

Lake County General Health District 2021 Annual Report

A Message from the Health Commissioner

The Lake County General Health District is dedicated to helping the residents of Lake County achieve and maintain an optimal level of wellness. The Health District remained committed to ensuring the delivery of its normal services despite the burden of the pandemic response. The Health District expanded services when possible and used strategic planning and modified its programs for public and staff safety. Together with our partners, we are embracing and promoting diversity throughout our programs.

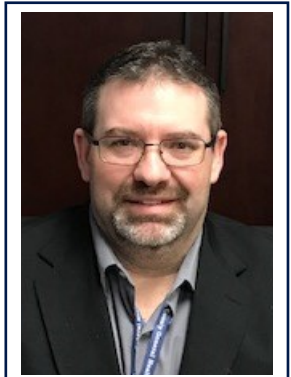
However, the COVID-19 pandemic continued throughout 2021 to dominate much of our work and all of our lives. We received our best tool in fighting the virus with the arrival of vaccines, and coordination and distribution of vaccines was a major part of worldwide public health effort throughout the year. The year saw several challenges related to varying viewpoints regarding the vaccines and other control measures like masking, social distancing, closures, and testing.

Through it all, I am proud of our staff, community partners, and all Lake County residents for working through our differences in a respectful and compassionate manner. This pandemic has continued to confirm that “public health” is for, and accomplished by, all of us working together. We encourage an active network of public health and safety professionals and community-based organizations. We are the community voice of public health based on our knowledge, experience, skills, and accessibility.

On behalf of the Lake County Board of Health, we would like to thank our key partners in the COVID-19 response for dedicating their time and talents: The Mayors and Managers Association led by Mayor Dennis Morley, Lake County EMA represented by Director Joe Busher, Lake County Fire Chiefs led by Chief Thomas Huffman, Lake County Commissioners represented by President John Hamercheck, and the Superintendents led by Superintendent Jennifer Felker of the Educational Service Center of the Western Reserve.

Each of the aforementioned partners worked extensively every week to help ensure timely and accurate communication in preparing county-wide COVID-19 prevention efforts. The Lake County General Health District and I would not have been able to respond as efficiently and effectively to protect our community without their partnership. It is with great appreciation and gratitude that we have a dedicated working relationship among the Lake County Leadership that is currently in place.

A huge heartfelt thank you to all who were involved with assisting the Lake County General Health District in protecting our community and its residents.



Ron H. Graham, MPH
Health Commissioner
2015 - Present

Environmental Health	2
Health Education and Outreach.....	3
Office of Health Policy & Performance Improvement...	4-5
Vital Statistics	6
Community Health Services	7
COVID-19	8-11
Financial Report.....	12

BOARD OF HEALTH

Randy Owoc President	Roger Anderson Irene Druzina Richard Harvey	Patricia Murphy Ana Padilla Lynn A. Smith
Alvin J. Brown President Pro-Temp	Nicole Jelovic Steve Karns Brian Katz	David Valentine Lindsey Virgilio Anthony Vitolo

**Mission of the Lake County General Health District:
Working to prevent disease, promote equity in health,
and protect our community through innovative public health practice.**

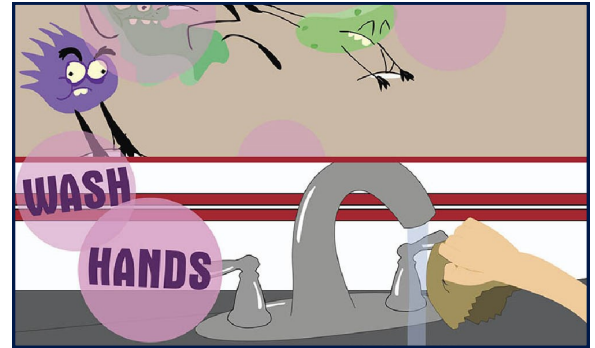
Environmental Health

Environmental Health Inspections During COVID-19

This year began with the Environmental Health Staff participating in the operation of mass vaccination clinics. Assisting in the clinics placed the inspection of food service operations and retail food establishments behind schedule. Over the course of a typical inspection 12 month year, the Environmental Health staff perform over 3,000 required inspections. COVID-19 presented many challenges to meet the required regulatory number of inspections.

