Environmental Sustainability
Enhanced program aimed at stopping natural resource depletion and maintaining environmental stability

Why Ottawa Wells are in DANGER of TAPPING OUT
Water is Not Free

PFAS
What we know about this Emerging Health Threat

Behind the Scenes of a PUBLIC HEALTH RESPONSE

How a Community Plan is Addressing 3 TOP HEALTH PRIORITIES

miOttawa.org/Health2019
Each year is filled with new strategies that address the complex issues that contribute to population health. These strategies focus on improving health behaviors, accessing health services and addressing environmental factors that contribute to health. In 2019, to address the increasing access to care needs, our department, in partnership with My Community Dental Centers, opened a new dental clinic in Grand Haven. This has provided better access to dental services for people with Medicaid, uninsured or underinsured. The work of the Ottawa County Department of Public Health (OCDPH) positively impacts the lives of every Ottawa County citizen. In the 2019 Annual Report, you will find examples of how we protect you against disease and environmental threats; communicate timely and credible health information you can use; offer new services that address the needs our community members have identified and how OCDPH works closely with community partners to protect your health and the environment. You will also find information on how we are using technology to improve the efficiency and effectiveness of our service delivery. I invite you to meet Flu Granny and learn about where to go for affordable dental services. I encourage you to read about Brett’s health journey and how his life has changed. I ask that you read how Ottawa County is protecting vital water resources and join us in expanding environmental sustainability.

As your Administrative Health Officer, I am honored to serve you and our Ottawa County citizens with programs and services that are designed to protect your health. I thank the Ottawa County Board of Commissioners for their support and commitment to the health and safety of each Ottawa County resident. I also commend the exceptional knowledge, skills and customer services of our public health staff who promote the mission, vision and values of our department in all that they do.

Sincerely,

Lisa Stefanovsky, M.Ed
Administrative Health Officer
A big thank you to the Ottawa County Department of Public Health team and community members who contributed to this publication. Your stories speak volumes, touch lives and make a difference!

FEATURES

Under the Public Health Code Act 368 of 1978, a local health department shall continually and diligently endeavor to prevent disease, prolong life and promote the public health through organized programs including prevention and control of environmental health hazards; prevention and control of diseases; prevention and control of health problems of particularly vulnerable population groups; development of health care facilities and health services delivery systems; and regulation of health care facilities and health services delivery systems to the extent provided by law. The Ottawa County Department of Public Health (OCDPH) is required by state mandate to perform a variety of specific services. Provision of these services is reviewed through a state accreditation process. In addition to, and ideally within the mandated services, OCDPH builds programs and services around community and customer/client needs. These needs are defined through community research. The OCDPH uses a variety of collected information to guide program development. This includes the Behavioral Risk Factor Survey, Youth Assessment Survey, Community Health Needs Assessment and the ongoing collection of epidemiological surveillance data and information.

LETTER FROM THE HEALTH OFFICER

ENVIRONMENTAL SUSTAINABILITY
Revamped program aimed at stopping natural resource depletion and maintaining environmental stability.

A WATER SHORTAGE IN MICHIGAN?
Scientific study reveals drinking water in the deep bedrock aquifer below Ottawa County isn’t being replenished as quickly as it’s being removed.

ROBINSON TOWNSHIP PFAS RESPONSE
PFAS in Ottawa County launched a multi-agency coordinated response to address the issue and develop a public health action plan.

BEHIND THE SCENES OF A PUBLIC HEALTH RESPONSE
Health officials work behind the scenes and are ready for any type of outbreak by developing policies and action plans before any occurrence.

FLU GRANNY AWARENESS CAMPAIGN
A cross-jurisdictional sharing project to promote flu prevention messages across the region.

PUBLIC HEALTH COMMUNICATIONS
Empowering citizens with credible and timely health information by providing the right message at the right time to reach the right people.

TECHNOLOGY UPDATES
Using technology to improve the efficiency and effectiveness of organizational service delivery.

NEW DENTAL CENTER IN GRAND HAVEN
Partnership with My Community Dental Centers expands affordable dental services for Ottawa County residents.

HEALTHY BEHAVIORS, MENTAL HEALTH & ACCESS TO CARE
How our community works together to address the greatest health needs.

GUIDING PEOPLE ON THEIR PATHWAYS TO BETTER HEALTH
Community health worker journeys with client to help improve his health and wellness.

WE ARE PUBLIC HEALTH
Program highlights, awards and recognitions.

FINANCIAL STATEMENT

SOURCES
Beginning in 2019, the Ottawa County Waste Management Program evolved. We are not simply talking about waste, rather stopping natural resource depletion and maintaining environmental stability. The goals of the program are to protect the environment by educating the public, properly disposing of materials and keeping recyclable materials out of landfills. In 2018, the program kept more than 260 tons of materials from landfills and in 2019, more than 278 tons. To better represent our program’s vision and goals, we renamed it the Environmental Sustainability Program. We help Ottawa County residents become more environmentally aware by providing informative resources and offering services at no charge such as collecting and properly disposing of household hazardous waste, used oil and antifreeze, old and unused medications, used sharps and scrap metal, along with offering residential recycling for a small annual fee.

Additionally, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Rural Electronic Recycling Grant enabled us to expand electronic waste recycling so we could accept projection TVs, Cathode Ray Tube (CRT) TVs and CRT computer monitors at the Ottawa County Resource Recovery Service Centers. Electronics often contain hazardous materials that should not be landfilled or incinerated. They also contain precious metals, glass and plastics that can be recycled. Recycling electronics conserves natural resources and avoids air and water pollution. The nearly $27,000 EGLE grant was used to purchase equipment to assist in collecting electronic waste and a structure to house them at no cost to residents since many retail stores charge fees to recycle electronics. Because of this grant, we went from collecting about 11 tons of electronic waste each year to 32 tons in 2019—nearly a 200% increase. Also in 2019, the Environmental Sustainability Program had a 26% increase in household hazardous waste collection—keeping even more waste out of landfills.

To expand our sustainability efforts in 2020, we will be collecting organic materials for composting. Additionally, we will be collecting scrap tires because of a $14,500 EGLE grant we received. The funds will be used for storage equipment at a permanent drop-off location versus only having one-day drop off events and proper recycling of scrap tires. Small changes in behavior can have a big impact on our planet. We can dramatically reduce the amount of trash thrown away by reducing the number of materials we use, reusing materials and recycling whenever possible. When we think about what we’re using and how to reduce the waste we produce, we help create cleaner land, air and water, and better health².
Known as the Great Lakes State, Michigan’s abundance of freshwater lakes, streams and coastlines are tied to the state’s identity. This creates a false perception that clean drinking water will always be readily available at the tap. Most Michiganders have not put much thought into where their water comes from or considered the possibility that it may one day be at risk1. It was the mid-2000s when the wells in Allendale Township’s Highland Trails subdivision began running out. Homeowners complained of low water pressure and even dry faucets. Area farmers also chimed in stating their soybean leaves were ‘burned’ because their irrigation water was salty. These reports were concerning, especially since Ottawa County is the fastest-growing county in the state and one of the most agriculturally diverse2.

