BUTLER COUNTY GENERAL HEALTH DISTRICT



Butler County
General Health District

2021 ANNUAL REPORT



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THANK YOU

We would like to thank the following people for their continued efforts in preventing disease and injury, promoting health and wellness, protecting the environment, and achieving health equity:

Our Staff
Our Board Members
Our Health District Advisory Council
Our Many Community Partners
The Citizens of Butler County

Thank you for all you do for the Butler County General Health District!

We Are ALL Public Health!

WHAT IS PUBLIC HEALTH?

Public health is the science of preventing disease, promoting health, and protecting the health of people and their communities.

Overall, public health is concerned with protecting the health of entire populations. These populations can be as small as a local neighborhood or as large as an entire country or region of the world.

Public health professionals work with communities and partners to implement educational programs; recommend health policies; analyze data to promote health; provide population health services; and conduct research and evaluation to ensure health for all. In addition, we work to identify health inequities and disparities and address them through programming. We work with partners to improve the social determinants that impact a person's ability to be healthy such as housing, transportation, food security, education, and employment opportunities.

In the medical field, clinicians treat diseases and injuries one patient at a time. In public health, we prevent disease and injury by working with communities and populations. We identify the causes of unhealthy living conditions and practices, disease and disability. Large scale and often, long-term solutions are proposed and implemented at the community level.

Instead of treating a gunshot wound, for example, we work to identify the causes of gun violence and develop interventions. Instead of treating premature babies, we investigate the factors at work and we develop programs to keep babies healthy. Instead of prescribing medication for high blood pressure, we examine the links among obesity, diabetes and heart disease- and we use our data to influence policy and community programs aimed at reducing all three conditions.

Public health addresses areas as broad-ranging as the science of aging, chronic disease, mental health, disaster response, refugee health, injury prevention and tobacco control. Public health also works to limit health disparities and promote healthcare equity, quality and accessibility.

(Sources: Centers for Disease Control and Prevention [CDC] https://www.cdcfoundation.org/ what-public-health and Johns Hopkins Bloomberg School of Public Health https://www.ihsph.edu/aboutlwhat-is-public-health)

HEALTH DISTRICT ADVISORY COUNCIL

Ohio Revised Code 3709.03: "There is hereby created in each general health district a district advisory council. A council shall consist of the president of the board of county commissioners, the chief executive of each municipal corporation (not constituting a city health district), and the president of the board of township trustees of each township. The council shall meet annually in March at a place determined by the chair and the health commissioner for the purpose of electing the chair and the secretary, making necessary appointments to the board of health, receiving and considering the annual or special reports from the board of health, and making recommendations to the board of health or to the department of health in regard to matters for the betterment of health and sanitation within the district or for needed legislation. The district advisory council shall appoint five members of the board of health - at least one member of the board of health shall be a physician - appointments shall be made with due regard to equal representation of all parts of the district."

TOWNSHIP TRUSTEES

Fairfield Shannon Hartkemeyer ♦ Susan Berding ♦ Joseph M. McAbee

HanoverJeff Buddo ♦ Larry Miller ♦ Douglas L. JohnsonLemonKevin Majors ♦ Joe Routson ♦ Janet K. MajorsLibertyTom Farrell ♦ Steve Schramm ♦ Christine MatacicMadisonBrian McGuire ♦ Alan Daniel ♦ Jeff WilloughbyMilfordPaul Gillespie ♦ Amy Butterfield ♦ Brad MillsMorganR. Brett Updike ♦ Tom Brucker ♦ Jeffrey R. Kolb

Oxford Gary R. Salmon ♦ Norma Pennock ♦ Kate Rousmaniere
Reily Dennis H. Conrad, Jr. ♦ C. Nicholas Schwab ♦ Tim Miller

Ross Keith Ballauer ♦ Thomas Willsey, Jr. ♦ Ellen Yordy

St. ClairJohn R. Snyder ♦ Tom Barnes ♦ Judy ValerioWayneEdward G. Truster ♦ Bill Jones ♦ Tim TaylorWest ChesterAnn Becker ♦ Mark S. Welch ♦ Lee Wong

CITIES & VILLAGES

Village of College Corner
City of Fairfield
Village of Jacksonburg
Village of Millville
City of Monroe
Village of New Miami

James R. Jackson, Mayor
Steven Miller, Mayor
Michael W. Sword, Mayor
Curt Pennington, Mayor
Jason Frentzel, Mayor
Stephanie Chandler, Mayor

City of Oxford Mike Smith, Mayor

Village of Seven Mile Vivian M. Gorsuch, Mayor City of Trenton Calvin G. Woodrey, Mayor

COUNTY COMMISSIONERS

Cindy Carpenter Donald L. Dixon T. C. Rogers

BOARD OF HEALTH

The Butler County General Health District is made up of 13 townships, and 9 cities and villages. The Board of Health is the policy making body for the health district, and has the authority to adopt rules and regulations according to law. The Board of Health consists of 8 members who serve 3 year terms. Three members are appointed by the cities of Fairfield, Oxford, and Trenton. The remaining 5 are at large. Meetings are held monthly on the third Thursday at 7:00 p.m. All meetings are open to the public.

BOARD OF HEALTH MEMBERS, 2021

Leon Simpson, President
Molly Emmert, MD
Bill Woeste
Tom Urban

Alan J. Burley, DDS, Vice President Stephanie Johnson, RN, BSN Stephen Schulte John Baumgartner

HEALTH COMMISSIONER

Erik Balster, MPH, REHS, RS Jennifer Bailer, RN, MS*

MEDICAL DIRECTOR

Michelle Burch, MD



^{*}EMPLOYED AT SOME TIME IN 2021.

MISSION / VISION / VALUES

OUR MISSION

At the Butler County General Health District, our mission is to prevent disease and injury, promote health and wellness, protect the environment, and achieve health equity.

OUR VISION

We aspire to create a healthy and connected community where residents can enjoy optimal physical, emotional, and environmental health.

OUR VALUES

Our guiding principles provide a framework for staff to conduct their jobs.

BUILD - We work with partners and stakeholders to meet the needs of our community to promote health equity.

UNITY - We show support, courtesy, and understanding for all with whom we interact.

TEAMWORK - We capitalize on our collective differences, strengths, and perspectives.

LEADERSHIP - We are committed to developing a public health staff that exceeds core competencies and provides outstanding service to the community.

EXCELLENCE - We set goals and strive to achieve the highest quality of public health service through innovation and demonstration of outcomes.

RESPECT - We respect the diversity of those we serve and value the contributions made by all staff.

WE ARE ACCREDITED!

During the pandemic, BCGHD continued working towards accreditation. In May of 2021, a 3 day virtual site visit was held with representatives of the Public Health Accreditation Board (PHAB) which included meetings with members of the health district, board members, and community partners to discuss conformity with the Standards and Measures guidance.

In August of 2021, BCGHD was notified that we had achieved PHAB Accreditation! This milestone accomplishment acknowledges that the health district meets the rigorous standards established by PHAB. Accreditation means that BCGHD is committed to continuous quality and performance improvement to meet the community's needs as effectively as possible.

Butler County General Health District is proud to be recognized by PHAB as a high-performing public health department. The achievement of national accreditation will help guide our work to better protect, promote and preserve the health of the people in our community.



LETTER FROM THE HEALTH COMMISSIONER

Dear Citizens of Butler County,

If 2020 was the year of the COVID-19 Pandemic, then 2021 was the year of the COVID-19 Pandemic Response. Throughout 2020, Butler County and the world had utilized a variety of disease prevention and mitigation strategies that helped keep our hospitals operating, our businesses re-opened and eventually got our children back in school. By January 1st of 2021, Butler County General Health District (BCGHD) received its first shipment of FDA approved, emergency use authorization, Moderna COVID-19 vaccine and began the rollout of vaccine to prioritized emergency response and medical personnel.

BCGHD's mass vaccination campaign would continue to hold COVID-19 vaccination clinics throughout the entirety of 2021 as more vaccine became available and population groups became eligible to receive the vaccine. By the end of 2021, BCGHD staff had given over 41,000 COVID-19 vaccinations! While I have only been lucky enough to consider myself a part of this team since November of 2021, I am confident our department's response to the COVID-19 Pandemic protected our citizens and saved lives.

On top of the our COVID-19 response, we had to do our best to keep up with the day to day Public Health needs of Butler County. From inspecting your favorite local restaurants to providing essential health resources and programs to those in need, we strived to positively impact all who live, work, and play in Butler County.

In the next year, as Butler County moves beyond the global COVID-19 pandemic, our attention must refocus on the many other endemic public health issues that our community faces. Problems like access to health care, chronic disease, and the opioid epidemic never went away, and in some cases, may have gotten worse. Unfortunately, the COVID-19 pandemic played a major role in making these issues worse through the unprecedented social isolation, unemployment, and limited access to treatment. Butler County General Health District is committed to addressing and reversing these deadly trends by leading the community conversation, providing timely data and bringing together the needed community groups and resources.