Staff challenges included assisting in COVID-19 vaccination clinics and staffing a call center to assist residents with vaccination appointments and general COVID-19 questions. Once an inspector was able get to an inspection, they had to deal with multiple issues stemming from COVID-19 effects on the restaurant industry. The issues encountered were: the restaurant was closed or had restricted hours compared to usual operating times, operators did refused entry to anyone inside their establishment who may be potentially sick, or nursing homes restricting access to anyone who did not work or live at the facility. Due to limited staffing at many of these locations, getting time to review inspections also became problematic .

The Environmental Health staff needed to adjust their typical inspection procedures to accommodate these restrictions and still complete the required number of inspections. The adjustments were completing inspections at different times to accommodate the businesses operations, emailing the completed inspections due to limited staff time to interact, and focusing on the food safety risk factors. Five risk factors have been identified as the main reason people get sick. These are: food from an unapproved source, improper holding time and temperature, poor personal hygiene, improper cooking and cross contamination.



Private Water System Sampling Campaign

Having clean drinking water is essential for a person's health. In a typical year, only 20-30 homeowners in Lake County will have their well tested for bacteria. In an attempt to highlight the importance of having well water tested annually, free water sampling was offered for a period of three months. In this time period, 64 households signed up for the free water sample. Twenty-eight percent of the samples were positive for bacteria. Staff discussed with homeowners about the importance of the quality of the water they drink and how to properly maintain their private water system. This opportunity allowed for a chance to educate the homeowner and show what steps should be taken to assure a safe, sanitary water supply.

A flyer for a free well water sampling campaign. The top section has the text 'FREE WELL WATER SAMPLING' and 'For Private Water Systems in Lake County' with a list of well types: Drilled Wells, Cisterns, and Dug Wells. It includes the slogan 'Know your well water! Call today!' and an image of hands holding a glass of water. Below this are three circular icons: 'Samples Taken on Tuesdays', 'Tests for Total Coliform & E. coli', and 'Annual sampling recommended'. The bottom section is for 'Lake County General Health District' and lists conditions: 'Limited appointments available through 2021', 'Excludes home sale evaluation samples', and 'Adult must be present to provide indoor access'. It also includes contact information and a website link.

FREE
WELL WATER
SAMPLING

For Private Water Systems in
Lake County

- Drilled Wells
- Cisterns
- Dug Wells

Know your well water! Call today!

Samples Taken on Tuesdays

Tests for Total Coliform & E. coli

Annual sampling recommended

Lake County General Health District

Limited appointments available through 2021 | Excludes home sale evaluation samples | Adult must be present to provide indoor access

Lake County General Health District Public Health

Make your appointment today!
Call us at: (440) 350-2543
<https://www.lcghd.org/private-water-systems/>

Health Education and Outreach

Women, Infants, and Children (WIC)

Many adjustments to WIC operations were made during the pandemic. Lake-Geauga County WIC staff:

- completed most of the WIC appointment by phone BEFORE the participant or caregiver needed to come to load the WIC Nutrition Card (WNC).
- asked that the participant or caregiver come to the WIC office alone, if possible.
- practiced social distancing (6 feet) between each other and between themselves and participants and wore masks.
- washed their hands often throughout the day.
- cleaned and disinfected frequently touched objects and surfaces before and after each use.
- avoided contact with people who were sick and stayed at home if they were sick.

Not only were there waivers in place throughout the pandemic, but Lake-Geauga WIC had additional challenges as well. For example, in late 2021, WIC participants did see a challenge in obtaining certain formulas because of the supply chain crisis.

