CHRONIC DISEASE IN NEW ORLEANS

2024

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BACKGROUND

Chronic disease is a leading cause of death across the United States,[1] and New Orleans is no exception. In recent years, heart disease and cancers have been the top two causes of death in Orleans Parish.[2]

Diabetes, kidney failure, and chronic lower respiratory diseases are also common killers. Chronic disease is often incurable and must be managed with medication and lifestyle changes.[3]

Causes of chronic disease are complex and often rooted in the social determinants of health: factors like nutrition, health awareness, lifestyle habits, and access to preventative care that are shaped by someone's socioeconomic status.[4] Like in other cities, those with low income and people of color living in New Orleans often experience higher rates of chronic disease.[5]
Many chronic diseases are connected to behavior. Smoking, diet, and physical activity levels all correlate closely with chronic disease risk .[3]

Programs and policies that promote a healthy weight and lifestyle habits can protect a community against the burden of chronic disease, saving lives and reducing the cost of medical care.[3]

The New Orleans Health Department's chronic disease team works to reduce the prevalence of preventable diseases like hypertension and diabetes, monitor the impact of chronic disease on the citizens of New Orleans, and communicate evidence-based best practices to other organizations and governmental agencies.

Methodology

Data for this report were sourced from the census, the American Community Survey of 2023, and electronic health records accessible via the MENDS public health information initiative, funded by the CDC. The specific data used in this report is provided by the Research Action for Health Network (REACHnet) project, operated by the Louisiana Public Health Institute. REACHnet reports observed health data from Ochsner Health Systems, Tulane University Health Clinics, and University Medical Center, and is updated quarterly. Records were from patients who visited the doctor at least once in the last two years.

Because the data reported in REACHnet is directly collected from patients in those healthcare systems (the 'observed population'), the reported outcomes provided here might diverge from the outcomes in unobserved populations (everyone who did not go to the doctor in one of those health systems in the last several years).

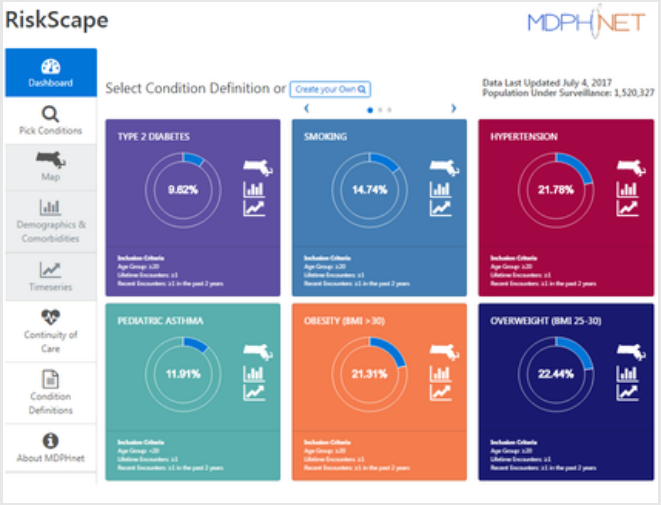
Therefore, readers should be aware that the overall rates of disease in each zip code may be higher or lower than what is reported here. Additionally, a hospital's patient population may not be congruent to the population in the area. For example, patients of a health system could be, on average, wealthier than the population of New Orleans as a whole. Because wealth and health outcomes are often closely correlated, this means the health outcomes reflected in the wealthy patient population may differ from the overall rates in the city.

The de-identified data of about 1.5 million Louisianians is included in REACHnet, out of a state population of 4.6 million.

REACHnet handles demographic data by using the characteristics reported in someone's medical chart. Race and ethnicity are separated, so that a person is counted into both a race group (Black, White, Asian, other, or unspecified), and into an ethnicity group (Hispanic or Latino, Not Hispanic or Latino, unknown). Patient zip codes are recorded based on their address, not where they received care.

Please also note that this report references the health outcomes of Black and White New Orleanians throughout. There are many residents not represented by those categories, whose health outcomes are important and whose experiences are unique. Their omission is due to the limited data available in the electronic health records. As more data is released, we will be able to create a better picture of chronic disease for all citizens of New Orleans.

For a better understanding of the data presented, zip code/neighborhood maps and tables are available in the appendix of this report (page 16).



CHRONIC DISEASE OVERVIEW

The Centers for Disease Control and Prevention (CDC) defines chronic diseases as conditions lasting one or more years that require ongoing medical attention, limit daily activities, or both. Major chronic diseases in the United States include heart disease, cancer, diabetes, kidney disease, Alzheimer's, arthritis, tooth decay, and obesity. Chronic diseases are influenced by behavior and lifestyle, genetics, environmental factors, age, and demographics. [3]

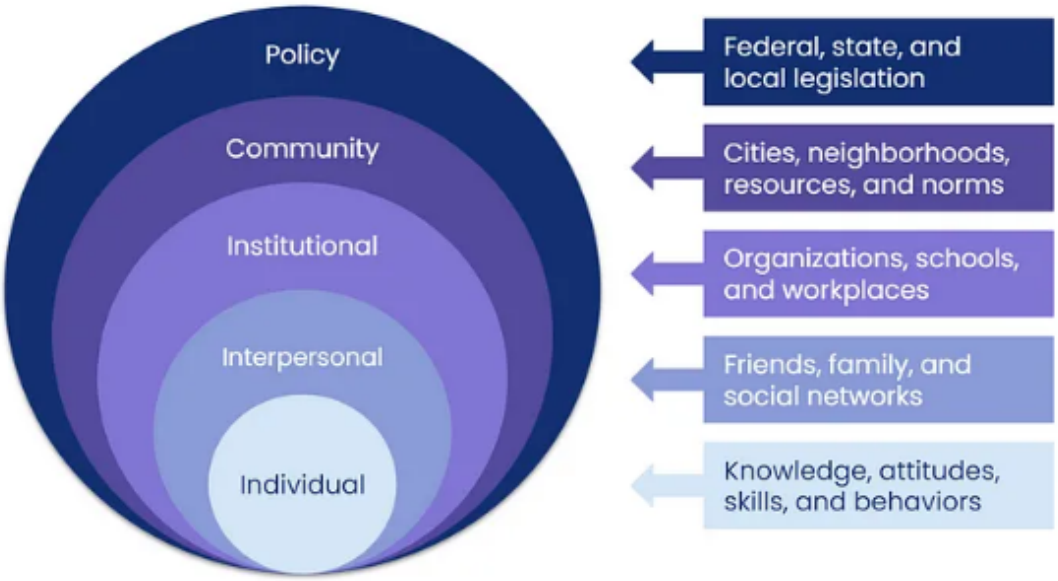


Figure 1. The Social-Ecological Model of Health.[27]

In the United States, 9 out of every 10 dollars spent on health care goes to the care of chronic diseases, and 6 in 10 adults have at least one qualifying condition. Since chronic diseases often develop together, 4 in 10 adults have two or more qualifying conditions.[6]

6 out of every 10 adults have one chronic condition. 4 out of every 10 have two or more chronic diseases.

$9 of every $10 spent on healthcare is spent on the care of chronic diseases.

New Orleans tends to have higher rates of chronic disease than the average for the United States.[7] However, preliminary data made available by the Research Action for Health Network (REACHnet), suggest chronic disease rates for New Orleans are lower than the state of Louisiana for certain groups and certain diseases, including a generally lower rate of obesity for all residents and lower rates of hypertension and diabetes among white residents.[29-31]

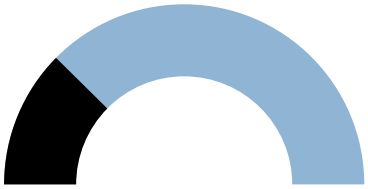
HOW CAN YOUR LIFESTYLE IMPACT YOUR DISEASE RISK?