Our continued promise to you, the citizens of Butler County, is to remain committed to meeting and exceeding your public health needs, whether it is as simple as providing answers to your phone calls or physically responding to a global Public Health crisis.

Erik Balster, MPH, REHS, RS Health Commissioner

LETTER FROM THE MEDICAL DIRECTOR

To the Citizens of Butler County:

Another year has come and gone, and what a year 2021 turned out to be. In many ways, 2021 was an incredible year of transition for the health district, filled with moments of incredible growth and progress, but also times of stress and uncertainty. Some of the highlights of 2021 that stand out in my mind include:

- We began 2021 with an immense COVID vaccination effort. With help from community partners
 and medical reserve corps volunteers, the health district administered approximately 41,462
 COVID-19 vaccines in 2021! I am incredibly proud of the hard work of each of our staff members
 that contributed to the success of this mass vaccination effort.
- In addition to ramping up COVID vaccination efforts, the health district staff continued to monitor, track and contact trace new COVID cases reported throughout 2021. Weathering both the Delta and Omnicron surges, Butler County saw an estimated 38,927 reported positive cases of COVID-19 in 2021.
- As you will see in this report, I am incredibly proud that despite the great challenges of living through COVID-19 in 2021, the essential function of the health district remained largely intact.
 We have continued to maintain each of our departments, while even seeing growth within several areas such as Harm Reduction and Maternal and Child Health.
- In August, the health district announced the retirement of our long-time Health Commissioner,
 Ms. Jennifer Bailer. Jenny helped lead the health district through tremendous growth and most
 recently to become a fully accredited health district as recognized by the public health
 accreditation board.
- In November, the Board of Health announced the appointment of our new Health Commissioner, Mr. Erik Balster. In addition to vast public health experience, Erik is the current president of the Association of Ohio Health Commissioners, which promotes strong public health leadership and facilitates collaboration with other health departments across the state and beyond. We are thrilled to have Commissioner Balster, and look forward to continued growth and prosperity under his leadership.

As we look to the future, I am confident that the health district will continue to provide essential services while working towards our mission of improved health for all of the citizens of Butler County.

Michelle Burch, MD, FAAP

Medical Director, Butler County General Health District

SOCIAL DETERMINANTS OF HEALTH



Health starts in our homes, schools, workplaces, neighborhoods, and communities. Conditions in these environments affect a wide range of health outcomes, which explain in part why some residents are healthier than others, and why others may not be as healthy as they could be. These conditions are known as **social determinants of health** (SDOH). Utilizing best practices to reduce health inequity and health disparities to create a culture of health and access to care for all can have a significant influence on community health outcomes. The table below highlights some SDOH in Butler County.

	Butler County	Ohio
Overall percentage of people under age 18 living in poverty	14%	18%
Percentage of population with a high school diploma	91%	90%
Percentage of population with some college	64%	66%
Percentage of population ages 16 and over unemployed but seeking work	3.8%	4.1%
Percentage of households that own a home	68%	66%
Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities	13%	14%
Average number of physically unhealthy days reported in past 30 days (age-adjusted).	4.3%	4.1%
Percentage of population under age 65 without health insurance.	7%	8%
Percentage of population who are low-income and do not live close to a grocery store	7%	7%
Percentage of population who lack adequate access to food	12%	14%

https://www.countyhealthrankings.org/app/ohio/2021/rankings/butler/county/outcomes/overall/snapshot

LIST OF PERSONNEL

Health Commissioner

Jennifer Bailer, RN, MS* Erik Balster, MPH, REHS, RS

Medical Director

Dr. Michelle Burch, MD

Administrative Staff

Carrie Yeager, RS, Director of Environmental Health
Lori Landis, RN, MSN, Director of Nursing*
Betsy Waldeck, RN, Interim Director of Nursing
Erin Smiley, MPH, CHES, Health Promotion Director/Maternal Child Health
Jerry Frederick, Chief Plumbing Inspector
Kimberly Geisler, Chief Fiscal Officer
April Thomas, Human Resources Manager*

Environmental Staff

Jeff Agnew, RS* Jamie Cahill, RS Alexander Dayton, SIT Pankti Desai, SIT* Jennifer Frederickson, RS Kristin Harbeson, SIT Bart Kelhoffer, RS, Supervisor Mark Knapke, RS, Supervisor Kaegon Mollett, SIT* Nicole Pennington, RS* Ryan Peltier, RS* Kariann Preszler, COVID Specialist Casalai Rotundo, SIT Matthew Strode, SIT Lauren Styczinski, COVID Specialist* Lucas Young, SIT

Plumbing Staff

Gary Baldwin, Inspector Mark Kuhn, Inspector Mike Schlabach, Inspector Scott Deaton, Maintenance

Emergency Response

Jennifer McCoy, Emergency Response Coordinator Bhumi Patel, Emergency Response Planner

Accreditation Coordinator

Mita Patel, RN, MS

Harm Reduction

Tyrina Taylor, MPH, Harm Reduction Coordinator Jordan Meyer, MPH, Epidemiologist

Nursing/Epidemiology Staff

Mary Bridge, CRNP Leah Elliott, MPH, Epidemiologist Mary Beth Grollmus, RN, BSN, MA Pamela Mullen, RN, MSN* Jordan Luttrell-Freeman, MPH, Epidemiologist Madison Ritchie, COVID Investigator Karen Ronto, Clinic Secretary

Maternal Child Health Staff

Tracy Bishop, MPH, CHES, OEI Program Director
Marie Brice, BA, C-CHW, Supervisor
Sonia Fongum, C-CHW*
Angela Fosu, MPH, Epidemiologist
Dominique Johnson, Neighborhood Navigator/
MCH Project Specialist
Francine Kuwonu - CHW
Michelle Tubbs, C-CHW
Goldie Wontumi, MD, MPH, MCP Program Director*

Office Staff

Amber Chamberlain, Executive Administrative Assistant Tina Combs, Vital Statistics Registrar Nikki Girdler, Plumbing Secretary Kathy Ripley, Environmental Secretary Rhonda Smith, Data Clerk*

Fiscal Staff

Donna Henley, Accounting Clerk Sherri Meyer, Accounting Clerk Joanna Murray, Assistant Fiscal Officer

*Employed at some time in 2021.

ENVIRONMENTAL HEALTH

FOOD PROGRAM: Food program inspections are very comprehensive. They involve plan review and inspections of Food Service Operations (restaurants), Retail Food Establishments (grocery stores), and Mobile Units, Temporary Food Service Operations, and Vending Machine locations at least twice per licensing year, or as needed.

Food Service Operation	Licenses Issued – 1277	Inspections – 1946
Mobile Food Facilities	Licenses Issued – 74	Inspections – 97
Temporary Food Facilities	Licenses Issued – 129	Inspections – 128
Vending Operations	Licenses Issued – 110	Inspections – 67

Environmental Health Specialists, along with epidemiologists, investigate foodborne illness and complaints in efforts to ensure food safety and to protect public health.

HOUSEHOLD SEWAGE TREATMENT SYSTEM PROGRAM: Environmental

Health Specialists review soil reports, sewage system designs and site reviews for the placement of household sewage treatment systems (H.S.T.S.) to serve dwellings. Approved H.S.T.S. site reviews are used to legitimize the issuance of installation permits.

OPERATION AND MAINTENANCE PROGRAM: The Health District has begun locating and evaluating all household sewage treatment systems as required under O.R.C. 3718.02. The program began with a comprehensive review of sewage nuisances and stream contamination data.

Sewage Installation Permits Issued (New and Alteration)	84
Sewage Installation Inspections (New, alterations and re-inspections)	79
NPDES Permits	27
Aerobic Systems Licensed	1595
Aerobic Systems Inspected	1204
Operation and Maintenance Systems Licensed	200
Operation and Maintenance Systems Inspected	96
Site Reviews	116
Private Sewage Surveys	4
Lot Splits	22

HOUSEHOLD SEWAGE REPLACEMENT AND REPAIR PROGRAM:

In 2020-2021, the Butler County Health District was awarded a \$150,000 grant from the Ohio EPA's WPCLF to aid homeowners with failing household sewage treatment systems. This grant provides financial aid to assist in the payment of Soil Scientists, the creation of system designs, and the installation of new systems. This fund has been used to install multiple new household sewage treatment systems. In addition, the WPLCF has paid for tap-in costs, abandonment of septic systems, and installation of new sewer lines.

This grant targets low-income households that otherwise would not be able to afford the high costs associated with new systems. In the 2020-2021 grant cycle, 10 properties were helped through this grant.

2020-2021 Grant \$150,000

Spent \$128,087.87

PRIVATE WATER SYSTEMS: Private water systems are regulated by the Ohio Department of Health (ODH) and administered by the Health District under Sections 3701.344 to 3701.347 of the Ohio Revised Code (ORC) and Chapter 3701-28 of the Ohio Administrative Code (OAC).