At the beginning of the pandemic, outreach for WIC was very minimal. The only opportunities to promote WIC were within our community partnership/coalition meetings, which were virtual. This past August, the Lake-Geauga WIC team celebrated Breastfeeding Awareness Month (BAM) and usually WIC has a big baby shower for the pregnant moms. Instead, the Breastfeeding Peer Helpers put together “BAM Giveaways” and distributed them to all the pregnant moms in all clinics.

During the spring of 2021, National WIC was provided an increase for fruits and vegetables. The CVB, or cash value benefit, is the money that the WIC participants received each month for fresh, canned, or frozen fruits and vegetables. Congress approved this increase from April - June and then October 2021 - March 2022. This meant that children ages 1-5 received \$24/month, pregnant and postpartum women received \$43/month and breastfeeding women received \$47/month. Without this continuing resolution, the fruit and vegetable cash benefit would revert back to children receiving \$9/month and women receiving \$11/month. This was been a huge help for our families due to the American Relief Act.

LCGHD is especially proud to share that the WIC staff consistently provided outstanding nutrition and breastfeeding education and made, as needed. COVID-19 did not change the staff’s professionalism, dedication, commitment, and compassion. They were flexible and they wanted to be here for their participants. They were supportive of each other, and they shared touching stories about how appreciative participants were that WIC was here when they need it the most.



Office of Health Policy and Performance Improvement

Lake County's MRC in Action

The Lake County Medical Reserve Corps (MRC) stepped forward many times in 2021 by showing their willingness to assist LCGHD's COVID-19 response. Lake County's MRC unit, consisting of both medical and non-medical volunteers, provided over 1,600 hours of volunteer support. These volunteers assisted with call center operations, administered vaccinations, provided pharmacy assistance, worked in data entry, and even directed traffic at mass vaccination clinics. The MRC once again proved their value as a vital, essential component of Lake County's emergency response effort.



Health Educators Return to the Field

While LCGHD's team of Health Educators spent the first half of the year assisting with COVID-19 vaccination clinics, the second half of 2021 was focused on re-establishing LCGHD's presence in the community as a health promotion resource.

The team took part in several exciting community events in 2021 including Live Well Willoughby, the Lake County Fair, and NAMI Walks Lake County. The Lake County Safe Communities Coalition returned with several of their signature events including McDonald's Buckle-Downs, a Drive Sober or Get Pulled Over campaign kickoff with the Painesville Speedway, and Hometown Heroes and the Protect and Serve Tavern at the Great Lakes Mall.



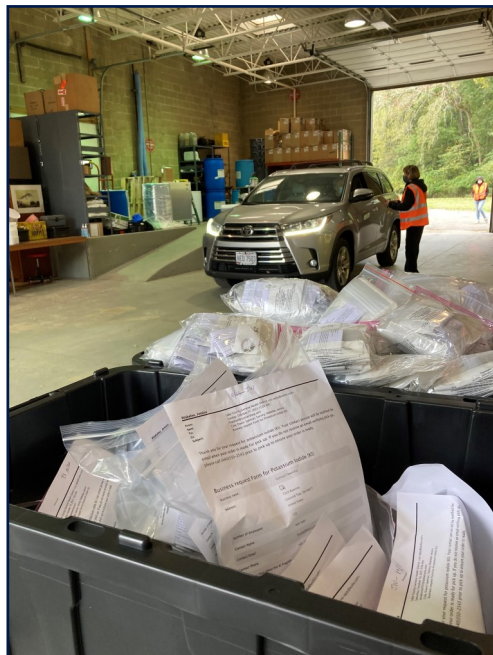
Tobacco cessation campaigns promoting the Ohio Tobacco Quit Line, as well as My Life, My Quit ran on both cable and social media. In addition to its very successful on-line naloxone distribution, Project DAWN hosted several in-person trainings for Willoughby Public Library and Perry High School.

