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LETTER FROM OUR HEALTH OFFICER & MEDICAL DIRECTOR

On behalf of District Health Department #10, it is our pleasure to present to you our 2018 Annual Report.

Each year, we look forward to sharing our accomplishments and trials from the previous year, as well as present what we feel the new challenges will be in the coming year. This report serves, not only as an opportunity for us to share information and data with you, but also for us to connect with our community members and partners. It is a chance for us to strengthen your understanding of Public Health and the role it plays in the overall health of each community throughout our jurisdiction.

As public health practitioners, we strive to protect and improve the health of our families and communities by promoting and supporting healthy lifestyles, conducting research, responding to emerging public health emergencies, and detecting and controlling infectious diseases. Please know that as your local health department, District Health Department #10 is dedicated to supporting our communities through developing effective policies, implementing system-level and environmental changes, and utilizing population-based efforts to achieve better health outcomes and well-being for all.

This year’s annual report theme is “Moving Forward to Public Health 3.0.” Inside this report is general agency information, our strategic plan benchmarks, fiscal information, divisional highlights, and some of our plans and challenges moving forward into 2019. You’ll also see examples of how we are moving toward a more innovative approach to public health called Public Health 3.0. The focus of this new method is helping local public health departments address the roadblocks that often prevent people from living healthy lifestyles, also known as social determinants of health. Public Health 3.0 emboldens local public health departments to become Chief Health Strategists by collaborating with other non-traditional sectors to build coalitions that investigate and take action to make meaningful progress on community health issues. Meeting this role will require strong leadership, a skilled workforce, and some cultural shifts in how our department functions. Through strategic partnerships, we can effectively collaborate to obtain more flexible and sustainable funding, as well as analyze and share relevant data and metrics to build a stronger foundational infrastructure.

In moving forward, our success in achieving the challenges mentioned will determine our success in improving and maintaining the health of our communities and residents. We recognize the size and importance of such a move forward and pledge that the leadership and staff of District Health Department #10 remain steadfast in our commitment to our mission of “Healthy People, Healthy Communities.”

To your health!

Kevin Hughes, M.A.
Health Officer

Jennifer Morse, M.D.
Medical Director
ABOUT US

District Health Department #10 was formed October 1, 1997, through the consolidation of four health departments into one organization. DHD#10 is the largest geographical health department in Michigan and is the tenth largest based upon population.

We serve 10 counties in northern and west Michigan, including: Crawford, Kalkaska, Lake, Manistee, Mason, Mecosta, Missaukee, Oceana, Newaygo, and Wexford.
WHAT GUIDES US

Our MISSION
To promote and enhance the health of our communities and environment through protection, prevention, and intervention.

Our VISION
Healthy People, Healthy Communities

Our VALUES
Integrity Responsibility Accountability
Customer Service Positive Attitude Communication

6 Functions of PUBLIC HEALTH GOVERNANCE
1. Policy Development
2. Resource Stewardship
3. Legal Authority
4. Partner Engagement
5. Continuous Improvement
6. Oversight

10 Essential PUBLIC HEALTH SERVICES
1. Monitor health status to identify 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 health and personal health care 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
District Health Department #10 maintains a workforce development plan to identify training needs and development opportunities among staff and leadership. We continue to build our staff and leadership by investing in their core competencies, knowledge, and skill sets.
STRATEGIC PLAN BENCHMARKS

Strategic planning is crucial to the success of District Health Department #10 because it establishes the direction we must take in the years ahead based on the needs of our communities. It then requires us to develop goals and targets that keep us focused on moving forward to accomplish our plans. In 2018, our strategic planning committee met several times throughout the year to determine the upcoming strategic plan benchmarks.

REFORMULATE PUBLIC HEALTH

- Increase Financial Stability
- Improve Client-Centered Access
- Advance Public Health
- Improve Agency Infrastructure

ENGAGE & EMPOWER STAFF

- Strengthen New Employee Process
- Expand Internal Training

STRENGTHEN COMMUNICATION & RELATIONSHIPS

- Improve Internal Communication Channels
- Expand External Communications
- Strengthen Community Relationships
ADMINISTRATIVE SERVICES

Responsible fiscal management and transparent fiscal reporting allows DHD#10 to continue to deliver essential public health services while maintaining the public’s trust. DHD#10 secures funding from a variety of sources, as evidenced in the revenues chart. Our agency partners are a vital part of keeping DHD#10 functioning at full capacity.

2018 REVENUES
- STATE/FEDERAL FUNDING: 23%
- COUNTY APPROPRIATIONS & SPACE: 14%
- BILLING INCOME/FEES: 34%
- ESSENTIAL LOCAL PUBLIC HEALTH SERVICES: 17%
- OTHER GRANTS/CONTRACTS: 6%
- MCDC/OTHER SERVICES: 6%

2018 EXPENDITURES
- PERSONNEL COSTS (WAGES/FRINGES): 69%
- TRAVEL: 6%
- SUPPLIES: 8%
- CONTRACTUAL: 7%
- COMMUNICATIONS: 4%
- CAPITAL OUTLAY: 3%
- SPACE: 2%
- MCDC/OTHER SERVICES: 2%
- OTHER: MAINTENANCE, EDUCATION/TRAINING, LIABILITY INSURANCE, PRINTING/PUBLISHING: 2%
DHD#10 AT WORK

The skilled staff in each division of DHD#10 works tirelessly to promote and enhance the health of our communities and environments. Here are some of our program highlights over the past year.