DIET AND EXERCISE

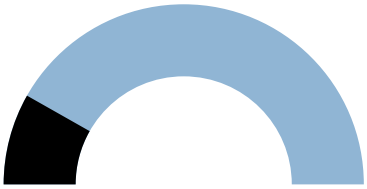
Diet and exercise are strong predictors of several chronic diseases, including obesity, diabetes, cardiovascular disease, and hypertension. These chronic diseases can be looked at together as 'diet-related disease.' Certain cancers are also closely tied to diet. [8]

New Orleans' unique food environment can contribute to additional risk for cardiovascular disease and obesity. Creole and Cajun cuisine here tends to be high in meat, sugar, salt, and fat. However, food is an important part of culture, and it is possible to maintain traditional dishes and flavors while making healthy substitutions. Local organizations like the Goldring Center for Culinary Medicine often host cooking classes that teach participants how to keep food tasty while improving its nutritional profile.

The challenges New Orleans faces with heat, poor infrastructure, and safety concerns can discourage people from exercise or make it difficult to access a park or gym. This is a hindrance to staying active. However, traditions like second lines and parades and a city-wide love of music and dance give people an opportunity to get moving.



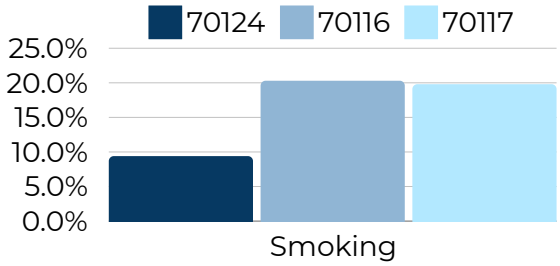
24.8% of New Orleans adults are physically inactive. [7]



16.4% of New Orleans adults are food insecure. [9]

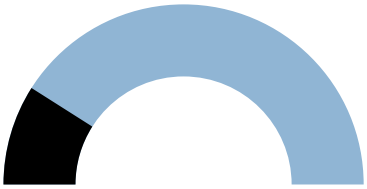
SMOKING

Smoking is linked to many health risks, including cancer, heart disease, stroke, diabetes, and lung disease. Despite similar smoking rates nationally, Black smokers are disproportionately affected by smoking, and die at a higher rate from tobacco-related disease than White smokers.[34] Louisiana is one of 13 Southern and Midwest states with persistently higher rates of smoking and higher smoking related mortality than the other regions of the US.[10]



Compared to other zip codes, Smoking is most common in zip codes associated with the French Quarter, the Marigny, the Bywater, and the Lower 9th Ward.[28]

Read more about smoking in New Orleans on page 10.



Up to 19% of New Orleans adults are regular smokers.[43]

Diabetes

Disease Overview

Diabetes is a long-lasting disease that affects how well a person's body can turn food into energy. When a person eats, their body breaks down the food and releases it as glucose (sugar) in their blood. Insulin, a chemical produced by the pancreas, helps sugar enter the cells of the body, where it is transformed into useful energy. With diabetes, a person's body either doesn't produce enough insulin (type 1 diabetes), or their body has become resistant and doesn't use the insulin correctly (type 2 diabetes). In either case, the person is at risk for long periods of elevated blood sugar, which can cause heart disease, vision loss, and kidney disease. [11]

Type 1 diabetes is genetic and accounts for about 5% of diabetes cases. To manage type 1 diabetes, a person needs to take insulin every day. There is no way to prevent or cure this type of diabetes.[11]

Type 2 diabetes develops over time and accounts for the remaining 95% of diabetes cases. This type of diabetes can be prevented and slowed with healthy lifestyle habits, such as a nutritious diet, maintaining a healthy weight or losing weight, and exercising. There are medications that can also help manage type 2 diabetes. These interventions can prevent type 2 diabetes from leading to heart, kidney, blood flow, and vision problems.[11] Since this type of diabetes can be prevented and controlled through lifestyle and medication, it is a priority for the New Orleans Health Department.

Table 1: Type 2 Diabetes Prevalence by Zip Code in New Orleans, June 2024 [29, 43]

Zip Code	Type 2 Diabetes Prevalence (% of Adult Population)
Louisiana	11.6
Orleans	14.0*
70112	10.1
70113	16
70114	15.5
70115	8.3
70116	15.3
70117	15.8
70118	10.5
70119	12
70122	11.6
70124	5.2
70125	12.4
70126	17.3
70127	19.6
70128	18.4
70129	15.6
70130	9.5
70131	13.9

*data from 2021 BRFSS

Prevalance and Risk Factors

Type 2 diabetes is more common among certain groups of people. Some risk factors are out of a person's control, such as family history, age, and genetic differences in how a person's body stores fat. Social determinants of health, like access to healthy foods, insurance status, and income also impact a person's risk of developing diabetes, and are often difficult to change.[12] Other risk factors, like weight, blood pressure, and physical activity can be modified by an individual. [13]

In New Orleans, Black residents are diagnosed with type 2 diabetes nearly four times as often as White residents in some zip codes and have significantly higher rates of the disease in most zip codes. In most areas of the city, close to 1 in 5 Black adults have diabetes. Zip code 70124 is the only area where Black residents have a diabetes rate below 10%.[29]

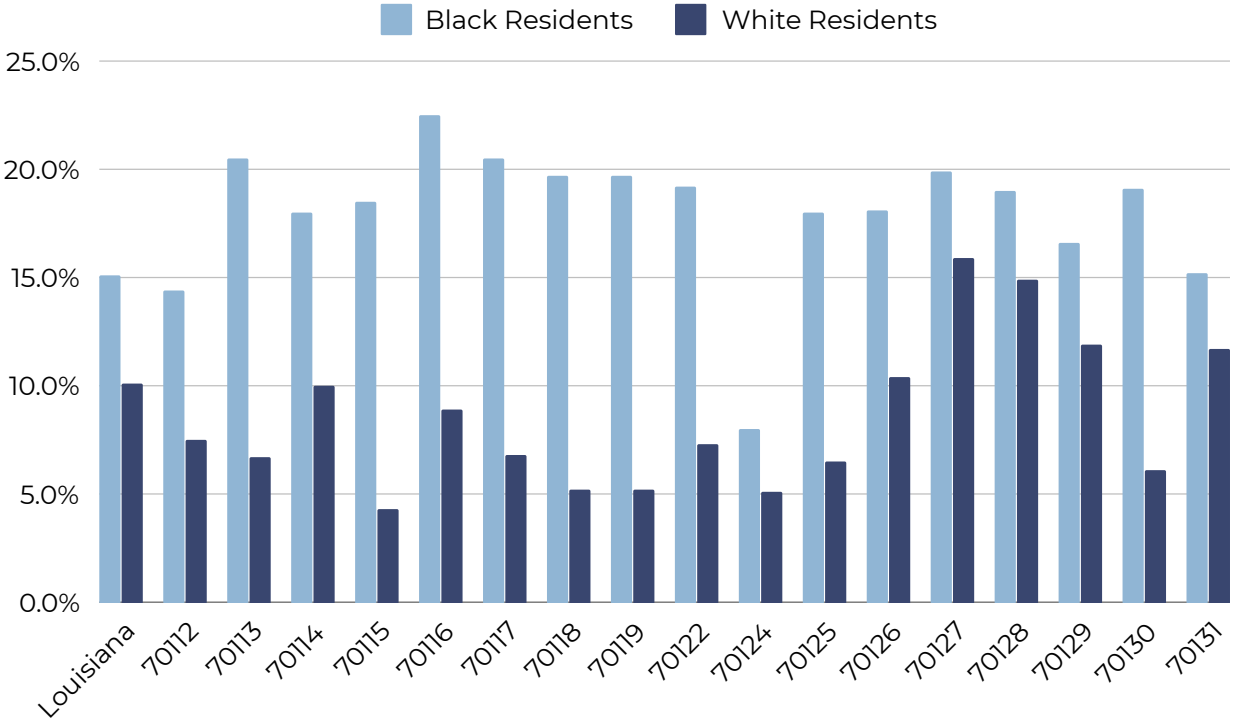
Close to 1 in 5 Black residents have type 2 diabetes.

Fewer than 1 in 10 White residents have type 2 diabetes.