The year concluded with LCGHD hiring its first ever dedicated Marketing and Communications Coordinator. This position will enhance all existing organizational communications activities, as well as seek out new opportunities to promote Lake County's health priorities identified in the Lake County Community Health Improvement Plan.

Potassium Iodide (KI) Distribution

In August 2021, LCGHD received its new allocation of potassium iodide tablets (KI) for packaging and distribution to residents and businesses within the 10-mile emergency planning zone (EPZ) around the Perry Nuclear Power Plant. KI is a stable salt tablet that can be taken in the event of a nuclear emergency to saturate and protect the thyroid from absorbing harmful radioactive iodine. Lake County's allocation of 112,800 doses replaced a previous supply that was set to expire December 31, 2021. The tablets were provided by the Ohio Department of Health (ODH) to jurisdictions in Ohio with nuclear power plants. ODH received the tablets from the Nuclear Regulatory Commission and the packaging supplies from Energy Harbor, the company who operates the Perry and Davis-Besse plants. Local health departments, in collaboration with their county emergency management agencies were tasked with packaging the dose packs and making them available to residents and businesses in the EPZ, as well as ensuring a supply for care centers that would be established for evacuees in the event of an emergency.

LCGHD enlisted the assistance of all of its staff, as well as Medical Reserve Corps and the Lake County Retired Seniors Volunteer Program (RSVP) to package the KI, and began distribution efforts in October. Residents may pick up their free KI at any time during business hours at the LCGHD Main Office front desk. LCGHD partnered with 13 local pharmacies in Madison, Concord, Painesville, and Mentor to provide free KI to residents, and the Perry Township Trustees Office and North Perry Village Hall also have supplies on hand for residents. LCGHD partnered with the Lake County Emergency Management Agency (LCEMA) and Lake County Board of Elections to distribute KI at polling locations in Perry and Madison on Election Day in November. A drive-through distribution was held for pre-registered local businesses on October 20, 2021, and businesses in the EPZ interested in maintaining a supply for their employees may place orders for pick-up with two business days' notice via the LCGHD website. Through December 31, 2021, a total of 18,405 dose packs were distributed to businesses, 4,723 dose packs were distributed directly to residents, 7,800 dose packs were provided to pharmacies for distribution to residents, and 400 dose packs (200 each) were provided to Perry Township and Perry Village for distribution to residents. LCGHD will continue awareness and distribution efforts in 2022.



Vital Statistics

Vital Statistics Operations

The Lake County Vital Statistics Office continued to serve members of the public with as little disruption to operations as possible. Although the building was closed to the public for the first half of the year, orders were still fulfilled daily. Birth certificate orders significantly increased as a result of other local Vital Statistics offices not being open for same-day service and due to the closure of the Euclid City Vital Statistics in April. Funeral homes continued to submit death certificates through electronic filing, allowing for quicker service without having to wait at the office.

	2021	2020	2019	2018	2017
Birth Certificates Issued	7232	5537	4,499	3,984	4,003
Out of County Birth Certs Issued	*	*	2,615	1,952	2,003
Death Certificates Issued	11,426	10,541	8,181	8,332	8,557
Fetal Death Certificates Issued	0	3	1	3	2
Burial Permits Issued	818	686	604	653	658
Birth Certificates Filed	1521	1533	1,640	1,766	1,713
Death Certificates Filed	2414	2315	1,761	1,727	1,751
Free Veterans' Copies	355	308	301	312	306
Affidavits Issued	319	261	448	521	451
Supplements Issued	437	421	354	415	509

*Beginning in 2020, the totals for issued in-county and out-of-county birth certificates have been combined. The total for both is listed in the category "Birth Certificates Issued".

COVID-Related Deaths

2020 and 2021 have presented an increase in deaths. The below table highlights the COVID-related deaths of Lake County residents from March 2020 through December 2021**. The data was extracted from the Ohio Disease Reporting System (ODRS) and was based on the date of death.

