

2022 Lake County Community Health Needs Assessment Deep Dive 3: High Blood Pressure Prevalence





Lake County General Health District

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This Deep Dive is the third in a series of Lake County General Health District's further investigation of health disparities identified in the 2022 Lake County Community Health Needs Assessment (CHNA).

High blood pressure was one of the priority health areas from the 2019 CHNA. It has continued to be an area of concern in the 2022 CHNA as well. In Lake County, Painesville, and Eastlake, high blood pressure was one of the most reported illness diagnoses by a provider across the three areas. Eastlake had the highest percentage of high blood pressure compared to Painesville and Lake County. This is according to the Community Health Survey that was distributed.¹

According to the Centers for Disease Control and Prevention (CDC), blood pressure prevalence in 2021 was at 36.9% of the population in Lake County.² This rate has risen since 2019, when the prevalence of high blood pressure was 34.1%.³

Methods and Results

In order to better understand high blood pressure prevalence in adults in Lake County, the Lake County General Health District (LCGHD) used the Healthy Northeast Ohio (NEO) platform (www.healthyneo.org) and U.S. Census data (www.data.census.gov) to explore percentages at the census tract level to determine whether specific areas in Lake County had percentages of adults who had been told they have high blood pressure. This information was then used to determine what, if anything, is different about the population in those areas that could provide additional context. When exploring High Blood Pressure Prevalence data at the census tract level for year 2021, one census tract, census tract 2013, was identified as having the highest percentages in Lake County, which was about three percentage points higher than the census tract with the next highest rate. Rates in 2021, 2017 and 2019 for census tract 2013 were 42.2%, 39.4% and 40.6% respectively, with the next highest census tract having percentages of 39.3%, 36.8% and 36.8% respectively.³

Census tract 2013 is located in Willoughby and inside of ZIP code 44094. This census tract's northern boundary is Euclid Avenue (Rt. 20) and has a southern boundary by I-90. The southern boundary runs through Gully Brook Park. The western border is SOM Center Road (SR-91). The eastern border consists of Shankland Road, Ridge Road (Rt. 84), and River Road (SR-174) that runs around Gully Brook Park. Basic demographics for the population living in this census tract and all of Lake County,

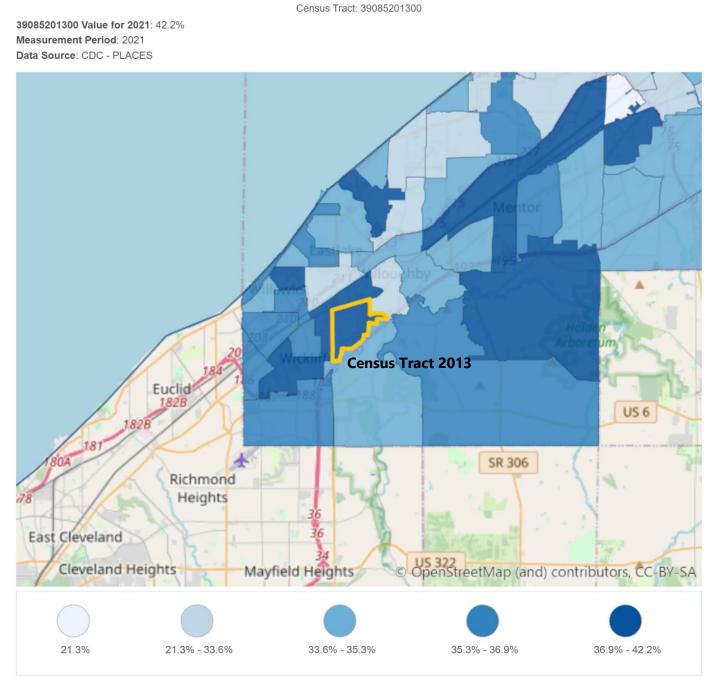
³ The Center for Health Affairs. (2022). Healthy Northeast Ohio: High Blood Pressure Prevalence. <u>https://www.healthyneo.org/indicators/index/view?indicatorId=2820&localeTypeId=4&periodId=227&localeFilterId=2137</u>



¹ Conduent Healthy Communities Institute. (2022). 2022 Lake County Health Needs Assessment. Available Online: <u>https://www.lcghd.org/wp-content/uploads/2022/10/FINAL-2022-Lake-County-Ohio-CHNA-Report 09 30 22.pdf</u> ² CDC PLACES: Local Data for Better Health, County Data 2023 release. <u>https://data.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb</u>

including income, age, race, ethnicity, education, housing, disability status, household size, and marital status were then reviewed and compared using 2021 U.S. Census data. Results are summarized in the following table.