Among White residents, the highest rates of diabetes diagnoses occur in New Orleans East. In zip codes 70127 and 70128, the rate of diabetes among White people is close to 15%. However, in most other zip codes, that rate is between 4.5% and 11.9%, or about than one in ten residents.[29]

Notably, among Black residents of New Orleans, the diabetes rate is about equal to or higher than the state average for Black people (15.1%) in all zip codes except 70124 (Lakeview area). Among White residents, the rate is about equal to or lower than the White state average (10.8%) for most zip codes, except several in New Orleans East. This means that New Orleans is facing worse racial disparities around diabetes than other areas of the state.[29]

Figure 2: Type 2 Diabetes Rates By Race and Zip Code [29]

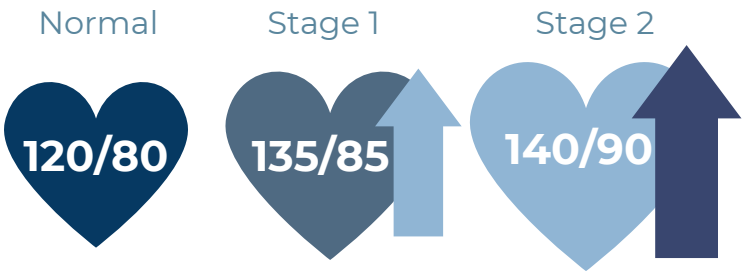


Hypertension

Disease Overview

Hypertension, more commonly known as high blood pressure (HBP) is a chronic condition that causes circulating blood to exert increased pressure onto a person's arteries. This causes the heart to have to work harder to pump blood throughout the body. [14]

A normal blood pressure reading is below 120/80mm. Elevated blood pressure, a precursor to hypertension, occurs when the top number is in the 120-129 range and the bottom number is above 80. In Stage 1 hypertension, the top number is between 130-39 and the bottom number is between 80 and 89. Stage 2 hypertension occurs when a person's blood pressure rises above 140/90. [14]



There are two main types of hypertension: primary and secondary hypertension. Primary hypertension is more common and often develops over several years without a clear direct cause. Secondary hypertension comes on more rapidly, due to an underlying condition and with an identifiable cause. Conditions that can result in secondary hypertension include kidney disease, sleep apnea, thyroid problems, certain drugs and medicines, and congenital heart defects. [15]

Hypertension in any stage may be symptomless, making it difficult to self-detect. Some estimates show that close to 1 in 3 people with hypertension are unaware that they have it. [16] Without treatment, this can lead to an increased risk of heart attacks, strokes, aneurysms, eye and kidney problems, dementia, and other memory issues. [13]

Table 2: Active Hypertension by Zip Code in New Orleans, October 2024 [30, 44]

Zip Code	Hypertension Prevalence (% of Adult Population)
Louisiana	36.6
Orleans	39.2*
70112	29.3
70113	36.0
70114	41.0
70115	26.8
70116	39.8
70117	37.9
70118	33.2
70119	30.5
70122	40.2
70124	26.8
70125	33.0
70126	44.3
70127	47.6
70128	46.6
70129	39.0
70130	26.8
70131	41.2

*data from 2021 Atlas of Heart Disease and Stroke

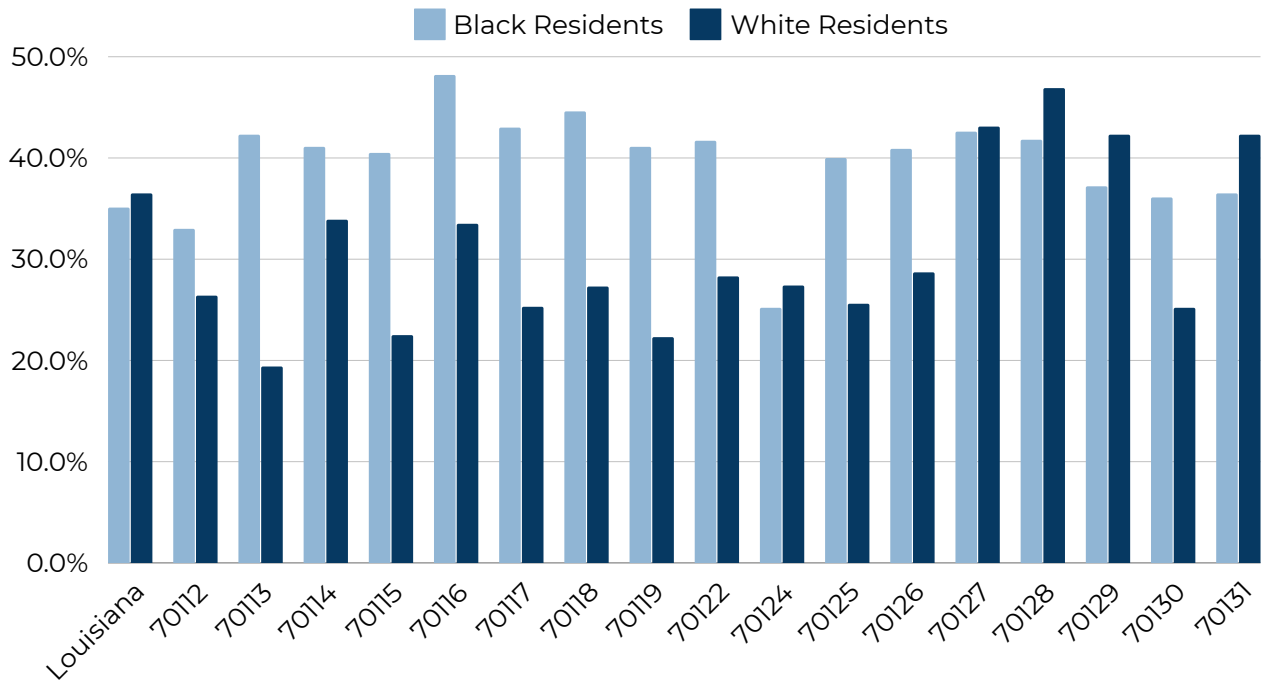
Prevalence and Risk Factors

High blood pressure is influenced by a variety of factors. Older age, family history of HBP, and obesity all increase a person's risk of developing HBP. Lifestyle habits also play a role. Eating a diet high in salt consuming too much caffeine and alcohol, lack of exercise, and lack of sleep all raise someone's risk of hypertension. Men are more likely to develop HBP during middle age, but this switches in older age, when women become more at risk. [16]

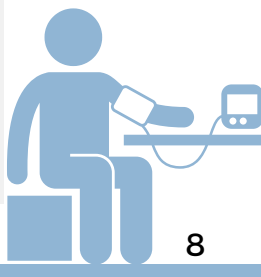
Overall, more than one in three New Orleanians have active controlled or uncontrolled hypertension, a rate similar to that of the state. Like diabetes, hypertension is more prevalent among Black residents than White residents in the parish, although generally, the disparity is much smaller for high blood pressure. In most zip codes, 35%-45% of Black residents and 20%-30% of White residents have hypertension. There are exceptions to this trend in New Orleans East and zip code 70131, where White residents have high rates of hypertension over 40% , and in the Lakeview area, where the rate of hypertension is under 30% for both groups. Importantly, many people with hypertension do not know it or see their doctor for it. This means it's likely that the true rate of high blood pressure is higher than the numbers shown here. [30]

Although hypertension is incurable, it is treatable. Through maintaining a proper diet, staying active, quitting or reducing smoking and drinking, and using medication, a person can mitigate the risks of hypertension.[10] Monitoring their blood pressure regularly can help someone catch and treat high blood pressure early.

Figure 3: Hypertension Rates by Race and Zip Code (Active Controlled/Uncontrolled/Unknown), October 2024 [30]



Different types of hypertension: With controlled hypertension, a person keeps their blood pressure under 140/90 through medication and lifestyle changes. With uncontrolled hypertension, a person is either not taking steps to lower their blood pressure, or their high blood pressure is resistant to medication. Among Louisiana Medicaid patients, about 70% have uncontrolled hypertension. [35]



Obesity

Disease Overview

Obesity is a chronic condition in which a person accumulates excess body fat. Obesity increases the risk of developing Type II diabetes, heart disease, stroke, and certain cancers.[17] It is commonly measured using the Body Mass Index (BMI). BMI is a calculation that compares your weight and height.