	2021	2020	2019	2018	2017
COVID-Related Deaths	281	254			

**Death reporting is delayed, so final numbers are not yet available for December 2021.

Community Health Services

Lake County Disease Investigation

Table 1. Reportable Communicable Diseases

Communicable Disease	2021	2020	2019
Babesiosis	0	0	1
Campylobacter	31	22	47
CP-CRE	25	35	7
Chikungunya	0	0	1
Chlamydia	591	647	765
COVID-19	28,435	13,100	0
Coccidioidomycosis	2	2	0
Cryptosporidiosis	5	0	2
Cyclosporiasis	2	2	0
E. Coli 0157:H7	7	4	7
Ehrlichiosis/anaplasmosis	1	0	1
Giardia	6	11	6
Gonorrhea	237	246	206
Haemophilus Influenza	0	0	10
Hepatitis A	8	11	9
Hepatitis B (perinatal)	3	3	4
Hepatitis B (acute)	1	0	2
Hepatitis B (chronic)	41	12	22
Hepatitis C (acute)	0	0	2
Hepatitis C (chronic)	177	169	269
Hepatitis C (peri-natal)	1	1	1
Hepatitis E	2	*	*
Influenza-Hospitalized	2	200	158
La Crosse Virus Disease	0	0	1
Legionnaires Disease	20	11	21
Listeriosis	1	0	1
Lyme Disease	43	15	14
Malaria	0	1	0
Meningitis-aseptic/viral	0	4	2
Meningitis, Bacterial not Neisseria	12	1	0
Mumps	0	0	1
Mycobacterium Tuberculosis	3	0	0
Pertussis	4	18	9
Rocky Mountain spotted	0	0	1

Table 1 (continued). Reportable Communicable Diseases

Communicable Disease	2021	2020	2019
Salmonella	32	19	31
Shigellosis	3	2	9
Staph Aureus VRSA	0	0	0
Streptococcal Group A	13	6	12
Streptococcal Group B Newborn	0	0	1
Streptococcus Pneumonai (ISP)	18	9	2
Syphilis	25	38	30
Tetanus	0	0	0
Varicella	17	10	6
Vibriosis	0	0	0
West Nile Virus	1	2	0
Yersinia	1	0	0
Totals	29,770	14,601	1,688

*Hepatitis E was added to Communicable Disease chart in 2021. Previous data not available.

Supply Chain Difficulties

With the continuation of the pandemic, the supply chain difficulties have made some changes to the day-to-day activities. There continues to be a shortage of needles and syringes for routine childhood immunizations, preventing us from restarting our routine immunization program. We have continued to do our lead testing for Head Start programs, work with Environmental Health and Epidemiology to manage any Communicable Disease outbreaks, manage our Tuberculosis patients, give out cribs and car seats to eligible residents, and manage our Children with Medical Handicaps Program.

COVID-19

COVID-19 Behind the Scenes

COVID-19 had a significant impact on Lake County General Health District operations during 2021. There was much activity taking place behind the scenes during the pandemic. LCGHD staff and volunteers took on many roles as they worked tirelessly to protect the community through vaccination, public information, providing and relaying guidance for safe operations. Below are a few examples.

Contact Tracing

LCGHD contact tracers have been instrumental in protecting Lake County residents. They called residents who tested positive for COVID-19, as well as identified and informed close contacts of their possible exposure and need to quarantine to keep from further spreading COVID-19. Prior to Public Consulting Group (PCG) taking on this role on behalf of local health departments, contact tracing in Lake County took place seven days a week. Forty-five contact tracers reached out to residents from 8:00 a.m. until 7:00 p.m., Monday through Friday, and from 8:00 a.m. until 4:30 p.m., Saturday and Sunday. Thousands of calls were made conducting case investigations.

School Health Services staff and Environmental Health staff continued to do contact tracing and handle epidemiology until Public Consulting Group (PCG) took over contact tracing in March. Our staff worked closely together and used quality improvement measures to develop and implement these processes.

