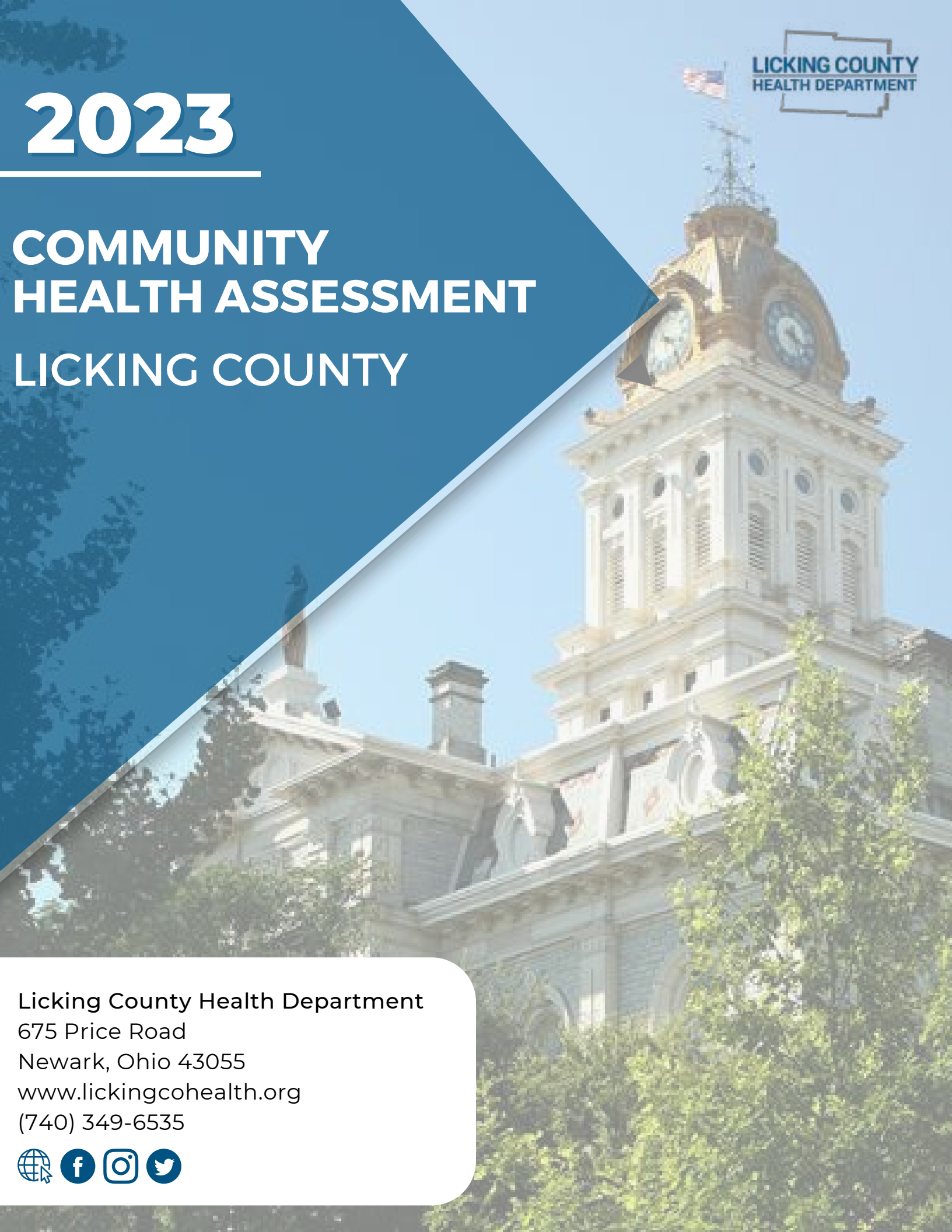
LICKING COUNTY
HEALTH DEPARTMENT

2023

COMMUNITY HEALTH ASSESSMENT

LICKING COUNTY



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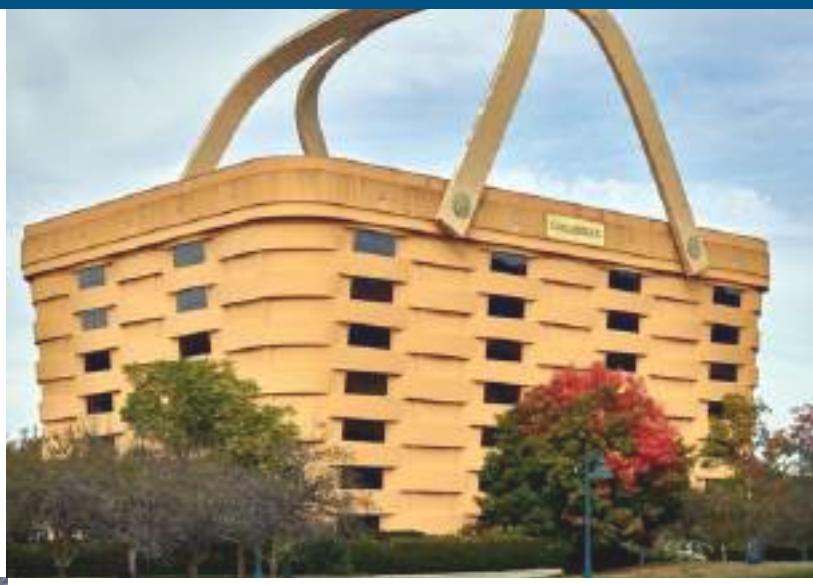
Public Health in Licking County

Licking County is located in central Ohio, just east of Columbus. Of the county's predominantly rural 687 square miles, less than 2% represent urban areas. You will find 6 major cities, 10 villages, 25 townships, 16 school districts, 2 universities, and 2 technical schools throughout the county.



Licking County is home to hiking and biking trails, parks, golf courses, community events, diverse shopping and dining venues, the world's largest basket building, the nation's largest collection of Native American earthworks, and more.

Licking County's population has grown by more than 30,000 people since 2000, and the population is predicted to increase drastically due to development projects in the western portion of the county. The county is home to the Velvet Ice Cream Company, National Trail Raceway, and Owens Corning.

Community Health Assessment (CHA) Process Description

Licking County Health Department (LCHD) last published a CHA in 2017. The CHA is completed every three years and is used to drive the development of the county's Community Health Improvement Plan (CHIP). Members of the Community Health Improvement Committee (CHIC) review the results from the CHA and determine priority areas for the county CHIP. Additional data is collected through a variety of mechanisms and is used for future planning.

The CHIC meets on a quarterly basis and conducts assessments as part of the Mobilizing for Action through Planning and Partnerships process, which was developed by the National Association of County and City Health Officials. CHIC members review primary and secondary data during their meetings and a subcommittee develops a draft CHA for CHIC members to review. After the committee reviews the data in the CHA, it is used to develop priorities and objectives in the county's CHIP. Additional data additional sources, including from school districts, healthcare providers, and other sources, are also used in the development of the CHIP.

DATA COLLECTION

Primary data were collected through a Behavioral Risk Factor Surveillance System (BRFSS) survey that was conducted in Licking County by the Hospital Council of Northwest Ohio in 2020. Additional primary data included in this document include data from listening sessions conducted as part of a PACE EH assessment, communicable disease reports, traffic and motor vehicle accidents, COVID-19 reports, and vectorborne disease illness reports.

Secondary data collection included data from the US Census, American Community Surveys (ACS), Ohio Department of Health (ODH), Ohio Cancer Incidence Surveillance System (OCISS), Bureau of Vital Statistics, Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR), and the Surveillance, Epidemiology, and End Results (SEER) Program, and ODMAP.

Overall, the development of the 2023 Licking County CHA was a collaborative process involving agencies representing multiple sectors of the public health system in the county. This approach allows for a comprehensive CHA that includes a wide variety of data to give a full picture of the public health status of Licking County.

Community Health Improvement

Conducting a CHA is one of the core responsibilities of a local health department. LCHD has been conducting CHAs since 2006. Over this time, the department's process has evolved and is now a collaborative effort conducted by the Licking County Community Health Improvement Committee (CHIC). The CHIC is comprised of agencies that work collaboratively to address public health issues in Licking County. The committee is chaired by LCHD, but ultimately it is a community-driven collaboration that is dedicated to improving the overall health and well-being of Licking County residents.

Members of the CHIC (as of February 2023):

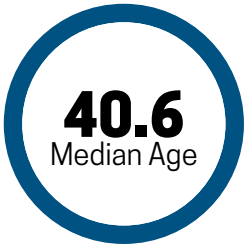
- Canal Market District
- Family Health Services of East Central Ohio
- Food Pantry Network of Licking County
- Heath City School District
- Licking County Aging Program
- Licking County Board of Developmental Disabilities
- Licking County Board of Health
- Licking County Children and Family First Council
- Licking County Coalition of Care
- Licking County Family YMCA
- Licking County Foundation
- Licking County Health Department
- Licking County Planning Department
- Licking Memorial Hospital
- Lower Lights Christian Health Center
- Mental Health America of Licking County
- Mental Health Recovery for Licking and Knox Counties
- Ohio Department of Health
- The Ohio State University
- Pathways of Central Ohio
- United Way of Licking County

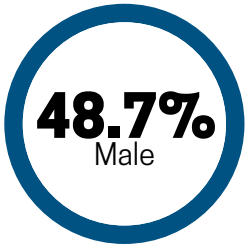
Community Health Improvement Plan (CHIP)

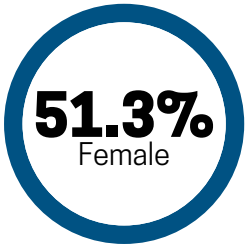
CHIC members have used data from past CHAs to inform their decision-making during the development of the county's Community Health Improvement Plan (CHIP). This work began in 2010 and resulted in the county's first CHIP in 2012. Since then, the CHIC has continued to meet on a quarterly basis and has continually reviewed and updated the CHIP as new data became available. This work will continue as the CHIC evaluates the CHA and makes updates to the CHIP.

Licking County Demographics - Population

The overall population of Licking County has increased to 178,519, according to the 2020 US Decennial Census - nearly a 5% increase from the previous population estimate in the 2017 CHA. No significant changes were noticed within sex and age group population profiles. The overall median age is also similar at 40.6 years, along with female and male representation at 51.3% and 48.7%, respectively.







Population Profile by Sex and Age Group
(Source: 2019 ACS 1-year Estimate)

Age Group	Population Estimate	N (% of sex-specific population)	
		Males	Females
Under 5 years	10,339	5,516 (6.4%)	4,823 (5.3%)
5 to 9 years	9,756	4,314 (5.0%)	5,442 (6.0%)
10 to 14 years	12,969	7,334 (8.5%)	5,635 (6.2%)
15 to 19 years	12,365	5,999 (7.0%)	6,366 (7.0%)
20 to 24 years	11,614	5,155 (6.0%)	6,459 (7.1%)
25 to 29 years	9,518	4,894 (5.7%)	4,624 (5.1%)
30 to 34 years	9,671	4,521 (5.3%)	5,150 (5.7%)
35 to 39 years	10,596	5,386 (6.3%)	5,210 (5.7%)
40 to 44 years	11,649	5,731 (6.7%)	5,918 (6.5%)
45 to 49 years	12,125	6,320 (7.3%)	5,805 (6.4%)
50 to 54 years	12,049	6,232 (7.2%)	5,817 (6.4%)
55 to 59 years	11,017	5,138 (6.0%)	5,879 (6.5%)
60 to 64 years	13,985	6,562 (7.6%)	7,423 (8.2%)
65 to 69 years	9,885	4,653 (5.4%)	5,232 (5.8%)
70 to 74 years	7,372	3,388 (3.9%)	3,984 (4.4%)
75 to 79 years	5,114	2,028 (2.4%)	3,086 (3.4%)
80 to 84 years	3,136	1,477 (1.7%)	1,659 (1.8%)
85 years and over	3,702	1,452 (1.7%)	2,250 (2.5%)
TOTAL POPULATION	**176,862**	**86,100 (48.7%)**	**90,762 (51.3%)**

Licking County Demographics - Race and Ethnicity

The population of Licking County is mostly represented by Whites (86.3%) - a slight decrease from the previous CHA - followed by African Americans (4.0%) and Asians (2.8%), with small representations of the remaining race categories. Approximately 2.2% of the county's population identifies as Hispanic or Latino. The combined racial demographic profile reports similar representation of races and ethnicities at both the county and state level. Compared to the state and similar to the previous CHA, Licking County's White population is 9.2% greater along with 8.6% fewer African Americans.

