

## **Appendix E-3**

Catholic Medical Center Community Needs Assessment Report, 2023

2022

# GREATER MANCHESTER COMMUNITY HEALTH NEEDS ASSESSMENT



The City of  
Manchester  
Health Department



# TABLE OF CONTENTS

Chapter 1: Introduction.....3

Chapter 2: Social and Economic Factors ..... 13

Chapter 3: Health Behaviors.....30

Chapter 4: Clinical Care.....47

Chapter 5: Nutrition and Food Security.....67

Chapter 6: Healthy Homes and Neighborhoods.....81

Chapter 7: Trauma and Health Outcomes.....95

Chapter 8: Conclusion.....110

Chapter 9: Resident Input Summary ..... 112

# INTRODUCTION



## INTRODUCTION

The 2022 Greater Manchester CHNA is intended to fulfill the requirements for all Manchester area healthcare charitable trusts to conduct a periodic community health needs assessment as required by the Affordable Care Act, as well as State law. In addition, it serves as a common data source to inform community-level action and guide the development of implementation plans by the healthcare entities in compliance with applicable rules. This report was developed by the City of Manchester Health Department, which serves as the chief strategist for health-and wellness-related issues for the Greater Manchester Public Health Region, in partnership with Catholic Medical Center, Dartmouth Health, and Elliot Health System. This report was produced with funding from the three health systems. Technical assistance was provided by JSI Research and Training Institute (JSI) in Bow, New Hampshire, in the collection and summary of Key Informant Interviews and Resident Surveys to provide resident input on major issues facing the Greater Manchester Region. Additional partners include Manchester Proud, LAUNCH Manchester, Makin' It Happen, Health Care for the Homeless, The Mental Health Center of Greater Manchester, Families in Transition, Manchester Food Collaborative, Neighborworks, and Amoskeag Health. The City of Manchester Health Department also secured the consultant expertise of Michelle Graham for much of the content. Reviewers of this report include Elaine Michaud and Victoria Adewumi. In addition, JSI contributed to the design and production of this report.

Data are drawn from national, state, and local sources, each offering different levels of geographic comparison. When possible, the data are drilled down to the neighborhood level using census tract maps. For some metrics, Manchester is compared to other towns within the Greater Manchester Region. This Region encompasses both the Greater Manchester Public Health Region (Auburn, Bedford, Candia, Deerfield, Goffstown, Hooksett, New Boston, and Manchester) and the Greater Manchester Hospital Service Area (HSA), which includes the Public Health Region plus Londonderry. For data points obtained from the City Health Dashboard (see data sources), Nashua and the 500 cities are used as appropriate comparisons for Manchester.

Table 1 describes the demographics of cities and towns within the Greater Manchester HSA in terms of population size and by major racial categories and Hispanic/Latino concentration. The City of Manchester is by far the most racially/ethnically diverse in the region, with 26% of residents identifying as non-White. Manchester is also the largest city in New Hampshire, and the largest north of Boston, with more than 115,000 residents.



**Table 1. Population Characteristics of Greater Manchester Hospital Service Area: Race/Ethnicity**

City/Town	Total Population	White	Black	Asian	Other	Hispanic/Latino
Auburn	5,946	92%	<1%	1%	4%	2%
Bedford	23,514	86%	1%	6%	4%	3%
Candia	4,013	92%	1%	1%	4%	2%
Deerfield	4,855	94%	<1%	<1%	4%	2%
Goffstown	18,577	90%	1%	1%	4%	3%
Hooksett	14,871	88%	1%	3%	5%	3%
Londonderry	25,829	89%	1%	1%	4%	4%
New Boston	6,108	92%	1%	<1%	5%	2%
<b>Manchester</b>	<b>115,644</b>	<b>74%</b>	<b>5%</b>	<b>4%</b>	<b>5%</b>	<b>12%</b>

Source: 2020 American Community Survey

Population distributions by age in the Greater Manchester Region are shown in Table 2. Candia and Bedford are home to the highest proportions of older adults, while Auburn and Bedford have the largest proportions of residents under 5 years of age. Bedford also has a uniquely high concentration of residents in the 30-49 year age range, at nearly 40%, while having the lowest percentage of residents in the 20-29 year age range, at just over 7%.