A healthy BMI falls between 18-25. A BMI over 25 is considered overweight, and a BMI over 30 is considered obese.[18]

Managing obesity often requires long-term lifestyle changes. The good news is that even a small amount of weight loss can help reduce the risks that come with obesity. An improved diet, increased physical activity, and changing daily habits can lead to weight loss.[18] In some cases medical interventions, like surgery or medication, may be needed. Rates of obesity in the U.S. have been rising steadily, becoming a significant public health concern. Between 2017 and 2020, 41.9% of all adults were classified as obese.[19]

Body Mass Index

It is important to note that BMI does not account for differences in the proportions of muscle and fat in a persons body, and was developed using only White bodies as examples. Many people who have a high BMI, particularly athletes, may still be healthy.

Table 3: Obesity Rates in New Orleans by Zip code, July 2024 [31, 43]

Zip Code	Obesity Prevalence (% of Adult Population)
Louisiana	32.8
Orleans	35.0*
70112	18.3
70113	29.3
70114	32.3
70115	22.3
70116	26.4
70117	29.2
70118	24.4
70119	25.6
70122	33.2
70124	20.8
70125	27.8
70126	36
70127	37.1
70128	37.3
70129	27.4
70130	22.2
70131	35.5

*data from 2021 BRFSS

Obesity

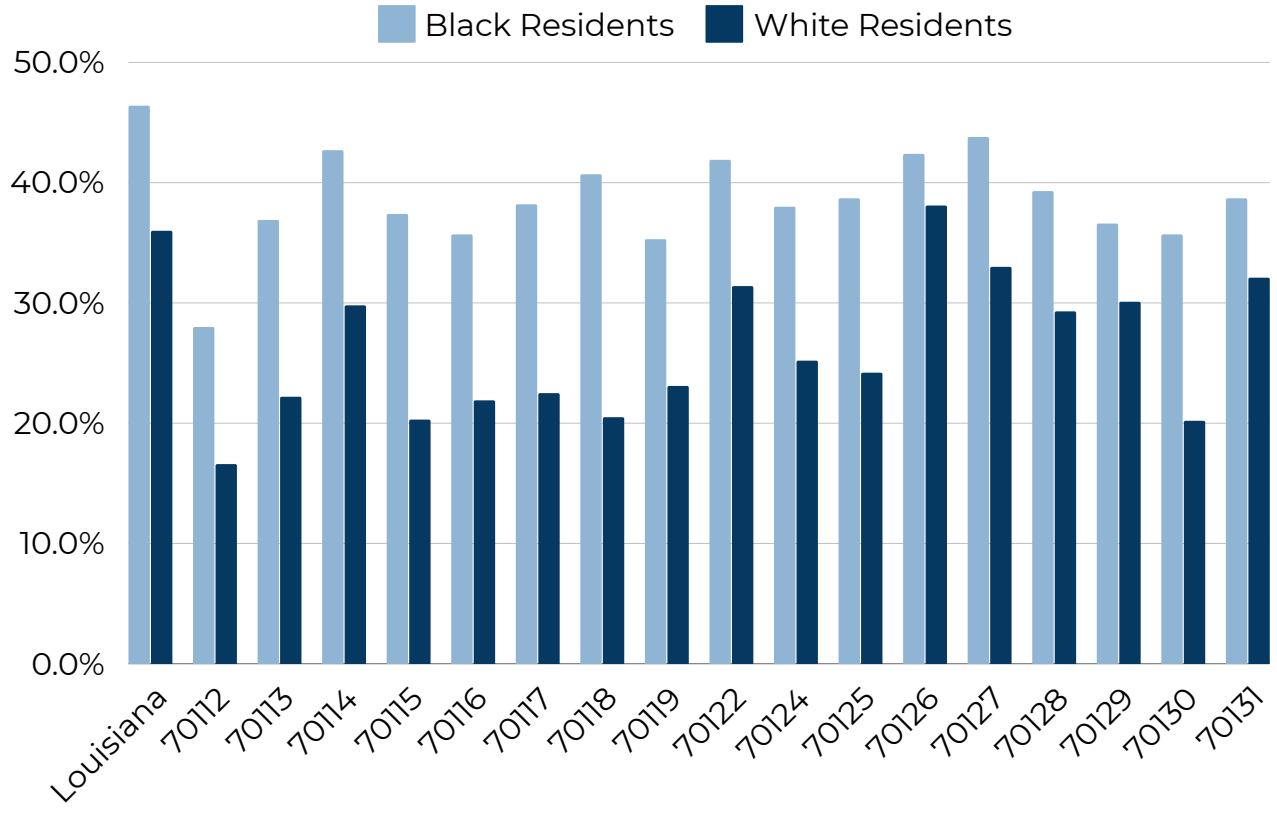
Prevalence and Risk Factors

Obesity affects different groups of people in different ways. In the United States, non-Hispanic Black adults have the highest rates of obesity at nearly 50%, followed by Hispanic adults at around 46%, non-Hispanic White adults at about 41%, and non-Hispanic Asian adults at 16%. Education level is also correlated with obesity. People with a high school diploma or some college education are more likely to be obese (46%) compared to those with a college degree (34%).[19]

There are many reasons why some people struggle with obesity. Genetics, what we eat, how active we are, and our economic status all contribute. People from lower-income backgrounds often find it harder to access healthy foods and places to exercise. Additionally, things like income and whether someone has health insurance can also influence obesity rates.[20]

In New Orleans, obesity rates vary widely by neighborhood and race. Areas with higher percentages of Black residents, like zip codes 70122 and 70127, show higher obesity rates compared to predominantly White zip codes. For instance, in zip code 70127, a predominately Black area, the overall obesity rate is 37.1% vs 20.8% in 70124, a predominantly White zip code. This difference is influenced by factors such as income levels and access to healthy food.[31]

Figure 4: Obesity Rates by Race and Zip Code, July 2024 [31]



Did you know?

In 2022, the City of New Orleans passed a law that any restaurant with a kids' menu must serve 100% juice, water, or milk as the default beverage for that meal. This policy aims to reduce the amount of sugary drinks that children consume while they eat out!

The Impact of Smoking

Smoking is not a chronic disease itself, but it has serious effects on nearly every organ in the body and is a major cause of many diseases. It leads to reduced overall health and can even shorten your lifespan. The good news is that quitting smoking can greatly reduce these risks and add years to your life. Smoking is the leading cause of preventable deaths in the United States, causing over 480,000 deaths each year. This is almost one in every five deaths, making smoking deadlier than HIV, illegal drug use, alcohol use, car accidents, and firearm-related incidents combined. In fact, more Americans have died from smoking than in all the wars the U.S. has fought.[21]

Smokers are more likely than non-smokers to develop serious health problems like heart disease, stroke, and lung cancer. Men who smoke are 25 times more likely to develop lung cancer, and women who smoke are 25.7 times more likely to develop lung cancer compared to non-smokers.[21]

Smoking causes about 90% of all lung cancer deaths and 80% of deaths from chronic obstructive pulmonary disease (COPD). Even smoking a few cigarettes per day can damage your heart and blood vessels, leading to higher blood pressure, faster heartbeats, and increased risk of stroke. Smoking also harms the lungs and airways, leading to diseases like COPD, emphysema, and chronic bronchitis.[21]

Across New Orleans, smoking remains prevalent, with rates in many zip codes that are higher than the state rate of 11.7%.[28]

Table 4: smoking Rate by Zip Code in New Orleans, August 2024 [28, 43]

Zip Code	Smoking Prevalence (% of Adult Population)
Louisiana	16.7*
Orleans	19.0**
70112	19.1
70113	19.5
70114	17.8
70115	13.1
70116	20.5
70117	19.8
70118	14.2
70119	17.4
70122	14.4
70124	9.4
70125	14.7
70126	15.6
70127	15.6
70128	13.4
70129	13.9
70130	15.4
70131	11.7