High Blood Pressure Prevalence



September 25, 2023

www.healthyneo.org



High Blood Pressure Prevalence Comparison ⁴				
Demographic Categories	Lake County	Census Tract 2013		
Income				
Median Household Income in Lake County	\$70,168	\$67,237		
Age				
Median age in Lake County	43.9 years	55.3 years		
Race				
American Indian and Alaska Native	0.1%	0.0%		
Asian	1.3%	1.6%		
Black or African American	4.6%	6.3%		
Native Hawaiian and Pacific Islander	0.0%	0.0%		
Some Other Race	1.4%	1.2%		
Two or More Races	3.6%	0.5%		
White	89.1%	90.5%		
Ethnicity				
Hispanic or Latino	4.7%	0.4%		
Non-Hispanic or Latino	95.3%	99.6%		
Education (25 years and over)				
High school or equivalent degree	31.3%	32.9%		
Some college, no degree	22.8%	22.2%		
Associate's degree	10.1%	6.0%		
Bachelor's degree	18.6%	24.3%		
Graduate or professional degree	10.2%	10.7%		
Housing				
Home Ownership Rate				
Housing units with a mortgage	62.9%	58.8%		
Housing Value (housing units with a mortgage)				
Less than \$50,000	2.5%	0.0%		
\$50,000 to \$99,999	12.1%	11.3%		
\$100,00 to \$299,999	71.1%	84.4%		
\$300,000 to \$499,999	11.2%	3.3%		
\$500,000 to \$749,999	2.1%	1.0%		
\$750,000 to \$999,999	0.4%	0.0%		
\$1,000,000 or more	0.3%	0.0%		
Housing Occupancy				
Occupied Housing Units	98,217	1,952		
Vacant Housing Units	6,784	106		

⁴ U.S. Census Bureau. (2021). Tables S1901, S0101, DP05, S1501, DP04, S2506.

High Blood Pressure Prevalence Comparison ⁵				
Demographic Categories	Lake County	Census Tract 2013		
Families and Living Arrangement				
Family and Household Character				
Average Family Size	2.94 persons	2.51 persons		
Marital Status				
Now Married (except separated)	50.0%	48.3%		
Widowed	6.4%	18.3%		
Divorced	12.5%	8.8%		
Separated	1.3%	0.4%		
Never married	29.8%	24.2%		

High Blood Pressure Prevalence Comparison ⁶			
Disability	Lake County	Census Tract 2013	
Health			
Disabled population	13.5%	23.5%	
Disability Type			
Hearing Difficulty	4.1%	10.7%	
Vision Difficulty	2.2%	6.3%	
Cognitive Difficulty	5.0%	7.7%	
Ambulatory Difficulty	6.9%	13.7%	
Self-Care Difficulty	2.5%	3.8%	
Independent Living Difficulty	5.8%	8.6%	

High Blood Pressure Prevalence Comparison ⁷				
Insurance Coverage	Lake County	Census Tract 2013		
Coverage				
Insured	94.9%	96.1%		
Uninsured	5.1%	3.9%		
Insurance Type				
Private health insurance	75.4%	72.8%		
Public health insurance	33.9%	49.1%		

When compared with Lake County's population, the population of census tract 2013 had a higher median age by more than 10 years. The Hispanic or Latino population was lower than Lake County as a whole by about three percentage points. There was a larger amount (by percentage points) of the population in census tract 2013 that had obtained a Bachelor's degree than that of the rest of the

⁷ U.S. Census Bureau. (2021). Tables S2701, S2703, S2704.



⁵ U.S. Census Bureau. (2021). Tables S1810, S1101, S1201.

⁶ U.S. Census Bureau. (2021). Tables S1810.

county. For housing, there were more homes in census tract 2013 with a housing value between \$100,00 to \$299,999 than Lake County, yet there were fewer homes (by percentage points) with a housing value between \$300,000 to \$499,999.

In terms of disability factors, census tract 2013 has a larger population, by percentage, of disabled people than Lake County. There was a larger number of the population that had hearing, vision, and ambulatory difficulties compared to the rest of Lake County. It should also be noted that a larger percentage of the population is covered by public health insurance than Lake County, yet both populations have similar percentages of their respective populations covered by private health insurance.

Conclusions

In the state of Ohio, hypertension, or high blood pressure, is one of the leading causes of death. Almost 35% of adults in Ohio have been diagnosed with hypertension. The true prevalence of hypertension is more likely closer to 50% of adult Ohioans. It is also possible than one third of adults who have hypertension remain undiagnosed.⁸

Even though these demographic and health comparisons are demonstrative, there is still no clear indication as to why census tract 2013 is an outlier for adults that have been told that they have high blood pressure. One telling statistic is that there is a higher percentage of a disabled population in census tract 2013 than in Lake County. This could potentially lead to the higher median age as well as the higher disabled population (along with higher amounts of the types of disabilities) in census tract 2013. The higher percentage of census tract 2013's population with an ambulatory disability could be significant because it can limit the ability of the population to participate in physical activity. It should be noted that there are multiple long-term care and senior facilities in census tract 2013. This may be a factor in leading to more prevalence of high blood pressure but cannot be concluded with the data and statistics presented in this data deep dive.

The data presented in this deep dive could potentially be useful to target this census tract for prevention and/or educational strategies to reduce the number of adults with high blood pressure. These prevention strategies could target plans that involve taking medications, reducing sodium in diets, getting daily physical activity, quitting smoking, and regularly monitoring blood pressure.⁹

⁹ Ohio Department of Health. High Blood Pressure. <u>https://odh.ohio.gov/know-our-programs/Heart-Disease/high-blood-</u>



⁸ Ohio Department of Health. Hypertension. <u>https://odh.ohio.gov/know-our-</u>

programs/hypertension/hypertension#:~:text=34.5%25&text=More%20than%20one%20third%20of,have%20been%20dia gnosed%20with%20hypertension.