Ethnicity Profile of Licking County and Ohio
(Source: US 2020 Decennial Census)

	Licking County, Ohio (n, % of total population)	State of Ohio (n, % of total population)
Hispanic or Latino	3,998 (2.2%)	521,308 (4.4%)
Not Hispanic or Latino	174,531 (97.8%)	11,278,140 (95.6%)
TOTAL POPULATION	**178,519**	**11,799,448**

Race Profile of Licking County and Ohio
(Source: US 2020 Decennial Census)

	Licking County, Ohio (n, % of total population)	State of Ohio (n, % of total population)
One race	168,745 (94.5%)	11,118,076 (94.2%)
White alone	154,070 (86.3%)	9,080,688 (77%)
Black or African American alone	7,213 (4%)	1,478,781 (12.5%)
Asian alone	5,028 (2.8%)	298,509 (2.5%)
American Indian and Alaska Native alone	452 (0.3%)	30,720 (0.3%)
Native Hawaiian and Other Pacific Islander alone	52 (0.02%)	5,034 (0.04%)
Some Other Race alone	1,930 (1.1%)	224,344 (1.9%)
Two or more races	9,774 (5.5%)	681,372 (5.8%)
Two races including some other race	2,522 (1.4%)	239,909 (2%)
Two races excluding some other race, and three or more races	7,252 (4.1%)	441,463 (3.7%)
TOTAL POPULATION	**178,519**	**11,799,448**

Race Alone or in Combination with One or More Other Races

	Licking County, Ohio (n, % of total population)	State of Ohio (n, % of total population)
White	163,503 (91.6%)	9,717,936 (82.4%)
Black or African American	7,485 (4.2%)	1,515,685 (12.8%)
Asian	5,073 (2.8%)	301,712 (2.6%)
American Indian and Alaska Native	476 (0.3%)	34,141 (0.3%)
Native Hawaiian and Other Pacific Islander	52 (0.03%)	5,630 (0.05%)
Some Other Race	1,930 (1.1%)	224,344 (1.9%)

Licking County Demographics - Household Income

Household income statistics showed a 14.5% increase in the median household income compared to previously published CHA data. According to the 2019 ACS 1-year estimates, the median household income was $66,013 and the mean household income was $88,327. The greatest increase was observed for the largest income bracket, $200,000 or more, at 3.3%, while the greatest decrease was observed for the $35,000 to $49,999 income bracket at 2.9%, compared to the respective statistics in the previous CHA. Additional income measures show a 5.1% decrease in the total number of persons below the federal poverty level (9.3%) as well as a 2.3% decrease in the unemployment rate (2.5%) for Licking County residents.

Selected Economic Demographics of Licking County, Ohio, and the United States
(Source: 2019 ACS 1-year Estimate)

Selected Economic Indicators	Licking County	Ohio	United States
Median Household Income	$66,013	$58,642	$65,712
Unemployment Rate (Population 16 years and over)	2.5%	4.6%	4.5%
Total Persons Below Federal Poverty Line (n, % of total population for whom poverty status is determined)	15,909 (9.3%)	1,484,862 (13.1%)	39,490,096 (12.3%)

Household Income Profile for Licking County, Ohio
(Source: 2019 ACS 1-year Estimate)

Income in the past 12 months (in 2019 inflation-adjusted dollars)	Licking County Households (n, % of TOTAL)
Less than $10,000	3,130 (4.7%)
$10,000 to $14,999	2,731 (4.1%)
$15,000 to $24,999	5,262 (7.9%)
$25,000 to $34,999	6,261 (9.4%)
$35,000 to $49,999	6,927 (10.4%)
$50,000 to $74,999	12,921 (19.4%)
$75,000 to $99,999	8,725 (13.1%)
$100,000 to $149,999	11,722 (17.6%)
$150,000 to $199,999	4,329 (6.5%)
$200,000 or more	4,596 (6.9%)
TOTAL	66,604

Licking County Demographics - Language Spoken at Home & Education

The large majority of Licking County residents speak only English at home. Of those who speak a language other than English at home, most speak Spanish or an Indo-European language. Indo-European languages include several branches: Anatolian, Indo-Iranian, Greek, Italic, Celtic, Germanic, Armenian, Tocharian, Balto-Slavic, and Albanian.

Language Spoken at Home, Licking County, Ohio (Source: 2020 ACS 5-year Estimate)		
Population 5 years and over	164,788	(X)
Speak only English	157,873	95.8%
Speak a language other than English	6,915	4.2%
Speak a language other than English		
Spanish	2,144	1.3%
Other Indo-European languages	3,196	1.9%
Asian and Pacific Island languages	756	0.5%
Other languages	819	0.5%

Educational attainment demographics of Licking County residents remain fairly unchanged compared to the previous CHA. Current data report the same percentage of individuals with a bachelor's degree or higher at 26.9% and a slight 1% increase in individuals who report being a high school graduate or higher at 91.3%, compared to 2014 US Census data. Data from the 2019 American Community Survey (ACS) estimated 11,189 residents enrolled in college or graduate school.

Education Profile of Licking County, Ohio (Source: 2019 ACS 1-year Estimate)	
Educational Attainment (≥ 25 years old)	**Estimate (n, % of TOTAL)**
Less than 9th grade	1,992 (1.7%)
9th to 12th grade, no diploma	8,389 (7.0%)
High school graduate (includes equivalency)	39,813 (33.2%)
Some college, no degree	24,502 (20.4%)
Associate degree	12,862 (10.7%)
Bachelor's degree	21,227 (17.7%)
Graduate or professional degree	11,034 (9.2%)
TOTAL (≥ 25 years old)	**119,819 (100%)**
High School Graduate or higher	109,438 (91.3%)
Bachelor's Degree or higher	32,261 (26.9%)

Behavioral Risk Factor Surveillance System (BRFSS) Summary

The Behavioral Risk Factor Surveillance System (BRFSS) was established by the Centers for Disease Control and Prevention (CDC) in 1984 and now collects data in all fifty states along with three US territories. These health-related surveys collect data regarding the health-related risk behaviors, chronic health conditions, and preventive services of individuals nationwide.

The 2020 Licking County BRFSS included 430 participants and was conducted by the Hospital Council of Northwest Ohio (HCNO). The HCNO organization works in collaboration with over 40 counties in Ohio to provide community health improvement services such as reporting, community health assessments, and planning and evaluation services.

TOBACCO USE

Licking County Health Department has set an overarching goal to reduce the percent of smokers in the county to 13% by the year 2023. The 2020 BRFSS results show a 7% decrease in the percent of residents who are current smokers compared to the 2015 BRFSS data. At 17%, this is the greatest decrease across five BRFSS reporting years for the county (2006, 2008, 2012, 2015, and 2020) and is the first statistic from those reporting years to fall under 20%. Between 2015 and 2020, the data show an average of a 1.4% decrease per year for this measure. If this trend continues, Licking County will reach, or possibly exceed, the goal of decreasing the percent of current smokers to 13% by 2023.

OBESITY

The Healthy People 2020 target for obesity in adults was 30.5%. In 2015, Licking County reported an estimated 38% of residents with a BMI of greater than 30 (obese). The results from the 2020 BRFSS estimated a decrease in that statistic of nearly 18%. The estimate for the percent of county residents classified as obese was 20.1% in 2020, far surpassing the Healthy People 2020 target. The Healthy People 2030 target for reducing the overall proportion of adults with obesity is 36% (an increase from Healthy People 2020) after seeing a significant worsening in the trend between the baseline and final values.

Behavioral Risk Factor Surveillance System (BRFSS) Summary

The table below provides the estimated prevalence of various risk factors and critical health issues reported by Licking County residents over four survey reporting periods: 2008, 2012, 2015, and 2020. For each risk factor or critical health issue, the 2020 weighted percentage is compared to the previously reported percentages. The data are presented as being similar (within a ±5% difference), higher (greater by >5%), or lower (lesser by >5%). Green statistics indicate a positive change while red statistics indicate a negative change compared to the 2020 county-level statistics.

Behavioral Risk Factor Surveillance System Prevalence and Trends Data in Licking County and Ohio

(Sources: Licking County 2020 BRFSS Data, Licking County 2017 CHA, Centers for Disease Control and Prevention)

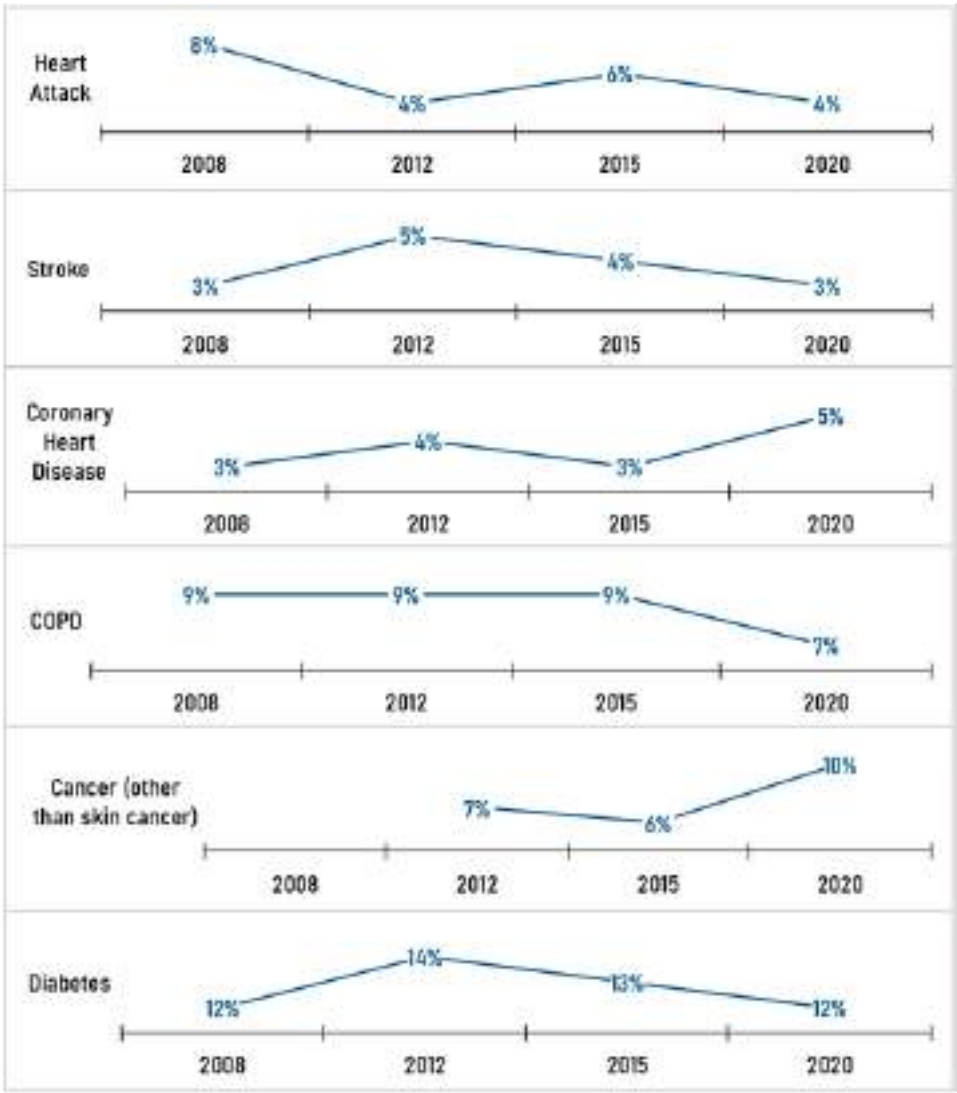
Risk Factors and Critical Health Issues	Licking County BRFSS Prevalence Data				Ohio BRFSS Prevalence[1] Data 2020
	2020 (weighted %)	2015	2012	2008	2020
Access to Care					
General health status is fair or poor	11%	Higher (18%)	Similar (15%)	Higher (18%)	14%
No health care coverage (ages 18-64)	6%	Similar (7%)	Higher (13%)	Higher (14%)	12%
Medical visit in the past 12 months	75%	Lower (68%)	Similar (75%)	Similar (76%)	75%
Prevention					
Flu shot during the past year (ages 65+)	81%	Lower (60%)	Lower (72%)	Similar (80%)	65%
Pneumonia vaccine ever (ages 65+)	85%	Lower (78%)	Lower (70%)	Similar (80%)	73%
Colonoscopy in past 2 years (ages 50+)	43%	Similar (40%)	Lower (29%)	Higher (59%)	N/A
Pap test in past 3 years (ages 18+)	67%	Similar (72%)	Similar (72%)	Higher (76%)	77%
Mammogram in past 2 years (ages 40+)	72%	Similar (76%)	Higher (83%)	Similar (77%)	68%
Chronic Disease					
Diagnosed heart attack	4%	Similar (6%)	Similar (4%)	Similar (8%)	4%
Diagnosed stroke	3%	Similar (4%)	Similar (5%)	Similar (3%)	3%
Diagnosed coronary heart disease	5%	Similar (3%)	Similar (4%)	Similar (3%)	4%
Diagnosed COPD	7%	Similar (9%)	Similar (9%)	Similar (9%)	7%
Diagnosed cancer (other than skin cancer)	10%	Similar (6%)	Similar (7%)	N/A	6%
Diagnosed diabetes	12%	Similar (13%)	Similar (14%)	Similar (12%)	11%
Health Behaviors and Risk Factors					
Currently smoking	17%	Higher (24%)	Higher (26%)	Higher (27%)	20%
Overweight (BMI between 25.0 and 29.9)	35%	Similar (32%)	Similar (35%)	Similar (40%)	33%
Obese (BMI greater ≥ 30.0)	20%	Higher (38%)	Higher (37%)	Higher (29%)	35%
High blood pressure	33%	Similar (33%)	Similar (35%)	N/A	31%*
High blood cholesterol	37%	Similar (39%)	Similar (41%)	N/A	28%*