**Table 2. Population Characteristics of Greater Manchester Hospital Service Area: Age**

City/Town	Under 5	15-19	20-29	30-49	50-64	65 and up	Total Population
Auburn	6.3%	15.8%	11.7%	24.7%	27.9%	13.8%	5,946
Bedford	5.9%	21.4%	7.2%	39.4%	23.6%	16.6%	23,322
Candia	4.6%	12.9%	10.2%	21.9%	32.8%	17.7%	4,013
Deerfield	4.1%	18.1%	11.6%	24.7%	29.3%	15.0%	4,855
Goffstown	5.3%	22.2%	12.1%	24.8%	19.3%	16.4%	18,577
Hooksett	4.0%	19.2%	14.7%	26.3%	20.4%	15.4%	14,871
Londonderry	5.3%	19.7%	10.5%	25.8%	24.5%	14.1%	25,826
New Boston	5.1%	22.5%	10.1%	28.5%	22.4%	11.3%	6,108
Manchester	5.1%	14.2%	11.1%	27.1%	20.9%	14.6%	115,644

Source: 2020 American Community Survey

**Table 3. Population Characteristics of Greater Manchester Region: Language Spoken at Home Other Than English**

City/Town	Spanish		Other Indo-European Languages		Asian and Pacific Island Language		Other Languages		Total Population
	%	#	%	#	%	#	%	#	
Auburn	0%	0	2.1%	108	0%	0	0.2%	9	5,946
Bedford	1.2%	246	7%	1496	2%	432	0%	0	23,322
Candia	1.9%	69	3.1%	116	0%	0	0%	0	4,013
Deerfield	0.3%	12	1.6%	70	0.2%	9	0.3%	11	4,855
Goffstown	1.1%	193	6.2%	1067	0.7%	116	0%	0	18,577
Hooksett	0.8%	107	5.3%	740	0.7%	102	1.9%	267	14,871
Londonderry	2.4%	594	3.1%	761	0.7%	172	<0.1%	11	25,826
New Boston	0.3%	14	0.4%	21	0.1%	4	0%	0	6,108
Manchester	8%	8,555	8.2%	8,700	2.5%	2,656	2.4%	2,609	115,644

Source: 2020: ACS 5-Year Estimates Subject Tables

Language spoken at home other than English is shown in Table 3 above. The population in Manchester has a remarkably higher percentage of all languages spoken other than English than all other towns within the Greater Manchester HSA. Distinctively, Spanish and other Indo-European language speakers make up over 16% of Manchester’s population.

Similar tables throughout this report illustrate regional differences in educational achievement, uninsurance rates, vehicle access, and other indicators of population health and well-being.

## Definition of Community

While much of the data used in this assessment is based on cities, towns, and census tracts, it is important to recognize that a geographical unit is not the only method of measuring determinants of health and health outcomes. As defined by the Institute of Medicine, “community” includes individuals with shared affinity, and, in some cases, a shared geography, who organize around an issue, with collective discussion, decision making, and action.<sup>1</sup> As a result, community health is profoundly affected by the collective beliefs, attitudes, and behaviors of everyone who lives in the community.<sup>2</sup> Individual political affiliation, voting practices, volunteerism, engagement in faith and charitable giving are important elements of social capital and collective efficacy which warrant further study as to their connection and influence to health in Manchester.

<sup>1</sup> *Improving Health in the Community* <https://health.gov/healthypeople/tools-action/browse-evidence-based-resources/improving-health-community-role-performance-monitoring>

<sup>2</sup> 2000. *Healthy people 2010, Volume I*. Washington, DC: U.S. Dept. of Health and Human Services.



## Equity, Inclusion and Accessibility

Strong communities that demonstrate resilience and perseverance foundationally also strive for systemic equity, inclusion and accessibility in all that they do. This document, will reflect health disparities when data is available and statistically significant. Differences in health status can occur because of unequal access and discrimination on the basis of gender, race or ethnicity, education, income, disability, geographic location, and sexual orientation among others. Social determinants of health, which are socially-engineered conditions like poverty, unequal access to health care, lack of education, violence, stigma, and racism are linked to health disparities.<sup>3</sup> Furthermore, it is well documented that urban areas and mid to upper-sized cities are prone to higher rates of infectious disease, injuries and interpersonal violence, and noncommunicable diseases often linked to environment such as asthma, diabetes, depression, anxiety, and mental illness.<sup>4</sup> Interventions and policy change recommendations steered by authentic resident engagement will be necessary to combat these injustices and inequities and prevent social conditions from determining health winners and losers.