**Personal HEALTH**

**IMMUNIZATIONS**

- Total Vaccines: 9,479
- Influenza Vaccines: 5,991

**HOME VISIT PROGRAMS**

- Maternal Infant Health Program (MIHP)
  - Clients: 987
  - Visits: 3,815

- Healthy Futures
  - Clients: 748
  - Calls: 127
  - Visits: 160

**HEARING & VISION**

- Hearing Screenings
  - Preschool: 2,003
  - School: 7,227

- Vision Screenings
  - Preschool: 2,313
  - School: 14,133

**Women·Infants·Children WIC**

- Average Monthly Enrollment: 7,920
- % Return Rate: 95.6%
- Project Fresh Coupons Distributed: 4,525
- Value of Project Fresh Coupons Distributed: $113,125
- Child Lead Screenings: 1,148
- Children Receiving Fluoride Varnish: 2,896

**Environmental HEALTH**

- Radon Kits: 293
- Soil Evaluations: 141
- Mortgage Evaluations: 252
- Building Permit Approvals: 276
- All Complaints: 185
- Child Care Inspections: 267
- Campground Inspections: 246
- Swimming Pool Inspections: 180
- Type II Sanitary Surveys: 194
- Tanning Inspections: 35
# Health Promotion

## Community Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
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</thead>
<tbody>
<tr>
<td>Worksite Wellness Program Participants</td>
<td>1,294</td>
</tr>
<tr>
<td>Community Nutrition Program Participants</td>
<td>3,023</td>
</tr>
<tr>
<td>Tobacco Treatment Program Participants</td>
<td>163</td>
</tr>
<tr>
<td>Diabetes Prevention Program Participants</td>
<td>21</td>
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<tr>
<td></td>
<td>189</td>
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</table>

## Family Health Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
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</thead>
<tbody>
<tr>
<td>Family Planning Program Participants</td>
<td>1,479</td>
</tr>
<tr>
<td>Breast &amp; Cervical Cancer Program Participants</td>
<td>348</td>
</tr>
<tr>
<td>Colorectal Cancer Program Participants</td>
<td>85</td>
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## Youth Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
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</thead>
<tbody>
<tr>
<td>Girls on the Run Program Participants</td>
<td>300</td>
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<tr>
<td>Adolescent Health Centers Services Provided</td>
<td>2,516</td>
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## Substance Use Prevention Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
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</thead>
<tbody>
<tr>
<td>Mason, Lake, Oceana, Missaukee, Wexford</td>
<td>4,967</td>
</tr>
<tr>
<td>Adults Reached in Community Education Programs</td>
<td>692</td>
</tr>
<tr>
<td>Students Reached in School Programs</td>
<td>67</td>
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<tr>
<td>Students at Youth Summit</td>
<td>1,000</td>
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<tr>
<td>Medication Disposal Packets Distributed</td>
<td>247</td>
</tr>
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</table>
MOVING FORWARD to PUBLIC HEALTH 3.0

Public health has long been described as the art and science of preventing disease, prolonging life, and promoting health, realized through its three core functions of assessment, policy development and assurance. While the core vision and mission of public health remains constant, the need to adapt and evolve to address emerging issues and challenges, and to take advantage of new and promising opportunities, is essential to public health relevancy in the future.

This need for a shift in practice is the result of several factors including: the changing health care needs of an aging population, the expanding health disparities of populations of color, the rise in chronic diseases and their risk factors, the increase in access to health care coverage, an information and data revolution requiring a need for meaningful sharing, and the need for collaboration with new non-traditional community partners.

In order to meet these challenges, public health is undergoing a transformation to a new model – Public Health 3.0. Building on its strong history, public health is expanding beyond its traditional role of disease prevention through immunizations, communicable disease investigation and containment, food service inspections and protecting ground water. It is evolving to a leadership role at the community stakeholder level, refocusing on the social determinants of health with policy change and action, all through assuming the role of Chief Health Strategist in order to meet the shifts in population health and the needs at the community level.
In 2014, the Public Health Leadership Forum identified this new model and role of public health as an essential shift in practice and outlined seven key practices of a high-achieving public health department. As a Chief Health Strategist, these practices support the vision of public health into the future while assuring its commitment to the reduction of the leading causes of preventable death and disability. Special emphasis is placed on underserved populations and a focus on health disparities - recognizing that where we live, work and play makes a difference in health outcomes.

Below are the seven key practices as determined by the forum. On the next several pages, we highlight how DHD#10 has put these key practices into action as the chief health strategist of our community. With strong leadership, robust and diverse community partnerships, competent staff, and a commitment to meeting the public health needs of the future, DHD#10 is poised to fulfill the challenges of Public Health 3.0.
PRACTICE
#1
Adopt and adapt strategies to combat the evolving leading causes of illness, injury and premature death

OPIOID & DRUG MISUSE PREVENTION EFFORTS

According to the Michigan Department of Health and Human Services, an average of 5 people per day die from opioid overdose. In 2016, there were 1,733 opioid overdose deaths in Michigan, compared to only 622 in 2011. With unintentional overdoses being one of the leading causes of death today, DHD#10 focused a great deal of effort toward substance use prevention in 2018.