Isolation Letters

LCGHD mailed over 28,000 letters to Lake County residents that were confirmed as positive for COVID-19 from data extracted from Ohio Disease Reporting System (ODRS). The letters informed those residents how to protect themselves and their close contacts to help stem the spread of COVID-19. Members of all health department divisions were enlisted to help with the preparation and mailing of the letters during 2021.

COVID-19 Call Center

The LCGHD COVID-19 Call Center has transformed since its implementation in January 2021. From January to April, the Call Center's primary objective was scheduling vaccine appointments. Thousands of residents were assisted in finding appointments. Nine stations were set up at that time. They were staffed by LCGHD staff and Medical Reserve Corps (MRC) volunteers. When the multitude of calls required additional aid, volunteers through the Lake County Volunteer Network also assisted with scheduling vaccination appointments. Stations were manned five days a week and additional Saturdays as needed. Since that time, the objective of the call center has shifted, along with the number of stations. While continuing to meet the demand for scheduling vaccine appointments, the call center has also managed public inquiries regarding COVID-19, many of which have centered on topics such as isolation and quarantine guidelines and other general questions and concerns.

Contact Tracing in Schools

With schools back to in-person learning this school year, the School Health Services Staff returned to their school clinics, where they continue to be the point persons in their schools for COVID-19 questions and provide contact tracing in the schools. With the initial roll out of COVID-19 vaccine for minors, the staff assisted with coordinating vaccines for their students and boosters for their teachers.

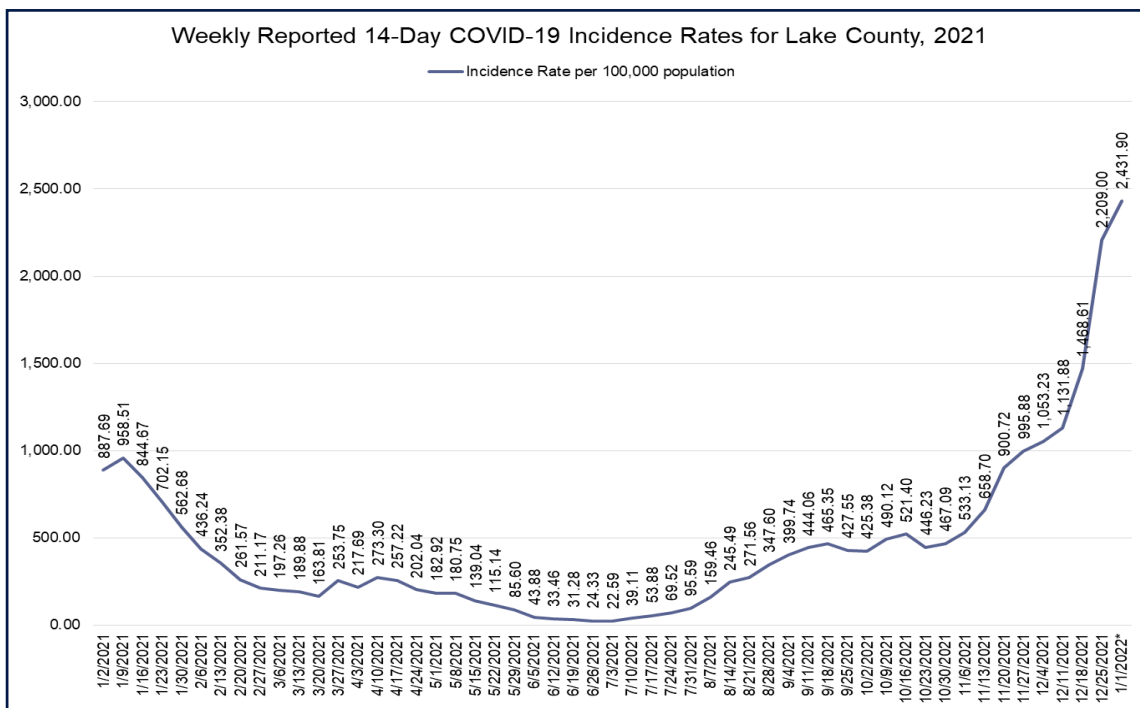
Table 2.
COVID Positive Cases as Reported by Schools, 2020-2021 School Year