## Neighborhoods of Opportunity

The neighborhoods people live in have a major impact on their health and well-being.<sup>5</sup> Furthermore, in almost all urban areas, serious health problems and unstable social conditions are highly concentrated historically, as well as through housing policy, in a fairly small number of distressed neighborhoods.<sup>6</sup> The U.S. Partnership on Mobility from Poverty defines opportunity neighborhoods as places where every family should be able to live and which support well-being and boost children's chances to thrive and succeed.

---

<sup>3</sup> <https://www.cdc.gov/nchhstp/healthequity/index.html>.

<sup>4</sup> <https://www.who.int/news-room/fact-sheets/detail/urban-health>.

<sup>5</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/neighborhood-and-built-environment>

<sup>6</sup> <https://aspe.hhs.gov/reports/neighborhoods-health-building-evidence-local-policy-1>.



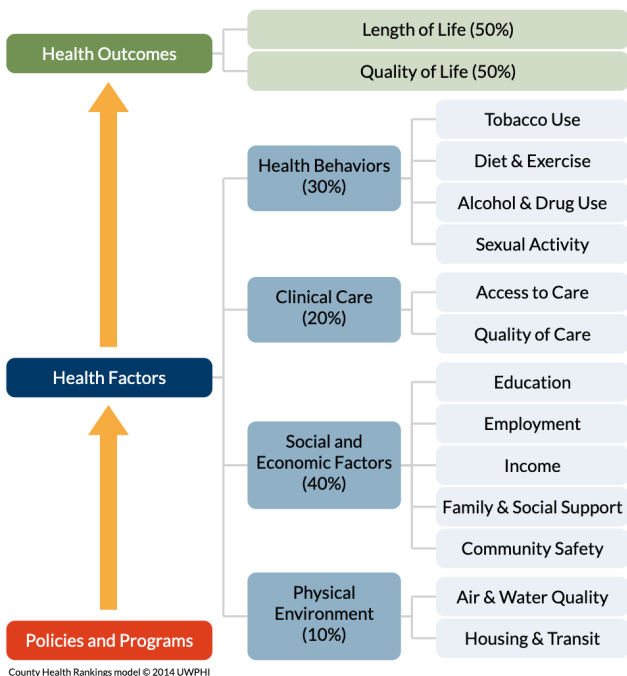
With this assessment, the City of Manchester and its partners share the commitment by the U.S. Partnership to foster neighborhoods of opportunity<sup>7</sup> which achieve:

- ▶ Economic success: Improvements in neighborhood quality and choice will lead to higher employment rates, higher incomes, and lower poverty.
- ▶ Power and autonomy: Communities will share a greater sense of agency, and indicators of civic activity, such as voting, will rise.
- ▶ Being valued in community: Residents of all races and ethnicities will report a greater sense of belonging and higher standing in the community and society. Experiences of discrimination and racial resentment should fall.

## Strategic Framework

The City of Manchester and its partners embrace a broad definition of health as more than the presence or absence of disease, but rather a state of well-being and resilience. Health is rooted in interactions among characteristics of an individual and their environment. The County Health Rankings Model (Figure 1), developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, provides a framework for population health that emphasizes the many factors that, if improved, help make communities healthier places to live, learn, work, and play. These factors fall into four domains—health behaviors, clinical care, social and economic factors, and physical environment—which together encompass all of the modifiable factors influencing individual and community health.

**Figure 1. County Health Rankings Model**



Source: <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

<sup>7</sup> <https://www.mobilitypartnership.org/opportunity-neighborhoods>.

This report uses the County Health Rankings framework at its chapter outline, focusing first on the factors that have the greatest overall impact on health outcomes—social and economic factors—and ending with health outcomes and opportunities. The framework uses the following descriptions to define each of its four domains influencing health:

- ▶ **Social and Economic Factors** (also call social determinants of health) include income, education, employment, community safety, and social supports that can significantly affect how well and how long an individual lives. These factors impact the ability to make healthy choices, afford medical care and housing, manage stress, and more. The Model estimates that 40% of an individual's health status is determined by social and economic factors.
- ▶ **Health Behaviors** include actions individuals take that affect their health, such as eating well and being physically active. Health behaviors also include actions that increase one's risk of negative health outcomes, including smoking and substance misuse. The Model estimates that 30% of an individual's health status is determined by their health behaviors.
- ▶ **Clinical Care** includes the extent to which residents have access to affordable, quality, and timely health care that can help prevent disease and detect health conditions early, enabling individuals to live longer, healthier lives. The Model estimates that 20% of an individual's health status is determined by access to quality and timely clinical care.
- ▶ **Physical Environment** includes characteristics of the environments in which individuals live, work, play, and worship that can have an impact on their overall health. A poor physical environment, such as substandard housing and poor walkability, can affect the ability to live long and healthy lives. The Model estimates that 10% of an individual's health status is determined by the characteristics of their physical environment.