Throughout our jurisdiction in 2018, we adopted several strategies to combat drug abuse, including increasing opportunities for proper medication disposal through permanent drop-box locations, a variety of medication take-back events, and distributing medication disposal bags to home-bound residents. We teamed up with community partners to provide lock-boxes for storing medications in the home, and also worked with 4 county-specific coalitions led by DHD#10 staff to strengthen partnerships and solidify infrastructure to address substance abuse issues at the local level. We worked with various schools to implement monthly “Prime for Life” classes to educate youth on the risks and impact of substance use during adolescence, and implement the LifeSkills and Project Alert programs as a prevention curriculum. The Annual Youth Summit was held again to bring high school students from different districts together for a day focused on leadership around substance abuse prevention.

CHILDHOOD LEAD POISONING PREVENTION PROGRAM (CLPPP) OUTREACH AND EDUCATION GRANT

As the leading causes of illness, injury, and premature death evolve, so must the strategies we implement to combat them. To do this, we have to stay current, not just with what is threatening people’s health, but also who is at the most risk. Children are at most risk for lead exposure and poisoning. In fact, according to the Michigan Department of Health and Human Services (MDHHS) the rate of elevated lead levels in Michigan increased in 2016 for the first time since 1998 in children under six years old.

In 2018, DHD#10 received a Childhood Lead Poisoning Prevention Program Outreach and Education Grant from MDHHS to implement regionally across 21 counties of Northern Michigan including Crawford, Kalkaska, Manistee, Missaukee and Wexford counties. The grant focuses on lead poisoning prevention education and outreach to community partners and health care providers.

DHD#10 hosted two Childhood Lead Exposure Elimination Commission forums, held multiple education and outreach events throughout the jurisdiction, and designed and distributed new lead prevention display boards across the region. We also received new Lead Care II machines used to start a new lead test collection process in Mason, Mecosta, Newaygo, Manistee, and Oceana counties.
HEPATITIS A OUTBREAK

DHD#10 adapted our traditional outreach strategies to utilize new communications methods in order to reach at-risk populations at non-traditional community venues. In 2018, Michigan had the largest hepatitis A outbreak in the country, and DHD#10 was included in that outbreak. With special funding from MDHHS, DHD#10 held numerous hepatitis A vaccination clinics and implemented a very aggressive outreach campaign to help slow down the outbreak and prevent individuals from getting or spreading hepatitis A.

Because of the seriousness of the outbreak, DHD#10 activated the Incident Management Team in January 2018 that included cross-divisional representatives from Personal Health, Environmental Health, and Health Promotion. This team worked together to develop workplans and follow state requirements for community outreach and targeted vaccination efforts. High-risk individuals, such as those homeless or in transient living conditions, injecting/non-injecting drug users, incarcerated individuals, men who have sex with men, individuals with chronic liver disease, those traveling to areas/countries with high-rates of hepatitis A, and those that work with high-risk individuals, were the primary targets of this effort.

In all, DHD#10 held off-site vaccination clinics at jails, homeless shelters, community meal sites, substance abuse treatment and counseling centers, community mental health organizations, and probation offices. We also targeted music festivals as high-risk venues due to large numbers of people gathering in one area, potential drug use, and limited hand washing facilities. Over 200 yard signs were dispersed at over 45 festivals to remind attendees to wash their hands and get vaccinated.

A massive education/outreach campaign was implemented to inform the public on how to prevent the spread of hepatitis A. Numerous print materials were created and a total of 7,121 were distributed to various establishments throughout the entire 10-county jurisdiction. Approximately 27 billboards were also placed throughout the jurisdiction that stressed handwashing and vaccination. Social media was also utilized to spread the word, as well as letters sent to 680 health care providers and community organizations, laminated posters and newsletters distributed to 236 campgrounds and 179 pool operators, and multiple presentations given to community collaboratives and other organizations.
Develop strategies for promoting health and well-being that work most effectively for communities of today and tomorrow

AGING WELL: EAT HEALTHY, BE ACTIVE

As the Chief Health Strategists for our communities, it is critical that DHD#10 shift our efforts with the changing demographics within our communities. Baby boomers are now over 65, making the elderly population larger than ever before. It is crucial that we focus on this growing population and help preserve their quality of life and curbing the prevalence of such conditions as dementia, as well as paying more attention to their preventable health concerns, such as injuries resulting from falls.

One way DHD#10 is accomplishing this is through programs like Aging Well: Eat Healthy, Be Active. This program helps reduce barriers among seniors to eating healthy foods and getting recommended amounts of daily physical activity. In 2018, DHD#10 partnered with four senior centers in the jurisdiction, including the Scottville Senior Center, Kalkaska Senior Center, Hart Senior Center, and Manistee Senior Center. DHD#10 implemented the evidence-based Walk with Ease program from the National Arthritis Foundation and trained senior center staff to conduct the program, along with forming walking clubs, promoting physical activity challenges and creating walking “loops” in the community where seniors and community members can walk safely. Walking Club members participated in “walking audits” to identify barriers to pedestrian safety in the community and presented on their findings to local health coalitions.