As the county’s population continues to grow and its agricultural industry flourishes, access to abundant freshwater is essential. Residents, agricultural producers and businesses in Ottawa County obtain their water from two primary sources; municipal water systems and natural aquifer systems. The county’s urbanized areas are served mainly by municipal systems that distribute water processed from Lake Michigan. Its rural areas rely on water that is pumped from the underground geologic aquifer systems. Since 2005, there have been instances in the county where the aquifer system has not had the capacity to support new withdrawals because of the low water levels. There have also been instances where extracted groundwater contains elevated levels of sodium chloride3.

Groundwater Study
As groundwater complaints mounted and to better understand the long-term sustainability of the county’s aquifer system, the Ottawa County Board of Commissioners requested a comprehensive, forward-looking study. One goal of the study was to identify areas in the county where continued and increased groundwater withdrawals may negatively impact the sustainability and quality of the aquifer system. Starting in 2012, Michigan State University conducted a two-part groundwater study. Phase I, which was completed in 2013, validated the anecdotal reports; water levels in the deep bedrock aquifer system have been declining for 20 years, and in certain areas, sodium chloride (salt) levels are rising above recommended standards. The Phase II study, which assessed how the groundwater supply could be impacted in the future, was completed in March 2018. Phase II demonstrated parts of the aquifer will continue to decline and sodium chloride levels will continue to increase if proactive steps are not deployed to manage withdrawal rates2.

Proactive Strategies
Armed with the data, the Ottawa County Planning & Performance Improvement Department developed partnerships with local scientists, policymakers and stakeholders—including the Ottawa County Department of Public Health (ODCIPH)—to help develop practical solutions to protect vital water resources. The result—a Proactive Strategies Index—a guidebook that highlights steps to address the water crisis. The ODCIPH has been working with PPI, particularly, in education and mitigation strategies by raising awareness of the water issue, conservation strategies and using policy to enhance groundwater sustainability1.

A Water Shortage in Michigan?
Groundwater issues aren’t an ‘out-west’ problem anymore. Seven years of scientific study reveals that drinking water in the deep bedrock aquifer below Ottawa County isn’t being replenished as quickly as it’s being removed.

PROACTIVE STRATEGIES INDEX

Educate
Advocating for change in regional water conservation perceptions

Mitigate
Using policy to enhance groundwater sustainability

Integrate
Partner-managed programs designed to make a difference

Coordinate
Creating accountability through organizational structure

WHY IT MATTERS

Falling Water Levels
in bedrock aquifer system

Wells Dry Up
leaving homes and farms without water

Rising Levels of Sodium
and other minerals in bedrock aquifer groundwater supply

Crops Suffer
yield loss and decreased quality

Plumbing Corrosion
can occur and water may have a foul taste

Health Concerns
may arise with increased intake of dietary sodium for people with diagnosed heart conditions.

With a dedicated group of partners, we’ve created an index that outlines the many ways we can tackle this groundwater issue,” said Paul Sachs, Planning and Performance Improvement Department Director. “This guidebook goes a long way to not only address the crisis with mitigation strategies, but also to offer common-sense solutions residents and businesses can implement.”

Pictured: Kirk Park in West Olive, Ottawa County

PROACTIVE STRATEGIES INDEX

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A thick clay layer above bedrock aquifer prevents it from being replenished. Bedrock aquifer cannot pull water from Lake Michigan because they are not connected. Geologic conditions, along with pumping rates, are causing water levels to decline in the bedrock aquifer. Salt to be pulled up from the bottom of the bedrock aquifer.

GROUNDWATER CHALLENGES

GROUNDWATER ORDINANCE

PROTECTING GROUNDWATER THROUGH INNOVATIVE POLICY

The county is researching options and examples for implementing an ordinance that will protect groundwater by managing certain aspects of development and enhancing municipal water access. Innovative techniques used by other jurisdictions include:

- Prioritized development credit programs
- Expanding municipal water infrastructure with new funding sources
- Rebate options for connecting to municipal water

ENVIRONMENTAL HEALTH REGULATIONS & POLICIES

Environmental health experts, Matthew Allen and Adeline Hambley, along with county officials, Health Officer Lisa Stefanovsky, Administrator Al Vanderberg and PPI Director Paul Sachs are working to revise and enhance existing regulations to accommodate the sensitive nature of the county’s geology. Potential revision areas include:

- Minimum separation distances between wells and septic systems
- Minimum distance requirements for new development to connect to municipal water/wastewater infrastructures
- Advanced types of on-site wastewater treatment (e.g. aerobic), where applicable
- Enhanced well drilling records
- Real Estate Transfer Evaluation Program

INNOVATIVE SYSTEMS & WAYS TO PERMIT

Opportunities exist for capturing, storing and reusing water from various systems that typically discharge water as a waste byproduct. Recycled water from these systems can be used for irrigation, agricultural or other applications. These systems may require certain types of approval and require significant coordination to implement. Possible sources for water recycling include:

- Household and industrial greywater systems
- Dewatering bags from various sources
- Sump collection systems
- Storm water collection and storage

EDUCATE

CREATE A CULTURE OF CONSERVATION

With funding from a $16,000 grant, PPI and OCDPH developed educational materials to distribute to the public and select stakeholder groups. The goal was to create conservation pieces to start dialogues about the need to change thinking and behavior in regards to water conservation. Outreach materials included:

- Billboards
- Johnny Poster Ads
- Stickers
- Pens
- Water Bottles
- Informative Handouts
- Faucet Aerators
- Shower heads
- Hose Timers
- Soil Moisture Meters
- Event Materials
- Table Cloths/Runners
- Banners/Display Boards
- Exhibitor Attire
- Interactive Tablet Display
- Irrigation Demo Equipment
- Interactive Groundwater Model

MITIGATE

OUTREACH CAMPAIGN

CREATE A CULTURE OF CONSERVATION

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HEALTH CODE REVISIONS & EXPLORING POLICIES

STRENGTHENING ENVIRONMENTAL HEALTH REGULATIONS & POLICIES

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WATER RECYCLING STRATEGIES

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- Household and industrial greywater systems
- Dewatering bags from various sources
- Sump collection systems
- Storm water collection and storage
On October 29, 2018, Ottawa County Department of Public Health (OCDPH) officials received water test results that measured levels of per- and polyfluoroalkyl substances (PFAS) from Robinson Elementary School’s drinking water well. The school’s water had PFAS levels above the EPA Health Advisory Level (LHA) of 70 parts per trillion (ppt) for PFOS and PFOA combined.