This report also references the benchmarks outlined in Healthy People 2030, which includes 355 core objectives for improvements within each of the domains listed above.<sup>8</sup> It places a special emphasis on Social Determinants of Health as major influencers of the health status of individuals, communities, and populations (Figure 2).

---

<sup>8</sup> *Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>*

Figure 2. The Five Social Determinants of Health, Healthy People 2030

### Social Determinants of Health



1. Healthcare Access and Quality
2. Neighborhood and Built Environment
3. Social and Community Context
4. Economic Stability
5. Education Access and Quality

Source: *Healthy People 2030*, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.



## Chapter Outline

Within the strategic framework outlined above, this report focuses on six priority areas identified in the 2019 Greater Manchester Community Health Needs Assessment: Manchester’s Urban Advantage. Key indicators and outcomes are described within each priority area, with the aim of informing rather than prescribing local action. The report is organized as follows:

- ▶ Chapter 1: Introduction
- ▶ Chapter 2: Social and Economic Factors
  - Priority: Improve Educational Outcomes
- ▶ Chapter 3: Health Behaviors
  - Priority: Reduce and Prevent Substance Misuse
- ▶ Chapter 4: Clinical Care
  - Priority: Improve Access to Quality Preventive Healthcare
- ▶ Chapters 5 and 6: Nutrition and Food Security and Healthy Homes and Neighborhoods
  - Priority I: Improve Access to Healthy Foods
  - Priority II: Improve Access to Healthy, Affordable Housing
- ▶ Chapter 7: Trauma and Health Outcomes
  - Priority: Prevent and Address Trauma
- ▶ Chapter 8: Conclusion
- ▶ Chapter 9: Resident Input Summary

Each chapter includes data on key indicators associated with its priority area along with a narrative describing the relevance of each indicator and interpretation of the data. Where appropriate, Healthy People 2030 targets are included as benchmarks in charts and tables. Relevant findings from the key stakeholder interviews and resident surveys are included at the end of each chapter. Finally, “community spotlights” have been added to each chapter to highlight important action being taken to address each of the six priorities. References within each chapter offer readers an opportunity to take a “deeper dive” into each of the topics presented.

## Data Sources

As mentioned above, this report pulls data from a variety of national, state, and local resources. While all sources are referenced throughout the report, some of the more commonly cited are described below.

### City Health Dashboard

The City Health Dashboard serves as a central repository for data on more than 40 indicators associated with health and wellness. The site was launched in 2018 with funding from the Robert Wood Johnson Foundation, and included data on the 500 largest cities in the US, including Manchester. The Dashboard calculates averages on each indicator across those 500 cities to provide a common measure against which individual municipalities can assess their performance. Most metrics on the Dashboard are available to view as maps detailing census tract-level variation in indicators and outcomes. For more information or to explore metrics not included in this report, visit: <https://www.cityhealthdashboard.com/>

### US Census Bureau

The Census Bureau's new data exploration site allows users to view data across years and from several geographic perspectives, allowing comparisons across the Greater Manchester Region and with the State of NH as a whole. The site includes results from a large selection of federally-sponsored surveys, including the American Community Survey. For more information or to explore data points not included in this report, visit: <https://data.census.gov>.

### NH DHHS Data Portal

The NH Department of Health and Human Services data portal includes state, regional and, when possible, local data on a variety of health-related outcomes and indicators. The site includes data from the Youth Risk Behavior Surveillance System and the Behavioral Risk Factor Surveillance System, two important surveys that measure youth and adult health-related risk factors across the US. Data not accessible through the portal were directly requested for use in this report by the City of Manchester Health Department. For more information or to search for additional data, visit: <https://wisdom.nh.gov/wisdom/>



## Resident Input

Local input on the priorities and issues outlined in this report was gained through interviews with key community stakeholders conducted by JSI in March and April of 2022 and resident surveys conducted online and through direct outreach to minority populations by Community Health Workers at the Manchester Health Department. Results from both sources are summarized in the final chapter of this report. The full thematic analysis and report from JSI is available on the City of Manchester Health Department's website: <https://www.manchesternh.gov/departments/health/>

## A Note About COVID-19

The two years preceding this report have been unlike any other in this generation's history. Public health strategies put in place to contain the COVID-19 pandemic led to vast disruptions in everyday life locally, nationally, and worldwide. School closures and stay-at-home orders interrupted routine data collection, impacting several data systems that provide critical information on health and human services.<sup>9</sup> The National Health and Nutrition Examination Survey missed a complete cycle of data collection. The Behavioral Risk Factor Surveillance System survey was conducted entirely by phone for the first time in history. Data collection for the most recent cycle of the Youth Risk Behavior Surveillance System was delayed by a year.