To encourage healthy eating, The Learning Kitchen, a hands-on nutrition education and cooking demo program, was implemented at the senior meal sites. Senior center staff were trained in this curriculum to ensure sustainability, and senior meal site food service staff incorporated local foods and fruits and vegetables in senior meal site menus.

Our rural communities must be designed for people of all ages and life stages. Currently, there are many barriers to being able to get to places to shop, access health care and socialize. Policies at the local level and state level that impact community design can help to increase infrastructure for walking in our communities. For example, busy roadways and intersections are barriers for people who cannot drive. Going to a full-service grocery store or accessing places to be active is difficult when public transportation is not available and walking is not a safe option. This project highlighted the need to create safe walking routes and to look at other routes that could be made safer by investing in sidewalks, traffic calming measures, and safe street crossings.
ADOLESCENT HEALTH CENTERS

Educating adolescents about their health and well-being today is an important way to prepare them for remaining healthy tomorrow. Shelby Adolescent Health Center, Wexford Adolescent Wellness Center, Viking Wellness Center in Grayling, Manton/Mesick Adolescent Wellness Center: different labels, common purpose. Each of these clinics represent a partnership between schools and DHD#10 where students have access to care in a location that is safe and convenient. The goal is to improve adolescent health and teach them to be better consumers of health care in the future.

A review of local needs assessment data helps ACH's identify their “Focus Areas” for education for the upcoming year. These assessments show whether the focus needs to be on teen pregnancy and STI's, substance abuse, chronic disease, behavioral health, or nutrition and physical activity. Behavioral health issues have been identified as a high-risk problem for many of the youth and are often what causes missed school days which can negatively impact academics and social interactions. Each of the AHC’s have adopted health as one of their focus areas and have implemented evidence-based interventions with outcomes in an effort to improve the overall behavioral health of students. The content of programming covers the basics for understanding illness, triggers, coping skills, and safety plans. The AHC clinicians and staff recognize and track youth with health concerns requiring a specific level of service. Clinicians use assessment and treatment plans to monitor progress towards behavioral health goals.

BREASTFEEDING SUPPORT PROGRAM

Promotion and support of breastfeeding women in the community is the key for women from all walks of life, race, or ethnicity, to continue their nursing journey. Our Breastfeeding Support Program is strengthened with a trained staff of BF Peer Counselors, Certified Lactation Specialists (CLS), Certified Lactation Educators (CLE) and International Breastfeeding Certified Lactation Specialists (IBCLC). DHD#10 received the USDA Loving Support Award, which recognizes excellence in breastfeeding support.

Having the ability to reach new moms immediately after giving birth allows us to work with them on techniques for successful breastfeeding. DHD#10 collaborated with local hospitals for “Building Bridges” training in Cadillac and Ludington which provided education to hospital and health care providers’ OB staff. With an agreement with Spectrum Health Gerber and Big Rapids, the BF Peer Counselors can make “rounds” to women after they deliver and assist with latching, etc. In addition, the peer counselors facilitate support groups in Manistee, Mecosta and Newaygo counties. Women have the opportunity to support each other and share the successes as well as their challenges with breastfeeding. Other community activities are “Rock and Rest” tents where moms can nurse her baby while attending an event. Examples include county fairs, festivals and concerts.
COMMUNITY HEALTH NEEDS ASSESSMENT

The need for data is evolving. It’s no longer a simple metric included on a final report for high ranking executives to evaluate. Data now needs to drive our work within the community; data unlocks the untold story of our community members and the challenges they may face (e.g. the social determinants of health). The problem has always been how to gather the information and data from our community members in a quick, inclusive, respectful, and statistically reliable manner.

Over the past two years, DHD#10 has been expanding our data collection efforts, including what type of data we collect and how we use it. Through our involvement as a key partner in a larger, regional effort through the Northern Michigan Public Health Alliance, we have had the opportunity to expand our data collection knowledge through various trainings and educational opportunities with a focus on community voice and involvement in data collection efforts.

DHD#10 has used these new data collection methods over the past year to better inform our programs, guide our work within the community, and take a critical look at how we provide our services and if we are truly meeting the needs of our communities.

One example includes utilizing “natural touch points” or, in other terms, meeting the people where they are (school events, neighborhood centers, health service providers, etc.). We did this by asking a simple, but cohesive, question, “What in your community helps you be healthy?” We learned that people’s social circle makes a big impact on how often they exercise or eat healthy foods. We also learned that factors, such as having a car or a steady job, makes it much easier to choose and engage in a healthy lifestyle.

COMMUNITY CONNECTIONS HUB

One important way DHD#10, in collaboration with the Northern Michigan Community Health Innovation Region (NMCHIR), is making a difference with community health data is through the establishment of the Community Connections HUB. The HUB is a team of Community Health Workers, Social Workers, and Registered Nurses who help connect individuals to available community resources.

Data collection is a significant component of the HUB. Clients are asked to complete a screening survey when seeing a partnering physician or community-based organization. If a client indicates a need and wants further assistance, a referral is sent to the HUB for follow up. A HUB team
member contacts the client and provides valuable connections to resources that can help alleviate the specific need. The HUB is able to not only provide high quality service delivery, but also identify gaps in services in each county. Typical data collected includes:

- Most common needs identified by clients-by county
- Needs that are not being resolved due to insufficient resources (ex. affordable housing pathway for a client may not be met due to housing issues that are prevalent in that area)
- Source of referrals to the program
- Rates of program referrals compared to referees that accept services when contacted

Once the HUB collects and analyzes trend level data, it is shared with community partners to better address needs in the community. Metrics are also shared with the care providers that make referrals to the HUB as well as the NMCHIR, who then sends this data to state partners. Insurance access, housing, food access and utility payment assistance were some of the most common needs seen in the clients in 2018.