Immediately upon receiving the test results, OCDPH notified Grand Haven Area Public Schools (GHAPS) who quickly shut off all water fountains and provided the students and staff with bottled water for drinking and cooking.

This launched a multi-agency coordinated response to develop a public health action plan.
Beginning in April 2018, the Michigan Department of Environment, Great Lakes, and Energy (EGLE formerly MDEQ) implemented a statewide program to test Michigan’s public water supplies, including schools with wells for PFAS. The initiative was formed by the Michigan PFAS Action Response Team (MPART) to identify sources and locations of PFAS and protect drinking water and public health.

PFAS chemicals have been used globally during the past century in manufacturing, firefighting and thousands of common household and other consumer products. They are persistent in the environment and in the human body. They don’t break down and can accumulate over time. In recent years, experts have become increasingly concerned by the potential effects of high concentrations of PFAS on human health, thus making it an emerging public health issue.

The EPA had set a LHA level for two PFAS chemicals in making it an emerging public health issue. The testing found that only two supplies in Michigan had PFOS and PFOA combined over the EPA LHA of 70 ppt. This was the City of Port Huron and Robinson Elementary School in Ottawa County.

EGLE collected the school’s initial water samples in September 2018. The OCDPH received the results on October 29, 2018, which had PFOS and PFOA combined at 110 ppt and total PFAS at 144 ppt. The results from this rural school were unexpected since other PFAS sites around the state were mainly related to other chemicals, including lead and copper, to ensure the new filtration system provides safe water at the school. Until the system is fully installed and tested, the school will continue to use bottled water.

One of the biggest public health communication challenges of this PFAS response was not having enough data to know how these chemicals could affect someone’s health. Yet, we still worked to craft and solidify coordinated messages with what information we had.

Key messages:
• Drinking is the primary way PFAS can get into the body.
• Washing hands and other skin contact is not considered health concern as PFAS does not move easily through the skin.
• PFAS health problems are not immediate. If you drink high levels of PFAS chemicals over time you could be more likely than the average person to develop some health problems in the future.

Call-to-action:
• If you’re concerned about PFAS exposure, contact the state toxicology hot line and reference the MDHHS and CDC resources.
• If you are within the study area, be available for well testing when we contact you.
• If you are not within the study area and are concerned about your well water, contact the state for residential water testing options.

What are PFAS?
Per- and polyfluoroalkyl substances (PFAS) are a large group of man made chemicals that are resistant to heat, and repel oil, stains, grease and water. They are used in fire-fighting foams, stain repellents, nonstick cookware, waterproof clothing and shoes, fast food wrappers, personal care products and many other consumer goods. These chemicals are very persistent and do not break down easily in the environment.

According to the Agency for Toxic Substances and Disease Registry (ATSDR), PFAS are found at low levels in the environment (air, water, soil). Because these substances are so widely used and because they move in groundwater and surface water, PFAS may be in some drinking water supplies. Drinking is the primary way PFAS can get into the body. Washing hands and other skin contact is not considered a health concern as PFAS does not move easily through the skin. If you are concerned about PFAS exposure, please contact the MDHHS toxicology hot line at 1-800-648-6942 or visit www.michigan.gov/pfasresponse or www.atd.cdc.gov/pfas.

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AGENCIES

In October 2019, GHAPS received official approval from EGLE to install a water filtration system at Robinson Elementary School. The approval outlined specific testing protocols for PFAS and other chemicals, including lead and copper, to ensure the new filtration system provides safe water at the school. Until the system is fully installed and tested, the school will continue to use bottled water.

update
Robinson Elementary School
Water Filtration System

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The afternoon of receiving the school’s initial water test results, EGLE collected a second confirmation sample at the school as well as samples from the nearby fire station and a daycare center adjacent to the school. EGLE had the testing expedited to receive them back that same week. However, EGLE had already begun the investigation by obtaining historic records for potential sources in the area. They obtained information from the Michigan Geological Survey to identify the groundwater flow direction in the area to determine the next steps in the investigation.

On October 31, 2018, EGLE received the school’s confirmation water test results which still indicated levels above the LHA of 70 ppt. The PFOS and PFOA combined tested at 119 ppt and total PFAS at 171 ppt. The other water samples taken from the fire station and daycare center were far below the LHA of 70 ppt. We presented these results at the second news conference held at the county administration board room and shared the next steps in the investigation with the public and media.

The test results from the school’s water supply well led to establishing the 120th Avenue PFAS Study Area in Robinson Township. EGLE conducted the study primarily in the area of Robinson Elementary School and the Robinson Township Fire Department (RTFD) and Township Hall to further understand the presence of PFAS in the environment and to potentially identify what caused the PFAS contamination. In November 2018, EGLE collected 23 residential well samples, as well as a sample from the school’s irrigation well, the township park’s irrigation well, an adjacent daycare, the township hall and fire department, a church and the wellhead at the school (to rule out internal plumbing as a potential source). After receiving these results and based on the data, EGLE proceeded to collect an additional 37 residential well samples. In total, one residential well exceeded 70 ppt for PFOS and PFOA combined.

In February 2019, EGLE began a hydrogeological study to understand the vertical and horizontal extent of the PFAS impact and better understand where the source area was potentially located. The hydrogeological investigation began with the installation of monitoring wells at the school, the township park, RTFD, as well as two residential properties adjacent to the fire station. It also included sampling of the vertical aquifer and soil sampling.

“Our department has been working closely with MDHHS to carry out the public health action plan,” said Matt Allen, environmental health supervisor with OCDPH. “For every resident who had their drinking water wells tested by EGLE and had any detection of PFAS, we offered and installed point of use water filters.”

By March 2019, EGLE had collected 24 groundwater samples at 10 locations and conducted soil sampling at four locations. PFAS was found in the groundwater at all 10 locations and in the soil at three of the four locations within the study area. The highest groundwater result was 643.61 ppt for PFOS and PFOA combined and 2,142.27 ppt total tested PFAS. PFAS was detected in the groundwater at Robinson Elementary School with 61 ppt for PFOS and PFOA combined and 409 ppt total tested PFAS.

Potential Sources
The hydrogeologic investigation did not identify a definitive source of PFAS contamination in the area. The presence of PFAS compounds in soil samples and the elevated concentrations of PFAS in groundwater at Robinson Elementary School and the RTFD indicate the PFAS compounds may have been released at both locations. EGLE explored whether this could have been caused by the use of Aqueous Film Forming Foam (AFFF or Class B Fire Fighting Foam). However, the RTFD indicated AFFF is not possessed nor historically used, and the Fire Department does not have any historical knowledge of AFFF being applied in the area. An investigation by EGLE confirmed the foam currently used by the RTFD does not contain PFAS. AFFF has been available since the 1960s, and it is possible that it was applied in the area during an era that pre-dates the knowledge of anyone currently associated with the RTFD. No other potential sources such as illicit dumping or disposal of industrial waste have been identified.

