Lake County General Health District 2019 Annual Report

A Message from the Health Commissioner

Working Together to Improve Health

The health of a county's population begins and ends in its homes, schools, workplaces, neighborhoods, and communities. It is well documented that taking care of one's self by eating well and staying active, not smoking, and receiving the recommended immunizations, screening tests, and clinical care all influence personal health. However, health is also determined in part by access to social and economic opportunities; the resources and supports available in homes, neighborhoods, and communities, the quality of schooling, workplace safety, the cleanliness of water, food, and air, and the nature of social interactions and relationships.

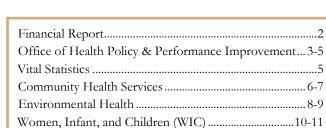
The aforementioned concepts are characterized as social determinants of health. Social determinants of health refer to the positive or negative physical, social, and economical conditions in which people are born, live, learn, work, play, worship, and age, which affect a wide range of health, functioning, and quality-of-life outcomes and risks. While public health's focus on population-level interventions, disease prevention, and health metrics can provide leadership and expertise in addressing social determinants of health, the field cannot succeed in doing so alone.



Ron H. Graham, MPH Health Commissioner 2015 - Present

From the Robert Wood Johnson Foundation's Culture of Health Action Framework to the US Surgeon General's commitment to focus toward "better health through better partnerships", the movement championing cross-sector collaboration is well established, and has inspired the creation of MOTIVATE Lake County (www.motivatelakecounty.com), a web-based wellness service platform for all Lake County residents and businesses that will launch in 2020. Collectively maintained by Lake County agencies and stakeholders, MOTIVATE Lake County centralizes the county's wellness opportunities and services, offers universal access for small business and residents alike, and retains an open membership advisory group to encourage and foster stakeholder collaboration and system level policy development.

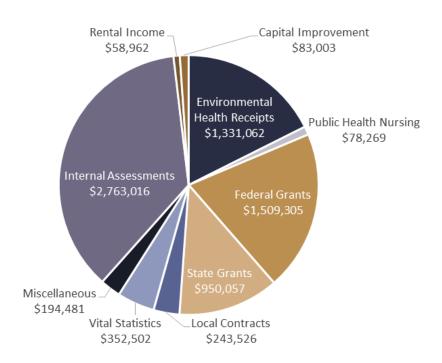
The future of public health in Lake County can undoubtedly be gauged in the strength of our collaborative partnerships, and MOTIVATE Lake County presents an opportunity to harness these partnerships.



| | BOARD OF HEALTH | | |
|------------|-----------------|--|--|
| Brian Katz | Roger Anderson | | |
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Agency Financial Report



Total Revenue \$ 7,564,183

The largest funding sources for the Lake County General Health District in 2019 included:

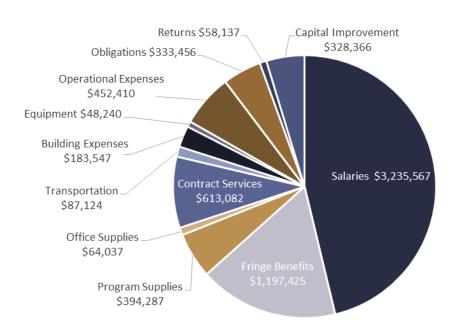
- Internal assessments (37%)
- State and federal grants (33%)
- Environmental health receipts (18%)

Total Expenditures \$ 6,995,678

Salary and fringe benefits to support the Lake County General Health District's 86 employees represents the principal expenditure for the agency in 2019, accounting for more than half (63%) of total disbursements.

Other notable expenditures include:

- Contract services (8%)
- Operational expenses (6%)
- Program supplies (6%)
- Obligations (5%)
- Capital improvement (5%)

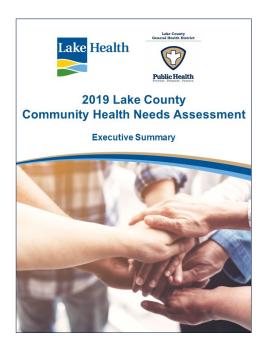


Office of Health Policy and Performance Improvement

OHPPI Partners with Lake Health to Produce the 2019 Lake County Community Health Needs Assessment and 2020 to 2022 Lake County Community Health Improvement Plan

In January of 2018, the Office of Health Policy and Performance Improvement (OHPPI) began working with Lake Health to conduct a joint community health needs assessment in Lake County, in order to maximize community resources, avoid service duplication, and enhance community collaboration and coordination. Planned in coordination with 11 local partner agencies and funded by Lake Health, the resulting 2019 Lake County Community Health Needs Assessment marks the first joint community health needs assessment effort ever conducted in Lake County, and potentially the first community health needs assessment facilitated directly by a local health department on behalf of a hospital system in the state of Ohio.