MICHIGAN CARE IMPROVEMENT REGISTRY (MCIR)

When it comes to immunizations, individuals used to be responsible for keeping track of the ones they or their children received on a tiny little green, half-folded record card. Today, the Michigan Care Improvement Registry (MCIR) has replaced that requirement by providing an effective means for collecting and consolidating immunization information from multiple providers into a comprehensive immunization record. DHD#10 serves as the regional coordinator for MCIR Region 5 and provides data support across the 31 counties of northern Michigan. We work with providers to assure accuracy of client data, including working to eliminate duplicate clients and training local providers on the database.

For DHD#10, having access to MCIR is not only convenient, it is crucial for our public health nurses to be able to accurately assess and administer the correct vaccines to our clients. It is so much more than this, however. The data entered into MCIR is utilized for the following:

- Pulling vaccination records to use in clinics to assure appropriate vaccinations are given
- Entering historical immunization data for clients from different states to create a permanent record
- Provide client with current record in real time
- Storing Vaccines for Children (VFC) inventories and inventory transfers and loss reports
- Verifying transactions and loss reports
- Monitoring and maintaining inventory balance
- Accessing provider MCIR sites to assist with inventory issues
- Reporting school and childcare immunizations
- Enrolling VFC for providers and DHD#10
- Assessing multiple reports for immunization levels and remind clients to return for vaccines

Most importantly, access to MCIR is shared with all immunization providers across the state to assure real-time access to immunization records in an effort to increase immunization compliance rates within our communities. Data is used for targeted DHD#10 outreach and education efforts around improving childhood, adolescent and adult vaccination rates to help us meet state and national goals.
Build a more integrated, effective health system through collaboration between clinical care and public health

**DENTAL HEALTH & FLUORIDE VARNISH PROGRAM**

It has long been recognized that a healthy mouth equals a healthy body. Thus, at District Health Department #10, the MIHP and WIC programs offer nutritional education that includes the importance of early and consistent dental care both at home and professionally. Clients are instructed to begin wiping their infant’s gums down at birth and to begin brushing their infant’s teeth once the first tooth erupts. Instructions on how long, when and how to brush these baby teeth are also given. Referrals for local dental clinics are made at appointments, with the hope that children are seen by a family dentist by the time they are 1 year old. By promoting dental health, District Health Department #10 is encouraging healthy hygiene behaviors and setting each child up for success.

Expanding from education to action, DHD#10 is in its second year of integrating fluoride varnish services for children ages 6 month through 3 years. Regular application of fluoride varnish has been proven to reduce dental decay by up to 37%. Public health, maternal infant health and WIC nurses were all trained in the application of the varnish so that this crucial service could be offered both in the home and in the clinic. Collaboration between the various departments increase the chance that a child will get a fluoride treatment more than once which in turn increases the benefits of the varnish. When applying the varnish, a risk assessment is done which includes questions re: the use of pacifiers and bottles, family history of dental disease or special need and eating habits that may increase the chance of dental decay such as constant snacking. Any red flags that are noted in this assessment are then addressed. On average around 240 kids per month get fluoride treatments through DHD#10. Meaning 240 kids, and their families, are getting education promoting a healthy mouth every month!

**TOBACCO TREATMENT SPECIALIST TRAINING**

Tobacco use continues to be an issue of concern across the DHD#10 health jurisdiction with our communities continuing a trend of significantly high smoking rates among adults overall and among women who smoke during pregnancy. The Michigan Tobacco Quitline has been one of very few available resources available to health care providers for tobacco cessation. DHD#10 launched the Tobacco Treatment Specialist Training in an effort to impact tobacco use rates through partnering with our health care provider networks.

In collaboration with our health care provider networks, DHD#10 continues to provide Tobacco Treatment Specialist (TTS) Training in an effort to build a more integrated, effective health system aimed at prevention. TTS Training is an evidence-based program designed to train professionals to provide comprehensive tobacco treatment services tailored to individual needs within health care or community
settings. This program trains participants in providing effective evidence-based interventions for tobacco dependence. The program uses the chronic disease model to treat nicotine dependence and is based on recommendations from the Clinical Practice Guidelines for Treating Tobacco use and Dependence: 2008 Update from the U.S. Health and Human Services Administration.

Collaboration between healthcare providers and public health has greatly increased opportunities for treating nicotine dependent patients in our rural communities. DHD#10 continues to work with health care providers to establish and strengthen the referral process linking patients in the clinical setting to tobacco cessation services provided by DHD#10 TTS staff, thus improving the delivery of tobacco cessation services across the region. As many healthcare providers do not have the resources to provide a tobacco treatment program like the DHD #10 Nicotine Dependence program, this collaboration has proven very successful with referrals into the program increasing every year, reaching 163 in 2018.