Based on these findings, EGLE will continue to work with Robinson Township and GHAPS to further the investigation and assess the groundwater to the area north and east of the fire station. As information is available, it will be posted at www.miOttawa.org/PFAS.
Collect and monitor health data to identify health threats.

Enforce laws and regulations that protect health.

Disseminate proactive educational messaging to the public and providers.

Educate providers and schools on vaccine-preventable diseases.

Communicate regularly with local, regional and state partners.

Strengthen community relationships with food establishments.

Evaluate policies, plans and response efforts for quality.

Respond and investigate complaints and increases in diseases.

Develop investigation survey tools.

What is an Outbreak?

According to the Centers for Disease Control and Prevention (CDC), an outbreak or epidemic occurs when there are more cases of disease or illness than would normally be expected in a specific time and place. It may be a disease that doctors have already seen before just in a new form or in abnormally high numbers, such as foodborne illnesses and vaccine-preventable diseases. It can also be an emerging issue where not much is known, such as PFAS (per- and polyfluoroalkyl substances), EVALI (e-cigarette or vaping product use-associated lung injury), and Triple E (Eastern Equine Encephalitis) virus. All of these scenarios need to be investigated to prevent other people from getting sick or dying and to determine why the outbreak is occurring.

Today’s world is more connected than ever. In as little as 36 hours, a pathogen from a remote village can spread to all major cities in six continents. That is why it is critical to detect, report and respond to outbreaks in a timely manner. Delays in response activities can lead to outbreaks spreading quickly and spilling over to other communities.

Preparedness

The Ottawa County Department of Public Health (OCDPH) officials work behind the scenes and are ready for any type of outbreak by developing policies and action plans before any occurrence. They continue to prepare, test and carry out immediate responses to better protect the community from health hazards. OCDPH’s strength in preventing and stopping the spread of diseases lies in its internal collaboration across the multi-disciplinary teams that aid in the surveillance and response. The teams consist of subject matter experts in environmental health (e.g., food safety and water quality), communicable diseases, immunizations, epidemiology, medical, administration, emergency preparedness and communications. They follow a structured incident command system to streamline the investigation and quickly implement control measures (next page). The system is also used by the Federal Emergency Management Agency and the CDC to enable effective and efficient incident management. This allows response teams to identify the key concerns associated with the incident—often under urgent conditions—without sacrificing attention to any component of the response.

To better control infectious disease outbreaks, the Michigan Department of Health and Human Services (MDHHS) requires local health departments, laboratories, emergency departments, schools and childcare settings, long-term care facilities and healthcare offices to report certain communicable diseases. Data collected in the Michigan Disease Surveillance System are monitored by the OCDPH communicable disease and epidemiology teams for disease trends in Ottawa County that include unknown, suspect, probable and confirmed cases of the reportable condition. Increases in any pathogen-like common influenza and chickenpox cases or uncommon measles and drug-resistant tuberculosis cases—prompt investigations. Similarly, an increase in calls to the department and online reporting submissions from the public also prompt investigations. The disease detectives from the environmental health, communicable disease, epidemiological and immunization teams spring into action to determine the source and size of a possible outbreak by contacting the ill to find out their symptoms and level of immunity (when applicable), identifying the risks of exposure, collecting lab results and connecting with affected facilities such as schools and restaurants. Accurately identifying the risk factors allow public health officials to put in place the appropriate prevention methods such as vaccination, prophylaxis, water filtration, disinfecting, isolation, quarantine, enforcement, sheltering or evacuation. As the investigation develops, the response team expands to include the incident commander—often the health officer who takes the lead on the outbreak response actions—the preparedness coordinator and public information officer. And at times, county emergency management, law enforcement, legal counsel and fiscal services. Each member of the response team works to ensure outbreaks are contained before they can spread by identifying the scope of the incident, implementing control measures, providing education and communicating with the public.

Prevention

Local public health works to prevent and promote the health of the community by carrying out the powers and duties as defined in the Michigan Public Health Code Act 368 of 1978. This includes, but is not limited to:

- Collect and monitor health data to identify health threats.
- Respond and investigate complaints and increases in diseases immediately to prevent an outbreak and additional illnesses in the community.
- Evaluate policies, plans and response efforts for quality improvements.
- Enforce laws and regulations that protect health.
- Develop investigation survey tools.
- Strengthen community relationships with food establishments.
- Provide food safety training.
- Educate providers and schools on vaccine-preventable diseases and disease reporting.
- Communicate regularly with local, regional and state partners.
- Disseminate proactive educational messaging to the public and media about disease prevention such as getting vaccinated and washing hands.
RESPONSE PROCESS

ROLES & ACTIONS

Depending on the type of contaminant or disease, contagiousness and the risk of exposure, some or all these roles and actions take place for every public health response.

PUBLIC
- Reports Illnesses & Implements Healthcare Recommendations

IMMUNIZATION TEAM
- Vaccinates against Diseases
  - Develops Community Partnerships
  - Provides Disease Education
  - Develops Response Guidance Documents
  - Administers Vaccines
  - Partners with Schools/Medical Offices
  - Provides Vaccine Recommendations
  - Implements Control Measures

INCIDENT COMMANDER
- Establishes Command
  - Leads Response Team
  - Assesses Situation
  - Creates Response Objectives
  - Determines an Outbreak
  - Activates Outbreak Response Plan
  - Notifies County and State Officials
  - Assigns Incident Action Items
  - Approves Release of Information
  - Authorizes Control Measures

PUBLIC INFORMATION OFFICER
- Coordinates Information
  - Communicates Strategies to Partners
  - Activates Crisis and Emergency Risk Communications Plan
  - Ensures Coordinated Response
  - Develops Communication Materials
  - Designates Spokesperson
  - Gathers and Disseminates Accurate and Timely Information
  - Engages with the Public
  - Follows up with Media Inquiries
  - Coordinates Press Conferences and Media Interviews
  - Logs Communication Activities

CALL-TO-ACTION
Awareness • Vaccination • Prophylaxis • Filtration • Disinfecting • Isolation • Quarantine • Enforcement • Sheltering • Evacuation
Flu to the Rescue!

The best way to prevent flu is to get a flu vaccine each year.