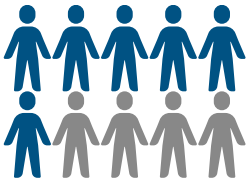
[1] *Age-adjusted prevalence.*

**Data from 2019 Ohio BRFSS; data were not available for this measure in 2020 at the state level.*

Chronic Disease in Licking County

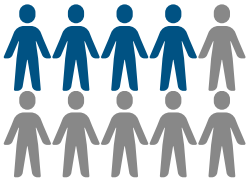
Often referred to as an epidemiologic transition, chronic diseases have replaced infectious diseases as the leading cause of morbidity and mortality in the US. From several years to decades, research has shown increases in non-communicable, chronic, degenerative diseases such as heart disease, cancers, and diabetes. The 2020 Licking County BRFSS measured estimates for several chronic diseases – cardiovascular disease (heart attack), stroke, coronary heart disease, chronic obstructive pulmonary disease (COPD), cancer (other than skin cancer), and diabetes. All chronic diseases reported showed slight changes over the reporting years, but those fluctuations were all within ±5% between any reporting year, thus classifying them as similar.





6 in 10

adults in the US have a chronic disease



4 in 10

adults in the US have two or more chronic diseases

Note: Data for the measured cancer statistic were not available for 2008.

Health Insurance Coverage

The 2020 BRFSS results show a similar statistic in the percent of Licking County residents with no health care coverage (6% in 2020, 7% in 2015). Results at the state-level show a 5% decrease in this statistic from 17% in 2013 to 12% in 2020.

Based on the data compiled from the American Community Survey (ACS), Licking County observed less than a 1% change in the percent of uninsured residents from 2014 to 2019. Health insurance coverage estimates remained relatively similar from 2018 to 2019 for all categories, as well as when compared to the 2014 data previously published. According to the 2019 data below, private health insurance continues to be the leading source of coverage for insured individuals at both the county (72.8%) and state (68.9%) level.

Community Resources: Licking County Job and Family Services

Access to Care in Licking County, Ohio
(Sources: 2018 ACS 1-year Estimate, 2019 ACS 1-year Estimate)

Population Estimate	Estimate (n, % of CNP)			
	2018		2019	
	Licking County	State of Ohio	Licking County	State of Ohio
Total Civilian Noninstitutionalized Population (CNP)	174,424	11,517,226	175,583	11,514,951
Insured	164,799 (94.5%)	10,773,321 (93.5%)	162,983 (92.8%)	10,757,189 (93.4%)
Uninsured	9,625 (5.5%)	743,905 (6.5%)	12,600 (7.2%)	757,762 (6.6%)
Health Insurance Coverage				
Private Health Insurance (alone or in combination)	**128,927 (73.9%)**	**7,904,891 (68.6%)**	**127,863 (72.8%)**	**7,939,274 (68.9%)**
Employer-based Health Insurance	107,746 (61.8%)	6,753,843 (58.6%)	109,663 (62.5%)	6,808,770 (59.1%)
Direct-purchase Health Insurance	21,906 (12.6%)	1,377,871 (12.0%)	22,886 (13.0%)	1,345,883 (11.7%)
Tricare/Military Health Insurance	3,510 (2.0%)	181,258 (1.6%)	3,678 (2.1%)	196,251 (1.7%)
Public Health Insurance Coverage (alone or in combination)	**61,964 (35.5%)**	**4,322,629 (37.5%)**	**60,500 (34.5%)**	**4,283,329 (37.2%)**
Medicare Coverage	32,563 (18.7%)	2,171,835 (18.9%)	32,258 (18.4%)	2,203,205 (19.1%)
Medicaid Coverage	31,809 (18.2%)	2,392,027 (20.8%)	30,720 (17.5%)	2,310,851 (20.1%)
VA Health Care	5,207 (3.0%)	273,600 (2.4%)	5,233 (3.0%)	256,620 (2.2%)

Maternal and Child Health

BIRTH RATES

Licking County continues to observe an overall decrease in the birth rate since 2006. This is a common trend seen across the United States for women in the three top racial groups (Non-Hispanic white, Non-Hispanic black, and Hispanic) per the CDC.

Birth Rates in Licking County, Ohio
(Source: ODH Public Health Information Warehouse)

Year	Number of Births	Birth Rate per 1,000
2015	1,885	11.0
2016	2,101	12.2
2017	1,900	10.9
2018	2,009	11.4
2019	2,004	11.3
2020	1,848	10.4

LIVE BIRTHS BY BIRTH WEIGHT

Low birth weights (less than 2,500 grams or 5 lbs. 9 oz) have been associated with several adverse health outcomes including increased risk of mortality, long-term chronic health conditions, and developmental delays. Within the 5-year period inclusively between 2016 and 2020, Licking County observed the greatest number of live births below normal birth weight in 2018. The number of infant mortalities due to extremely low birth weight, extreme immaturity, preterm delivery, or other low birth weight causes were 3 in both 2016 and 2019 and 1 in 2017, 2018, and 2020, respectively.

Number of Live Births by Birth Weight Category in Licking County, Ohio
(Source: ODH Public Health Information Warehouse)

Birth Weight Category (weight in grams)	Year				
	2016	2017	2018	2019	2020
Very low birth weight (<1500g)	27 (1.3%)	22 (1.2%)	21 (1%)	27 (1.3%)	25 (1.4%)
Low birth weight (1500g - 2499g)	126 (6%)	120 (6.3%)	155 (7.7%)	126 (6.3%)	101 (5.5%)
Normal birth weight (2500g-3999g)	1,739 (82.9%)	1,569 (82.6%)	1,679 (83.7%)	1,678 (83.9%)	1,561 (84.5%)
High birth weight (4000g+)	206 (9.8%)	189 (9.9%)	152 (7.6%)	170 (8.5%)	161 (8.7%)
TOTAL	**2,098**	**1,900**	**2,007**	**2,001**	**1,848**

Maternal and Child Health

TEEN BIRTH RATES

In Licking County, teen birth rates declined overall for all age group categories from 2016 to 2020. The birth rate for women aged 15-17 years old decreased 31.3% from 2016 to 2020. For women aged 18-19 years old, the birth rate decreased 54.4% from 2016 to 2020.

Teen Birth Rates (per 1,000) in Licking County, Ohio
(Source: ODH Public Health Information Warehouse, ACS 1-year Population Estimates)

Mother's Age Group	Year				
	2016	2017	2018	2019	2020*
10-14 years old	0.3	0.0	0.0	0.2	0.0
15-17 years old	6.4	5.8	7.2	4.9	4.4
18-19 years old	44.1	40.2	31.6	29.4	20.1

**Rates for 2020 were calculated with 2019 population estimates.*

INFANT MORTALITY

Infant mortality rates for Licking County ranged from 3.7 to 9.5 between 2015 and 2019. Most of the mortalities were associated with certain conditions originating in the perinatal period or other congenital birth defects. Licking County participates in the Ohio Child Fatality Review Board, which reviews the causes of death of children in Licking County.

Infant Mortality in Licking County, Ohio
(Source: ODH Public Health Information Warehouse)

Year	Number of Deaths	Infant Mortality Rate per 1,000 Live Births
2015	12	6.4
2016	20	9.5
2017	7	3.7
2018	10	5.0
2019	9	4.5

Maternal and Child Health

Infant Mortality

A multicounty program to promote Safe Sleep practices has been implemented in order to reduce infant mortality. The program provides cribs to parents who cannot afford to purchase one, and educates parents on the importance of safe sleep. Unsafe sleep practices have been identified as one of the leading causes of infant mortality in the county. This program is using a two-pronged approach to educate parents and provide them with the knowledge and tools they need to prevent infant deaths.

Nearly 10% of pregnant women indicated they experienced depression during their most recent pregnancy. While this number seems elevated, 36% of all women (regardless of pregnancy) indicated they had been diagnosed with a depressive disorder. This statistically significant gap in diagnosis indicates additional screening for depression in pregnant women and postpartum women is needed. Untreated depressive disorders can lead to negative health outcomes and can contribute to concerns regarding infant health as well.

Community Resources: Cribs for Kids Program

PRENATAL CARE

Prenatal care can be an important part of a healthy pregnancy for both mother and child. Regular prenatal care can reduce the risk of pregnancy-related complications and ensure healthy fetal growth and development. From 2016 to 2020, the percent of mothers who received prenatal care during the first, second, and third trimester was similar (within ±5%), respectively. Most mothers entered into prenatal care during the first trimester, with 2020 showing the highest reported measure at 73.3%. However, this number is still well below the Healthy People 2030 goal of 80.5%.

Community Resources: Heartbeats of Licking County
Licking Memorial Women's Health

Trimester of Entry into Prenatal Care in Licking County, Ohio
(Source: ODH Public Health Information Warehouse)

Trimester of Entry into Prenatal Care	Year of Birth				
	2016	2017	2018	2019	2020
First Trimester	1,453 (69.2%)	1,292 (68%)	1,389 (69.1%)	1,386 (69.2%)	1,355 (73.3%)
Second Trimester	384 (18.3%)	392 (20.6%)	376 (18.7%)	408 (20.4%)	335 (18.1%)
Third Trimester	64 (3%)	77 (4.1%)	80 (4%)	75 (3.7%)	64 (3.5%)
None	26 (1.2%)	18 (0.9%)	25 (1.2%)	38 (1.9%)	21 (1.1%)
Unknown	174 (8.3%)	121 (6.4%)	139 (6.9%)	97 (4.8%)	73 (4%)
Total	**2,101**	**1,900**	**2,009**	**2,004**	**1,848**

Infectious Disease Reporting

A major function of the Licking County Health Department (LCHD) is to conduct infectious disease surveillance and investigate reports in the jurisdiction. By collecting data and information, LCHD staff learn how these infections are occurring and work toward preventing future illnesses. Guidance documents and plans are developed to address communicable diseases with the ultimate goal of reducing disease incidence in Licking County.

In 2021, LCHD measured the top reportable diseases in the county, which were slightly different from previous years due to the surge in Lyme disease cases and the COVID-19 pandemic.

COVID-19 was the leading reportable disease in the county in 2020 and 2021. The first confirmed case in the county was reported on March 16, 2020. In 2020, the county reported 10,153 total (suspected, probable, and confirmed) COVID-19 cases. In 2021, total case counts rose to 21,684. With increased case counts between 2020 and 2021, deaths jumped from 151 to 271.

An increase in Lyme Disease cases has been observed in the county over the past several years. A record-high case count of 148 was reported in 2021, a 573% increase from the 22 cases reported in 2017. The western spread of blacklegged ticks is a strong contributing factor to the increase in Lyme disease cases in Licking County and throughout the state.

The incidence rate for chronic Hepatitis C decreased from 2015 to 2021 by 9%. However, the county's 5-year average (2017-2021) rose 26.2% from 63.4 per 100,000 to 80 per 100,000.

Campylobacteriosis rates increased 82% between 2015 and 2021. However, there was an observed 27.2% decrease in the 5-year average inclusive of 2017-2021 compared to the 5-year average inclusive of 2011-2015.

LCHD developed the Influenza Reporting Information System (IRIS) to track influenza each week amongst county providers. The data is published on the LCHD website for community situational awareness. During 2021, influenza activity remained low mostly as a result of the preventative measures put in place to combat COVID-19.