**CANCER SCREENING COLLABORATION IS GOOD PUBLIC HEALTH**

Collaboration between clinical care and public health has long been evidenced through the Breast and Cervical Cancer Control and Navigation Program (BCCCNP), which partners public health navigation and coordination services with the local health care provider network. BCCCNP has funded life-saving cancer screening services, follow-up care and cancer treatment for 40-64 year old, low-income women since 1991. DHD#10 serves as one of 15 local coordinating agencies across the state, working to enlist the cooperation and participation of local physicians, hospitals, laboratories and other health care organizations to link women in need of cancer screening to local services and then, most importantly, to assure follow-up on abnormal screening results from clinical breast exams, Pap smears and screening/diagnostic mammograms. The project is managed successfully through the Michigan Breast and Cervical Cancer Control Information System (MBCIS) which collects clinical and claims data for tracking quality improvement requirements set out by the Centers for Disease Control and Prevention. DHD#10 works in tandem with its clinical partners to link women to needed care to address both cancer screening services and assure access to care of abnormal screening results. This partnership has well served the women of our communities, identifying seven breast cancers and three cervical cancers during the 2018 fiscal year. Two of the women diagnosed with breast cancer had not had a mammogram in many years – one in over 10 years and the other 24 years – and a third woman over sixty who had only had three mammograms in her lifetime, demonstrating the importance of annual mammograms especially after age 50.

Similar to the BCCCNP is DHD#10’s partnership with the Michigan Colorectal Cancer Early Detection Program which provides outreach and colorectal cancer education, risk assessment and screening services to low income 50-64-year-old men and women. DHD#10 serves as one of six local coordinating agencies in the state and works in partnership with our local provider network to provide colonoscopy for average or increased-risk individuals and offers the option of the Fecal Immunochemical Test (FIT) for those at average risk. Staff work to connect eligible clients to services locally and reduce barriers to timely screening for colorectal cancer. The US Preventative Services Task Force recommends screening starting at age 50 years through age 75. The MCRCEDP also used the MBCIS database to track clinical and claims data for colorectal cancer screening. DHD#10’s collaboration with our clinical partners resulted in 85 screenings this year including 60 colonoscopies and resulted in one diagnosed colon cancer.
Collaborate with a broad array of allies to build healthier and more vital communities

MINI-GRANTS FOR LOCAL HEALTH COALITIONS

Building healthier and more vital communities often takes teamwork and collaboration. One way DHD#10 accomplishes this is by engaging community partners and businesses to form local coalitions and participate in outreach activities regularly. Each county in DHD#10’s ten-county jurisdiction has a local coalition working to improve public health and prevent chronic disease.

Of course, funding for the outreach is always a necessity. In 2018, all ten local coalitions received mini-grants through DHD#10’s Chronic Disease Prevention Program, funded by the Tencon Health Plan, to support the efforts of the Northwest Michigan Chronic Disease Prevention Coalition (NMCDCPC). The mini-grant opportunity is part of the regional coalition’s Policy, Systems and Environmental Change (PSE) Task Force which develops the plan for distributing $50,000 to support local efforts that impact community health. Each coalition received $5,000 to implement a PSE change strategy to improve access to healthy foods, increase physical activity opportunities, and/or increase tobacco-free lifestyles. Examples of funded projects include signage for creating tobacco free outdoor recreation areas, improvements in schools, trails, playgrounds and parks to increase physical activity, and enhancement of food pantries, community gardens, and farmers markets to increase access to healthy foods.

In the last 3 years, Northwest Michigan Regional Chronic Disease Prevention Coalition has funded 43 different community partners for projects around nutrition, physical activity and tobacco prevention. Recipients include 9 school districts, 8 community gardens, 7 local governments, 5 farmers markets, 5 food pantries, 5 senior centers, 2 local libraries, 1 youth center and 1 local food council. In September, a Summit was held at Ferris State University for all local chronic disease prevention projects to come and share their successes and learn from others.

OCEANA HEALTHBOUND COALITION

An example of a local successful community collaboration is clearly demonstrated by the efforts of the Oceana Healthbound Coalition. The goals of the Coalition are to decrease rates of diabetes and increase physical activity among residents of Oceana County. The Coalition is impacting its communities through partnering with farmers markets to implement strategies for increasing healthy food access, and working with the Village of Walkerville and the Walkerville Thrives Coalition to increase physical activity in parks as well as to make the parks tobacco free. The City of Hart has also been engaged to increase activity in parks and enhance the farmers market. The real success of the coalition is its ability to partner with other community coalitions and collaborative efforts happening across the county to reduce duplication of effort, and increase shared understanding and a collective impact.
WORKSITE WELLNESS PROGRAMMING

Another area where DHD#10 partnered with non-health sector allies is through our Worksite Wellness programming. DHD#10 worked with 24 worksites and reached 1,294 individuals in 2018, including libraries, senior centers, local transportation, local government, manufacturing, hospitality, schools and healthcare providers. We not only provided nutrition programming to employees, but also helped worksites improve opportunities to be healthier at work through policy, systems, and environmental changes. In addition we link all the sites we work with into our LiveWell campaign and share newsletters, tips on programming and resources.

BEACH MONITORING

An important part of the “Up North” experience for those who live in Northern Michigan, or those who are visiting, is recreation on Lake Michigan and the many inland lakes and rivers. Unfortunately, with increased development and increased population, the quality of some of our favorite water locations are being questioned. Algae blooms are becoming more common and water-borne illnesses, such as giardiasis and cryptosporidiosis, continue to occur.