*data from 2021 BRFSS **data from 2022 BRFSS

Prevalence and Risk Factors for Smoking

Despite ongoing efforts to reduce smoking rates, smoking continues to be the number one cause of preventable disease and death.[22] The prevalence of smoking varies significantly across different demographics. For example, 13.1% of men and 10.1% of women in the U.S. currently smoke. Smoking rates are highest among adults aged 45-64, with nearly 15% reporting regular smoking, compared to only 5.3% of young adults aged 18-24. Educational attainment is another correlated factor. 30.7% of GED holders smoke, compared to just 3.2% of those with a graduate degree. Moreover, income level, health insurance status, and psychological health are all associated with smoking prevalence, with higher rates observed among those with lower income, Medicaid or no insurance coverage, and individuals experiencing severe psychological distress.[22]



In New Orleans, smoking rates vary by zip code, with significant differences between predominantly Black and White neighborhoods and across different income levels. For example, the 70124 zip code, which has a higher median income, shows a smoking rate of 9.4%. In contrast, the 70112 zip code, which has a lower median income, has a smoking rate of 19.1%. Predominantly Black zip codes, such as 70122 and 70127, [23]show higher smoking rates of 19.1% and 15.6%, respectively,[28]compared to some predominantly White zip codes. These disparities highlight the impact of socioeconomic factors and access to resources on smoking prevalence. [28]

Table 5: Zip code, Smoking Prevalence, and Income[23, 28]

Zip Code	Smoking Prevalence (%)	Median Income ($)
70124	9.4	113,526
70126	15.6	$43,226

Did you know?

In 2014, the City of New Orleans passed the Smoke Free Air Act, which prohibits smoking inside any indoor public place, including bars, casinos, and restaurants. This law protects employees and patrons at these locations from being exposed to dangerous second hand smoke.

Social Determinants of Health

A person's risk of developing chronic disease is related to much more than their personal behaviors or their genetics. The social determinants of health are "the conditions in the environments where people are born, learn, work, play, worship, and age that affect a wide range of health outcomes." The social determinants of health include being able to quickly and easily access nutritious food, having enough money to pay to see a doctor, receiving a quality education, and living in a safe, secure home. Job opportunities, transportation, and pollution are other conditions that affect health.[24]

Racism and discrimination are also social determinants of health. Racism is a root case of unequal distribution of wealth , access to healthcare and other protective conditions. Bias in healthcare can also lead to worse outcomes for people of color.[25]

Figure 5: Social Determinants of Health [32]

At the New Orleans Health Department, addressing social determinants of health is a top priority. Our population health team works on factors like transportation and food security to achieve improved health outcomes for New Orleanians. Our equity team ensures that our projects and programs are targeting the people most in need and that the health department is considering social and economic barriers to health.

NOHD also uses policy as a tool to address social determinants of health. By working on local ordinances and state level advocacy, NOHD pushes for laws that will create a safe, economically secure city with access to healthcare, healthy food, and education for all.

About NOHD

Mission:

To protect, promote, and improve the health of all in our community through equitable policies, programs, and partnerships.

Vision:

Building a healthy and equitable New Orleans by supporting the well-being of everyone in the region.

Values:

Our values are the principles that guide how the New Orleans Health Department's team members approach our work and interactions with one another, partner organizations, and community members.

- Integrity
- Responsiveness
- Excellence
- Diversity and Inclusion Health Equity

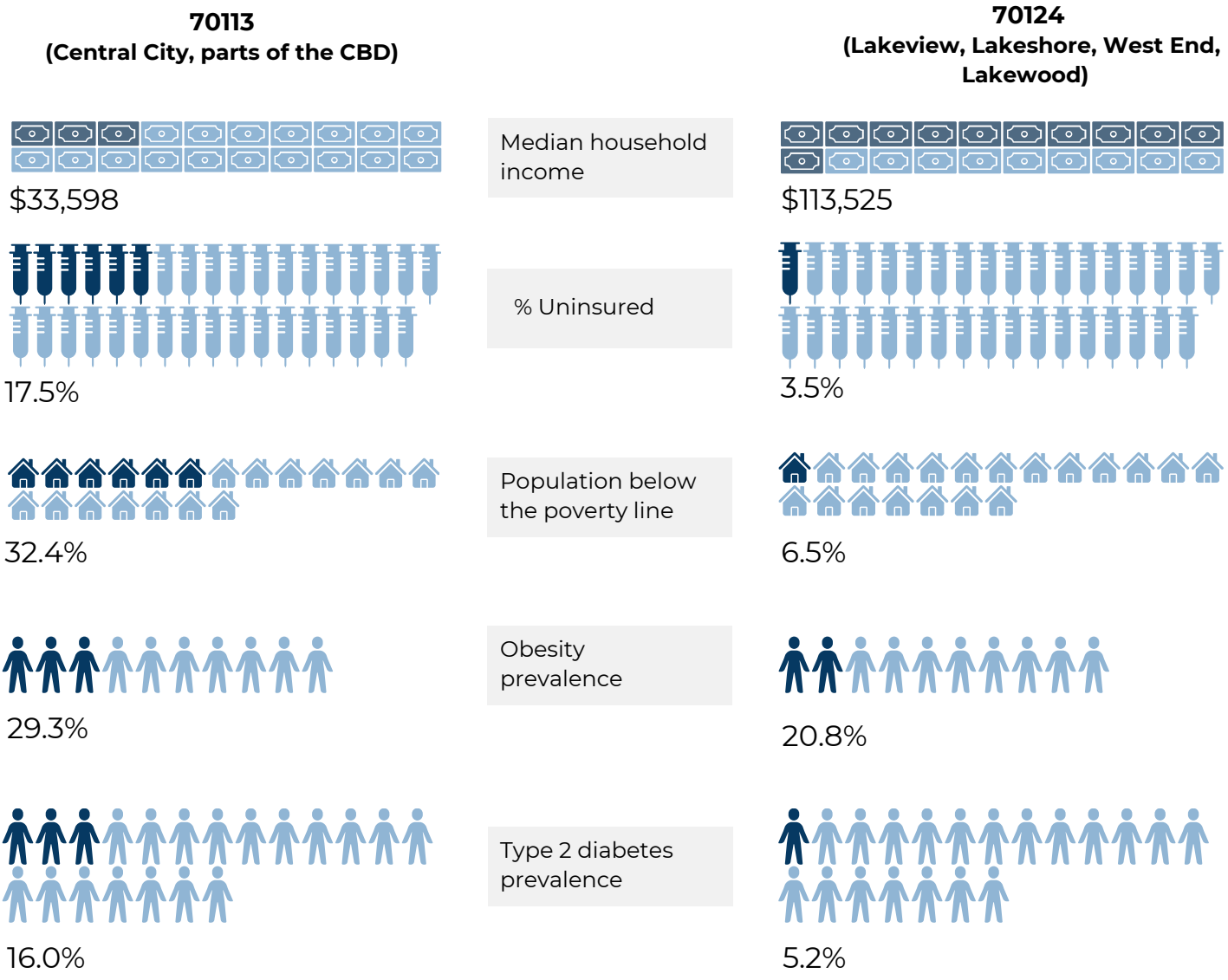
What is Equity?

Equity is "the absence of unfair, avoidable or remediable differences among groups of people.... Health equity is achieved when everyone can attain their full potential for health and well-being." [33]

-World Health Organization

Figure 6: Zip Code Comparisons [23,30,29]

Although these areas are less than 5 miles apart, their outcomes differ significantly.



In New Orleans, health outcomes and economic stability vary widely across different neighborhoods. Data taken from the most recent census and local electronic health record systems show that areas with higher median incomes, like zip code 70124, have improved health outcomes compared to areas with lower median incomes, like zip code 70113.[23] Life expectancy also varies widely across neighborhoods. Although zip-code level data is not available, census-tract level analysis reveal that some neighborhoods, such as census tract 94 in central city, have a life expectancy as low as 62 years, while others, such as census tract 65.02 in Lakeview have life expectancies as high as 88 years.[36]

Higher incomes help people have more money to spend on going to the doctor, eating healthy food, and prioritizing healthy activities. Higher incomes are also correlated with greater rates of health insurance.

