preschoolers, and thereafter in grades 1, 3, 5, 7, and 9. There were 4,608 children screened through this program in 2018.



Maternal and Child Health Programs (Cont'd)

Breastfeeding Initiatives

Breastfeeding has been shown to have multiple benefits for both mother and baby. A breastfed baby has a decreased risk for diseases such as asthma, leukemia, and type 2 diabetes. Breastfeeding has been shown to decrease a child's risk of obesity and death from SIDS. Mothers who breastfed their babies have a decreased risk for developing certain breast and ovarian cancers.

Through the administration of the WIC program (Women, Infants, and Children Special Supplemental Nutrition Program) the agency has been able to play a major role in helping women choose breastfeeding as the best source of nutrition for their children. WIC encourages all women to breastfeed and offers breastfeeding education to pregnant and breastfeeding women through Peer Counselors. WIC Breastfeeding Peer Counselors are women who have breastfeed their child or children. Peer Counselors are trained to provide basic breastfeeding education and support to WIC mothers during their pregnancy and breastfeeding experience through office visits and phone calls.

The state and national averages for infants on WIC who have ever breastfed are 66.8% and 70.2%, respectively. Locally, WUPHD's WIC program's average for the number of infants who have ever breastfed is higher, at 79.6%. We continue to surpass the state (16.9%) and national (20%) averages of the number of infants who are breastfed at 6 months, at 27.92%. Approximately, 20.8% of WIC infants in the Western U.P. WIC program continue to be breastfed at 1 year, which is much higher than the state rate of 10.8% and the national rate of 14.6%.

In addition to WIC, the health department provides breastfeeding support through the Maternal Infant Health Program, which provides home and office visits to our Medicaid eligible women and infants. WUPHD has also been spearheading the formation of a Moms' Breastfeeding Support Group through partnerships with U.P. Health System Portage, Aspirus Keweenaw Hospital, and Portage Lake District Library.



Environmental Health Programs

Environmental health programs seek to control and prevent environmental conditions that may endanger the health or safety of the community.

Food and Foodborne Illness Programs

Food Safety

The Michigan Food Law requires all full-service food establishments to have a manager trained and certified in safe food-handling practices. The health department provided training to 50 food facility managers during 2018. In addition, Environmental Health Sanitarians conducted 718 inspections at 404 licensed food establishments. Sanitarians reviewed 20 engineered sets of plans for new or renovated food establishments to grant approval prior to construction.

Michigan's Food Law was amended to allow temporary food service licenses to be issued without a required on-site inspection for temporary facilities serving only "low-risk" foods. All Upper Peninsula health departments worked together to develop a new licensing protocol for these facilities. There were a total of 138 (both low and high-risk) temporary food licenses issued in 2018.

Agency staff investigates cases of foodborne illness as they are reported to us. During suspected foodborne illness outbreak, investigation protocols are used to conduct rapid interviews with those who have become ill and an on-site evaluation of foodhandling practices is completed. Restaurant inspection reports can be found online at https://www.wupdhd.org/environmental-health/food-protection-program/search-restaurant-inspection-reports/.



Environmental Health Programs (Cont'd)

Drinking Water and On-Site Sewage Programs

Drinking Water

In the western Upper Peninsula, a significant number of residents and businesses obtain their drinking water by means of groundwater wells. Properly locating, constructing, maintaining, and monitoring groundwater wells are critical to the prevention of waterborne illnesses. The Environmental Health division evaluates proposed well locations and issues well construction permits for family dwellings and smaller businesses. Registered well drillers are required to construct wells in accordance with Michigan's Water Well Construction and Pump Installation Code, Services provided by the health department include: new well site evaluations, replacement/repair site evaluations, water sample tracking, well record and abandoned well tracking, contaminated groundwater investigations, and noncommunity public water supply monitoring. In 2018, agency staff completed 228 site pre-drilling site evaluations, issued 156 permits, and monitored 119 non-community water supplies.

On-Site Sewage

Rural areas often rely upon on-site sewage systems for the management of wastewater and sewage. Properly locating, constructing, and maintaining sewage systems is critical to the prevention of ground water and surface water contamination. On-site sewage systems consist of a septic tank followed by a network of piping, gravel, and soil to process waste. Services provided by the health department include: raw land/building site evaluations replacement/repair sewage system evaluations, sewage system permitting, existing sewage system/tank inspections, sewage system installer licensing, and groundwater/surface water contamination investigations. In 2018, agency staff completed 228 site evaluations, issued 194 permits, and inspected 184 existing systems under this program.