Although DHD#10 does not have the resources to sample and monitor all the water recreation sites in its jurisdiction, we do attempt to sample the most popular locations. For example, over the past 15 years we have sampled 21 beaches on Lake Michigan weekly for E. coli bacteria. Several years ago, DHD#10 partnered with the Bear Lake Association, a community environmental group in Manistee County, to conduct sampling twice a month at six of its public beaches. This was expanded in 2018 when the Village of Onekama, also in Manistee County, chose to work with us to sample 12 locations twice a month around Portage Lake. The locations were areas that citizens had suspicions of water contamination. Several areas of concern were found and are being investigated by both the village and DHD#10. Sampling will also continue throughout the next year.
PERFORMANCE MANAGEMENT SYSTEM

Moving into the future, the need to assure public health progress requires a commitment to continuous quality improvement, improved business practices and a commitment to transparency and accountability. In an effort to be good stewards of our resources, DHD#10 is updating its antiquated system of tracking progress to a fully integrated, organization-wide performance management system. This move will improve our ability toward measuring, analyzing, and tracking both public health goals and specific health indicators to demonstrate progress in reaching improvements in population health outcomes.

The new system allows for real-time monitoring of program specific projections, strategic plan initiatives, and community health improvement plan progress. It also allows the management team to adjust as needed to assure progress. In addition, the system will identify quality improvement opportunities to strengthen the agency’s ability to serve the community and demonstrate accountability of resources.

Initiation of the new performance management system began in 2018 as we researched various systems, identified our needs, purchased a fully integrated system, and implemented training. We look forward to building our performance measures into the system and its full launch in 2019.

ENHANCED FINANCIAL SYSTEMS

DHD#10 continues to make progress in improving its approach to financial management including budgeting, financial analysis, and reporting. Improvements this past year have included implementing new training on budget monitoring for our management staff and overall agency staff, and better alignment with our human resource department. In addition, develop of new management tools included creating budgeting templates and enhanced budget monitoring tools. These new tools allow for faster reporting of budgeted-to-actual revenues and expenses and identification of budget variances for better budget control.

Expanding DHD#10’s capacity included adding a financial analyst to the team. This addition has helped build our expertise to analyze results, monitor variances, and identify trends. Leadership now has access to trend reports that include service, revenue/expense, labor distribution and mileage data. These changes have enabled us to provide more accurate and timelier budget oversight and monitoring processes and has led to program efficiencies.
CROSS-JURISDICTIONAL SHARING

Inefficiencies in public agencies can often be tied to limited resources, infrastructure, and size of organizations. When a public health agency is too small, it may lack the expertise to carry out specialized work and/or lack resources to accomplish the core functions of public health and its ten essential services. These limitations could be in the form of being too small to support an epidemiologist, information technology staff, a medical director, or even an inability to support the backbone infrastructure of specific administrative functions. Such limitations can be overcome by strategic alliances with neighboring public health jurisdictions through the use of cross-jurisdictional sharing agreements up to and including formal mergers.

District Health Department #10 has a very long history of taking advantage of cross-jurisdictional sharing opportunities. Back in 1997, the agency was created as a result of consolidation of four separate local public health departments which had a history of sharing its health officer, an administrator, human resource functions, finance departments and health promotion services. Its merger demonstrated the full advantage of cross-jurisdictional sharing, creating a stronger infrastructure, reducing administrative burden, expanding and redirecting resources to secure needed expertise, and supportive technology. Currently DHD#10 is in a formal cross-jurisdictional agreement for sharing an epidemiologist and a Medical Director with Central Michigan District Health Department and Mid-Michigan District Health Department. This agreement allows each agency to meet mandatory state requirements while sharing the cost and allowing for redirecting funds to strengthen services.

Cross-jurisdictional sharing can be realized beyond staffing and include sharing resources for staff development and administrative supports. DHD#10 is currently involved in expanded cross-jurisdictional relationships to support shared training to increase staff competency to address newly emerging public health priorities, new technologies and competencies. The agency also works with its partner health departments to share best practice in policy development, legal review, and aligning best practices clinically.

One such partnership that has strengthened the capacity of DHD#10 is membership in the Northern Michigan Public Health Alliance (NMPHA). The NMPHA is a collaboration of seven public health departments covering the 31 counties of northern Michigan. This collaboration provides strength in advocating as an aligned force at the state level for public health funding and public health policy. It also provides opportunity for seeking funding to implement programming on a regional level with a unified message and approach. There is strength in numbers and strength in sharing resources and expertise to gain efficiencies and achieve economies of scale.
Work with corresponding regional, state & federal partners to better meet the needs of the community

**DRUG-FREE COMMUNITIES GRANT**

Working with federal partners to help meet community needs is a significant way DHD#10 can act as the Chief Health Strategist. In Lake County, DHD#10 facilitates the Communities that Care Coalition (CTC) for Substance Use Prevention. CTC brings together schools, businesses, law enforcement, parent groups, and other members of the community to help protect youth from the devastating consequences of substance use.