Month	# Students	# Staff
September	4	1
October	27	2
November	171	130
December	24	21
January	119	51
February	114	39
March	65	15
April	5	1
May	36	6
June	0	0
July	1	1
August	4	4

Table 3.
COVID Positive Cases as Reported by Schools, 2021-2022 School Year

Month	# Students	# Staff
August	198	49
September	453	67
October	543	91
November	1,154	231
December	1,204	402

Weekly COVID-19 Incident Rates in 2021



Vaccinations

With Moderna and Pfizer receiving their initial Emergency Use Authorizations from the U.S Food and Drug Administration in December of 2020, and Janssen receiving its initial Emergency Use Authorization the following February, 2021 would largely become the year of vaccinations. Initial clinics began in December of 2020 for Lake County's first responders. Then in January 2021, Lake County General Health District (LCGHD) partnered with Lake Health Systems for the first public clinics serving Lake County's seniors and those with severe medical conditions. After that, drive-through clinics of 300 people were held, followed by the first Mega Point of Dispensing (POD) at Mentor High School in March in which over 5,000 people were vaccinated that day. LCGHD would go on to hold a total of eight Mega-PODs in conjunction with our local community college, fire, police, and various county agencies, while continuing to hold clinics throughout the county.

In April, LCGHD worked with Lake Health Hospital Systems to utilize the mobile vaccine unit which borrowed from the state. In July, the County Commissioners worked with LCGHD and the Ohio Department of Health to purchase the mobile vaccination unit. The mobile vaccination unit, which was used through December, allowed us to focus on our areas of high social vulnerability and to take the vaccine into the areas that needed it the most. During 2021, vaccination clinics were held in nursing homes, group homes, assisted livings, homeless shelters, dialysis centers, schools, businesses, county agencies, and residents' homes.

By December of 2021, the Lake County General Health District had approximately 155,000 vaccination-related patient encounters, and provided approximately half of the total vaccinations in the county. The mobile unit was responsible for providing approximately 1% of our vaccinations. We have remained the second highest vaccinated county in the state.

Initially, vaccinations were uploaded manually into the Ohio Impact Statewide Immunization Information System (ImpactSIIS), an online tool that allows providers to record immunizations/vaccinations administered in Ohio. In March of 2021, LCGHD contracted with ArmorVax LLC, located in Mentor, to use their application. This allowed patients to schedule their own vaccine appointments and allowed LCGHD to upload data directly to ImpactSIIS. Second dose appointments were automatically scheduled and reminder emails were able to be automated. The use of ArmorVax has allowed the vaccination process to be more streamlined and efficient.