Reducing disparities in income and health access, along with promoting healthy behaviors like exercise, diet, and not smoking, are important ways for New Orleans to reduce chronic disease among its citizens. [26]

The Way Forward

Community Engagement as a Tool for Health Improvement

The disparities in health outcomes across our communities did not develop overnight. They are deeply entrenched, stemming from hundreds of years of historical inequity, structural racism, and poverty. However, we are able to make a change.

New Orleans has a rich community and many health assets, including a wealth of community-based organizations determined to tackle chronic disease and social determinants of health. We also have an engaged and creative citizen body, comprised of people who love their home. To lower the rates of chronic disease in our community, the City of New Orleans must engage proactively with these community members and make sure that its services are culturally relevant and accessible. Trust between city leadership and residents will improve the reach of public health services, increase the impact of health programs and education, and reduce the burden of chronic disease over time.

Listening to community members about the barriers they experience when trying to access healthcare, food, transportation, and housing should inform the steps taken by the government and medical providers to improve health rankings. Additionally, we must ensure that healthcare and public health education is culturally appropriate for every resident and delivered by trusted messengers who understand the community they are working with.

In the future, the New Orleans Health Department will continue to promote policies and programs that improve equity, healthcare access, and health outcomes. Several recommendations are presented below.

Next Steps: Recommendations for the City of New Orleans and Community-Based Organizations

Incentivize retailers who align their offerings to the City's health goals.

- Reward retailers who stop selling tobacco or choose to sell healthy food options.
- Offer advertising, funding, infrastructure, or technical assistance to qualified vendors.

Support the development of CDC-recognized Diabetes Prevention Programs.

- Diabetes prevention programs offer lifestyle coaching and disease management to people with diabetes or pre-diabetes.

Support increasing the state's tax on tobacco and nicotine products.

- Evidence shows that increasing the price of tobacco is the most effective and cost-effective measure to reduce tobacco use.[39]
- Youth and low-income groups are most affected by increases in tobacco pricing.[39]

Recommendations continue on page 16.

Support local, state, and federal measures that reduce youth access to tobacco and nicotine products.

- Youth who begin using tobacco earlier in life are more likely to become lifelong smokers and suffer the health consequences of tobacco use.[40]
- Although the nation's rate of youth vaping and nicotine has decreased, in Louisiana, those rates continue to rise.
- Flavored products should be heavily restricted when possible. Most youth who begin to use tobacco first experiment with flavored nicotine products.[40]

Increase equitable access to green spaces for all residents.

- Green space allows residents to exercise when the weather is nice, a preventative measure for many diet-related chronic diseases.
- Green spaces also provide shade, cooling, reduced flooding risk, and improved air quality.

Continue City support for successful community food security initiatives, such as those funded by the American Rescue Plan Act.

- Diet-related diseases, including obesity, hypertension, and diabetes contribute significantly to the health burden of our residents.
- These programs reduce the price of healthy food, especially produce, and place it in more accessible locations.

Increase equitable access to healthcare for all residents.

- Early detection of chronic health conditions could help reduce the impact to each individual and possibly prevent the onset of disease.
- For individuals with chronic diseases, regular visits with a healthcare provider will help them manage their condition.

Support and fund early childhood education (ECE) and school programs that promote physical activity and healthy eating.

- Investing in Farm-to-ECE programs helps children become exposed to healthy food and build healthier habits early on.
- Youth who exercise in their childhood have a reduced risk of chronic disease later on, in particular type II diabetes and obesity.[41]

Invest in culturally appropriate prevention and health promotion in the most at-risk zip codes.

- Partner with local organizations to host education and screening events, fund food retailers, and conduct diabetes prevention programming.
- Support state efforts to fund community-based health workers (CHWs) that connect people with chronic disease to care and provide lifestyle education and resource navigation.
- CHWs have been shown to improve cardiovascular risk reduction and cancer prevention.[42]

Resources - Learn More and Access Care

Diabetes:

Learn more:

American Diabetes Center - Louisiana

National Diabetes Prevention Program - CDC

Access Support:

Well Ahead Louisiana Diabetes Resource Guide

Obesity:

Learn more:

Obesity Information - CDC

Louisiana Department Of Health Obesity Page

Access Support:

My Plate Food Planner

Move Ya Brass Free Fitness Classes

Food insecurity:

Learn more:

NOHD Food Insecurity Report

Access Support:

Second Harvest Food Bank

Louisiana SNAP Application Instructions

Hypertension:

Learn more:

American Heart Association- High Blood Pressure

Access Support:

How to Monitor Your Blood Pressure - New Orleans Coroner's Office

American Heart Association: How to Manage Hypertension

Get Down With Your Blood Pressure

Smoking:

Learn more:

Health Impacts of Smoking - CDC

Health Risks of Smoking- American Cancer Society

Access Support:

Quit With Us Louisiana

Well Ahead Louisiana Tobacco Cessation Guide

City Direct Services:

The city operates several WIC clinics, healthy start locations, and a low-barrier health clinic available to all. Learn more here:

Healthy Start

Women, Infants, and Children (WIC)

HCH Clinic

Low-Barrier Disease Management:

504HealthNet is a local network of healthcare clinics that can help you manage your chronic disease, offer screenings, and provide care even if you are uninsured or low-income. View their "Find A Clinic" map to seek care at one of their low-cost or sliding scale offices.

Many 504HealthNet clinics also offer Medicaid enrollment assistance.

APPENDIX

Figure 6: New Orleans Zip Codes [36]

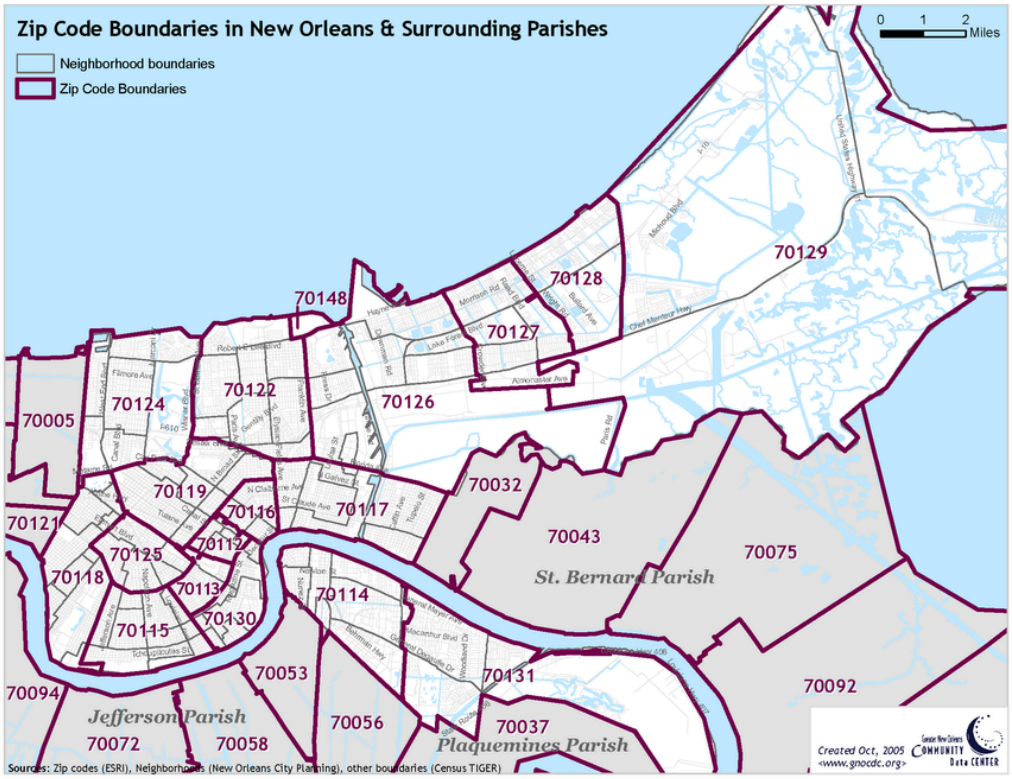


Figure 7: New Orleans Neighborhoods, 2020 [37]