Flu can cause mild to severe illness, and at times can lead to death. Flu is different from a cold. Flu usually comes on suddenly. People who have flu often feel some or all of these symptoms:

- fever or feeling feverish/chills (not everyone with flu will have a fever)
- cough
- sore throat
- runny or stuffy nose
- muscle or body aches
- headaches
- fatigue (tiredness)
- some people may have vomiting and diarrhea (this is more common in children than adults)

Flu can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. Some people, such as older people, young children and people with certain health conditions, are at high risk of serious flu complications. The Centers for Disease Control and Prevention (CDC) estimated the burden of illness during the 2017-2018 season was 48.8 million people who got sick with flu in the United States. On average, more than 200,000 people in the United States are hospitalized each year for respiratory and heart conditions illnesses associated with flu virus infections and 36,000 people die from flu-related complications. During past seasons, approximately 80 percent of flu-associated deaths in children have occurred in children who were not vaccinated.¹

Schools, licensed childcare centers, healthcare providers and long-term care facilities report flu-like illnesses to the Ottawa County Department of Public Health (OCDPH) on a weekly basis. With this information and data from the Michigan Disease Surveillance System of flu-like illnesses reported by Ottawa County hospital emergency department visits, more than 35 thousand people had flu-like illnesses during 2018 in Ottawa County.²

How Flu Spreads
Most experts believe flu viruses spread mainly by tiny droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose or possibly their eyes. The best way to prevent getting sick with flu is to get a flu vaccine each year.³

Flu Vaccine
The CDC conducts studies to measure the benefits of seasonal flu vaccination each flu season to help determine how well flu vaccines are working. These vaccine-effectiveness studies regularly assess and confirm the value of flu vaccination as a public health intervention and monitor ways to improve their benefits. Over the last five flu seasons, the flu vaccine was anywhere between 19 to 48 percent effective.⁴

Flu vaccine coverage for adults has been increasing over the last five flu seasons. Across the nation, it has gone from 41 to 45 percent. Ottawa County’s flu vaccine coverage for adults is usually lower than the national average but is improving over the years from 28 to 39 percent. This is still higher than the state’s average which has risen from 20 to 30 percent.⁵

By Toni Bulthuis, BSN, RN
Immunization Team Supervisor


Problems to Address

- Low influenza vaccination rate.
- Misconceptions that the flu shot isn’t necessary or it causes sickness.
- Getting flu isn’t that big of a deal or it only affects me.

Flu Granny Solution!

Flu Granny was so popular in earlier years that she made a return! She made her debut in 2006 where she captivated audiences with her satirical and scolding tone. Flu Granny has revived thanks to funding from the Michigan Association of Local Public Health who provided $40,000 to OCDPH. This awareness campaign was a cross-jurisdictional sharing project with Kent, Muskegon, Kalamazoo, Calhoun and Allegan Counties to promote flu prevention messages across the region and provide campaign materials to health departments statewide. The objectives were to increase the number of people getting vaccinated before the start of the flu season and to help people understand getting flu can be serious. It’s not just about them getting sick for a few days, rather it can affect vulnerable people around them.

The campaign collaboration began in February 2019 and completed by October 2019. The project went through several phases; developing a communications plan, budgeting, creating campaign materials, reserving ad space, monitoring social media and evaluating the campaign’s performance. Flu Granny saturated the region via website resources, social media posts and ads, community events, cable and digital ads, radio ads, magazine ads, indoor and outdoor billboards, college campus posters and banners, promotional products (t-shirts, hand sanitizers, pens, tissue packs, magnets and bandage dispensers), bus ads and flu bulletins.

Granny says . . .

- FOR CRYING OUT LOUD, GET YOUR FLU SHOT! It’s a matter of public health.
- FOR THE UMPIRE SENSE, WASH YOUR HANDS! It’s a matter of public health.
- YOU’RE OLD ENOUGH TO KNOW BETTER. DON’T GO TO WORK SICK! It’s a matter of public health.
- FOR GOODNESS SAKES, COVER YOUR MOUTH WHEN YOU SNEEZE! It’s a matter of public health.

Estimated Impressions

CAMPAIGN TOTAL 5,075,256
Public Health COMMUNICATIONS

The study and use of communication strategies to inform and influence decisions and actions to improve health.
- Centers for Disease Control and Prevention

By Kristina Wieghmink, M.Ed
Communications Specialist

Public health communication plays a critical role in providing the right message at the right time to reach the right people. Government agencies must strengthen public trust and transparency by clearly and strategically communicating with the public. Messages must be coordinated and consistent with stakeholders and response agencies. Messages can be proactive to change behaviors for healthier outcomes and they can be reactive to respond to public concerns and media inquiries during times of emergencies or outbreaks.

Messages must be conveyed using empathy and using a health equity lens to reach diverse populations. When we have the public’s trust, we empower people to act on our information effectively. Whichever the situation, public health communicators organize, create and disseminate credible and timely messages to help ensure the health and safety of our community.

Goal: To Maintain and Enhance Communication with Citizens, Employees and Other Stakeholders
- Ottawa County Strategic Plan and 2018-2019 Business Plan

EFFECTIVE COMMUNICATIONS:
- Saves Lives
- Provides Consistent Messages
- Changes Behaviors
- Increases Healthy Outcomes
- Reaches Diverse Populations
- Addresses Concerns
- Tells a Story
- Expresses Empathy
- Forms Partnerships
- Enhances Public Trust
- Saves Money and Resources

HOW WE REACH PEOPLE:
- News Releases
- Public Service Announcements
- Annual and Community Reports
- Public Forums and Events
- Infographics
- Brochures and Flyers
- Promotional Products
- Television and Radio
- Social Media Posts and Videos
- Billboards, Posters and Banners
- Newspapers and Magazines

MODEL THE WAY
In 2019, departments within Ottawa County started using a single platform for data collection called Qualtrics. The Ottawa County Department of Public Health (OCDPH) uses this web-based software to easily create surveys, collect data using forms and generate advanced reports without having data management or statistical analysis expertise. The department customized these tools to align with its brand and developed program-specific templates that showcase their logos. The OCDPH collaborates internally and externally to align with its brand and developed program-specific templates that allow OPBH to collect, analyze and report outcomes in response to identified community health needs. - OPBH Nurse Supervisor Susan Keen

"During the 2019 cycle of the Youth Assessment Survey (YAS), we used Qualtrics to collect survey data from students across Ottawa County. In the past, we used different software that limited the number of survey responses we could accept at one time. To overcome this issue, schools were assigned different one-week windows to take the YAS. This created an inflexible schedule that limited the number of student responses. In 2019, Qualtrics allowed us to collect an unlimited number of responses at any time. We opened the YAS to all schools for an entire month. The number of students’ responses increased from about 4,300 in 2017 to nearly 6,500 in 2019. This is an increase of almost 50%! The schools had more time to plan and deploy the survey; creating a better customer experience that resulted in much more participation." - Senior Epidemiologist Derel Glasshower