Consisting of two principal documents, including an executive summary and a 226-page technical report, the 2019 Lake County Community Health Needs Assessment leveraged secondary data, community resident and community leader surveys, and five community resident focus groups, in order to identify 16 county-specific health concerns. Health concerns identified included access to care, alcohol abuse, alcohol-related deaths, alcohol-related



driving deaths, Alzheimer's disease, diabetes, drug overdose deaths, fall deaths, fast food restaurant density, heart disease, high blood pressure, limited access to healthy foods, mental health, obesity, preventable hospitalizations, and preventable teen deaths.

Based on these county health concerns, OHPPI and Lake Health collectively convened 18 local agencies to participate in the development of the 2020 to 2022 Lake County Community Health Improvement Plan. Following the prioritization of health concerns identified in the 2019 Lake County Community Health Needs Assessment, a total of 21 community health improvement strategies, addressing chronic disease and mental health and addiction, were identified and included in the plan. As agency leads work towards the implementation of these strategies during the next three years, strategy impact will be assessed and updated quarterly. These documents can be accessed at both https://www.lcghd.org/reports/ and https://lakehealth.org/About/Health-Needs-Assessment.

Office of Health Policy and Performance Improvement

Unprecedented CDC Pilot Project Began in April

In an effort to increase bidirectional collaboration and communication between local and federal public health agencies, Senior Public Health Advisor Roberta Erlwein from the Centers for Disease Control and Prevention's Center for State, Tribal, Local, and Territorial Support, or CSTLTS, relocated from Atlanta, Georgia, in order to work directly with the Office of Health Policy and Performance Improvement (OHPPI) for a two-year pilot project. Beginning on April 15, 2019, and focusing largely on locally-informed public health systems change

opportunities, the pilot project marks the first time that a CSTLTS staff member has been placed with a local health department in a CSTLTS-funded capacity, as previous collocated projects have traditionally taken place at the Ohio Department of Health in Columbus. As such, Roberta's presence is a unique opportunity for Lake County General Health District (LCGHD) to inform national public health policy and practices. Project aims currently include the identification of a process communication between LCGHD CSTLTS, development of a plan to collaboratively engage other local and state public health partners, and a description of both the local and federal opportunities created by the project.

In conjunction with the CSTLTS pilot, LCGHD was also identified as a host site for CSTLTS' Public Health Associate Program, a competitive two-year training program which places recent college graduates with local health departments and nonprofits across the country to gain hands-on public health experience. Public Health Associate Ramsey Baden, a recent graduate of Emory University in Atlanta, began his two-year Public Health Associate



From left to right, Roberta Erlwein, Senior Public Health Adviser, Ron Graham, Health Commissioner, and Matthew Nichols, Director, Office of Health Policy and Performance Improvement.

Program with OHPPI on October 15, 2019, and has already contributed to several office initiatives.

CDC Officials Come to Lake County for Site Visit

In order to discuss current pilot project activities, officials from the Centers for Disease Control and Prevention's Center for State, Tribal, Local, and Territorial Support (CSTLTS) participated in a site visit at Lake County General Health District (LCGHD) on October 24, 2019. CSTLTS Branch Chief Gustavo Aquino and Deputy Branch Chief Steven Shapiro joined CSTLTS Senior Public Health Advisor Roberta Erlwein, Lake County Health Commissioner Ron Graham, and Office of Health Policy and Performance Improvement (OHPPI) staff to discuss the status of the pilot project between CSTLTS and OHPPI, which began in April of 2019 to increase bidirectional collaboration and communication between local and federal public health. The seven-hour site visit was scheduled around a working meeting to discuss key elements of the pilot project, and ended with pilot project action items, proposed dates for a second in-person site visit, and a shared understanding of each agency's long-term goals as they pertain to efforts for increased local-federal collaboration. The meeting marks the first time in agency history that LCGHD has hosted leadership staff from the CSTLTS for a site visit.