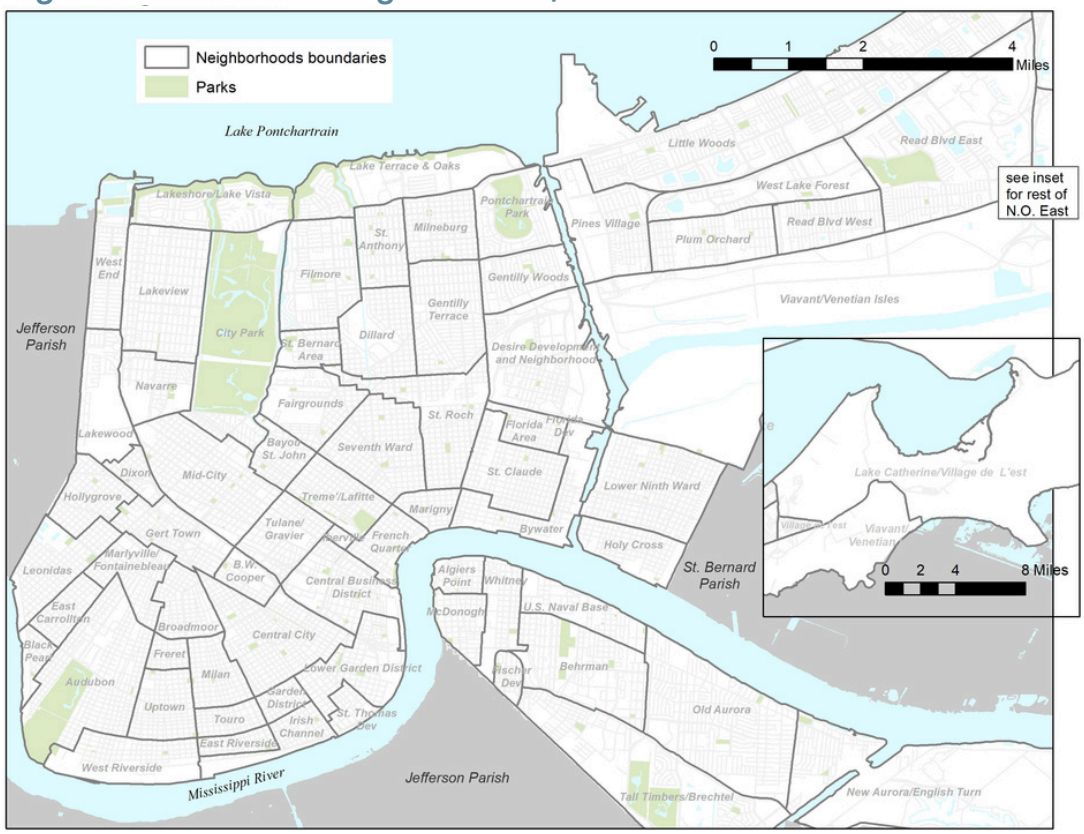


Table 5: Selected Characteristics By Zip Code[23, 28, 29, 30, 31]

Zip Code	Neighborhoods	Type 2 Diabetes*	Hypertension*	Smoking*	Obesity*	% Black Population	% Population below poverty line	Median household income	% Uninsured
State	State of Louisiana	11.6	36.6	11.7	32.8	32.8	18.6%	$55,416	6.9%
70112	Tulane Gravier, Parts of Treme, Parts of CBD	10.1	29.3	19.1	18.3	57.3	44.6	$31,250	10.0
70113	Central City, parts of the CBD	16	36.0	19.5	29.3	67.0	32.4	$33,598	17.5
70114	Algiers, Whitney, Behrman, Naval Base, McDonogh	15.5	41.0	17.8	32.3	74.2	25.8	$40,175	7.5
70115	Uptown, Freret, Milan, Touro, East and West Riverside	8.3	26.8	13.1	22.3	24.9	12.2	$91,672	4.6
70116	Marigny, St. Roch, 7th Ward	15.3	39.8	20.5	26.4	40.4	24.7	$43,226	9.7
70117	Lower 9th Ward, Holy Cross, Bywater, St. Claude	15.8	37.9	19.8	29.2	61.5	28.3	$37,472	10.7
70118	Audobon, Carrolton, Holly Grove, Black Pearl	10.5	33.2	14.2	24.4	37.9	23.4	$60,636	8.6
70119	Mid-City, Bayou St. John, Fairgrounds, 7th Ward, parts of Treme	12	30.5	17.4	25.6	45.1	22.0	$47,507	12.2
70122	Fillmore, Dillard, Gentilly, St. Bernard	11.6	40.2	14.4	33.2	71.6	21.6	$44,750	8
70124	Lakeshore, City Park, Lakeview, Lakewood, West End	5.2	26.8	9.4	20.8	5.9	6.5	$113,525	3.5
70125	Broadmoor, Gert Town, Fontainblue	12.4	33.0	14.7	27.8	56.3	25.7	$56,810	6.4
70126	Gentilly, Desire, NO East - Plum Orchard, Pines Village, Venetian Isles, Little Woods	17.3	44.3	15.6	36	88.2	32.8	$34,621	9.6
70127	NO East - Read Blvd. West, Venetian Isles, West Lake Forest, Little Woods	19.6	47.6	15.6	37.1	93.1	28.1	$37,401	6.8
70128	NO East - Read Blvd. East, Little Woods	18.4	46.6	13.4	37.3	87.7	24.8	$47,937	10.8
70129	NO East- Lake Catherine, Venetian Isles	15.6	39.0	13.9	27.4	46.7	29	$51,500	13.3
70130	Lower Garden District, Irish Channel, Parts of the CBD, French Quarter	9.5	26.8	15.4	22.2	31.2	18.2	$78,674	7.0
70131	Old and New Aurora, Brechtel	13.9	41.2	11.7	35.5	63.1	15.8	$60,157	6.4

*Prevalence in adult population >20 years old who visited the doctor at least one time in the last two years.

REFERENCES

1. National health expenditure data: historical. Center for Medicare & Medicaid Services. Updated December 13, 2023. Accessed February 6, 2024. https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical

2. Louisiana Health Report Card 2022. Louisiana Department of Health. Prepared by the Bureau of Health Informatics. 2023. Accessed July 23rd, 2024. https://ldh.la.gov/assets/oph/Center-PHI/2022_Health_Report_Card.pdf

3. Chronic disease. About chronic diseases. Centers for Disease Control and Prevention. Updated May 15th, 2024. Accessed July 20th, 2024. https://www.cdc.gov/chronic-disease/about/index.html#:~:text=Chronic%20diseases%20are%20defined%20broadly,disability%20in%20the%20United%20States.

4. Social determinants of health. Healthy People 2030, US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed July 20th, 2024. https://health.gov/healthypeople/objectives-and-data/social- determinants-health

5. New Orleans community health improvement plan 2022-2025. New Orleans Health Department. Published 2022. Accessed June 17th, 2024. https://nola.gov/getattachment/Health/Community-Health-Improvement/NOHD_New-Orleans-CHIP-2022-2025_FINAL.pdf/?lang=en-US.

6. Carney TJ, Wiltz JL, Davis K, Briss PA, Hacker K. Advancing Chronic Disease Practice Through the CDC Data Modernization Initiative. *Prevention of Chronic Disease*. 2023; 20:230120. http://dx.doi.org/10.5888/pcd20.230120. Accessed July 20th, 2024.

7. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. PLACES Data. 2022. Accessed Aug 14 2024. URL: https://www.cdc.gov/PLACES

8. Roberts CK and Barnard RJ. Effects of exercise and diet on chronic disease. *Journal of Applied Physiology* 2005. 98:1, 3-30. https://doi.org/10.1152/japplphysiol.00852.2004. Accessed July 15th, 2024.