Regulatory Programs

Environmental Health staff also regulate other public facilities through inspection and monitoring of 40 campgrounds, 37 swimming pools, 41 bathing beaches, 17 septage haulers and 7 septage receiving stations.

Other services offered include indoor radon test kits, testing of ticks for lyme disease, mold education, and mercury spill response. Staff responded to 71 consumer complaints relating to regulated programs during the year.

OUTREACH AND COMMUNITY HEALTH

Community Health Education

Western Upper Peninsula Health Department's health educators provided direct education to more than 300 students in thirteen 4th, 5th, and 6th grade classrooms using Cooking With Kids, an 11-lesson evidence-based nutrition program. Cooking With Kids is a hands-on experiential curriculum with food tastings and cooking lessons featuring healthy recipes from a variety of cultures and cuisines. Students learned about nutrition and practiced basic cooking skills, improving knowledge, positive attitudes, and healthy eating habits, with a focus on increasing daily fruit and vegetable consumption.

Nutrition educators worked with the E.B. Holman School Wellness Team, including their superintendent and food service staff, to assess school nutrition policies, programs, and the food service environment using Cornell University Smarter Lunchrooms Scorecard, and helped the school plan and implement four no-cost PSE (Policy, Systems, and Environmental) changes from the Smarter Lunchrooms Handbook. Applying lessons learned at E.B. Holman, WUPHD will foster PSE improvements in three additional schools in 2019.

Health educators implemented "Taste of the Season - Western U.P." project which reached over 500 adult food purchasers at five grocery stores and three farmers markets in Houghton, Baraga, and Gogebic counties. Each store/market was visited on four separate occasions throughout the summer months where educators gave nutrition presentations from the Linking Lessons curriculum including tips to help consumers spend their SNAP benefits wisely. Accompanying the lessons were simple food preparation and tasting demonstrations using locally available, fresh, seasonal produce.



OUTREACH AND COMMUNITY HEALTH (Cont'd)

Youth Substance Abuse Prevention

Educators provided substance abuse prevention education in area 6th and 7th grade classrooms using the evidence-based Botvin Lifeskills Training Middle School Curriculum. The comprehensive program addresses important factors that led adolescents to use one or more drugs by teaching them a combination of health information, general life skills, and drug resilience skills. In addition, educators conducted tobacco vendor education and compliance checks across our five-county district. Each tobacco vendor understand the Youth Tobacco Act that prohibits furnishing tobacco to minors.

The health department is a member of Communities That Care coalitions serving all Western U.P. counties. Communities That Care surveys youth to determine rates for individual, family, school, and community risk and protective factors and supports evidence-based prevention programs that have been proven to reduce problem behaviors like use of alcohol, tobacco and other drugs, teen pregnancy, and failure to graduate. Health educators also provide prevention education in schools and monitor tobacco vendors for compliance with youth tobacco laws.



Emergency Preparedness

Partnering with local, state, and federal response agencies to effectively respond to disease outbreaks, natural disasters, and other events that threaten health and safety.

Strong partnerships are vitally important in any emergency. In 2018, the Health Department's Emergency Preparedness program strengthened through experience with two incidents: the Sturgeon River Gasoline Spill and the Father's Day Flood. Through the hardship of these two events, the Health Department exhibited excellent communication with the staff and public despite staff limitations, displayed a rapid response in time of emergency, advocated for public and worker safety and health, and garnered support for difficult decisions.

Sturgeon River - US-41 Gasoline Spill

The Western Upper Peninsula Health Department (WUPHD) was one of the responding agencies to a 4,000 gallon gasoline and 1,500 diesel spill in Houghton County, Michigan on February 3, 2018. A four-vehicle fatal accident involving a tanker occurred in Chassell on highway US-41 near the Sturgeon River. This prompted the call-down of several agencies including: Michigan State Police, U.S. Coast Guard, Environmental Protection Agency (EPA), and Department of Environmental Quality. Additional responders included: Chassell Volunteer Fire Department, Houghton County Emergency Management, Western Upper Peninsula Health Department, DP Construction, B&B Contracting, Tri-Media, EPA START, Michigan Department of Transportation, and Waste Management. All responding agencies worked well together under unified command. Recovery lasted 18 days. There were no worker injuries, the response was completed in a reasonable timeframe, and communications were accurate and timely.