Private water systems are wells, springs, cisterns, hauled water storage tanks, and ponds. Prior to placement, an application and site plan must be submitted by the installer for health department review and approval.

New Installation Permits Issued	8
New Installation Inspections	8
Alteration Permit Issued	3
Alteration Inspections	3
Well Sealing	10

RABIES SURVEILLANCE: Environmental Health Specialists are actively involved with quarantining domestic animals (dogs, cats & ferrets) when they are reported to have bitten or scratched humans. Captured wild animals are euthanized and laboratory tested for the rabies virus. A series of post-exposure rabies immunizations can be given to animal bite victims when the biting animal cannot be quarantined or tested.

Animal Bite Investigations	276
Rabies Laboratory Specimens Submitted	32
Positive Rabies Results	0

SWIMMING POOLS AND SPAS: In efforts to prevent recreational water illnesses (RWI) and to prevent bather injuries, Environmental Health Specialists inspect public pools for safety and sanitation.

Swimming Pool Sites – 131 Licenses Issued – 195 Inspections – 572

SCHOOLS: Ohio Revised Code 3707.26 requires the Health District to inspect semiannually the sanitary conditions of all schools and school buildings within its jurisdiction. Along with school sanitary conditions, sanitarians conduct comprehensive school environmental safety inspections.

Number of Schools – 69

Number of Inspections – 69

CAMPS: Environmental Health Specialists inspect licensed campgrounds to ensure that the campgrounds, buildings, sites, and facilities are being maintained in a clean and sanitary manner in accordance with O.A.C. 3701-26.

Camp Licenses Issued – 2 Inspections – 2
Resident Campground Licenses Issued – 1 Inspections – 1

NUISANCE ABATEMENT: A public health nuisance means any condition which is injurious or potentially injurious to the health and safety of the public. Environmental Health Specialists investigate nuisance complaints to determine legitimacy. Appropriate enforcement is issued to abate public health nuisances.

Number of Complaints - 143

SMOKING: Environmental staff oversees Administrative Rules for ORC 3794 the "smoke-free workplace act". Environmental Health Specialists follow enforcement procedures through investigations and notifications to proprietors reminding them of their responsibilities to prevent smoking within their businesses.

Number of Complaints - 14

Actions Taken - 13

MOSQUITO CONTROL: Through a mosquito control grant obtained through the Ohio Environmental Protection Agency, the Health Department also partnered up with the Butler County Recycling and Solid Waste District on a tire collection event, to eliminate sources for mosquito breeding.

MISCELLANEOUS INSPECTIONS / REVIEWS: Sanitarians inspect for cleanliness, sanitation and safety of jails, and Body Art Establishments.

Jail Inspections - 4

Body Art Establishment Inspections - 31

PLUMBING

Our Plumbing Department is responsible for ensuring the safety of the community by inspecting all plumbing in new construction and remodels, in compliance with the Ohio State Plumbing Code.

PLUMBING INSPECTIONS RESIDENTIAL		
Rough Plumbing Inspections	1,642	
Final Plumbing Inspections	1,387	
Backflow Inspections	21	
Water Line Inspections	446	
Sewer Line Inspections	365	
Total Inspections	3,861	

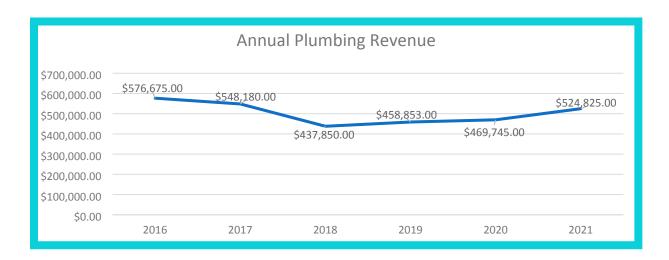
PLUMBING INSPECTIONS COMMERICAL		
Rough Plumbing Inspections	385	
Final Plumbing Inspections	216	
Backflow Inspections	0	
Water Line Inspections	53	
Med Gas Inspections	18	
Sewer Line Inspections	40	
Total Inspections	712	

TOTAL INSPECTIONS

4,573

REGISTERED LICENSE PROFESSIONALS		
Master Plumbers	357	
Journeymen	304	
HSTS Installers	39	
Septage Haulers	21	
Service Providers	37	

REVENUE		
Residential	\$376,640.00	
Commercial	\$148,185.00	
HSTS	\$30,710.50	
Med Gas	\$8,790.00	
Total Permits Issued	3,831	



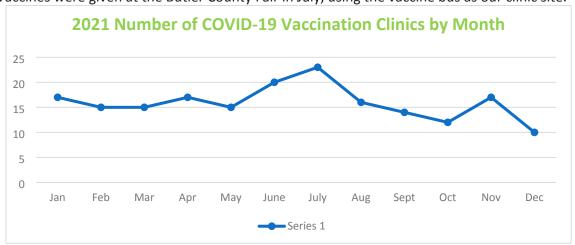
NURSING

IMMUNIZATIONS

Due to the ongoing COVID-19 pandemic our mitigation efforts were solely focused on providing COVID-19 vaccines to the community. The Rosin Clinic at the Butler County General Health District remained closed for routine, immigration, and travel vaccinations.

The nursing department was extraordinarily engaged in the vaccination of all sectors of our community during 2021. The Ohio Department of Health (ODH) provided ProLink contract nurses to assist us with the enormous task. Vaccines were rolled out using a tiered system to identify those who qualified for vaccines first, according to pre-determined qualifying determinates identified by the Ohio Department of Health (ODH), in conjunction with the Center for Disease Control (CDC). By years end, everyone 5 years of age and older qualified for vaccine, including booster doses for those who had completed the initial COVID vaccine series earlier in the year. We are happy to report that we were able to reach out to our community utilizing the following methods:

- EMS were supplied with vaccines and essential supplies (as per emergency policy use guidelines), in order to vaccinate themselves, thus freeing up health district staff to vaccinate our community members.
- Numerous community based clinics were held at the Butler County Fairgrounds (drive-through and walk-in clinics), Butler County General Health District (outside clinics), and the Butler County Educational Service Center/ESC (inside clinics).
- School based clinics
- Local businesses
- Home bound vaccine visits for those unable to easily leave their home for a vaccine due to a disability
 or illness.
- Targeted vaccine clinics were held in order to reach our "at risk" community members, at various sites throughout Butler County. We met this need through a partnership with the Butler County Regional Transit Authority (BCRTA). They provided a bus that their driver would take to various locations and then we held vaccine clinics from the bus.
- Vaccines were given at the Butler County Fair in July, using the vaccine bus as our clinic site.



According to the ImpactSIIS report module the amount of all vaccines given by the Butler County General Health District during 2021 was 41,153*. (*Total numbers may vary depending on reporting systems used to obtain data).

PREINATAL HEPATITIS B PREVENTION PROGRAM

The Perinatal Hepatitis B Prevention program focuses on preventing babies of hepatitis B-positive mothers from contracting the hepatitis B virus at birth. In 2021, our public health nurse followed 4 new couplets of babies and moms. The Hepatitis B vaccine series is recommended to be started for the baby at birth, dose #2 given at 1 or 2 months of age, and dose #3 given no sooner than 6 months of age. During this time the Perinatal Hep B Coordinator contacted the family and/or Physician of the baby, to check on the current Hepatitis B vaccine status of the baby. This contact served as a reminder to the family of the importance of the baby remaining up to date on this vaccine, answer any questions, and provide further education when needed. Following completion of the Hepatitis B vaccine series (baby must be at least 9 months old and 2 months have passed after dose #3) the baby has post-serology blood testing completed to be checked for an adequate immune response from the vaccination series. Once an adequate immune response was confirmed the baby is then discharged from the program.

TUBERCULOSIS (TB) CLINIC

The Butler County General Health District TB Control Unit consists of public health nurses and our contracted Infectious Disease physician who work in collaboration with the Ohio Department of Health (ODH) to monitor and case manage individuals in the county who have been diagnosed with TB. Each person identified as having active TB prompts a thorough investigation of the people who may have been in contact with the individual. In 2021, 8 active cases of TB were identified and treated in Butler County. Due to the ongoing COVID-19 pandemic, these individuals were followed using in home visits, frequent phone calls, and video calls with our TB Control Unit staff. There was constant communication between the TB Control Unit Infectious Disease physician and staff. Each case's treatment was documented with daily directly observed therapy, verifying that these individuals took all of their prescribed medications. Contacts possibly exposed to TB by these individuals were notified by the TB Control Unit and given an order to receive a quantiferon test.