Sexually Transmitted Infections (STIs)

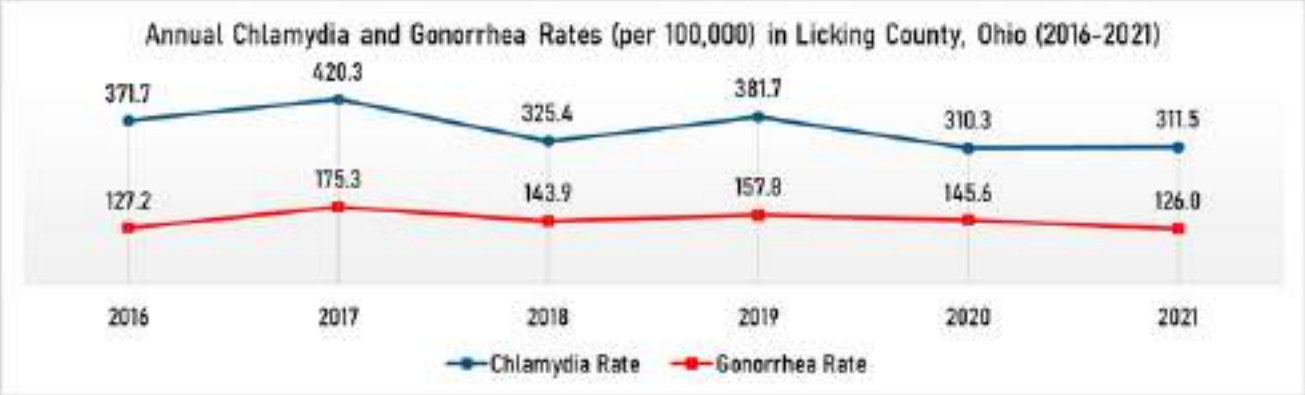
CHLAMYDIA

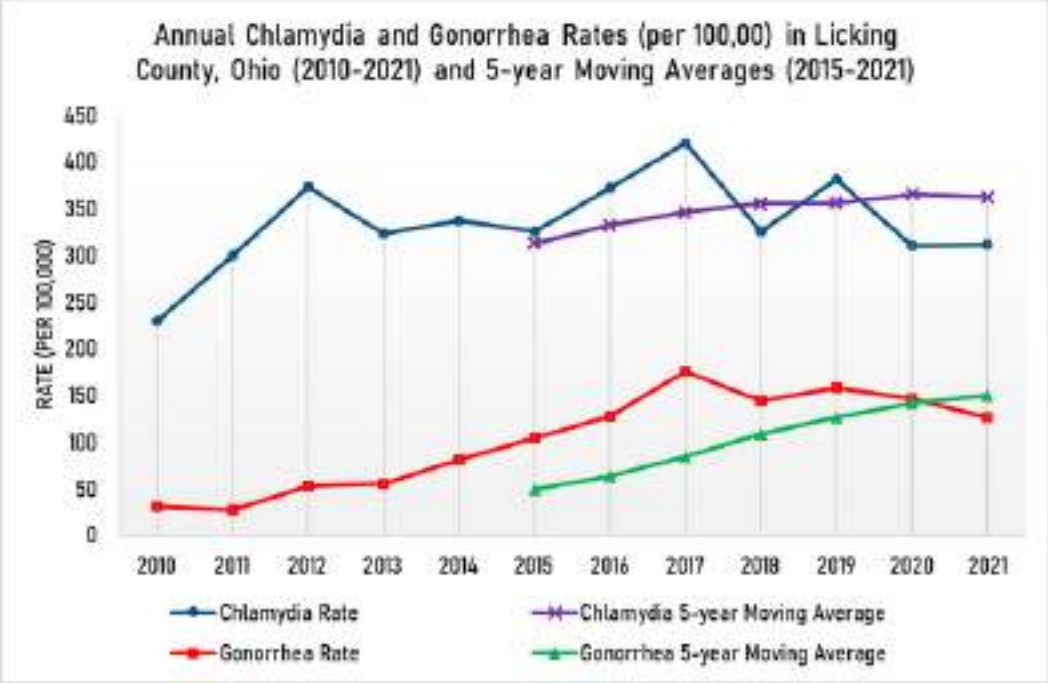
Over the past six years (2016-2021), the overall chlamydia rate in Licking County moderately declined. However, two of the highest rates in the past eleven years were observed in 2017 and 2019. Over the span of those eleven years (2011-2021), the overall rate of chlamydia in the county is mostly unchanged (R=0.0031).

GONORRHEA

The overall gonorrhea rate in the county from 2016 to 2021 was relatively unchanged. Following a similar trend as chlamydia, the highest rates in the county for the past eleven years (2011-2021) were observed in 2017 and 2019. However, unlike the overall chlamydia rate change from 2011 to 2021, the gonorrhea rate in the county since 2011 has shown a significant increasing trend (R=0.7283).

Community Resources: Family Health Services of East Central Ohio

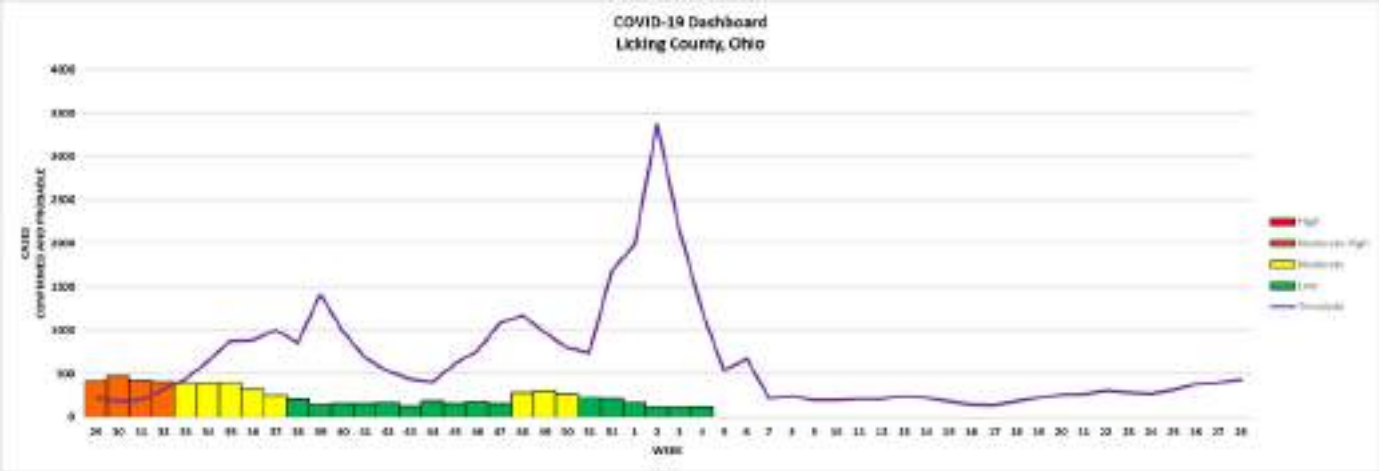




COVID-19 in Licking County

The Licking County Health Department (LCHD) has been tracking COVID-19 data since the start of the pandemic in March of 2020. Data isbeen used to develop a dashboard which can help forecast spikes and allow LCHD to promote preventative measures to control disease spread.

Licking County COVID-19 Dashboard - as of January 2023



From the data, LCHD has identified some seasonal trends which correlate to students returning to school and gatherings such as holidays (Thanksgiving and Christmas). The data collected since March of 2020 has been used to set thresholds for each week during the year to determine the level of disease activity within the county. Similar data is published weekly related to influenza. However, data related to COVID-19 has only been collected for 3 years, while influenza data has been collected for over a decade.

LCHD has additional datasets available regarding COVID-19 which can be found on the department's website.

Community Resources: Licking County Health Department - COVID-19 Program

Holiday COVID-19 Test Kit Pass Out

Cancer in Licking County

The Licking County Cancer Profile published by the Ohio Department of Health in 2021 provides measures on cancer incidence at the county, state, and national levels. Over a 5-year period (2014-2018), Licking County observed a greater overall incidence rate compared to both the state of Ohio and the US for all cancer sites/types.

Average Annual Number of Cases and Age-adjusted Cancer Incidence and Mortality Rates by Site/Type in Licking County, Ohio, and the United States (U.S.), 2014 – 2018

(Source: Licking County Cancer Profile, 2021; ODH, OCISS, and the Bureau of Vital Statistics, 2021; SEER Program, 2021)

Cancer Site/Type	Incidence				Mortality			
	Licking County		Ohio	U.S.	Licking County		Ohio	U.S.
	Cases	Rate	Rate	Rate	Deaths	Rate	Rate	Rate
All Sites/Types	**1,044**	**491.8**	**467.5**	**450.5**	**370**	**174.9**	**172.3**	**155.5**
Bladder	49	23.4	21.8	19.7	13	6.5	5	4.3
Brain and Other CNS	14	6.8	7	6.4	12	5.2	4.6	4.4
Breast (Female)	153	138.2	129.6	129.1	26	22.6	21.9	20.1
Cervix	7	7.3	7.9	7.5	<2	*	2.3	2.2
Colon and Rectum	81	39.9	41.3	37.8	30	14.5	15.1	13.7
Esophagus	11	5.1	5.4	4.2	10	4.4	4.9	3.9
Hodgkin Lymphoma	6	3.2	2.7	2.6	<2	*	0.3	0.3
Kidney and Renal Pelvis	39	18.2	17.6	16.4	7	3.3	3.9	3.6
Larynx	10	4.2	3.9	2.8	3	1.3	1.2	0.9
Leukemia	29	14.3	12.4	14.3	15	7.6	6.7	6.3
Liver and Intrahepatic Bile Duct	16	7	7.3	9	12	5.5	6.1	6.6
Lung and Bronchus	172	78.3	67.3	53.1	117	53.6	46.7	38.5
Melanoma of the Skin	61	30.7	24.8	22.8	5	2.5	2.7	2.3
Multiple Myeloma	10	4.4	6.2	7.1	6	3.3	3.5	3.2
Non-Hodgkin Lymphoma	37	17.8	19.2	19.6	13	6.3	6	5.4
Oral Cavity and Pharynx	30	13.4	12.2	11.5	8	4	2.8	2.5
Ovary	13	12	10.3	10.9	7	5.8	6.8	6.7
Pancreas	23	10.4	13.4	13.2	21	9.4	12	11
Prostate	120	109.8	107.2	111.3	15	18.9	19.3	19
Stomach	12	5.5	6.1	7.2	4	1.9	2.6	3
Testis	4	5.2	5.8	6	<2	*	0.3	0.3
Thyroid	34	17.9	15.2	15.5	<2	*	0.5	0.5
Uterus	40	34.1	31.1	28.1	8	6.6	5.3	4.9

- Rates are per 100,000 people and age-adjusted to the 2000 U.S. standard population. Rates are sex-specific for cancers of the breast, cervix, ovary, prostate, testis, and uterus.
- CNS = Central Nervous System.

* Rates may be unstable and are not presented when the total count for 2014-2018 is less than five (incidence) or 10 (mortality).

Cancer in Licking County

Lung and bronchus cancer continues to be the leading type of cancer in the county for incidence and mortality. County-specific incident and mortality rates of this cancer type exceed both the state and US measures. Pancreatic and esophageal cancers showed the lowest survival (less than 10%) over the 5-year reporting period based on the comparison of incident cases and number of deaths.

The top 5 cancers reported in Licking County based on average annual number of incident cases in the 2014-2018 reporting period did not change from the previous CHA. They remain to include breast (female-dependent), colon and rectum, lung and bronchus, melanoma of the skin, and prostate (male-dependent) cancers.

When comparing incident cases in 2014 to incident cases in 2018, the greatest percent increase was observed for pancreatic cancer cases (+76.5%) and greatest percent decrease was observed for stomach cancer cases (-72.2%). For the top 5 cancers shown in the table below, an increase was seen for overall incident cases between 2014 and 2018 for all 5 excluding colon and rectum cancer, which measured a nearly 23% decrease in incident cases.