Vital Statistics

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|----------------------------------|-------|-------|-------|-------|-------|
| Birth Certificates Issued | 4,499 | 3,984 | 4,003 | 3,865 | 3,892 |
| Out of County Birth Certs Issued | 2,615 | 1,952 | 2,003 | 1,957 | 1,621 |
| Web Orders for Birth Certs | 1 | 0 | - | 132 | 509 |
| Death Certificates Issued | 8,181 | 8,332 | 8,557 | 7,954 | 8,631 |
| Web Orders for Death Certs | ı | 0 | - | 20 | 111 |
| Fetal Death Certificates Issued | 1 | 3 | 2 | 1 | 1 |
| Burial Permits Issued | 604 | 653 | 658 | 650 | 648 |
| | | | | | |
| Birth Certificates Filed | 1,640 | 1,766 | 1,713 | 1,653 | 1,999 |
| Death Certificates Filed | 1,761 | 1,727 | 1,751 | 1,729 | 1,852 |
| Free Veterans' Copies | 301 | 312 | 306 | 327 | 354 |
| Affidavits Issued | 448 | 521 | 451 | 402 | 514 |
| Supplements Issued | 354 | 415 | 509 | 379 | 366 |

Community Health Services

LCGHD Car Seat Program Returns



CPS technicians check a car set for proper installation.

In order to ensure the availability of child safety and booster seats among low income Lake County families, Lake County General Health District (LCGHD) recently reestablished its car seat distribution program through support from the Ohio Department of Health's Ohio Buckles Buckeyes initiative. The distribution program, which provides child safety and booster seats to participating families at no cost, also includes Child Passenger Safety (CPS) education, in order to increase participant understanding of proper car seat installation and use.

In October of 2019, six LCGHD staff members completed certification training to become nationally certified CPS technicians. As CPS technicians, the respective LCGHD staff members can conduct car seat checks, provide safety education, and offer hands-on assistance to program participants to ensure the proper use of their child restraint systems. Moreover, CPS technicians are expected to know current Ohio Child Passenger Safety Laws, the latter of which requires children less than 4 years old, or weighing less than 40

pounds, to use a child safety seat that meets federal motor vehicle safety standards; children less than 8 years of age, unless at least 4 feet, 9 inches tall, are required to use a booster seat, and all

children 8 to 15 years of age must use a safety belt. The CPS certification is valid for two years, and requires certified technicians to attend continuing education opportunities and events.

On November 14, 2019, LCGHD held its first car seat distribution class, and provided child safety seats and CPS education to eight Lake County families. Moving in 2020, car seat classes will be held at LCGHD on the second Thursday of each month from 2:00 pm to 3:30 pm.



Haley Russo demonstrates the correct way to restrain a child.

Lake County Disease Investigation

| Table 1. Reportable Communicable Diseases | | | | | | |
|---|------|------|------|--|--|--|
| Communicable Disease | 2019 | 2018 | 2017 | | | |
| Babesiosis | 1 | 0 | 0 | | | |
| Campylobacter | 47 | 32 | 46 | | | |
| CP-CRE | 7 | 6 | N/A | | | |
| Chikungunya | 1 | 0 | 0 | | | |
| Chlamydia | 765 | 801 | 695 | | | |
| Coccidioidomycosis | 0 | 0 | 0 | | | |
| Cryptosporidiosis | 2 | 6 | 0 | | | |
| Cyclosporiasis | 0 | 0 | 0 | | | |
| E. Coli 0157:H7 | 7 | 8 | 2 | | | |
| Erlichiosis/Anaplasmosis | 1 | 0 | 0 | | | |
| Giardia | 6 | 10 | 10 | | | |
| Gonorrhea | 206 | 181 | 134 | | | |
| Haemophilus Influenza | 10 | 4 | 1 | | | |
| Hepatitis A | 9 | 2 | 0 | | | |
| Hepatitis B (perinatal) | 4 | 1 | 0 | | | |
| Hepatitis B (acute) | 2 | 0 | 0 | | | |
| Hepatitis B (chronic) | 22 | 15 | 20 | | | |
| Hepatitis C (acute) | 2 | 1 | 0 | | | |
| Hepatitis C (chronic) | 269 | 251 | 252 | | | |
| Hepatitis C (perinatal) | 1 | 1 | 0 | | | |
| Influenza (hospitalized) | 168 | 281 | 136 | | | |
| La Crosse Virus Disease | 1 | 0 | 0 | | | |
| Legionnaires Disease | 21 | 18 | 16 | | | |
| Listeriosis | 1 | 0 | 2 | | | |
| Lyme Disease | 14 | 16 | 16 | | | |
| Malaria | 0 | 0 | 1 | | | |
| Meningitis (aseptic/viral) | 2 | 3 | 4 | | | |
| Meningitis | 0 | 5 | 7 | | | |
| (bacterial, not Neisseria) | 0 | | | | | |
| Mumps | 1 | 0 | 1 | | | |
| Mycobacterium Tuberculosis | 0 | 0 | 0 | | | |
| Pertussis | 9 | 8 | 18 | | | |
| Rocky Mountain Spotted Fever | 1 | 0 | 0 | | | |
| Salmonella | 31 | 26 | 25 | | | |
| Shigellosis | 9 | 1 | 2 | | | |
| Staphylococcus Aureus VRSA | 0 | 0 | 0 | | | |
| Streptococcal Group A (SGA) | 12 | 15 | 9 | | | |
| Streptococcal Group B (newborn) | 1 | 0 | 0 | | | |