“We used Qualtrics to create a complaint questionnaire so the public could report a concern or submit a question at their convenience at any time of the day and not solely during business hours. Once a complaint has been submitted, the system sends an automatic notification to all members of the surveillance team. This online process standardizes our approach in collecting data and saves a significant amount of time from what it normally takes to conduct a phone interview when investigating a foodborne illness. In addition, OCDPH can quickly implement changes to the questionnaire in the event of an outbreak and place it on the department’s website. This tool has assisted immensely in the response time of outbreaks all while providing better customer service." - Environmental Health Supervisor Spencer Ballard

"The Ottawa Pathways to Better Health (OPBH) program adopted the Care Coordination Systems (CCS) software to document and report the health and social service needs of at-risk people in Ottawa County. Care Coordination health workers coordinate client care by using Pathways in CCS to identify, intervene and measure outcomes for their at-risk clients. The reporting capabilities of CCS allow OPBH to collect, analyze and report outcomes in response to identified community health needs." - OPBH Nurse Supervisor Susan Keen

"The Immunization and Sexual Health clinics, along with the community health programs, replaced their legacy Electronic Health Record (EHR) system with a new cloud-based system. The previous system was in service for more than 10 years and had become outdated. Patagonia Health EHR system took approximately five months to set up, customize, test and migrate data. It provides better efficiencies, reduces paper waste and standardizes reports. Being cloud-based, Patagonia Health also integrates with the Michigan Care Improvement Registry for bi-directional immunization lookup, pharmacies for prescription orders, lab test results, and insurance verification for real-time status. To continue quality improvements and customer service, we’re working to develop a patient portal to securely communicate with patients and share test results." - Clinical Health Services Manager Helen Talbot

"The Emocha system enables public health tuberculosis nurses to communicate with patients and provide Directly Observed Therapy. This CDC-endorsed model creates patient accountability by verifying medication adherence remotely through video observation rather than being present with an ill person. Patients can use their mobile phones to record themselves taking medication at their convenience. The asynchronous video recordings are securely viewed by a public health nurse to verify compliance of treatment. Emocha tracks missed and taken doses and allows for more accurate data on treatment to the patient and nurse." - Communicable Disease Clinic Supervisor Tamara Drake

"As I look at the second full-recycling container holding about 400,000 pages of Ottawa County historical files, I can affirm that 2019 was a transformative year. The OCDPH Field Services Team—which does well and septic permitting, real estate evaluations of septic and wells, along with other services—leaped into the future, by embracing new software and new technologies. With the help of the Information Technologies department, our team left paper behind and is better equipped to meet the needs of Ottawa County residents. We took a process tied to paper files and completely changed it. Developing new software, purchasing new tablets, creating an app and having a team full of devoted employees; we are nearing the point where we can issue reports and permits from the field. Our records are accessible from outside the office which enables us to create, process and email our documents from the field. This directly benefits Ottawa County residents by lowering the turnaround time from when they apply for a service to when they have the report in their hands. This innovative and quality improvement is another way to offer the best customer service to residents." - Environmental Health Supervisor Matt Allen
NEW DENTAL CENTER
expands affordable services for Ottawa County residents

By Debra Bassett RDH, BHS
Oral Health Team Supervisor

The Centers for Disease Control and Prevention states that oral health affects our ability to speak, smile, eat and show emotions. It also affects self-esteem, school performance and attendance at work and school. Oral diseases, which range from cavities to gum disease to oral cancer, cause pain and disability for millions of Americans. Cavities (also called tooth decay) are one of the most common chronic diseases in the United States. Oral health has been linked with other chronic diseases, like diabetes and heart disease. It is also linked with risk behaviors like using tobacco and eating and drinking foods and beverages high in sugar.¹

According to the 2017 Ottawa County Behavioral Risk Factor Survey, almost one in five adults (19.1%) have not visited a dentist in the past year. Of those, more than nine in 10 said the main barrier to accessing needed dental care was related to cost, specifically lack of insurance and the inability to afford treatment.²

The Ottawa County Department of Public Health (OCDPH) partnered with My Community Dental Centers Inc. (MCDC) to provide greater access to dental care in Ottawa County by opening a new dental center in Grand Haven. MCDC operates the six-chair center on behalf of the health department. The center provides quality dental care to children and adults enrolled in Medicaid, Healthy Kids Dental, Healthy Michigan Plan and private dental insurance. MCDC also offers MyDental Program (MyDP) for people without dental insurance, which provides reduced fees based on household income. The center also uses electronic patient records, digital radiography and state-of-the-art dental equipment. MCDC operates dental centers throughout Michigan and focuses on quality care that is customized for each patient and offered in a patient-centered atmosphere with exceptional customer service. More information at www.mydental.org.

SERVICES OFFERED:
• Dental Exams
• Cleanings
• Fillings
• Tooth Removal
• Partials
• Dentures
• Other Dental Procedures

This new center fulfills a need in our community-giving residents greater access to affordable dental services.

I am so happy someone referred me to MCDC! Very friendly staff, received my first cleaning and she did such a good job in making sure I was comfortable. Happy to have found a dentist I feel confident going back to.

-MCDC patient Kristy

I had been putting off going to the dentist for years due to fear of pain and judgement. I finally went and even though I have more work that needs to be done, I’m not dreading it. They made me feel very comfortable.

-MCDC patient Courtney

2,539
Office Visits
October 1, 2018 - September 30, 2019
HEALTHY BEHAVIORS

While Ottawa County ranks first, and at times second, in the state for health outcomes, the proportion of our population who are overweight and obese is not better than MI or the U.S., and we continue to grow bigger1. Not being at a healthy weight contributes to chronic conditions like heart disease and stroke2. Unhealthy behaviors, such as lack of physical activity and inadequate daily fruit and vegetable consumption, remain a growing issue2. The Ottawa County Health Improvement Plan’s strategies2 include supporting the efforts of Ottawa Food, increasing awareness about low-cost and free opportunities for physical activity, working with health care professionals to reduce barriers for patients and creating educational campaigns. Through this work, we collaboratively help create a Healthy Ottawa for residents to live healthier and happier lives.

6 in 10 ADULTS ARE NOT A HEALTHY WEIGHT
8 in 10 ADULTS CONSUME LESS THAN 5 SERVINGS OF FRUITS & VEGETABLES EACH DAY
1 in 4 ADULTS DO NOT ENGAGE IN PHYSICAL ACTIVITY

1 in 5 MINORITY TEENS GOES HUNGRY
1 in 4 TEENS ARE ABOVE A HEALTHY WEIGHT

PROMOTE CONSISTENT HEALTHY BEHAVIOR MESSAGES AND DECREASE BARRIERS TO HEALTHY LIVING.
MENTAL HEALTH

Awareness of mental health conditions and access to treatment are some of the top priorities that surfaced in the Ottawa County Community Health Needs Assessment. Community members and organizations have been working to increase public awareness of existing mental health treatment models and services, increase community conversations about mental health and educate the community on Adverse Childhood Experiences (ACES). Thrive Ottawa County, an ACEs initiative, offered Community Champion trainings. Participants included law enforcement, first responders, education, health services, faith-based groups and social services workers. Additionally, as a result of the Youth Assessment Survey, Ottawa County formed the Suicide Prevention Coalition to combat the alarming high rate of teen suicide ideations and attempts.