Community Resources: Licking Memorial Cancer Care Program
SASS for Breast Cancer Program
Breast & Cervical Cancer Program

Number of Cases and Age-Adjusted Cancer Incidence Rates (per 100,000) by Cancer Site/Type in Licking County, Ohio
(Source: ODH Public Health Information Warehouse, Ohio Cancer Incidence Surveillance System (OCISS))

Cancer Site/Type	Year									
	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Breast (Female)	119	108.5	202	189.7	166	148.9	124	107.4	155	136.4
Colon & Rectum	83	44.4	90	44.7	81	39.8	88	42.7	64	29
Lung and Bronchus	156	74.6	172	82.1	184	83	163	72.8	183	79.3
Melanoma of Skin	53	27.2	55	29.3	72	34.4	58	30.2	65	32.4
Prostate (Male)	94	90.6	100	93	129	119	137	121.9	139	122.3

Cancer in Licking County

Number of Incident Cancer Cases by Type in Licking County, Ohio (Source: ODH Public Health Information Warehouse/Ohio Cancer Incidence Surveillance System (OCISS))					
Cancer Site/Type	Year				
	2014	2015	2016	2017	2018
	Cases	Cases	Cases	Cases	Cases
Bladder	45	42	52	61	44
Brain and Other CNS	11	9	23	11	18
Breast	120	203	166	124	155
Cervix	4	9	5	9	6
Colon & Rectum	83	90	81	88	64
Esophagus	11	11	8	12	15
Hodgkin's Lymphoma	6	4	6	5	8
Kidney & Renal Pelvis	37	48	35	42	34
Larynx	10	10	10	8	10
Leukemia	27	31	28	28	29
Liver & Intrahepatic Bile Duct	18	17	15	14	14
Lung and Bronchus	156	172	184	163	183
Melanoma of Skin	53	55	72	58	65
Multiple Myeloma	9	6	11	8	14
Non-Hodgkin's Lymphoma	32	38	40	29	48
Oral Cavity & Pharynx	31	26	33	30	28
Other Sites/Types	64	85	71	61	88
Ovary	14	16	15	14	7
Pancreas	17	21	25	24	30
Prostate	94	100	129	137	139
Stomach	18	11	9	15	5
Testis	3	5	5	4	3
Thyroid	38	28	24	43	37
Uterus	34	45	42	40	40
Total	**935**	**1,082**	**1,089**	**1,028**	**1,084**

Cancer in Licking County

Stage at diagnosis is another important measure for cancer statistics. The table below shows the percent of cases for each specific site/type diagnosed at an early stage or late stage for reporting years 2014-2018. Lung and bronchus, oral cavity and pharynx, ovarian, and pancreatic cancers continue to be mostly diagnosed in late stages and follow the trend seen at the state and national levels, as well.

Percent of Site-specific Cancer Cases by Stage Group at Diagnosis for the Leading and Screenable Cancers in Licking County, Ohio, and the US (2014-2018)

(Source: ODH Public Health Information Warehouse; OCISS; Surveillance, Epidemiology, and End Results (SEER) Program)

Cancer Site/Type	Licking County[1]		Ohio[1]		United States[2]	
	Early[3]	Late[4]	Early[3]	Late[4]	Early[3]	Late[4]
Bladder	83.2	10.7	80.7	12.1	83.8	12.2
Breast (Female)	71.8	26.1	71.1	27.2	64.8	33.0
Cervix	54.5	42.4	44.6	51.2	42.9	51.4
Colon and Rectum	34.9	55.2	35.6	54.6	37.3	56.0
Lung and Bronchus	22.9	69.4	23.3	68.3	23.0	70.8
Melanoma of the Skin	81.3	8.4	82.4	8.5	80.5	12.5
Oral Cavity and Pharynx	35.5	57.4	30.8	64.8	30.2	63.4
Ovarian	15.2	75.8	20	72.3	17.3	75.8
Pancreas	13.6	78.8	11.9	73.3	12.9	77.8
Prostate	66.9	21.5	68.4	21.3	70.8	21.4
Testis	40	50	64.2	31.7	68.3'	29.3'
Thyroid	70.8	25.7	73	24.7	65.0	32.7

[1] For Licking County and Ohio data, these data were provided by the Ohio Cancer Incidence Surveillance System, Ohio Department of Health.
[2] US data were provided by the SEER Program database, November 2020 submission, released April 2021.
[3] Early stage is defined by stage groups *in situ* and localized.
[4] Late stage is defined by stage groups regional and distant.
' Testis cancer staging was not coded/available for 2018 for the staging variable utilized with the remainder of the US data. Data shown above for this measure are 5-year cumulatives from 2013-2017.

Research has documented several ways in which cancer deaths could be prevented or reduced. One in three cancer deaths could be prevented with earlier screening and detection. Likewise, nearly one-third of all cancer deaths could be prevented by eliminating the use of tobacco. Adopting healthy diet and exercise practices could help prevent one-fifth of cancer deaths.

Cancer in Licking County

Statistics for cancer and gender continue to measure higher incidence and mortality rates for males compared to females at the county, state, and national levels. For categories of race, the highest incidence and mortality rates are observed for Whites, followed by African Americans. The largest percent difference to note is the mortality rate of males is 28.7% higher than the mortality rate for females.

Average Annual Number and Age-adjusted Rates of Invasive Cancer Cases and Cancer Deaths by Sex and Race in Licking County, Ohio, and the United States (2014-2018)

(Source: Licking County Cancer Profile, 2021; OCISS and ODH Ohio Public Health Information Warehouse, 2021; SEER Cancer Statistics Review, 1975-2018)

DEMOGRAPHICS		INCIDENCE				MORTALITY			
		Licking County		Ohio	U.S.	Licking County		Ohio	U.S.
		Cases	Rate	Rate	Rate	Deaths	Rate	Rate	Rate
Sex	Male	522	527.9	505.2	489.2	195	210.6	207.2	185.5
	Female	521	468.8	443.6	425.6	175	150.1	147.3	133.5
Race	White	996	489.5	465.5	460.9	360	176.3	171.2	156.3
	Black	26	444.4	450.8	445.2	8	153.1	192.4	177.5
	American Indian or Alaskan Native	1	N/A	105.5	N/A	0	N/A	58.3	N/A
	Asian or Pacific Islander	4	223.3	232.9	N/A	2	N/A	85.4	N/A
	Other	2	N/A	N/A	N/A	0	N/A	N/A	N/A
TOTAL		1,044	491.7	467.4	450.5	370	175.0	172.3	155.5

Note: Incidence and death rates are per 100,000 and are age-adjusted to the respective county, state, and national populations.
TOTAL values report total average annual cases, incidence rates, and death rates for the respective county, state, and national populations (whole population).
N/A (county and state data) = indicates where rates may be unstable for case counts less than five or where population counts are not available. For US, data are not available for selected race categories.

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates by Gender in Licking County, Ohio, and the United States (2014-2018)

(Source: ODH Public Health Information Warehouse)

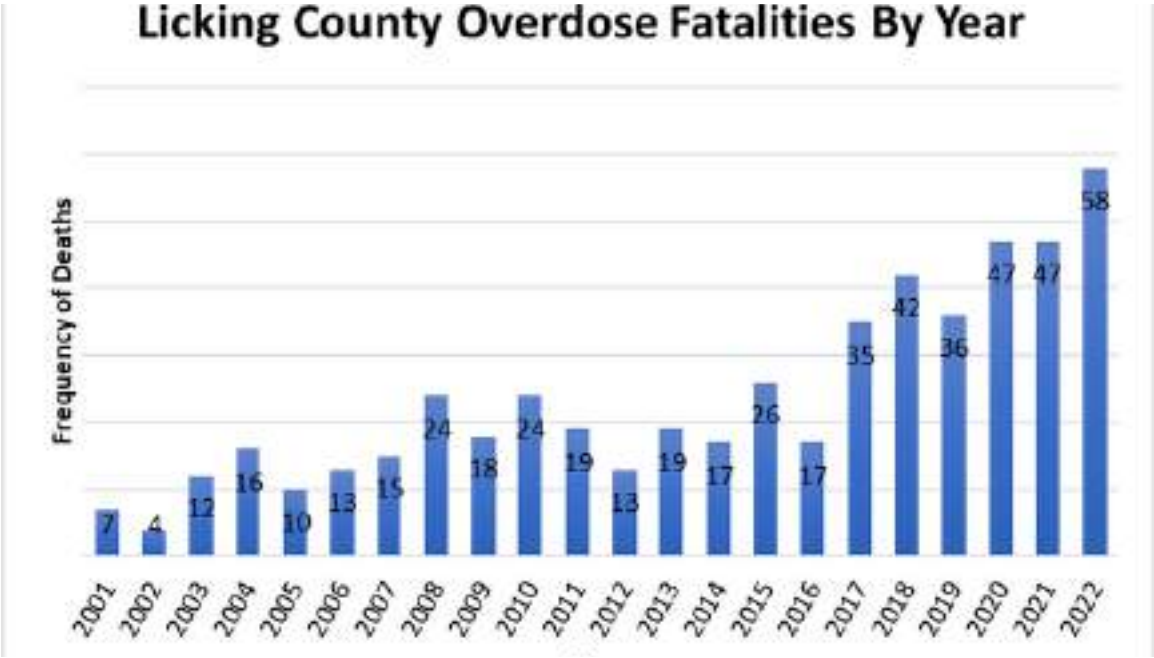
		Licking County		Ohio		United States	
Cancer Site/Type	Sex	Average Annual Death Count	Age-adjusted Mortality Rate*	Average Annual Death Count	Age-adjusted Mortality Rate*	Average Annual Death Count	Age-adjusted Mortality Rate*
Breast	Female	26	22.6	1,744	21.9	41,737	20.1
	Male	0	N/A	19	0.3	477	0.3
	Total	26	12.3	1,763	12.2	42,214	10.1
Colon and Rectum	Female	14	12.9	1,070	12.9	24,600	11.5
	Male	15	16.7	1,143	17.9	27,609	16.3
	Total	30	14.5	2,214	15.1	52,209	13.7
Lung and Bronchus	Female	54	45.3	3,120	37.9	68,367	32.6
	Male	63	65.4	3,859	58.3	80,841	46.9
	Total	117	53.6	6,979	46.7	149,208	38.5
Pancreas	Female	10	7.9	886	10.6	20,715	9.6
	Male	11	11.6	901	13.7	22,028	12.7
	Total	21	9.4	1,788	12.0	42,743	11.0
Prostate	Female	0	N/A	0	N/A	0	N/A
	Male	15	18.9	1,163	19.3	29,907	19.0
	Total	15	18.9	1,163	19.3	29,907	7.8
Total'	Total	370	175.0	25,417	172.3	596,800	155.5

* Age-adjusted mortality rates are per 100,000
For US data: Underlying mortality data provided by NCHS (www.cdc.gov/nchs).
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.
' US cancer site/type values were modified for data display. The following cancer sites/types were originally defined as such for US data only: All Malignant Cancers = Total.

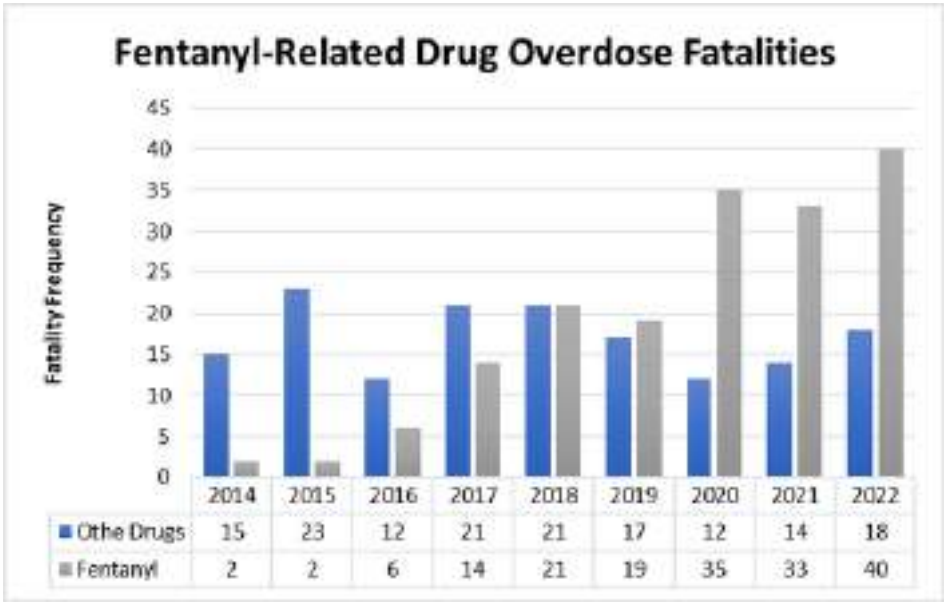
The average annual number of deaths for selected cancer sites/types is greater for males than females at the county, state, and national levels (excluding gender-specific cancers). Hence, the observed trend of higher mortality rates for males compared to females is also observed in the table to left.

Substance Misuse in Licking County - Drug Overdoses

Substance misuse has become an emerging concern for the county over the past several years. Unintentional drug overdose death counts in Licking County have fluctuated between 2001 and 2021. Death counts between 2001 and 2016 ranged between 4 and 26. Between 2017 and 2021, there have been 35 or more recorded deaths per year, and 58 were recorded in 2022, the highest ever reported. The greatest percent change in the number of unintentional drug overdose deaths rose to a 112% increase between 2016 and 2017 - the greatest change since 2003. In 2020 and 2021, Licking County observed the greatest number of deaths since 2001 at 47, respectively, followed by 42 deaths in 2018.



In 2020 and 2021, nearly 75% of all overdose fatalities were associated with fentanyl. While only 69% of overdose fatalities were attributed to fentanyl in 2022, the number of fentanyl fatalities increased by 21%. Trends identified in the 2020 and 2021 Licking County Overdose Fatality Review Annual Reports include decedents being mostly young, white males. Nearly 80% of all fatalities reported an education level of high school diploma/GED credential or lower.