Table 4. Total COVID-19 Vaccines Given

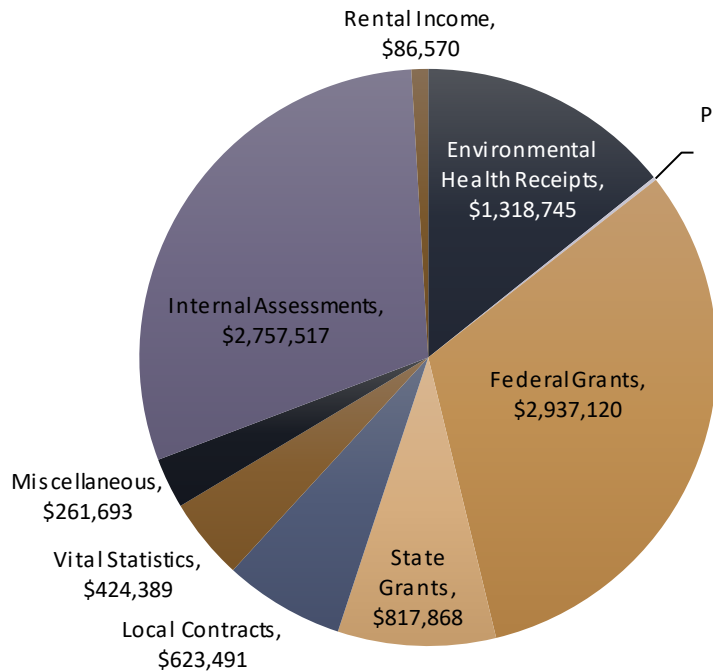
Month	Moderna	Janssen	Pfizer	Pediatric Pfizer	Total
January	1,732	0	567		2,299
February	3,725	0	4,238		7,963
March	6,477	297	17,771		24,545
April	7,811	0	13,446		21,257
May	5,522	684	3,019		9,225
June	679	237	1,034		1,950
July	46	88	264		398
August	85	98	270		453
September	113	0	476		589
October	745	16	1,244		2,005
November	1,556	132	1,189	329	3,206
December	1,792	68	1,949	270	4,079

Program Success

Lake County General Health District would not have been as successful without significant support and cooperation from numerous partners, including our fire departments, police departments, school staff, Superintendents, our Medical Reserve Corps, Northern Career Institute, our continued partnerships with the local hospital systems, the Lake County Commissioners, the Lake County Emergency Management Agency, LakeTran, Lake County Board of Developmental Disabilities, all other Lake County agencies and clinic host sites, and everyone who volunteered in 2021.



Agency Financial Report



Total Revenue
\$9,244,018.00

The largest funding sources for the Lake County General Health District in 2021 include:

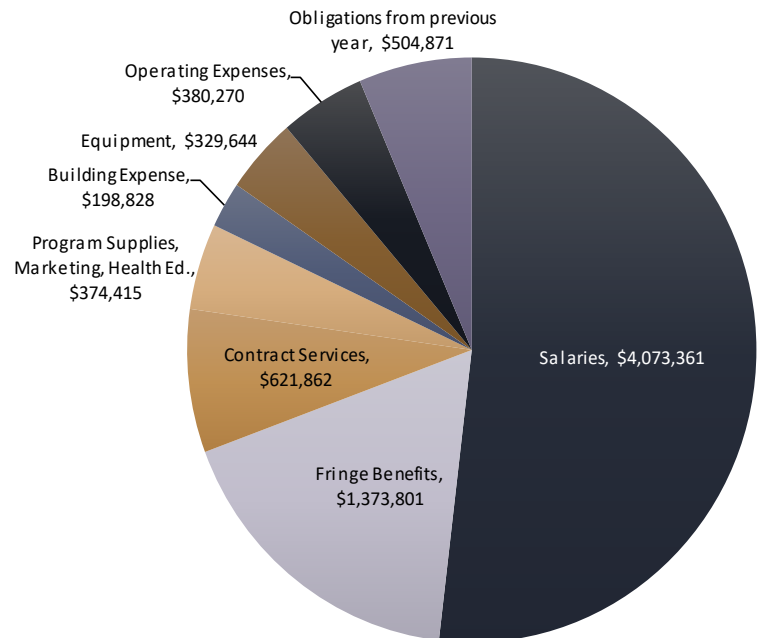
- Federal Grants (32%)
- Internal Assessments (30%)
- Environmental Health Receipts (14%)

Total Expenditures
\$7,934,685.00

Salary and fringe benefits to support the Lake County General Health District's employees represent the principal expenditure for the agency in 2021, account for more than half (69%) of total disbursements.

Other notable expenditures include:

- Office Supplies and Postage (\$51,488.00)
- Transportation and Travel (\$17,104.00)
- Returns (\$4,686.00)
- Capital Improvement (\$4,355.00)



Lake County
General Health District

Public Health
Prevent. Promote. Protect.