Quantiferon testing continued to demonstrate a higher accuracy with less false positive results. During 2021 latent TB clients were referred to their own Primary Care Physician for follow up, in consultation with our Infectious Disease physician, when needed. It is recommended that Latent Infection (LTBI) cases identified have treatment initiated to prevent active disease.

Following is a summary of the past 5 years of active TB cases in Butler County and Ohio

NUMBER OF ACTIVE TB CASES

	Butler County	Ohio
2017	7	148
2018	1	178
2019	9	150
2020	5	130
2021	8	Unknown at present

*Data obtained from the Ohio Department of Health

COMMUNICABLE DISEASES



Butler County General Health District Annual Communicable Disease Report

Year 2021

Jordan Luttrell-Freeman, MPH, Epidemiologist Luttrell-freemanj@butlercountyohio.org

Notifiable Communicable Diseases

Summary:

- Number of Disease Reports in Butler County: 43,832
- COVID-19 Cases in Butler County: 40,902
- Number of Non-COVID-19 related Disease Reports: 2,930
- Most Frequently Reported Diseases: COVID-19 Chlamydia Infection, Gonococcal infection, Hepatitis C, and Hepatitis B.

Tables and Figures:

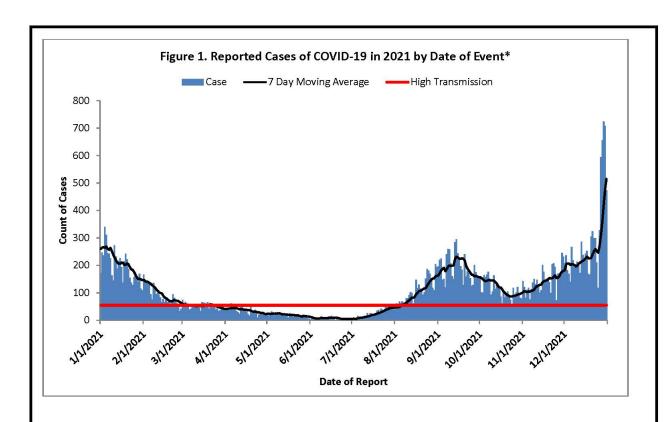
Table 1.* Communicable Diseases by Jurisdiction except COVID-19 (2021)			
Jurisdiction	Count	Rate per 100,000	Change from 2020
Butler County General Health District	1648	594.0	↓ 8.7% from 2020 (n=1806)
Middletown City Health Department	580	1,137.5	↓ 28.3 % from 2020 (n=809)
City of Hamilton Health Department	702	1,133.5	↓15.3% from 2020 (n=829)
Butler County (all inclusive)	2930	750.6	↓14.9% from 2020 (n=3444)

Table 2.* COVID-19 by Jurisdict	ion (2021)		
Jurisdiction	Count	Rate per 100,000	Change from 2020
Butler County General Health District	29,020	10,459.9	↑43.5% from 2020 (n=20,214)
Middletown City Health Department	5,578	10,940.0	↑64.8 % from 2020 (n=3,385)
City of Hamilton Health Department	6,304	10,178.9	↑ 54.1% from 2020 (n=4,091)
Butler County (all inclusive)	40,902	10,478.1	↑47.7% from 2020 (n=27,690)

*Data is provisional and subject to change — Table 1 does not include gonorrhea or chlamydia due to the high likelihood of duplicate cases and co-infections. Orly probable & confirmed cases are included in counts for Tables 2,3, and 5 except for cases of arboviral encephalitis such as Zika virus disease of which only probable and confirmed cases are reported and Novel Influenza A of which only confirmed cases are reported. Report reflects time period of the year 2019 unless otherwise noted. Table 6 includes only probable and confirmed cases. Data accessed from the Ohio Disease Reporting System (ODRS) on 1/02/2020. Suspected cases are included on Figure 1.

Jurisdictions:	Butler County General Health District	Middletown City Health Department	City of Hamilton Health Department	Butler County (all inc
Amebiasis	1	0	0	
Brucellosis	2	0	0	
C. auris- Investigation	1	0	0	
Campylobacteriosis	26	2	7	
Chlamydia	811	280	317	
Coccidioidomycosis	2	0	1	
COVID-19	29020	5578	6304	
CP-CRE	11	0	2	
Creutzfeldt Jakob Disease	1	0	0	
Cryptosporidiosis	4	0	1	
Dengue	1	0	0	
E. coli, Shiga Toxin-Producing	14	0	1	
Ehrlichiosis	1	0	0	
Giardiasis	11	3	5	
Gonococcal infection	238	128	115	
Haemophilus Influenzae	2	2	3	
Hepatitis A	28	5	11.	
Hepatitis B	113	21	32	
Hepatitis C	203	94	142	
HIV	29	13	18	
HUS	1	0	0	
Influenza-associated hospitalization	19	0	1	
Legionellosis	.5	3	2	
Lyme Disease	4	1	0	
Malaria	1	0	0	
Meningitis - aseptic/viral	14	0	1	
Meningitis - bacterial (Not N. meningitidis)	3	0	0	
MIS-C	13	1	2	
Mumps	1	0	0	
Pertussis	4	0	3	
Salm onellosis	21	3	2	
Salmonellosis-Typhoid Fever	1	0	1	
Shigellosis	2	0	1,	
Spotted Fever Rickettsiosis,including Rocky Mountain spotted fever (RMSF)	0	0	1	
Streptococcal - Group A -invasive	11	13	13	
Streptococcus pneumoniae	17	9	8	
Syphilis	16	1	6	
Toxic Shock Syndrome	0	0	1	
Tuberculosis	10	0	0	
Varicella	2	1	5	
Vibriosis (not cholera)	2	0	0	
VISA	1	0	0	
Yersiniosis	1	0	0	

*Data is provisional and subject to change — Table 1 does not include gonorrhea or chlamydia due to the high likelihood of duplicate cases and co-infections. Only probable & confirmed cases are included in counts for Tables 2,3, and 5 except for cases of arboviral encephalitis such as Zika virus disease of which only probable and confirmed cases are reported and Novel Influenza A of which only confirmed cases are reported. Report reflects time period of the year 2019 unless otherwise noted. Table 6 includes only probable and confirmed cases. Data accessed from the Ohio Disease Reporting System (ODRS) on 1/02/2020. Suspected cases are included on Figure 1.



Reportable Disease Subgroup	2016	2017	2018	2019	2020	5 year average (2016-2020)	2021
Viral Hepatitis (B and C)	871	871	946	679	643	802	605
Sexually-Transmitted Diseases (Chlamydia, Gonorrhea, and							
Syphilis)	1898	2214	2251	2348	2199	2182	1912
Enteric Diseases (Hepatitis A, Amebiasis, Campylobacteriosis,							
Cryptosporidiosis, Cyclosporiasis, STEC, Giardiasis,							
Salmonellosis, Shigellosis, and Vibriosis)	153	179	458	218	154	232	159
Vaccine-Preventable Diseases (COVID-19^, influenza-							
associated hospitalizations, Haemophilus influnzae, Bacterial							
meningitis, Mumps, Pertussis, invasive Streptococcus							
pneumonia, Tetanus, and Varicella)	201	411	597	493	351	410.6	41010
Total:	3123	3675	4252	3738	4252	3409	43832

[^]COVID-19 became a vaccine preventable disease in 2021 and significantly skews this figure.

*Data is provisional and subject to change – Table 1 does not include gonorrhea or chlamydia due to the high likelihood of duplicate cases and co-infections. Only probable & confirmed cases are included in counts for Tables 2,3, and 5 except for cases of arboviral encephalitis such as Zika virus disease of which only probable and confirmed cases are reported and Novel Influenza A of which only confirmed cases are reported. Report reflects time period of the year 2019 unless otherwise noted. Table 6 includes only probable and confirmed cases. Data accessed from the Ohio Disease Reporting System (ODRS) on 1/02/2020. Suspected cases are included on Figure 1.

Butler County Reportable Disease Surveillance 5-Year Comparison

Table 6 outlines Butler County's select, reportable disease counts by year, that were classified as either "probable" or "confirmed" during the years of 2014 to 2019 and provides a 5 year average (2014-2018) column for comparison. This graph includes those diseases that represent a consistent threat to public health.