Substance Misuse in Licking County - ODMAP

The Overdose Detection Mapping Application Program (ODMAP) is a free software platform that provides near real-time fatal and non-fatal suspected overdose surveillance data. Before the use of ODMAP, LCHD tracked data related to only overdose fatalities. However, there was a large gap in non-fatal overdose data within Licking County. The goal of implementing ODMAP is to identify a true picture of Licking County's overdose problem. With this surveillance system in place, LCHD can monitor overdose events occurring within the county and target prevention efforts as well as community resources (i.e., naloxone distribution). In addition, ODMAP can notify LCHD when a possible surge, also known as a "spike," in overdoses is detected. This allows LCHD, and its partners, to respond to the event with the goal of reducing the number of additional overdoses from occurring.

LCHD began implementing ODMAP in 2018, and the data allows the department to issue overdose spike alerts to partnering agencies. Currently 12 entities enter data in the system, and additional partners are being onboarded. Collecting this data not only allows agencies to target specific areas with increased access to naloxone and other services, but also allows them to understand the populations within these areas so that interventions can be properly designed.

2018: There were 129 suspected overdoses reported in ODMAP. Only 2agencies were entering data.

2019: There were 156 suspected overdoses reported in ODMAP. Six agencies were entering data.

2020: There were 266 suspected overdoses reported in ODMAP. Nine agencies were entering data.

2021: There were 332 suspected overdoses reported in ODMAP. Twelve agencies were entering data.

Community Resources: Mental Health Recovery for Licking and Knox Counties
Behavioral Health Care Partners
Licking County Alcohol Prevention Program
Lower Lights Christian Health Center
Shepherd Hill

Tobacco Use in Licking County

Licking County's overarching strategic goal is to reduce the number and rate of adult smokers. According to the 2020 Licking County BRFSS, the percent of current smokers decreased from 24% in 2015 to 17% in 2020. A continuation of this trend will allow Licking County to reach the defined goal of reducing the percent of adult smokers to 13% by 2023.

However, over the past several years the use of e-cigarettes (also known as vapes) has increased, and they are viewed by the public as a safe alternative to traditional cigarettes. E-cigarette aerosol generally contains fewer toxic chemicals than the mix of chemicals in smoke from regular cigarettes. However, e-cigarette aerosol is not harmless. It can contain harmful and potentially harmful substances, including nicotine, heavy metals like lead, volatile organic compounds, and cancer-causing agents (CDC, 2021). Data have shown that teenagers are increasingly using e-cigarettes, and this is a concerning trend in Licking County. Most e-cigarettes contain nicotine, which is addictive, and can harm adolescent brain development, which continues into the early to mid-20s.

Community Resources: Licking Memorial Tobacco Cessation Program
Licking County Tobacco Use Reduction Network

Behavioral Health in Licking County

Behavioral Health

Behavioral Health was the top priority in the county's 2018 CHIP, and it is likely to be a priority in the county's 2023 CHIP. This topic encompasses issues such as depression and anxiety as well as substance misuse. Data contained in this document supports the need for Behavioral Health to be considered a top priority by the public health system, and CHIC members will work to implement strategies to address these issues.

OHYES! Behavioral Health

The Ohio Healthy Youth Environments Survey (OHYES!) is a survey administered by the Ohio Department of Mental Health and Addiction Services, Ohio Department of Health, Ohio Department of Education, and Ohio National Guard. One of the goals of the survey is to identify trends in youth behaviors and risk and protective factors. Survey participants were students aged 12 and over in grades 7-12 in public and private schools. OHYES! includes information on demographics, alcohol, tobacco and vapor products, marijuana, prescription drugs, bullying, safety and violence, physical health and wellbeing, mental health, school climate and safety, gambling, family and peer factors, school success, community environment, suicide, and sexual behavior.

For the survey year 2021-2022*, students in Licking County rated higher than the state average for multiple behavioral health issues as indicated below.

	OHYES!			County		
	Yes	Responses	Yes (%)	Yes	Responses	Yes (%)
% with anxiety issues warranting further exploration by a mental health professional*	6636	20977	31.63	518	1520	34.08
% with depression issues warranting further exploration by a mental health professional*	4749	20762	22.87	376	1508	24.93
% with mental health issues warranting further exploration by a mental health professional*	5325	21007	25.35	426	1522	27.99

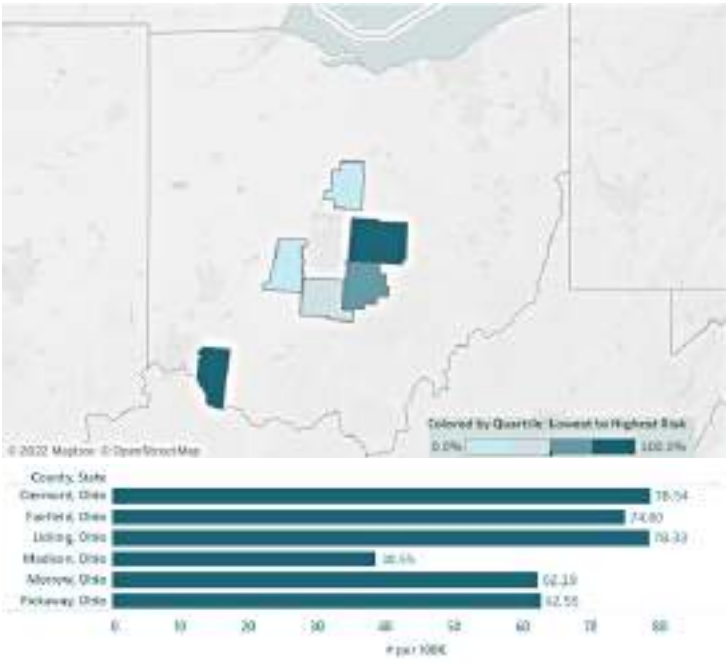
*Note: Not all eligible schools in Licking County participated in the OHYES! survey.

Community Resources: Behavioral Healthcare Partners
Mental Health America of Licking County
Mental Health and Recovery for Licking and Knox Counties
Licking Memorial Behavioral Health Services
Lower Lights Christian Health Center

Behavioral Health in Licking County

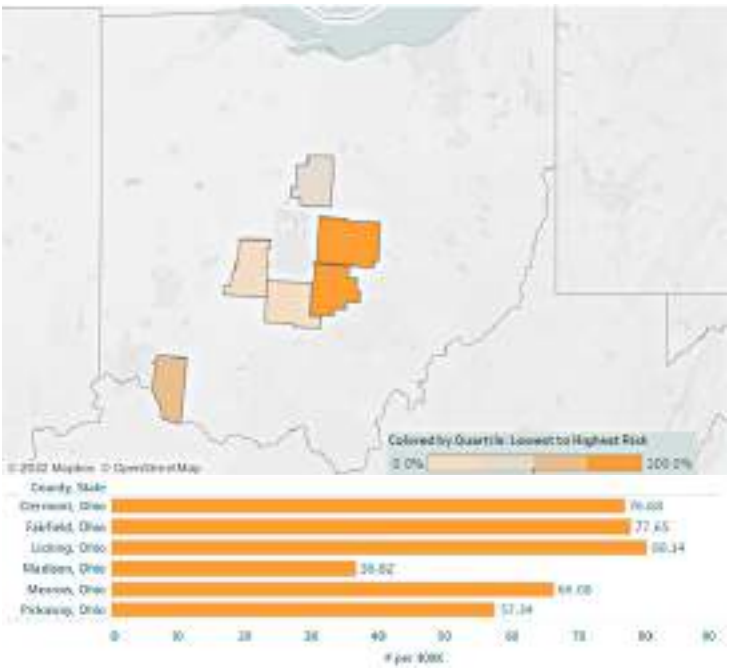
Mental Health America (MHA)

Mental Health America's County and State Data Map is a dashboard that geographically visualizes data from mental health screenings taken at MHAScreening.org in 2020 and 2021. The interactive maps allow you to view data on certain conditions individually along with comparisons of conditions. One of the assessments - the PHQ-9 depression screen - scores individuals on depression and reports frequencies of suicidal ideation.



Depression

The results for Licking County show that 130 out of 385 responses for the PHQ-9 assessment scored severe depression which equates to a rate of 78.33 per 100,000 persons. This rate sits above the overall state rate of 70.25 per 100,000. This map shows the distribution of severe depression, rates based on the 2020-2021 Mental Health America screenings for Licking County and peer counties. The darker the color, the higher the rate of individuals with severe depression. In comparison to the peer counties in Ohio defined by County Health Rankings, Licking County showed the second highest rate just under Clermont County.

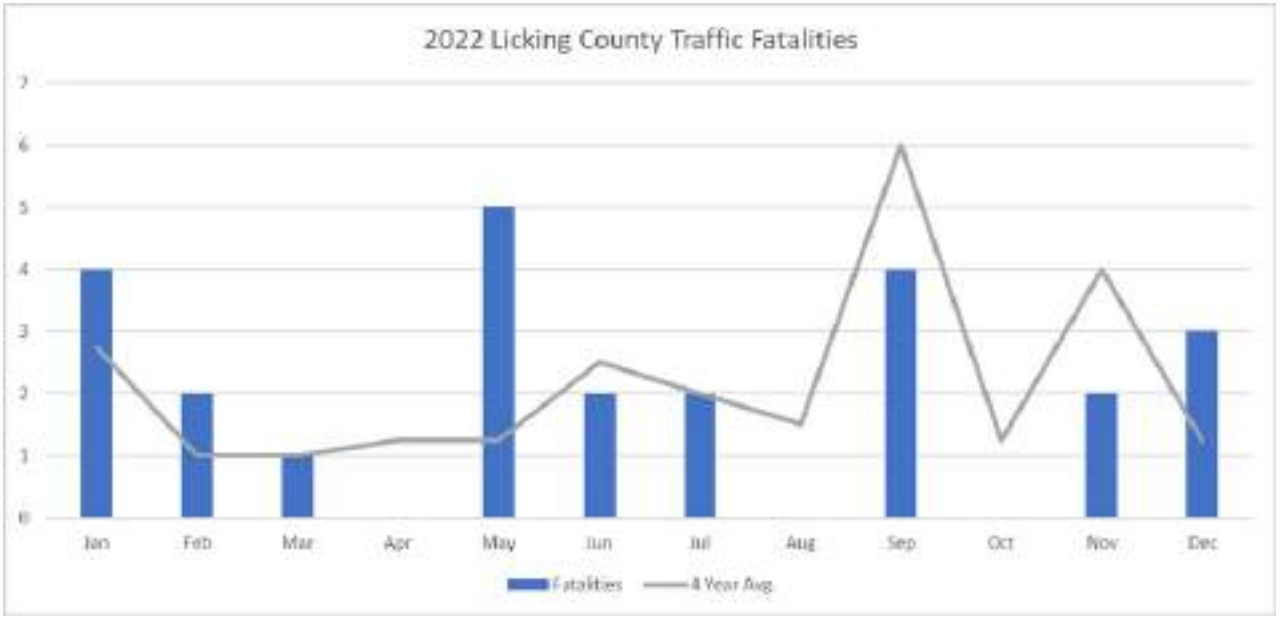


Suicidal Ideation

The results for Licking County show that 133 out of 385 responses for the PHQ-9 assessment reported frequent suicidal ideation, which equates to a rate of 80.14 per 100,000 persons. This rate sits above the overall state rate of 72.54 per 100,000. This map shows the distribution of reported suicidal ideation rates based on the 2020-2021 Mental Health America screenings for Licking County and peer counties. The darker the color, the higher the rate of individuals who reported frequent suicidal ideation. In comparison to the peer counties in Ohio defined by County Health Rankings, Licking County showed the highest rate followed by Fairfield and Clermont Counties, respectively.

Motor Vehicle Accidents and Injury Prevention

Motor vehicle crashes are a global public health concern. In the United States, motor vehicle crashes are a leading cause of death with more than 100 fatalities every day. Injury and violence are major public health problems in Ohio because of their incomparable cost and disabling and disrupting consequences. The factors are the fifth leading cause of death overall in Ohio and accidents are the fourth leading cause of death in Licking County.



In 2021, of Licking County's 24 fatal crashes and 106 serious injuries, 23.1% were due to unsafe speed, 18.2% drove off the road, 15.4% were due to failure to yield, and 10.5% went left of center. The majority of persons involved were male between the ages 15 and 35 (53%). Licking County's Fatal Crash Severity Index was 18%, compared to Ohio's Fatal Crash Severity Index of 15% from 2018 to 2021. Specifically in 2021, Licking County's Crash Severity was also 18% compared to Ohio's Fatal Crash Severity of 16%.