ACCESS TO CARE

The Ottawa Pathways to Better Health (OPBH) program uses an evidence-based community health worker (CHW) model designed to identify and address individual risk factors. CHWs walk alongside clients to set goals and assist in achieving them. CHWs are trusted members of the communities they serve; sharing common ethnicity, language, culture and life experiences with their clients and connect eligible program participants to health care and social service providers in the community. The program began in 2017 as a strategy from the 2015 Community Health Improvement Plan that identified access to care as one of the top health priorities within the Ottawa County Community Health Needs Assessment. More information about the program is available at www.miOttawa.org/OPBH.

INCREASE ACCESS TO A PATIENT-CENTERED AND COMMUNITY-INTEGRATED SYSTEM OF CARE.
**HEALTH JOURNEY**

By Brittney Brown, Community Health Worker
Ottawa Pathways to Better Health

Through the Ottawa Pathways to Better Health program, we journey with people down various paths to help improve their health and wellness. As community health workers, we see how the face-to-face interaction and support we give our clients help them feel and know someone is on their side. The people we work with become more accountable and take a hold of their health when we help provide them with the tools they need to be successful.

I started working with Brett a little more than a year ago. He was referred to the program by a nurse care manager at his doctor’s office. His health was failing and he had multiple chronic medical problems, including a history of surgeries for kidney stones and hernias with more surgeries pending. With his financial limitations, it was difficult for him to afford diabetes medications and food. Brett needed help accessing affordable insulin medication, along with securing health insurance, disability income, in-home support and help to manage his diabetes. When I arrived at Brett’s home, he expressed his urgent financial needs. While I listened to his concerns, it was clear he also had underlying anxiety. He was not aware of community resources and services that could help his situation and ease some of his stress. I worked with Brett on many pathways—health insurance, financial assistance, social support, food assistance, medication assistance, family assistance, disability, legal assistance and a flu shot. Before Brett enrolled in the program, he was usually in the emergency department one to two times a month. Since working with him, his last visit there was more than seven months ago. His nurse care manager said Brett’s progress has helped him gain control of his diabetes, lose weight and turn his physical and mental health around. Brett can better cope with his health concerns because he knows he’s not alone and I’m there to guide him through his journey. I work to provide and connect him to needed resources in the best of my ability. Working with Brittney has been more than I ever thought it would be—she is amazing and always goes the extra mile,” said Brett. “My doctors are stunned by how much better I look—I smile more and my doctors are proud. This program has been such a help!”

Before starting the program, Brett felt his overall health was poor and his physical and mental health was not good. The challenges he faced affected his ability to do his usual daily activities. Since working with me and successfully completing his pathways, he now states his overall health is good and he’s had few to no days where his physical and mental health have kept him from doing usual daily activities. You can’t put a price tag on that! We are so proud of Brett and all our clients for their success in the program. The Pathways to Better Health program continues to expand community partnerships by connecting with the health department’s Maternal and Infant Health Program and the county’s Community Mental Health Department. Our goal is to reach even more people in our community to address physical and mental health needs. It is truly rewarding to work with community members and see how we make a difference so people can live happier and healthier lives!

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### 2019

<table>
<thead>
<tr>
<th><strong>Sealant Appointments</strong></th>
<th><strong>Real Estate Evaluations</strong></th>
<th><strong>Septic &amp; Well Permits Issued</strong></th>
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<td>1,194</td>
<td>1,093</td>
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<tr>
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<th><strong>Condoms Distributed</strong></th>
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<td>145,000+</td>
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<th><strong>Vaccinated or have waivers. Data through Sept. 2019.</strong></th>
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<td>272</td>
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<table>
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<th><strong>Septic &amp; Well Permits Issued</strong></th>
<th><strong>Real Estate Evaluations</strong></th>
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<td>1,093</td>
<td>1,194</td>
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<th><strong>Children’s Special Health Care Services</strong></th>
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<th><strong>Influenza-like Illnesses</strong></th>
<th><strong>Vision Screenings</strong></th>
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<th><strong>Travel Clinic Visits</strong></th>
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<tr>
<th><strong>Food Safety Inspection Activities</strong></th>
<th><strong>Travel Clinic Visits</strong></th>
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<tr>
<th><strong>Compliance</strong></th>
<th><strong>Flu Shots</strong></th>
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<td>100%</td>
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<tr>
<th><strong>Children &amp; Adult Immunizations Clinic Visits</strong></th>
<th><strong>Travel Clinic Visits</strong></th>
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<th><strong>FRESH PRODUCE</strong></th>
<th><strong>Sealant Appointments</strong></th>
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<tbody>
<tr>
<td>2019</td>
<td>372</td>
</tr>
</tbody>
</table>

Pictured: Brittney, Community Health Worker and Brett, OPBH client
Our department is filled with so many outstanding team members! Your excellence and commitment show in your work and in our community!

Hometown Health Hero Award

Leanna Kermeen, public health nurse, Ottawa County Department of Public Health, received a 2019 Hometown Health Hero Award presented by the Michigan Public Health Week Partnership. This award recognizes people across the state working tirelessly to maintain and improve the health of their local communities. Kermeen received the award for her dedication to the migrant farm worker program in Ottawa County. When Kermeen clocks out of work, she does not go home or run errands, instead she visits migrant communities to provide sexual health services and education to break down barriers to STD testing and treatment. “Your impactful work to improve the health of migrant workers outside of your normal working hours is exemplary and we wish you continued success,” stated James Koval, Michigan Department of Health and Human Services, in the award letter. During the last two years, Kermeen has worked with public health agencies, private farm owners and growers, and a multi-county migrant resource council to identify and treat communicable diseases within the camps; primarily in men 25 years of age and younger. Her work to slow or stop the spread of infections, such as chlamydia, has positively impacted migrant farm workers and the community. She also connects with local food pantries to seek donated food, ensuring the workers have access to fresh fruits and vegetables, clothing, toothbrushes, and other necessities.

TB Warrior Award

Patty Feenstra received the 2019 Michigan Department of Health and Human Services (MDHHS) TB Warrior Award for her exceptional work with a very complex and challenging case of drug-resistant tuberculosis. Patty has been a nurse for 43 years and has been working as a TB nurse for the Ottawa County Department of Public Health (OCDPH) eight of those years. “Patty provides exceptional and compassionate care to Ottawa County residents with tuberculosis,” stated Tamara Drake, OCDPH communicable disease supervisor. “Patty always goes above and beyond to make sure they complete the necessary treatment.” This award was given at the 2019 MDHHS World TB Day Conference in Lansing, where she also presented Notes from the Field. “Receiving the MDHHS TB Warrior Award at the 2019 MDHHS World TB Day Conference was a special honor for me and I appreciated the recognition for doing the work that I am passionate about,” said Patty. “I am proud to be part of a great team here at OCDPH and at the MDHHS TB Control Program that provides awesome care for the TB patients of Ottawa County.”