| Table 1 (continued). Reportable Communicable Diseases | | | | | | |
|---|-------|-------|-------|--|--|--|
| Communicable Disease | 2019 | 2018 | 2017 | | | |
| Streptococcus Pneumonai (ISP) | 20 | 19 | 24 | | | |
| Syphilis | 30 | 10 | 12 | | | |
| Tetanus | 0 | 1 | 0 | | | |
| Varicella | 6 | 5 | 5 | | | |
| Vibriosis | 0 | 0 | 0 | | | |
| West Nile Virus | 0 | 3 | 1 | | | |
| Yersinia | 0 | 0 | 3 | | | |
| Totals | 1,689 | 1,730 | 1,442 | | | |

Infectious Disease Cases

In accordance with Communicable Disease Rules 3703-3-01 through 3701-3-31 of the Ohio Administrative Code, hospitals, laboratories, and healthcare providers in Ohio are required to report new diagnoses of Ohio's Class A, B, and C infectious disease to their local health jurisdiction. Public health nurses track this information, analyze trends, and investigate when appropriate.

In 2019, 1,689 communicable diseases were reported to Lake County General Health District, representing a 2% reduction from 2018. All required investigations were completed on cases reported. Upwards of 115 cases were reported to Lake County General Health District and transferred to other jurisdictions for investigation. A total of nine disease outbreak investigations were conducted in 2019, including two Influenza, two Norovirus, one Legionella, three Respiratory Syncytial Virus, and one Scabies investigation, respectively.

Public health nurses also utilize the EpiCenter Surveillance System to monitor regional hospital emergency department registrations. The respective community health surveillance program monitors surges in respiratory, gastrointestinal, and neurologic conditions. In 2019, 63 EpiCenter investigations were conducted.

Environmental Health

Clean Water Collaborative Partnership Formed with Lake Erie College

In May 2019, Lake County General Health District (LCGHD) and Lake Erie College (LEC) entered into an agreement for sample collection and laboratory analyses of water quality discharging from Lake County's home sewage treatment systems.

Discharging home sewage treatment systems installed since 2007 are permitted by the Ohio Environmental Protection Agency under the National Pollutant Discharge Elimination System program, and are required to be sampled annually to ensure proper operation and discharging water quality in accordance with both the Clean Water Act and United States Environmental Protection Agency standards. Owners of these systems are issued annual operation permits from LCGHD, the latter of which include requirements for sampling, and an accompanying sampling fee. Due to sample acceptance limitations, scheduling restrictions, and increasing costs imposed by county and commercial laboratories, maintaining fee costs for system owners while continuing to be able to complete sampling within an acceptable timeframe has prompted the health district to identify a new means for sample testing through collaboration with Lake Erie College.

Under the agreement, Lake Erie College faculty selected two qualified students to be hired as seasonal employees by the health district, who then completed morning field collection for a total of 356 county systems during a period of 12 weeks, under the direct supervision of LCGHD staff members. In turn, Lake Erie College faculty provided student training, supervision, and oversight for afternoon laboratory analyses of the respective samples.

The total number of discharging home sewage treatment systems in Lake County has nearly doubled during the past four years, and continues to increase. Given the increased sampling workload, the respective partnership with Lake Erie College is vital, as it stands to provide a consistent, reliable, and cost-effective sample collection protocol and schedule each summer, with standardized laboratory results in accordance with the required





LEC students field collecting effluent samples (left) and performing laboratory analysis (right).

methods set forth by the United States Environmental Protection Agency standards.

For the students involved, the partnership offers an innovative experiential learning opportunity that incorporates both scientific and public service competencies. Based upon the success of this partnership, additional water quality collaborations with Lake Erie College are currently being discussed for implementation in 2020.