Motor Vehicle Accidents and Injury Prevention

Licking County Motor Vehicle Crash Severity 2018-2021					
Crash Severity	2018	2019	2020	2021	TOTAL
Fatal	21	23	15	24	83
Serious Injury Suspected	99	71	99	106	375
TOTAL	120	94	114	130	458

Ohio Motor Vehicle Crash Severity 2018-2021					
Crash Severity	2018	2019	2020	2021	TOTAL
Fatal	994	1,041	1,153	1,203	4,391
Serious Injury Suspected	6,251	5,983	5,926	6,189	24,349
TOTAL	7,245	7,024	7,079	7,392	28,740

Licking County Alcohol-related and Drug-related Motor Vehicle Crashes (Source: Ohio Strategic Highway Safety Plan)			
		Alcohol Impairment	Drug Impairment
2018	Fatal	3	6
	Serious Injury Suspected	22	11
2019	Fatal	7	9
	Serious Injury Suspected	11	11
2020	Fatal	7	8
	Serious Injury Suspected	18	11
2021	Fatal	8	9
	Serious Injury Suspected	19	9

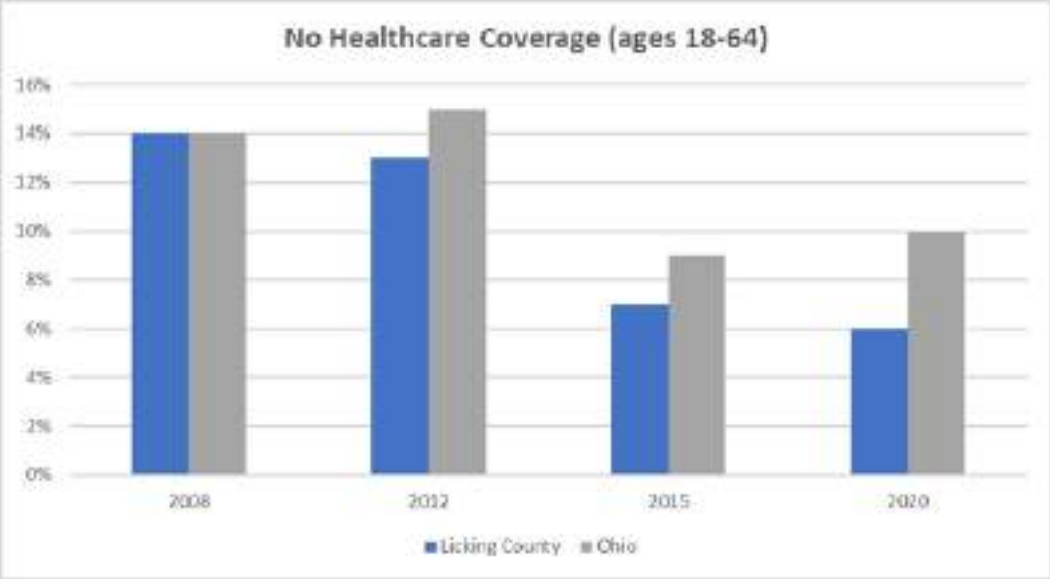
Between 2018 and 2021, drug-impaired driver fatalities and serious injuries overlapped 50% with alcohol-related factors and 65% with crashes due to roadway departure. Motor vehicle crashes that were primarily alcohol-related overlapped 39% with drug-related factors and 66% with roadway departure crashes. Data obtained from the Ohio Strategic Highway Safety Plan also indicated that alcohol and drug-impaired driver fatalities and serious injuries, respectively, also overlapped with speed and young driver emphasis areas.

Community Resources: Licking County Traffic Safety Program

Health Inequities in Licking County

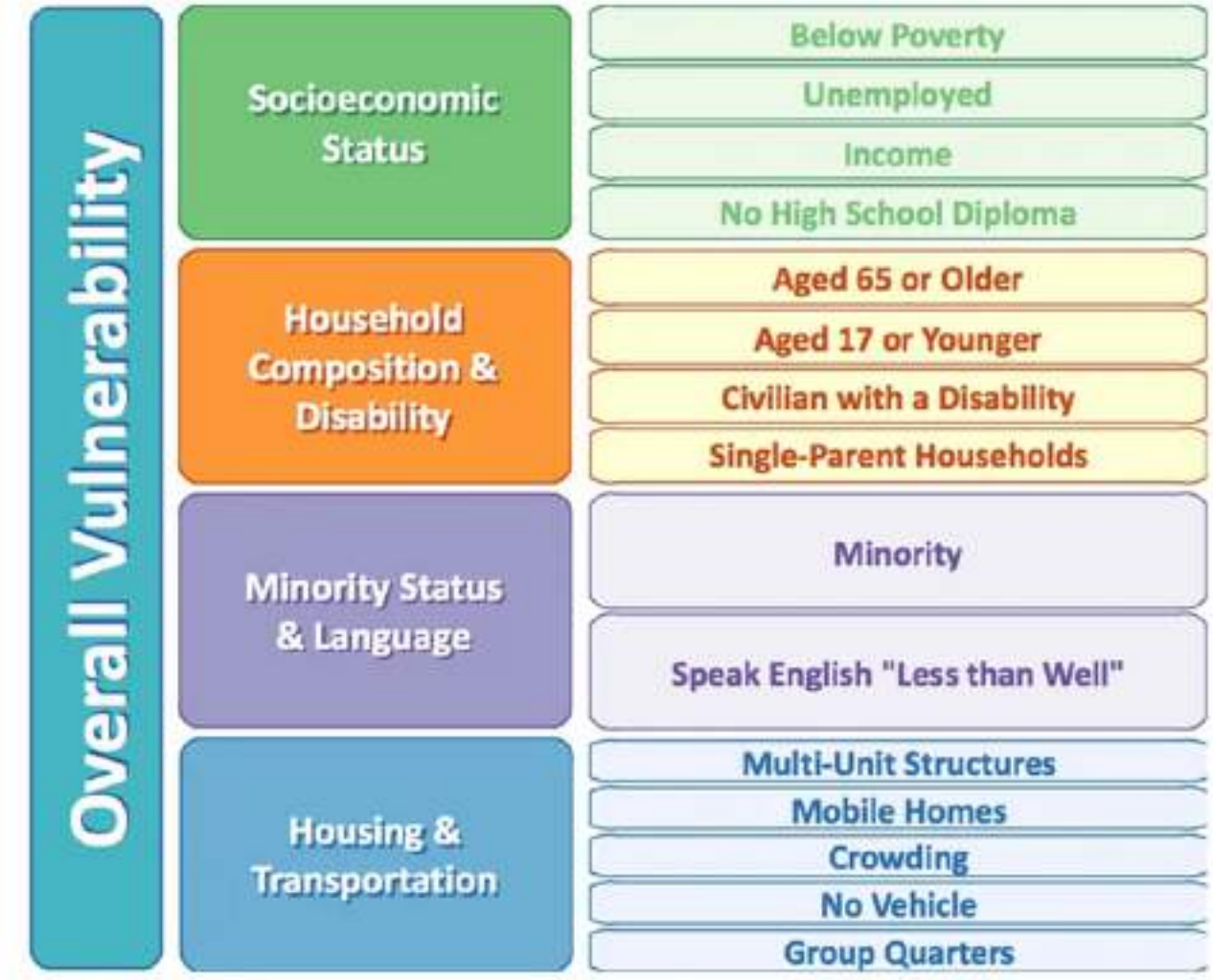
The World Health Organization defines health inequities as differences in health status of different populations. Often health inequities are attributed to health status differences related to socioeconomic status, age, race, geographical location, etc. Populations in Licking County experience health inequities, and primary and secondary data has been analyzed related to health disparities. This information is included throughout the CHA; however specific examples are listed below and on the next several pages.

An example of this issue in Licking County is healthcare access versus usage. Overall, the percentage of adults without healthcare coverage has decreased; however, a more detailed look at the data suggests there are still concerns with this subject. More than 25% of the respondents to the BRFSS survey indicated they would be prevented from seeing a doctor when needed due to the cost of the visit or due to not having insurance. Only 5.5% of the respondents stated they did not have insurance. This indicates of the 25% that stated they could not see a doctor when needed, approximately 20% have insurance. This data suggests that even though some individuals have insurance, there is some uncertainty as to how to utilize their coverage due to out of pocket expenses.



Social Vulnerability Index (SVI)

Social Vulnerability Index (SVI) is a term used to describe how resilient a community is when confronted by external stresses on human health. There are a number of different factors that influence the overall vulnerability of a set population and the Centers for Disease Control and Prevention (CDC) have combined 14 social factors into 4 key themes. The themes and factors are listed below:



The Licking County Health Department (LCHD) is evaluating the county as a whole using SVI scores at the census tract level to determine which areas are most at risk for unfavorable health outcomes. LCHD will compare available datasets against SVI to understand if a particular theme/factor is impacting the health of Licking County residents. SVI is used as an additional tool to measure health equity in the county.

Social Vulnerability Index (SVI)

Comparing SVI against Licking County datasets for Cancer (2018-2020), the census tracts with the highest SVI scores primarily listed Lung and Bronchus cancer as the top type of cancer. In addition, stage of cancer was evaluated against SVI scores. Data sets where a majority of cases were labeled late stage tended to correlate with higher SVI scores. Stage of cancer and type can include several variables to consider, but the conclusion in this analysis is that areas with higher SVI scores tend to see more Lunch and Bronchus cancer, which can be attributed to smoking. The majority of cancer cases being staged late may also indicate that preventative screenings and early detection are not occurring among the population groups living within these census tracts.

SVI Score vs. Cancer (2018-2020)
Licking County, Ohio
(Source: Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR) and Ohio Cancer Incidence Surveillance System (OCISS))

Census Tract	City/Village	SVI Score	Cancer Incidence	Top Cancer Type	Primary Stage
752500	Newark	0.9632	14.5	Lung and Bronchus	Early
759000	Newark	0.9074	20.9	Lung and Bronchus	Equal
753100	Heath	0.84	17.7	Lung and Bronchus	Late
750700	Newark	0.8093	16.9	Lung and Bronchus	Late
751900	Newark	0.7852	24.9	Lung and Bronchus	Early
754700	Newark/Saint Louisville/Utica	0.778	22.2	Lung and Bronchus	Early
758300	Buckeye Lake/Hebron	0.6977	19.9	Lung and Bronchus	Late
756500	Pataskala	0.6847	20.6	Breast	Late
752200	Newark	0.5516	18.8	Breast/Lung and Bronchus	Late
753300	Newark	0.5124	17.6	Breast	Early
751600	Newark	0.49	21.5	Breast	Early
754101	Newark	0.4668	69.0	Breast	Early
751000	Newark	0.4222	16.5	Lung and Bronchus	Early
751300	Newark	0.4052	18.4	Lung and Bronchus	Late
755900	Pataskala	0.3977	13.7	Breast	Early
759100	Granville/Hebron	0.3882	18.2	Lung and Bronchus	Early
755300	Johnstown	0.379	18.0	Breast	Early
756202	Reynoldsburg	0.3783	26.4	Breast	Early
756201	Etna	0.364	15.0	Lung and Bronchus	Early
752800	Heath	0.3258	20.8	Breast	Early
758900	Glenford/Heath/Newark	0.2952	20.0	Breast	Early
756800	Pataskala	0.2588	15.1	Breast	Early
753900	Newark	0.221	20.5	Breast	Early
754400	Frazeysburg/Newark/Saint Louisville	0.2111	17.5	Lung and Bronchus/Melanoma of Sk	Early
757400	Etna/Pataskala	0.1709	14.2	Breast	Early
757700	Granville	0.1587	17.5	Breast	Early
753600	Newark	0.1457	26.9	Breast	Early
755600	Alexandria/Johnstown/Pataskala	0.1379	22.6	Lung and Bronchus	Early
757100	Granville/Kirkersville/Pataskala	0.1267	19.0	Breast	Early
758600	Heath/Hebron/Thornville	0.1059	22.2	Breast	Early
754102	Newark	0.096	35.2	Breast	Early
755000	Centerburg/Croton/Johnstown/Utica	0.0143	17.2	Prostate	Early

Cancer Incidence: Number of newly diagnoshed cases per 1,000
Primary Stage: Early (In situ, Localized), Late (Regional, Distant); label was given to majority of cases in either early or late