With grant funding from the Drug-Free Communities Support Program, awarded by the Office of National Drug Control Policy, CTC is working hard to make Lake County a safe and healthy environment for youth. The funding has helped CTC become a reliable resource for prevention education in the county. We provide fun activities for youth and their families to participate in without drugs or alcohol. We are also able to provide substance abuse prevention education for grades 3 through 12. CTC has built strong relationships with many community partners in an effort to increase protective factors and reduce risky behaviors.
PFAS WATER INVESTIGATION

DHD#10 continues to work closely with state and federal partners to assist in the ongoing PFAS water investigation happening throughout the state. DHD#10 Health Officer Kevin Hughes sits on the Local Health Advisory Committee for the Michigan PFAS Action Response Team (MPART). MPART is an advisory body within the Department of Environmental Quality (DEQ) tasked with addressing the threat of PFAS contamination in Michigan, protecting public health, and ensuring the safety of Michigan's land, air, and water, while facilitating inter-agency coordination, increasing transparency, and requiring clear standards to ensure accountability. Other state agencies involved include Department of Health and Human Services, Department of Natural Resources, Department of Agriculture and Rural Development, Department of Transportation, Department of Military and Veteran Affairs, and Department of Licensing and Regulatory Affairs. MPART also works with several federal agencies including the Environmental Protection Agency, the Department of Defense, and 14 other federal agencies that make up the Toxics and Risk Committee on Environmental, Natural Resources, and Sustainability National Science and Technology Council.

Crawford County continues to be a location where PFAS is being investigated. To date, approximately 684 private residential wells have been tested around the Grayling Army Airfield (GAAF), and 453 around Lake Margrethe (LM) in Grayling for PFAS. Of those tested, 17 wells came back as exceeding 70 parts per trillion for PFOA and PFOS in the GAAF area, and 2 wells exceed in the LM area. In 2018, the DEQ began installing monitoring wells in several key locations where PFAS was highly detected in both areas to try and determine the characteristics of the contamination. Once data is fully received and analyzed, a plan for remediation will be determined.

Due to foam found on Lake Margrethe, DHD#10 placed Public Health Advisory signs at public access locations around the lake to discourage people from ingesting foam. DHD#10 also kept the public informed through public meetings held in June and December 2018.

In 2018, the DEQ began a statewide initiative to test drinking water from all schools that use well water, all community water supplies, and all child care providers and Michigan Head Start programs listed at Type II Non-Transient Non-Community Water Supplies in Michigan. The vast majority of sites did not detect PFAS in the water. Some sites had detections of PFAS in the water and are being reevaluated and prioritized for retesting by the DEQ. There were no sites within DHD#10’s jurisdiction that exceed the lifetime health advisory of 70 parts per trillion for PFOA and PFOS.

It is this type of collaboration with regional, state, and federal partners that truly helps us best meet the needs of our communities. Working together as a team ensures that all the bases are covered and that we are all on the same page.
LOOKING AHEAD to 2019

Looking ahead to the next fiscal year, DHD#10 faces several challenges, yet we are prepared to meet them head on. Through strategic planning, collaboration with community partners, and good old elbow grease, we head into the next year equipped to achieve our mission of promoting and enhancing the health of our communities and environment through protection, prevention, and intervention.

On the TO-DO List:

- Increase County Appropriations
- Begin New Workforce Development Plan
- Finalize New Agency Strategic Plan
- Launch Electronic Health Records (EHR)
- Initiate Public Health 3.0
- Adjust Organizational Structure
- Implement Performance Management System
2018 COMMUNITY PARTNERS

DHD#10 recognizes all of the partnerships and support we receive from numerous outside agencies. With so much cross-jurisdictional sharing, partnerships, and support, we are able to continue offering unique programming and comprehensive public health services to our entire 10-county jurisdiction.

Arbor Circle
Baldwin Community Schools
Baldwin Family Health Care
Cadillac Area Public Schools
City of Big Rapids
Crawford Ausable School District
Crawford County Community Christian Help
Dental Clinics North
Family Practice of Cadillac, P.C.
Ferris State University
Fremont Area Community Foundation
Fremont Christian Church
Great Start Collaborative
Health Department of Northwest Michigan
Heeren, LLC
Houseman’s Foods
Lake County Children’s Trust Fund
Lake County Department of Health and Human Services
Lake County Habitat for Humanity
Lake County Juvenile Court
Lake County Michigan Works!
Lake County MSUE
Lake County Sheriff Dept
Lake County Trial Court
Lake Osceola State Bank
Lakeshore Community Hospital Medical Staff
Magna Mirrors
Manton Consolidated Schools
Mason County Community Foundation
Mesick Consolidated Schools
Michigan Cancer Consortium
Michigan State Police
Michigan State University Extension
Munson HealthCare
Munson Healthcare Cadillac Hospital
My Community Dental Center Big Rapids
My Community Dental Clinic
Northern Michigan Community Health Innovation Region
Northwest Michigan Chronic Disease Prevention Coalition
Pompeii’s Pizza
Rice Lake Farms
Shelby Public Schools
Spectrum Health Big Rapids
Spectrum Health Gerber Hospital
St. Stephen’s Council of Women
Tencon Health Plan
Thorton Fund
West Michigan Community Mental Health
Wexford Missaukee Intermediate School District
Woods and Water RV Park

Thank You!
Moving Forward