Tak	No 6 3	Renarter	4 Drobable	/Canfirmer	l Cacac in Rut	ler County	(2016–2021)
1011	JIE U.	NEDOLLER	a rionanic	/ COIIIII IIIC	i Cases III Dul	iei coulity	LECTO FOETI

	Year / Average Columns:	2016	2017	2018	2019	2020	5 Year Avg (2016-2020)	202
	Amebiasis	0	0	2	1	0	<1	
	Brucellosis	0	0	0	0	0	<1	
	Campylobacteriosis	47	41	33	45	30	39.2	
	Chlamydia Infection	1392	1586	1560	1612	1512	1532.4	14
	CP- CRE (not reportable prior to 2019)		-	8	4	10	N/A	
	COVID-19 (Not Reportable prior to 2020)	593	PEC	*		26421		395
	Creutzfeldt-Jakob Disease	1	1	1	2	0	1	
	Cryptosporidiosis	10	9	6	4	6	7	
	Cyclosporiasis	0	0	4	2	0	1.2	
	Dengue	1	0	0	1	0	<1	
	E. coli, Shiga-Toxin Producing	13	8	14	11	14	12	
	Giardiasis	7	8	12	12	4	8.6	
	Gonococcal Infection	486	602	654	725	651	623.6	
	Haemophilus influenzae (invasive disease)	2	5	17	10	7	8.2	
	Hepatitis A	2	1	308	104	2	83.4	
	Hepatitis B - acute/chronic/perinatal	146	126	166	107	67	122.4	
	Hepatitis C – acute/chronic	727	749	778	572	485	662.2	
	Influenza-associated Hospitalization	102	290	479	321	266	291.6	
	Legionellosis – Legionnaires' Disease	6	9	15	17	10	11.4	
sease	Listeriosis	1	1	1	0	0	<1	
lame	Lyme Disease	1	3	4	3	2	2.6	
dillo	Malaria	5	2	2	2	2	2.6	
	Meningitis – aseptic/viral	29	26	16	25	9	21	
	Meningitis – bacterial (not N. meningitidis)	6	9	3	4	3	5	
	Meningococcal dz. – Neisseria meningitidis	1	1	0	0	0	<1	
	MIS-C	120	-	2	€	1	1	
	Mumps	3	2	2	1	0	1.6	
	Pertussis	16	25	16	35	13	21	
	Salmonellosis	29	40	32	32	20	30.6	
	Shigellosis	45	72	45	7	8	35.4	
	Spotted Fever Rickettsiosis (including RMSF)	2	0	0	0	2	<1	
	Streptococcal – Group A – invasive	16	32	23	24	27	24.4	
	Streptococcal – Group B – in newborn	1	1	3	0	1	1.2	
	Streptococcus pneumoniae – Invasive	44	46	54	66	31	48.2	
	Syphilis (all stages)	30	30	47	11	18	27.2	
	Tuberculosis (active)	6	8	2	8	6	6	
	Varicella	10	11	13	14	1	15.7	
	The state of the s						9.8 <1	
	Vibriosis (not Cholera)	1	0	2	1	0	5048	
	West Nile Virus Disease	0	1	0	0	0	<1	
	Yersiniosis	0	0	0	1	0	<1	

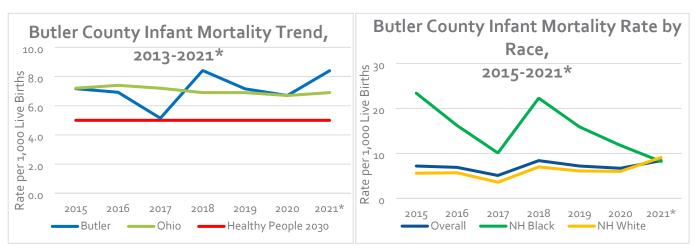
*Data is provisional and subject to change – Table 1 does not include gonorrhea or chlamydia due to the high likelihood of duplicate cases and co-infections. Only probable & confirmed cases are included in counts for Tables 2,3, and 5 except for cases of arboviral encephalitis such as Zika virus disease of which only probable and confirmed cases are reported and Novel Influenza A of which only confirmed cases are reported. Report reflects time period of the year 2019 unless otherwise noted. Table 6 includes only probable and confirmed cases. Data accessed from the Ohio Disease Reporting System (ODRS) on 1/02/2020. Suspected cases are included on Figure 1.

MATERNAL AND CHILD HEALTH

INFANT MORTALITY

Infant mortality is the death of a live-born baby before his or her first birthday. Infant mortality is often driven by racial disparities and socio-structural determinants of health (SDOH). SDOH are the conditions in the environment where people are born, live, work, worship and age that affect a wide range of health and the quality of life outcomes.

A way to measure infant death is Infant Mortality Rate (IMR), which is calculated as the number of babies who die each year before their first birthday per 1,000 live births. Of 3,829 live-born babies in 2021, 32 infants died before their first birthday in Butler County. The overall infant mortality rate for all races was 8.4 deaths per 1,000 live births in 2021.

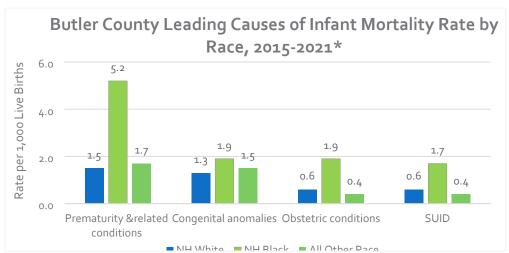


Source: 2015-2021 Ohio Department of Health, Ohio Public Health Information Secure Data Warehouse Data. 2021* data is provisional; ODH finalizes data by fall of the subsequent year.

LEADING CAUSES OF INFANT DEATH

The causes of infant death are disparities that affect prematurity-related and obstetric conditions. Non-Hispanic Black infants are at 3.5 times more likely to die from prematurity-related conditions than non-Hispanic white infants are and over 3 times more likely to die compare to babies born to mothers of other racial background.

Babies born to Black mothers were over 3 times more likely to die from obstetric conditions than babies born to white mothers, 2.8 times more likely to die from sleep related deaths than white babies, and 1.4 times more likely to die from birth defects than infants born to white mothers.



Source: 2015-2021 Ohio Department of Health, Ohio Public Health Information Secure Data Warehouse Data. 2021* data is provisional; ODH finalizes data by fall of the subsequent year.

Preterm birth is defined as a baby born alive before 37 weeks of pregnancy are completed. In 2021, about three fourths (75%) of infants who died in Butler County was born preterm. However, 10% of all infants born in 2021 were preterm. Black infants (13%) were more likely than white infants (10%) to be born before 37 weeks of gestation age.

Low birth weight is defined as an infant weighing less than 2,500 grams (approximately 5.5 pounds) at birth. In 2021, eight percent of all infants born had a low birth weight less than 2500 grams. However, about one-third (63%) of infants who died had low birthweight. Black infants (12%) were more likely than white infants (7%) to be born at a low birth weight.

LEADING INFANT VITALITY EQUITABLY

Leading Infant Vitality Equitably (LIVE), a Butler County community coalition, works to achieve equity by connecting pregnant Black women to clinical and social services to improve access to care and resources needed for healthier pregnancies. A second prong strategy of LIVE includes addressing policy and practices that influence the SDOH as they related to poor birth outcomes.

LIVE continued its partnership with Butler County Regional Transit Authority. The focus of the subcommittee is to gain public approval for an additional bus stop and facilitating conversations between partners and hospitals to improve access to prenatal care.

LIVE has also collaborated with WIC to advocate and assist local hospitals implement standard operating procedures for people who are pregnant and post-partum presenting in the emergency department with urgent maternal warning signs.

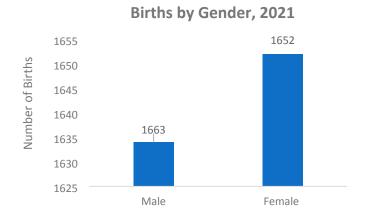
The Implicit Bias Subcommittee continues to address racism within health care and direct service providers to reduce bias, improve patient-provider relationship, and create a culture of respect, inclusivity, and equity within health care systems.

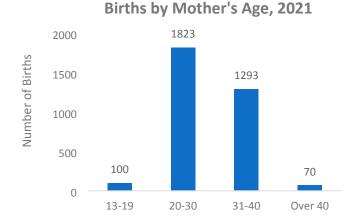


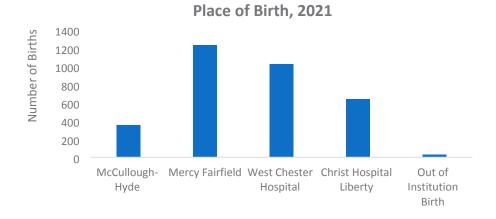
Visit our website to view the entire Infant Vitality Annual Report 2021.