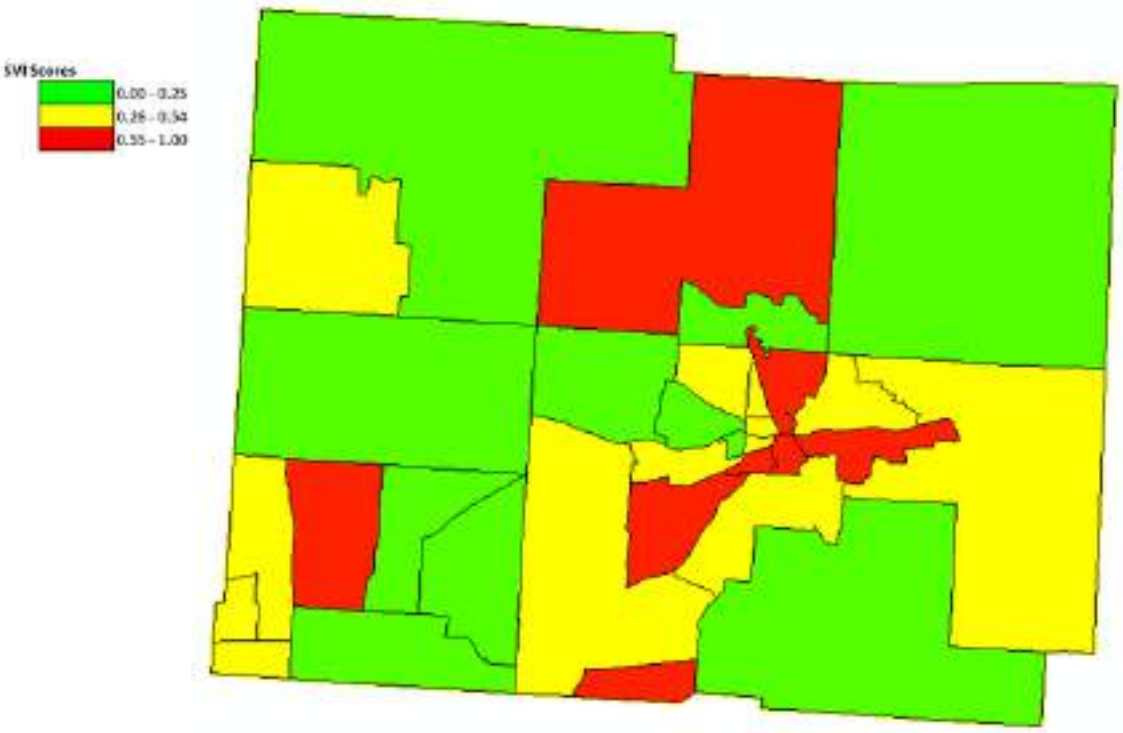
Social Vulnerability Index (SVI)

Cancer incidence was also factored in this analysis with SVI scores. Establishing a threshold of SVI scores at 0.50 and checking the average cancer incidence above and below this mark revealed higher incidence in census tracts with lower SVI scores. This may indicate that areas with lower SVI scores are taking advantage of health options for preventative screenings and detecting more cancer and, in particular, cancer in early stages. Early detection is key for treatment options and positive outcomes.

SVI Score Threshold and Cancer Incidence

- ⩾ 0.50 – Average Incidence = 19.4
- ⩽ 0.49 – Average Incidence = 22.1

Licking County Census Tract SVI Scores



The census tracts with the highest SVI scores are also the most impoverished. Of the 8 census tracts with an SVI score higher than .5, 6 of them have poverty rates higher than 21%. This is the highest percentage measured by the American Community Survey. These areas of Licking County are also shown to have the lowest in healthcare coverage, usage and availability, a lack of adequate housing, and increased likelihood of suffering from substance misuse disorder. Individuals living in these areas face barriers to optimal health that other residents do not encounter.

Social Vulnerability Index (SVI)

Substance misuse and overdoses continue to be an issue in Licking County and throughout Ohio. Data related to this issue is contained within this document in the Substance Misuse and Overdose section. Looking at fatal overdose data in relation to SVI scores within the county provides an insight as to where these issues are occurring.

A total of 8 census tracts in Licking County had 10 or more overdose deaths from 2018 to 2022. Of these census tracts, 6 have an SVI score higher than 0.50, and the average SVI score for the census tracts is 0.6381. Census tract 7541 has a low SVI score, but also had 13 fatal overdoses during this time period. A closer look at this tract revealed a cluster of overdoses at a low-income apartment complex within the tract. If this outlier is removed from the calculation, the average SVI score for the remaining census tracts is nearly 0.70.

Below is a table showing overdose deaths for each census tract in Licking County, as well as their correlating SVI scores.

SVI Score vs Overdose Deaths (2018-2022)
Licking County, Ohio

Census Tract	City/Village	Overdoses	TOTAL SVI Score
7522	Newark	16	0.5516
7533	Newark	13	0.5124
7541	Newark	13	0.2814
7525	Newark	12	0.9631
7500	Newark	11	0.9074
7547	Newark/Saint Louisville/Utica	11	0.778
7528	Heath	11	0.3258
7519	Newark	10	0.7851
7507	Newark	9	0.8093
7559	Pataskala	9	0.3977
7589	Glenford/Heath/Newark	8	0.2952
7550	Centerburg/Croton/Johnstown/Utica	8	0.0143
7580	Granville /Hebron	7	0.3882
7553	Johnstown	7	0.379
7565	Pataskala	6	0.6847
7513	Newark	6	0.4052
7571	Granville/Kirkersville/Pataskala	6	0.1207
7531	Heath	5	0.84
7510	Newark	5	0.4222
7585	Buckeye Lake/Hebron	4	0.8977
7516	Newark	4	0.49
7562	Reynoldsburg	4	0.3712
7568	Pataskala	4	0.2588
7574	Etna/Pataskala	4	0.1709
7544	Frazeysburg/Newark/Saint Louisville	3	0.2111
7536	Newark	3	0.1457
7556	Alexandria/Johnstown/Pataskala	3	0.1379
7586	Heath/Hebron/Thornville	3	0.1069
7539	Newark	2	0.221
7577	Granville	0	0.1587

Mortality in Licking County

The leading cause of death in Licking County alternated between heart disease and cancer between 2015 and 2019. In 2015 and 2018, heart disease was the leading cause of death in the county, while cancer was the leading cause of death in 2016, 2017, and 2019. Preliminary data from 2020 and 2021 show heart disease as the leading cause of death with a declining trend in cancer mortality rates. At the state level, heart disease was observed to be the leading cause of death since 2007.

Since 2007, Licking County has observed fluctuations in mortality rates of heart disease without an overall significant change compared to the 2019 mortality rate (178.4 per 100,000 in 2007; 172.6 per 100,000 in 2019). Cancer mortality rates have also experienced some fluctuations since 2007 but have declined overall (200.1 per 100,000 in 2007; 183.2 per 100,000 in 2019) and may continue to be on the decline. Furthermore, the county's cancer mortality rate in 2018 (161.4 per 100,000) was the lowest reported rate since 2007.

Leading Causes of Death in Licking County and Ohio
(Source: ODH Public Health Information Warehouse)

Leading Cause of Death	Age-adjusted Rate (per 100,000)									
	2015		2016		2017		2018		2019	
	Licking County	Ohio	Licking County	Ohio	Licking County	Ohio	Licking County	Ohio	Licking County	Ohio
Cancer (all sites/types)	183.2	175	176.1	173	172	171.4	161.4	165.7	183.2	163.2
Heart diseases	192	191.3	166	184.5	166.3	186.3	187.9	191.7	172.6	189.2
Chronic lower respiratory diseases	60.6	49.5	51.2	47.4	51	48.5	52	49.1	49.4	46
Accidents	55.8	55.8	47.1	66.4	60	75	56.3	63.9	60.4	67.7
Cerebrovascular diseases	45.7	40.5	27.1	40.5	46.5	42.9	34.6	42.8	35.1	42.3
Diabetes	32.3	25.2	25.1	24.5	34.8	25.2	26.5	25.4	24.8	25.5
Alzheimer's disease	33.1	31	35.6	33.3	36.6	33.6	35.2	35.1	33.2	33.7

Environmental Health in Licking County

The Environmental Health Division of the Licking County Health Department is involved in monitoring the overall environmental health in the county. The practice of environmental public health is vital to protecting public health and the communities it serves. Current public health initiatives of the Environmental Health Division include programs addressing food safety, sewage treatment and maintenance, solid waste, vector control, campground inspection and maintenance, plumbing, public pools and spas, and private water systems.

HOUSING

In 2020, LCHD conducted a PACE EH assessment. The assessment is designed to determine the most prominent environmental health issues facing communities. It also promotes community engagement and allows community members to make their voices heard regarding environmental health. The PACE EH assessment in Licking County involved an online survey, an in-person survey, and community listening sessions. A total of 486 individuals participated in the assessment via the 3 options listed.

The most prominent issue identified in the assessment was access to safe and affordable housing. Almost 40% of the assessment participants listed this as their top priority, which was nearly double the amount of the second most prominent issue identified which was water quality.

LYME DISEASE

Licking County has observed a spike in cases of Lyme disease over the past 4+ years. This tick-borne disease involves a bacterial infection which can cause fever, headaches, a "bull's-eye" skin rash, fatigue, and, if left untreated, infection can spread to the joints, heart, and nervous system (CDC, 2022). In 2021, there were a total of 148 cases with most cases reported in June and the majority of cases reported between May and September. According to the county's 2020 PACE EH report, many members of the community showed a lack of concern regarding Lyme disease. In addition, data showed that most of the Lyme disease cases were being contracted in the county and not associated with travel. Some ticks are active year-round, with others being more active in the spring, summer, and into fall. Residents are urged to be vigilant regarding Lyme disease after being outdoors by inspecting themselves for ticks and seeing their medical provider should they develop a bullseye shaped rash.

Environmental Health in Licking County

FOOD SAFETY & ACCESS

The PACE EH assessment also found that the vast majority of county residents felt that food safety at restaurants and grocery stores was high but had concerns about food safety at festivals and outdoor events. LCHD conducts food safety inspections at festivals and outdoor events to ensure that vendors are following the required food safety protocols.

Also, the majority of respondents felt that access to healthy food was readily available. This observation shows the success of the work done to increase access to farmers markets and to encourage all types of stores to offer healthy food options.

HEALTHY FOOD ACCESS MAP

The healthy food access map (left) depicts Licking County farmers markets, grocery stores that accept SNAP and/or WIC benefits, gas stations and convenience stores that accept SNAP benefits, and food pantry locations. The map on the right has been zoomed in on the center of the City of Newark, where many of the food access opportunities are present.

Community Resources: Licking County Health Department Food Safety Program
Licking County Coalition for Housing
Canal Market District
Licking County Parks District
Food Pantry Network of Licking County

Data Sources

Behavioral Risk Factor Surveillance System (BRFSS)
The Hospital Council of Northwest Ohio (HCNO) conducted Licking County's BRFSS in 2020. A total of 430 county residents participated in the survey which provided reliable data on several health risks and behaviors within the community.

Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI) Data and Documentation Download
SVI scores were provided by the CDC/ATSDR data download website where Licking County Geographic Information System (GIS) shapefiles are available for free.
https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

Ohio Cancer Incidence Surveillance System (OCISS)
Licking County Cancer Profile 2021, Ohio Annual Cancer Report 2021
Cancer incidence data were provided by OCISS, the central cancer registry for Ohio, and accessed through the Ohio Public Health Data Warehouse. OCISS is supported in part by the State of Ohio and the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries, cooperative agreement number NU58DP006284. The contents of this report are the sole responsibility of the Ohio Department of Health (ODH) and do not necessarily represent the official views of the CDC.

OCISS Data & Statistics: https://odh.ohio.gov/know-our-programs/ohio-cancer-incidence-surveillance-system/Data-Statistics
Phone: 614-752-2689
Email: ociss@odh.ohio.gov

OHYES! Report for Licking County - 2021-2022
The Ohio Healthy Youth Environments Survey (OHYES!) is a collaborative effort of the Ohio Departments of Education, Health and Mental Health and Addiction Services, Ohio National Guard, and representatives from higher education, juvenile courts, foundations, and community service providers.

Ohio Vital Statistics
Cancer mortality data were provided by the Bureau of Vital Statistics and accessed through the Ohio Public Health Information Warehouse.

Ohio Public Health Information Warehouse
The Ohio Public Health Information Warehouse is a self-service online tool where anyone can obtain the most recent public health data available about Ohio. The application allows for the creation of custom reports, charts, and maps from a variety of data sources. These data were provided by the Ohio Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions. https://publicapps.odh.ohio.gov/EDW/DataCatalog

Data Sources

U.S. Incidence Data

Cancer statistics for the United States were obtained from National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program (https://seer.cancer.gov/), based on SEER 18 Registries, November 2020 data submission, released April 2021, and using SEER*Stat software version 8.3.9.2.

U.S. Census Bureau

The newly developed https://data.census.gov/cedsci/ allows users to obtain data integrated from several individual tools. The site has the capability to filter data by geographical locations, topic, and other characteristics. Datasets from surveys such as the American Community Survey (ACS) and the Decennial Census are available along with numerous additional data sources.

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