Protecting Residents from Mosquito-borne Diseases



In order to better protect Lake County residents from dangerous mosquito-borne diseases, such as West Nile Virus and Eastern Equine Encephalitis, the Lake County General Health District (LCGHD) refined its mosquito control efforts in the spring of 2019 through the use of a new organic mosquito adulticide spray. The LCGHD mosquito control program, which has historically conducted evening spraying activities to target adult feeding (biting) mosquitoes throughout Lake County, began using Merus 3.0 during the 2019 spraying season, an EPA-registered adulticide containing natural pyrethrin, which is derived from chrysanthemum flowers in Africa. Merus 3.0 contains no chemical synergist or petroleum distillates, is applied at an extremely low dosage rate

of less than one ounce per acre, and is comprised of components approved for crops grown for human and animal consumption.

The organic compound is the only Organic Materials Review Institute-listed and National Organic Program-compliant mosquito adulticide spray available to public health agencies. Moreover, results of the mosquito adulticide throughout 2019 demonstrated its effectiveness as a mosquito control tool, and served as an important forward step in the positive public perception of mosquito control. The use of Merus 3.0 is another example of LCGHD's sound environmental practices and continued advancement of the public health mission to prevent, promote, and protect.





New mosquito trucks and equipment were purchased in 2019. These new trucks, which are smaller than the program's previous models, are equipped with GPS-based electric sprayers, and will allow the program to serve the public more efficiently. Additional mosquito surveillance traps were also set throughout the county in 2019.

Women, Infants, and Children (WIC)

Farmers Market Nutrition Program

The Women, Infants, and Children (WIC) Farmers Market Nutrition Program (FMNP) provides the opportunity for local residents to buy fresh local produce, as well as speak directly to local farmers, who can provide information on choosing, storing, and preparing produce. Nationally, approximately 2 million people receive FMNP benefits each year, which includes a coupon book of four \$5 vouchers, the latter of can be redeemed at participating farms and farmers markets.

In 2019, the Lake-Geauga WIC program distributed a total of 721 FMNP coupon voucher books to 335 Geauga County and 386 Lake County participants, respectively, amounting to \$14,420 in redeemable coupon vouchers. In Lake County, FMNP coupon voucher books were distributed throughout the summer at the Willoughby Outdoor Market, the Painesville Farmers Market, Secor's Nursery, Rainbow Farms, and Wayman Farms. In Geauga County, where freestanding farms and farm stands are more commonplace, FMNP participants were able to receive their coupon books at the WIC office and use them where they are already accustomed to purchasing produce.

There are several health and economic benefits of having a farmers market in your community. Farmers markets can offer a wide variety of fresh produce, serve as a place to share cooking tips and recipes, and support local farmers. According to a study from the University of California Agriculture and Natural Resources, "for every dollar of sales, farmers are generating twice as much economic activity within the region, as compared to farmers who are not involved in markets". Moreover, a study in Pennsylvania found that nearly 70% of farmers market customers also shop at local downtown businesses.



Madison WIC Clinic Has Moved

In November of 2019, the Lake County General Health District's Women, Infants, and Children (WIC) moved its Madison office from its 33 East Main Street Stratton Place location to 31 Park Street, the latter of which is located behind the Park United Methodist Church. Both the Madison Village Administration and the Park United Methodist Church were extremely helpful during the planning process and office transition, thereby facilitating a smooth service transition between the two locations, and continued service to Madison WIC clients.

Benefits of WIC

- Improves pregnancy outcomes by providing or referring to support services necessary for full-term pregnancies.
- Reduces infant mortality by reducing the incidence of low birth weight (infants under 5 ½ pounds are at greater risk of breathing problems, brain injuries, and physical abnormalities).
- Provides infants and children with a healthy start in life by combating a poor and/or inadequate diet.

Breastfeeding Peer Helper Success Story

In January 2020, Brenda, a resident of Painesville, received a certificate for breastfeeding her baby for the first year! Olivia Mack, WIC Breastfeeding Peer Helper, supported Brenda throughout the year by calling her every week for the first month after Brenda gave birth, and every month thereafter. While Brenda experienced challenges along the way, Olivia was instrumental in aiding her through the breastfeeding process. Brenda plans to continue breastfeeding her son beyond the first year.



Madison WIC team members, from left to right, include Olivia Mack, Breastfeeding Peer Helper, Pat Collins-Reed, Clerical Specialist, and Stephanie Oudomlith, Registered Dietitian.



From left to right, Brenda holding her son, and Olivia Mack, Breastfeeding Peer Helper.

This is Public Health

A snapshot of some of the services provided by Lake County General Health District in 2019.



Issued: 7,114 **Birth Certificates**

8,182 **Death Certificates** **Naloxone Kits**





Trapped and Tested

2,933 WIC **Clients** Served



257 ` ServSafe® Students

0 West Nile Cases

160 Tobacco Non-compliance Checks Performed