VITAL STATISTICS - BIRTHS*

NUMBER OF BIRTHS	S IN 202	1
GENDER		
Male	1634	50%
Female	1652	50%
TOTAL	3286	
AGE OF MOTHERS		
13-19 years	100	3%
20-30 years	1823	55%
31-40 years	1293	40%
Over 40 years	70	2%
RESIDENCE OF MOTHERS		
Butler County	1610	49%
Non-Butler County	1676	51%
PLACE OF BIRTH		
McCollough-Hyde	356	11%
Mercy Fairfield	1234	38%
West Chester Hospital	1026	31%
Christ Hospital Liberty	641	19%
Out of Institution Birth	29	1%





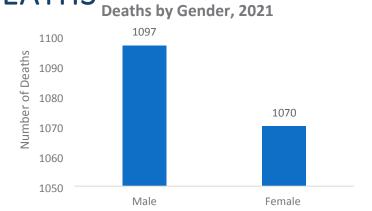


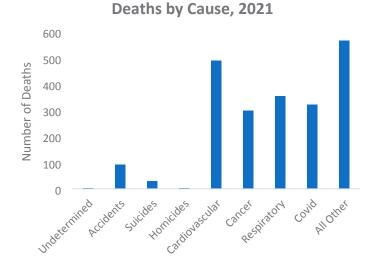


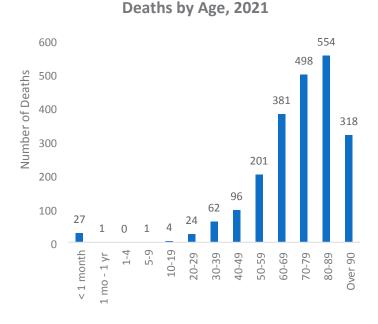
^{*} Births: The Butler County General Health District vital statistics numbers are for birth certificates filed within Butler County, and do not include birth certificates for births that occurred in the cities of Hamilton or Middletown. The birth totals include only certificates filed in 2020, not births that occurred in 2020.

VITAL STATISTICS - DEATHS**

NUMBER OF DEA	THS IN	2021
GENDER		
Male	1097	50%
Female	1070	49%
TOTAL	2167	
CAUSE OF DEATH		
Undetermined	2	.1%
Accidents	93	4%
Suicides	29	2%
Homicides	2	.1%
Cardiovascular	490	23%
Cancer	300	14%
Respiratory	355	16%
Covid	322	15%
All Other	567	26%
Pending	7	.3%
AGE AT DEATH		
Under 1 month	27	1%
1 month - 1 year	1	< 1%
1-4 years	0	0%
5-9 years	1	<1%
10-19 years	4	< 1%
20-29 years	24	1%
30-39 years	62	3%
40-49 years	96	4%
50-59 years	201	9%
60-69 years	381	18%
70-79 years	498	23%
80-89 years	554	26%
Over 90 years	318	15%







^{**}Deaths: The Butler County General Health District vital statistics numbers are for death certificates filed within Butler County, and do not include death certificates for deaths that occurred in the cities of Hamilton or Middletown. The death totals include only certificates filed in 2020, not deaths that occurred in 2020.

FISCAL - BUDGET & FINANCE

ALL BOARD OF HEALTH FUNDS

REVENUE	
2020 Balance	2,127,947.72
Taxation	135,000.00
Grants	4,095,359.30
Fees & Miscellaneous	1,231,236.02
State Subsidy	48,256.75
Food Service	612,295.47
Pool Licenses	64,375.55
Recreational Vehicle/Camp Licenses	642.37
Household Sewage Treatment Systems	258,284.48
TOTAL REVENUE	8,570,397.66

EXPENDITURES				
Salaries	2,217,957.88			
PERS	297,615.40			
Workers Compensation	49,695.80			
Medicare	30,009.67			
Group Insurance	463,733.98			
Unemployment	0.00			
Supplies	311,570.66			
Travel & Expenses	8,148.18			
Contractual Services	1,760,218.59			
Equipment	0.00			
Other - Miscellaneous	25,973.66			
State Portion	294,456.92			
Encumbered Carry-Over	121,603.10			
Contingency	2,989,413.82			
TOTAL EXPENDITURES	8,570,397.66			

EMERGENCY PREPAREDNESS

The Emergency Response Coordinator (ERC) manages the BCGHD Emergency Preparedness and Response Program alongside the Emergency Response Planner, a new position added in 2021. The program is supported by the Public Health Emergency Preparedness (PHEP) and Cities Readiness Initiative (CRI) grants. CDC's PHEP capabilities and standards dictate the planning and operational activities conducted under this program.

The 2021 grant cycle focused on Continuity of Operations Planning, Medical Countermeasure Dispensing and Distribution, and Distribution Strategies and Tactics. All exercises for 2021 were postponed due to the COVID-19 response.

Similarly to 2020, in 2021 the focus of the Emergency Preparedness team at BCGHD was centered on the COVID-19 response. Even with a focus on the COVID-19 response, all PHEP/CRI related grant objectives were met in 2021.

COVID-19 RESPONSE

Year two of the COVID-19 response for BCGHD began with a wave of optimism due to the rollout of the COVID-19 vaccine. Even with vaccines taking center stage, case investigations and contact tracing continued. Partnerships with Miami University allowed BCGHD to continue to conduct contact tracing and case investigations even during periods of record breaking case counts. Education for the community, public information, and remaining accessible to the public also remained priorities for BCGHD throughout 2021.











MASS VACCINATION: BUTLER COUNTY FAIRGROUNDS

With the help of the Butler County Fairgrounds & Fair Board, the Butler County Emergency Management Agency, the Butler County Incident Management Team, and countless EMS and Fire agencies, the Butler County Fairgrounds acted as our main mass vaccination site. Come rain, snow, sleet, or cicadas BCGHD staff, partners, and volunteers made sure the COVID-19 vaccines were available to the public. At its peak, the clinic at the Fairgrounds vaccinated almost 1700 individuals in one day.















MOBILE CLINICS

BCGHD collaborated with the Butler County Regional Transit Authority (BCRTA) in a successful campaign to increase vaccine uptake and awareness by physically going to socially vulnerable areas throughout Butler County. The focus was on eliminating accessibility barriers to receiving the vaccine by bringing the vaccine to these communities with the use of mobile clinics. BCGHD also conducted outreach to businesses and institutions for on-site vaccine clinics intended for their staff. Successful outreach for other on-site vaccine clinics also included a regional college campus, a variety of schools,



community events such as the Hispanic Expo, and presence for the entirety of the Butler County Fair.

MEDICAL RESERVE CORPS VOLUNTEERS

The Butler County Medical Reserve Corps volunteers were integral to the COVID-19 response in Butler County. Over the course of 2021 BCGHD used a total of 175 individual volunteers at 76 clinics. These individuals contributed 3,061 volunteer hours or \$87,360.94 to the BCGHD COVID-19 response (rate based on calculations by the Do Good Institute). Individuals volunteered in both medical and non-medical roles assisting with everything from directing traffic to administering the vaccines. BCGHD owes a large debt of gratitude to these individuals for volunteering their time to support our COVID-19 response.





PARTNERS IN RESPONSE

BCGHD relied on a multidisciplinary team of partners to continue our COVID-19 response in 2021. Partners included government agencies, first responders, schools, healthcare agencies, non-profits, and other community groups.

Amongst a group of many, the Butler County Emergency Management Agency (EMA) continued to stand out as a key partner in 2021. Since the beginning of vaccine rollout in Butler County, BC EMA has provided support with the planning, logistics, and operationalization of our vaccine strategies. Their ability to provide subject matter experts to support our clinics through their own team members as well as the Butler County Incident Management Team proved invaluable to BCGHD.

Miami University and the Butler County Educational Service Center also stepped up to support BCGHD in many ways throughout 2021. They partnered with us to provide the vaccine to their communities and worked with us on quarantine and isolation of students/staff even as the guidance seemed to change week by week.

The Butler County Commissioners and the Butler County CARES group also deserve to be highlighted. Supported by Coronavirus Relief Funds allocated through the CARES Act, the BC Cares group provided much needed information and material support to Butler County residents. It was through this group that we were able be part of the efforts to offer COVID-19 kits, hand sanitizer stations, and 1:1 COVID-19 consulting to local businesses. Organizations in the group included the Butler County Board of Commissioners, Butler County Emergency Management Agency, Butler County Board of Health, Butler County Visitors Bureau and Butler County Chamber Coalition.

In many more ways than one, BCGHD has leaned on its partners throughout the past two years to help us serve the members of our communities. We are incredibly grateful for the support shown to us from all those that have been involved in our COVID-19 response so far.













BCGHD COVID-19 RESPONSE BY THE NUMBERS

Butler County General Health District's 2021 COVID-19 Update Confirmed and Probable COVID-19 Cases Reported to Butler County*

Butler County Residents, 2021

Total # of Cases (2021): 38927* ODH verified Deaths (2021): 552** Hospitalizations (2021): 1,491 First Case Reported: 1/1/2021 **Last Case Reported:** 12/31/2021 **Confirmed Cases:** 27,949 **Probable Cases:** 11,433 Age Range: <1-103 Median Age: 37 Mean Age: 38.4

Incidence: 23,557.6 per 100,000
Prevalence: 10.2% of BC population

This report has transitioned from using the target indicators that Governor DeWine and the Ohio Department of Health had previously set to the CDC's Community Transmission Indicators. The CDC has its own data tracker that is accessible at https://covid.cdc.gov/covid-data-tracker/#datatracker-home, which gives a good picture of how the nation as a whole is doing. They also have county tracking information, but as CDC mentions, local reports will be more up-to-date and should be considered more definitive.