Objectives during the response are as follows:

- **Objective 1**: Protect public health and safety for residents living in the immediate vicinity by having a strong presence in unified command.
- Objective 2: Provide public information and messaging by serving as the Public Information Officer (PIO) for the incident while working through a Joint Information Center (JIC).
- **Objective 3**: Identify and consult with Subject Matter Experts (SME's) to assist in determining the potential risks to the community.
- **Objective 4**: Test our administrative preparedness by quickly assigning an account code to record hours for staff working the response.
- Objective 5: Activate our Emergency Operations Center using our pre-identified calldown procedures.
- **Objective 6**: Effectively manage our public health response by keeping the Incident Management Team and health department staff updated on our response efforts.

Emergency Preparedness (Cont'd)

Father's Day Flood

On Sunday, June 17, 2018, the Western Upper Peninsula experienced an unprecedented, 1,000 year rain event. The most seriously impacted areas of the Western Upper Peninsula Health Department (WUPHD) service area included a section of the Keweenaw Peninsula from roughly Chassell to Calumet, this area experienced rainfall amounts of 6-10 inches between the hours of 2 AM and 6 AM. The catastrophic storm damaged hundreds of roadways and homes, with public infrastructure damage to roads and bridges estimated in excess of \$100 million, resulting in a State Disaster Declaration and application for federal assistance. Injures, loss of life, damaged and destroyed homes, as well as severe property and infrastructure damage were all results of the storm. Public health implications were many, with primary focus on environmental health concerns. WUPHD was engaged in the community response immediately with both the Environmental Health Director, the Director of Community Planning and Preparedness acting as designated Health and Human Service officers as part of the Houghton County Unified Command System.

The WUPHD engagement with the unified command system lasted six weeks, however the agency response to the flood event lasted into the first week of October with continued surface water program concerns, municipal sewer issues, requests for funding assistance, and property owner information requests. Flood-related activities largely overwhelmed the Environmental Health Division for the majority of the summer. In spite of the flood response, EH staff continued their commitment to the community and worked to complete routine services and backlogged paperwork due to response continues to this day.

Primary objectives during the response were as follows:

- **Objective 1**: Activate and sustain public health emergency operations.
- Objective 2: Participate fully in the community unified command system.
- **Objective 3**: Serve an active role in the emergency public information system.
- Objective 4: Support mass care operations.
- Objective 5: Support recovery operations.
- **Objective 6**: Implement environmental health surveillance operations.
- Objective 7: Implement flood-related disease surveillance.



Financial Health

The health departments finances remained stable in 2018, with the agency adding \$13,423 to the fund balance. Actual revenue for the year was lower than anticipated, but management controls during the year enabled us to also decrease our costs in step with revenue declines. The agency continues to experience budget pressures as it seeks to improve the funded status of its defined benefit plan; all current funding requirements are being met. Salary and fringe benefits was again the most significant line item at 77% of the total budget. The health department employed 46 people during 2018.

Sources of Funding:

Fees and Collections State Grants Other Grants Federal Vaccines County Appropriations Total Funding	\$ 1,552,056 \$ 1,298,765 \$ 425,016 \$ 114,259 \$ 544,829 \$ 3,934,925
Expenditures by Activity:	
General Public Health	\$ 2,333,238
Environmental Health	\$ 823,918
Prevention & Assessment	\$ 428,394
Administration & Emergency Preparedness	\$ 335,952
Increase in fund balance	\$ 13,423
Total Expenditures	\$ 3,934,925

Looking forward to 2019, the health department anticipates that most funding sources, such as basic state grants, will remain consistent. Projections for fees and collection based upon clinical and environmental service look similar to 2018 levels. The largest impact on future expenditures is projected to stem from employee related costs as we continue to improve the funding status of our pension plan. We also anticipate additional costs to improve existing facilities and technology to meet the health needs of the communities we serve.

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