The Mosley Team Award for Extraordinary Community Health Worker Service

The Ottawa Pathways to Better Health community health workers (CHWs) team received a well-deserved honorable mention for their award at the Spectrum Health 12th Annual Community Health Worker Conference. CHWs work within the community and walk alongside clients to set goals and assist in achieving them. They connect eligible program participants to health care and social service providers in the community.

“Public health is vital to the health of our county, state and nation. An act of public health positively impacts a person but it has a ripple effect to the larger population,” exclaimed Kermeen. “It’s been my privilege, honor and passion to work in public health. Receiving a Hometown Health Hero Award is humbling and it gives validation for the work being done. This work matters, and it’s thrilling to drive public health forward with such a supportive network.”
**FINANCIAL**

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<th>Budget Amounts</th>
<th>Actual Amount</th>
<th>Variance (Negative)</th>
<th>2018 Actual</th>
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<td><strong>Revenues</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Taxes</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
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<tr>
<td>Intergovernmental revenues</td>
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<td>5,635,930</td>
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<tr>
<td>Charges for services</td>
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<td>705,870</td>
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<tr>
<td>Fines and forfeits</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Investment earnings</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>Licenses and permits</td>
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<td>1,052,855</td>
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<tr>
<td>Rental income</td>
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<tr>
<td>Other</td>
<td>11,510</td>
<td>112,788</td>
<td>135,976</td>
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<tr>
<td></td>
<td>6,215,977</td>
<td>7,832,008</td>
<td>8,164,258</td>
</tr>
</tbody>
</table>

| **Expenditures**      |              |                     |             |
| Current operations    |              |                     |             |
| Personnel services    | 8,293,070    | 8,335,710           | 7,988,542  | 467,168 | 7,417,469 |
| Supplies              | 874,317      | 1,177,456           | 1,072,513  | 104,943 | 820,367   |
| Other services and charges | 2,210,166 | 2,347,186           | 2,224,038  | 123,148 | 2,027,884 |
| Debt service          |              |                     |             |         |           |
| Principal retirement  | -            | -                   | -          | -       | -         |
| Interest and fiscal charges | -       | -                   | -          | -       | -         |
| Capital outlay        | -            | -                   | -          | -       | -         |
|                      | 11,377,553   | 11,860,352          | 11,165,093 | 695,259 | 10,277,033 |

| **Total expenditures** |              |                     |             |
|                      | 6,215,977    | 7,832,008           | 8,164,258  | 332,250 | 6,124,489 |

| Revenues over (under) expenditures |              |                     |             |
| (5,161,570)                        | (4,028,343)   | (3,000,835)          | (1,027,508) | (4,152,544) |

| Other financing sources (uses)      |              |                     |             |
| Issuance of bonds                  | -            | -                   | -          | -       | -         |
| Premium on bonds issued            | -            | -                   | -          | -       | -         |
| Transfers from other funds         | 4,610,714    | 4,610,714           | 4,610,715  | 358,994 |
| Transfers to other funds           | -            | -                   | -          | -       | -         |
| Total other financing sources (uses) | 4,610,714 | 4,610,714           | 4,610,715  | 358,994 |

| Net change in fund balance         | (550,862)    | 582,371             | 1,609,880  | (1,027,507) | (569,550) |
| Fund balance, beginning of year    | 885,613      | 885,613             | 885,613    | -         | 1,455,163 |
| Fund balance, end of year          | $ 334,751    | 1,467,984           | 2,495,493  | (1,027,507) | $ 885,613 |


**RECOGNITION**

**Ottawa County Emerging Leaders**

A group of Ottawa County employees celebrated the completion of their Emerging Leaders course at a graduation ceremony in December 2019. The group engaged in learning opportunities and projects designed to enhance their leadership abilities. They explored skills to speak persuasively, fostered teamwork, built acceptance and resolved disagreements. The participants also conducted a job shadow, prepared a mission and values project and hosted a leadership luncheon and panel session. The course helped to provide a leadership foundation and to prepare participants for their future career goals. Congratulations, graduated!

Public Health Graduates pictured: Jill Bannink-Albrecht (5th from left, front), Judy Kettring (2nd from right, front), Rebekah Folkert (6th from left, front), Glorie Orozco (4th from right, front), Derel Glashower (3rd from right, front) and Kris Conrad (2nd from right, front)

**Ottawa County Outstanding Customer Service**

I want to congratulate and thank the nominees of the Ottawa County Outstanding Customer Service Award for their continuous commitment to our customers. Congratulations to Glorie Orozco, Leanna Kermeen, Hannah Hoeksema, Melissa Dowey, Kelsey DeMull, Toni Bluthuis, Chelsea Vandel-Hoff, Julie Kuper, Cindy Blotby, Tonya Barber, Kayla Anderson, Soenier Ballard, Ryan McCarthy, Jessica Behringer, Kevin Hoxsey, Mike Marlowe, Amelia Pratt, Skylar Garrison, Rebekah Folkert, Matthew Allen, Jill Bannink-Albrecht, Brittny Brown, Morique Carey, Drew Shaw, Cecilia Soriano, Kimberly Walters, Jamie Fennertmacker and Judy Kettring.

I also want to thank everyone in the entire department for making customer service a priority and for delivering professional, helpful, respectful and quality service in every encounter. Thank you for all you do to make our department outstanding and to meet the needs of our customers!

-Judy Stefanovskiy, Administrative Health Officer

"Judy truly cares about the well-being of the people she works with in the community and it shows in her efforts to assure she is providing the highest level of customer service," said Nurse Supervisor Susan Keen. "She is consistent, compassionate, reliable and responsive. Judy is a great representative of the Ottawa Way and demonstrates what customer service is all about."

**ACHIEVEMENT**

**Nicely Library Service**

Andrea Whittaker

Earned a Masters in Public Administration

Recognized for 10 nominations and counting!

**ACHIEVEMENT**

**Rebekah Folkert**

Judy Kettring, recipient of a 2019 Ottawa County Outstanding Customer Service Award

Judy Kettring, Administrative Health Officer

"Judy truly cares about the well-being of the people she works with in the community and it shows in her efforts to assure she is providing the highest level of customer service," said Nurse Supervisor Susan Keen. "She is consistent, compassionate, reliable and responsive. Judy is a great representative of the Ottawa Way and demonstrates what customer service is all about."

**ACHIEVEMENT**

**Andrea Whittaker**

Recognized for 10 nominations and counting!
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