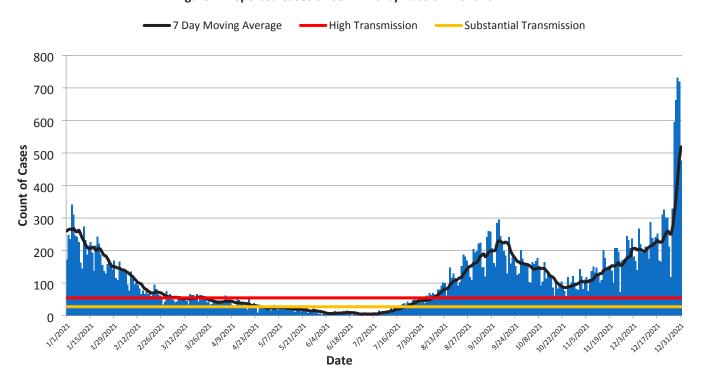


Figure 1. Reported Cases of COVID-19 by Date of Event 2021*

All figures show reported cases of COVID-19 in Butler County as of 0800 EST 02/17/2022. Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and confirmed and probable case criteria AND reported to Public Health.

**This should not be assumed to be the total disease burden of COVID-19 in Butler County only those that have been laboratory confirmed OF probable case criteria AND reported to Public Health.

**Pata is provisional—only confirmed or probable COVID-19 cases are included in counts. Report reflects time period since the introduction of SARS-COV-2 into humans, measured in days. Deta accessed from the Ohio Disease Reporting System (ODRS) on

Vaccination numbers were collected 1200 EST 02/17/2022 from ODH COVID-19 Dashboard and the Innovate Ohio Platform. Vaccination sare considered started on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered completed on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered started on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered completed on the day an individual receives the final recommended dose of a vaccine.

#Gathered from CDC's Data Tracker of Butler County 02/17/2022 0800 EST accessible at https://covid.cdc.gov/covid-data-tracker/#county-view

^{02/17/2022} at 0800 EST.
*Deaths are now reconciled to the Ohio Department of Health's available data to avoid discrepancies between the state and local numbers. ODH's protocol has changed to avoid reconciliation errors and now only includes those deaths that have been reconciled with Vital statistics and may not match what has been reported to the CDC which are provisional numbers. This is a lagging indicator and will be multiple weeks behind.

Table 1: Total Reported* Cases by ZIP Code			
ZIP Code	Number of Cases	Cases per 100,000	% of Cases
45011	7203	10337.7	18.5%
45044	5863	11099.5	15.1%
45013	5331	10132.5	13.7%
45069	5092	10379.1	13.1%
45014	4563	10390.1	11.7%
45056	1954	7226.9	5.0%
45042	2701	10211.3	6.9%
45067	1756	12634.9	4.5%
45050	1189	13909.7	3.1%
45015	1150	9553.1	3.0%
45241	577		1.5%
45053	293	8567.3	0.8%
45005	233		0.6%
45064	168		0.4%
45246	70		0.2%
45062	55		0.1%
Cases lacking zip code			
information or from zip			
codes with too few cases	729		1.9%
Butler County (inclusive)	38,927	10,160.1	
			100%

Zip-codes that have transmissions not rated have most of their populations outside of Butler County. Zip-codes with too few cases have been removed for privacy concerns.

New Cases are determined by "Date of Event" which is when the case was ill/test was collected. CDC determines new cases by "Date of Report".

Table 2 shows the zip-code level data that is new for this week. <u>All zip-codes</u> have rates of disease that once again meet the CDC's definition of a <u>community of high transmission</u>. Almost all zip-codes are seeing record levels of transmission.

Figures 3 and 4 show severe case outcomes. These are both lagging indicators since it typically takes time for a case to succumb to COVID and well over a month for a COVID-19 death to be verified. Deaths will take about 4-6 weeks to begin to register for last week. Hospitalized case reports are coming in to BCGHD and these are most likely undercounts due to lags in getting reported cases entered in to the Ohio Disease Reporting System.

completed on the day an individual receives the final recommended dose of a vaccine.

#Gathered from CDC's Data Tracker of Butler County 02/17/2022 0800 EST accessible at https://covid.cdc.gov/covid-data-tracker/#county-view

All figures show reported cases of COVID-19 in Butler County as of 0800 EST 02/17/2022. Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and confirmed and probable case counts are likely to increase. *This should not be assumed to be the total disease burden of COVID-19 in Butler County only those that have been laboratory confirmed OR meet ODH probable case criteria AND reported to Public Health.

*Data is provisional — only confirmed or probable COVID-19 cases are included in counts. Report reflects time period since the introduction of SARS-COV-2 into humans, measured in days. Data accessed from the Ohio Disease Reporting System (ODRS) on 02/17/2022 at 0800 EST.

^{**}Deaths are now reconciled to the Ohio Department of Health's available data to avoid discrepancies between the state and local numbers. ODH's protocol has changed to avoid reconciliation errors and now only includes those deaths that have been reconciled with Vital statistics and may not match what has been reported to the CDC which are provisional numbers. This is a lagging indicator and will be multiple weeks behind.

Ascicination numbers were collected 1200 EST 20/17/2022 From ODH COVID-19 Dashboard and the Innovate Ohio Platform. Vaccinations are considered stated on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered stated on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered stated on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered stated on the day an individual receives first dose of a COVID-19 vaccine.

Figure 3. Confirmed COVID-19 Deaths by date of death, 2020-22**

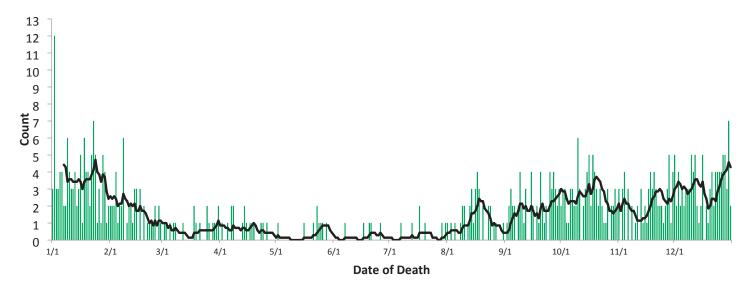
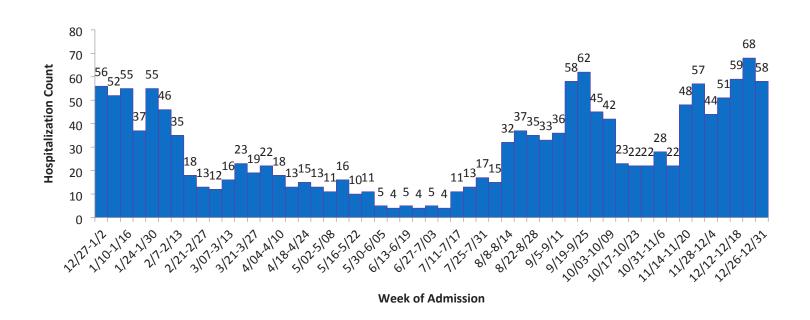


Figure 4. COVID-19 Hospitalizations of Butler County Residents by Week since the first week of March 2021



This is nown repurted cases or COVID-19 in Butter County as of 0800 EST 02/17/2022. Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and confirmed and probable case are likely to increase. "This should not be assumed to be the total disease burden of COVID-19 in Butter County only those that have been laboratory confirmed OR meet ODH probable case criteria AND reported to Public Health.
"Data is provisional – only confirmed or probable COVID-19 cases are included in counts. Report reflects time period since the introduction of SARS-CoV-2 into humans, measured in days. Data accessed from the Ohio Disease Reporting System (ODRS) on 02/17/2022 at 0800 EST. All figures show reported cases of COVID-19 in Butler County as of 0800 EST 02/17/2022. Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and confirmed and probable case counts

completed on the day an individual receives the final recommended dose of a vaccine.