9. Food insecurity in New Orleans, Louisiana. Feeding America. Published 2022. Accessed August 26th, 2024. https://map.feedingamerica.org/county/2022/overall/louisiana/county/orleans

10. Tobacco Nation: A call to eliminate geographic smoking disparities in the U.S. Truth Initiative. Published June 28th, 2023. Accessed August 24th, 2024. Truthinitiative.org/tobacconation

11. Diabetes. World Health Organization. Accessed August 1st, 2024. https://www.who.int/news-room/fact-sheets/detail/diabetes

12. National Diabetes Statistics Report. Centers for Disease Control and Prevention. Published May 15, 2024. Accessed August 1st, 2024. https://www.cdc.gov/diabetes/php/data-research/

13. Hill-Briggs F, Adler NE, Berkowitz SA, Chin MH, Gary-Webb TL, Navas-Acien A, Thornton PL, Haire-Joshu D. Social Determinants of Health and Diabetes: A Scientific Review. *Diabetes Care. Published* January 1, 2023; 44 (1): 258–279. https://doi.org/10.2337/dci20-0053

14. Hypertension. World Health Organization. Updated March 16, 2023. Accessed August 1st, 2024. https://www.who.int/news-room/fact-sheets/detail/hypertension

15. Hegde S, Ahmed I, Aeddula NR. Secondary Hypertension. Updated 2023 Jul 30. Accessed August 1st, 2024. https://www.ncbi.nlm.nih.gov/books/NBK544305/

16. What is High Blood Pressure? National Institute of Health. National Heart, Lung, and Blood Institute. Published April 205th, 2024. Accessed August 1st. 2024. https://www.nhlbi.nih.gov/health/high-blood-pressure#:~:text=Blood%20pressure%20levels&text=Symptoms%20from%20high%20blood%20pressure,to%20control%20their%20blood%20pressure.

REFERENCES CONT.

17. About Obesity. Centers for Disease Control and Prevention. Updated January 23, 2024. Accessed August 23rd, 2024. https://www.cdc.gov/obesity/php/about/index.html.

18. Obesity. Mayo Clinic. Published July 22, 2023. Accessed July 30th, 2024. https://www.mayoclinic.org/diseases-conditions/obesity/symptoms-causes/syc-20375742.

19. Adult obesity facts. Centers for Disease Control and Prevention. Updated May 14, 2024. Accessed August 26th, 2024. https://www.cdc.gov/obesity/php/data-research/adult-obesity-facts.html.

20. Risk factors for obesity. Centers for Disease Control and Prevention. Updated March 18, 2024. Accessed August 12, 2024. https://www.cdc.gov/obesity/php/about/risk-factors.html.

21. About the health effects of cigarette smoking. Centers for Disease Control and Prevention. March 15, 2024. Accessed August 12, 2024. https://www.cdc.gov/tobacco/about/index.html.

22. Burden of cigarette use in the U.S. Centers for Disease Control and Prevention. May 4, 2023. Accessed August 12, 2024. https://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-united-states.html?s.

23.Selected economic characteristics in New Orleans, Louisiana. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03, 2022. U.S. Census Bureau. Accessed on August 23, 2024. https://data.census.gov/table/ACSDP5Y2022.DP03?g=040XX00US22_050XX00US22071.

24. Healthy People 2030. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed August 23rd, 2024. https://health.gov/healthypeople/objectives-and-data/social-determinants-health

25. Malawa Z, Gaarde J, Spellen S. Racism as a root cause approach: a new framework. Pediatrics. 2021. Jan;147(1):e2020015602. doi: 10.1542/peds.2020-015602. PMID: 33386339.

26. Oates GR, Jackson BE, Partridge EE, Singh KP, Fouad MN, Bae S. Sociodemographic patterns of chronic disease: How the mid-south region compares to the rest of the country. *Am J Prev Med*. 2017;52(1S1):S31-S39. doi:10.1016/j.amepre.2016.09.004

27. Kasley K. Applying the social-ecological model of health to loneliness and recognizing the power of local community action. *Medium.* Published December 23rd, 2020. Accessed August 28th, 2024. https://kasleykillam.medium.com/the-inspiration-behind-community-microgrants-5bdedff5e48a

28. Research Action for Health Network, Louisiana Public Health Institute. August 2024. Smoking among Louisiana zip codes, stratified by race. Inclusion Criteria: one or more visits in the last two years, age of 20 years or more. Data from Tulane University Hospitals and Clinics, University Medical Center, and Ochsner Health Systems. New Orleans, Louisiana: Louisiana Public Health Institute.

29. Research Action for Health Network, Louisiana Public Health Institute. June 2024. Diabetes among Louisiana zip codes, stratified by race. Inclusion Criteria: one or more visits in the last two years, age of 20 years or more. Data from Tulane University Hospitals and Clinics, University Medical Center, and Ochsner Health Systems. New Orleans, Louisiana: Louisiana Public Health Institute.

30. Research Action for Health Network, Louisiana Public Health Institute. October 2024. Hypertension among Louisiana zip codes, stratified by race. Inclusion Criteria: one or more visits in the last two years, age of 20 years or more, active-controlled, active uncontrolled, or active unknown. Comorbidities: Hypertension active-controlled, inactive, or never Data from Tulane University Hospitals and Clinics, University Medical Center, and Ochsner Health Systems. New Orleans, Louisiana: Louisiana Public Health Institute

31. Research Action for Health Network, Louisiana Public Health Institute. July 2024. Obesity among Louisiana zip codes, stratified by race. Inclusion Criteria: one or more visits in the last two years, age of 20 years or more. Data from Tulane University Hospitals and Clinics, University Medical Center, and Ochsner Health Systems. New Orleans, Louisiana: Louisiana Public Health Institute

REFERENCES CONT.

32. Social determinants of health. Public Health Professionals Gateway. CDC.Gov. Updated May 15th, 2024. Accessed August 17th, 2024. https://www.cdc.gov/public-health-gateway/php/about/social-determinants-of-health.html

33. Health equity. World Health Organization. Accessed August 28th, 2024. https://www.who.int/health-topics/health-equity#tab=tab_1

34. African-Americans experience a health burden from commercial tobacco. Centers for Disease Control and Prevention. Updated May 15th, 2024. Accessed August 30th, 2024. https://www.cdc.gov/tobacco-health-equity/collection/african-american-health-burden.html#:~:text=At%20a%20glance,Non%2DHispanic%2C%20White%20people.

35. Wandler, A. Demographic factors affecting hypertension control in Medicaid populations in Louisiana. *Medicine Research Day, Louisiana State University*. Published April 2024. Accessed August 30th, 2024. https://digitalscholar.lsuhsc.edu/mrd/2024mrd/mrd2024/143/

36. Unpacking neighborhood differences in life expectancy. The Data Center. Accessed August 30th, 2024. https://www.datacenterresearch.org/placing-prosperity/chapter-1.html

37. New Orleans Zip Code Map. The Data Center. Published 2005. Accessed August 29th, 2024. https://www.datacenterresearch.org/maps/reference-maps/#gallery-5

38. 2020 New Orleans neighborhood boundary map. The Data Center. Published 2020. Accessed August 29th, 2024. https://www.datacenterresearch.org/maps/reference-maps/#gallery-4

39. Raising Taxes On Tobacco. The World Health Organization. Accessed September 20th, 2024. https://www.who.int/activities/raising-taxes-on-tobacco#:~:text=Tobacco%20use%20kills%20eight%20million,a%20simple%20excise%20tax%20structure.

40. Flavored Tobacco Attracts Kids. Campaign for Tobacco Free Kids. Accessed September 20th, 2024. https://assets.tobaccofreekids.org/factsheets/0383.pdf

41. Physical Activity Guidelines for Americans, 2nd Edition. US Department of Health and Human Services. Publishes 2018. Accessed September 2oth, 2024. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

42. Kim K, Choi JS, Choi E, et al. Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review. Am J Public Health. 2016;106(4):e3-e28. doi:10.2105/AJPH.2015.302987

43. Orleans Parish. County Health Rankings. CountyHealthRankings.Org. Accessed October 2, 2024. https://www.countyhealthrankings.org/health-data/louisiana/orleans?year=2024#health-outcomes

44. Interactive atlas of heart disease and stroke. Orleans Parish. High blood pressure among adults 18+. Centers for Disease Control and Prevention. Accessed October 2, 2024. https://nccd.cdc.gov/dhdspatlas/default.aspx

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