#Gathered from CDC's Data Tracker of Butler County 02/17/2022 0800 EST accessible at https://covid.cdc.gov/covid-data-tracker/#county-view

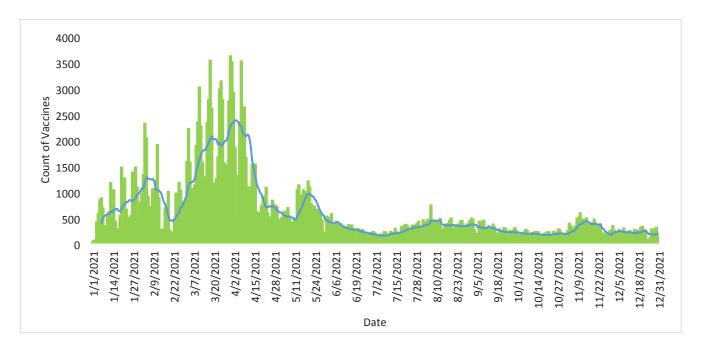
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Vaccination numbers were collected 1200 EST 02/17/2022 from ODH COVID-19 Dashboard and the Innovate Ohio Platform. Vaccinations are considered started on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered

Butler County General Health District's 2021 COVID-19 Vaccine Distribution

All Partners in Butler County 2021 Vaccine Distribution

Vaccines Administered to Butler County Residents Date of Vaccination



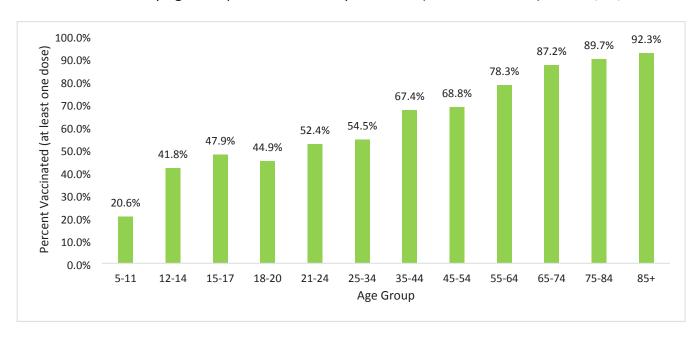
Percent Vaccinated by Zip Code (at least one dose) as of 12/31/2021

Zip Code	% of the Total Population Vaccinated	% of the Eligible Population Vaccinated	% of 12-17 Year Olds Vaccinated	% of 5-11 Year Olds Vaccinated
45011 - Hamilton	55%	59%	48%	19%
45013 - Hamilton	54%	57%	38%	12%
45014 - Fairfield	64%	67%	53%	17%
45015 - Hamilton	46%	50%	33%	7%
45042 - Middletown	51%	54%	35%	9%
45044 - Middletown	55%	59%	48%	16%
45050 - Monroe	62%	66%	53%	21%
45053 - Okeana	55%	58%	43%	9%
45056 - Oxford	44%	45%	44%	34%
45064 - Somerville	44%	46%	24%	7%
45067 - Trenton	42%	45%	34%	8%
45069 - West Chester	72%	77%	65%	37%

Vaccination Statistics by Age Group for Butler County Residents

Age Group (Years)	Estimated Count of Population # (%)	Count of People Vaccinated (%) as of 12/31/2021 (at least one dose)
5-11	33,689 (9%)	6,929 (20.6%)
12-14	15,069 (4%)	6,299 (41.8%)
15-17	15,838 (4%)	7,572 (47.8%)
18-20	20,735 (5%)	9,305 (44.9%)
21-24	23,864 (6%)	12,474 (52.3%)
25-34	48,008 (13%)	26,102 (54.4%)
35-44	45,659 (12%)	30,714 (67.3%)
45-54	46,344 (12%)	31,850 (68.7%)
55-64	48,369 (13%)	37,821 (78.2%)
65-74	36,132 (9%)	31,478 (87.1%)
75-84	17,318 (5%)	15,524 (89.6%)
85+	6,788 (2%)	6,265 (92.3%)

Percent Vaccinated by Age Group for Butler County Residents (at least one dose) as of 12/31/2021



BCGHD Vaccine Distribution 2021 Vaccine Distribution

BCGHD has:

Vaccinated people from 358 different cities

Vaccinated people from 33 different states

Median age: 50 years

Vaccination Breakdown by Manufacturer

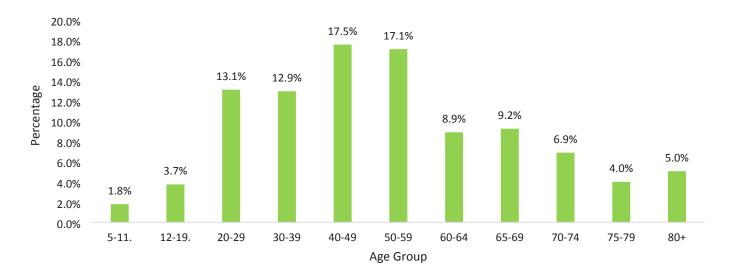
Total Vaccinations by BCGHD in 2021:	40,994
Total Jansenn Doses	772
Jansenn 1st Doses	720
Jansenn Booster Doses	52
Total Pfizer Doses	2,370
Pfizer 1st Doses (12+)	956
Pfizer 2 nd Doses (12+)	386
Pfizer 1st Doses (5-11)	312
Pfizer 2 nd Doses (5-11)	92
Pfizer Booster Doses	624
Total Moderna Doses	37,852
Moderna 1st Doses	18,766
Moderna 2 nd Doses	17,265
Moderna Booster Doses	1,821

Race/Ethnicity of Individuals BCGHD has vaccinated

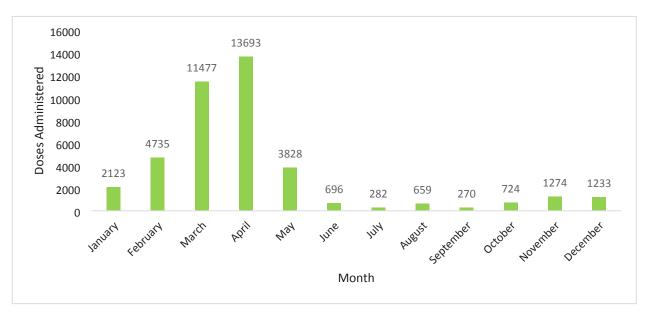
Race/Ethnicity	%
Non-Hispanic White	68.3%
Non-Hispanic Black or African American	5.7%
Asian	4.7%
Hispanic or Latino	3.9%
Other*	1.2%
White but unknown Ethnicity	9.8%
Other, but Not Hispanic or Latino	6.3%

^{*}Other- American Indian/Alaska Native, Native Hawaiian, Pacific Islander or Other

Number of Vaccines Administered by BCGHD by Month



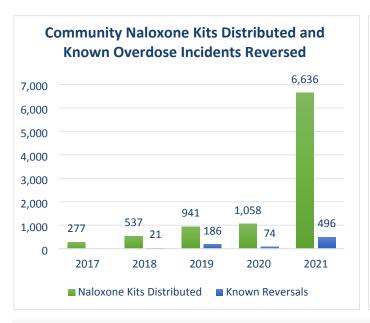
Percentage of Age Groups Vaccinated by BCGHD

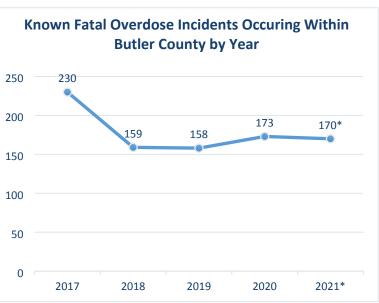


Data was sourced from the Ohio Department of Health's Innovate Ohio Platform on 2/16/2022. Data reflects vaccination statistics from 1/1/2021 - 12/31/2021. Due to delays in reporting, number of vaccinations are subject to change between reports. Population estimates for Table__ are from the Ohio Department of Health, as of December 2020.

HARM REDUCTION

Harm reduction consists of evidence-based strategies that aim to reduce the harms associated with certain behaviors, especially those associated with addictions. Butler County is the 7th largest county in Ohio with a current population estimated at 390,357 per the most recent U.S. Census estimates. Butler County has ranked 7th for the state of Ohio for the number of unintentional overdose deaths.





- Many of these deaths are linked to overdose of prescription opioid painkillers.
- In 2020, the Butler County age-adjusted death rate for unintentional drug overdoses deaths is 56.0 deaths per 100,000 population, compared to the state of Ohio for unintentional drug overdoses deaths of 45.6 deaths per 100,000 and the national rate of 14.6.

Fatal Overdose Case Demographics Summary for 2020 Incidents					
	Count	Percent			
Sex					
Male	112	64.74%			
Female	61	35.26%			
Age Group					
18-24	11	6.36%			
25-34	47	27.17%			
35-49	65	37.57%			
50-64	43	24.86%			
65+	7	4.05%			
Race/Ethnicity					
Non-Hispanic White	161	93.06%			
Non-Hispanic Black	10	5.78%			
Hispanic	2	1.16%			

Fatal Overdose Data was obtained from the Butler County Coroner's Office

Through Butler County's collaborative partnerships, the Butler County General Health District has been able to gain a better understanding of how all partners can work together to end the opioid epidemic, especially through the establishment of the Butler County Overdose Fatality Review. The Butler County Coroner's Office has played a vital and supportive role in providing comprehensive information regarding overdose fatalities, case demographics and primary substances responsible for the cause of death. Much success has stemmed from the support of the County Coroner's office by helping to make connections with community partners. As a result, we have been able to join forces with several partners establishing and maintaining an OFR committee. Together, the OFR are working together to utilize this important data to meet people where they are at - saving lives, building community capacity and integrating care across the continuum of services.