The impact of COVID-19 on this report goes beyond data collection. "Various data indicate that in 2021, relief measures reduced poverty, helped people access health coverage, and reduced hardships like inability to afford food or meet other basic needs," according to the Center on Budget Policies and Priorities.<sup>10</sup> Yet these efforts did not provide the ongoing support families need, particularly in the face of rising inflation. More than 26,000 New Hampshire families were behind on rent in the third quarter of 2021 as eviction protections expired.<sup>11</sup> In addition, Supplemental Nutrition Assistance benefit increases were discontinued in September, 2021. Equitable economic recovery post-COVID must be the community's priority and may take decades to achieve as neighborhood vulnerabilities persisted in Manchester prior to the pandemic.

These rapid and consequential changes in social policy cannot easily be reflected in the data sources utilized in this report, as State and Federal data often lag by 1-2 years between the date of collection and the time of reporting. It is important to keep these limitations in mind when reviewing this report and monitoring trends in the health and well-being of Manchester residents.

---

<sup>9</sup> <https://aspe.hhs.gov/reports/covid-19-impacts-hhs-data>

<sup>10</sup> [https://www.cbpp.org/sites/default/files/2-24-2022pov\\_1.pdf](https://www.cbpp.org/sites/default/files/2-24-2022pov_1.pdf)

<sup>11</sup> *Ibid*

# SOCIAL AND ECONOMIC FACTORS



## PRIORITY: IMPROVE EDUCATIONAL OUTCOMES

The association between education and health is well-established and persistent over the lifespan. Higher education attainment is linked to lower morbidity from chronic and acute conditions, lower prevalence of chronic disease, reduced age-adjusted mortality from all causes, and increased physical and mental functioning.<sup>1</sup> While some of this relationship can be explained by healthier lifestyle choices, other factors associated with employment, income, and environment also contribute to better overall wellbeing.

Research consistently demonstrates that high school graduates obtain higher income jobs and, therefore, gain access to better living conditions.<sup>2</sup> Individuals who drop out of high school are more likely to report overall poor health and suffer from at least one chronic health condition.

*"Educational attainment is a particularly profound predictor of length of life, now surpassing both race and gender in importance in the United States."*

## COVID-19 Response

The COVID-19 pandemic has had a dramatic negative impact on child development, health, and wellbeing across the country. With a switch from in person to online learning, student educational outcomes have been greatly impacted. In Manchester, the school district proactively implemented measures to protect students including a new policy dictating smaller class sizes, standardized new curriculum, integrated English learning programming, increased number of guidance counselors, a targeted approach to seniors who are at risk of graduating, improved internet connectivity, a layered mitigation plan to safely allow for students to return to in person learning, enhanced ventilation and cleaning in schools, free tutoring services in person and online, continued Social Emotional Learning (SEL) resources, continued Multi-Tiered System of Supports (MTSS) that supports students where they are at, strengthened professional development for students, and the district continued to deepen community partnerships to support children.

National studies on educational assessments following the COVID-19 pandemic show Manchester's consistency with national trends. Recognizing the impact, supplementary measures implemented by the Manchester school district include partnerships with GEAR UP, a program that supports low-income students to help prepare them to succeed in post-secondary education. Furthermore, the school district is utilizing data from standardized testing to help in fully understanding student growth as well as informing instruction moving forward.

---

<sup>1</sup> Cutler, D.M. & Lleras-Muney, A. (July 2006). *Education and health: evaluating theories and evidence*. National Bureau of Economic Research, Working Paper 12352. doi: 10.3386/w12352.

<sup>2</sup> <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/high-school-graduation>

In addition to these measures the district created a daily data dashboard that was specific to the Manchester school district. The dashboard was a decision making dashboard that was based on risk correlated to district action levels. This dashboard facilitated the driving forward of the strategic plan and helped the City of Manchester reach a renewed place where student health and safety were the main priority.

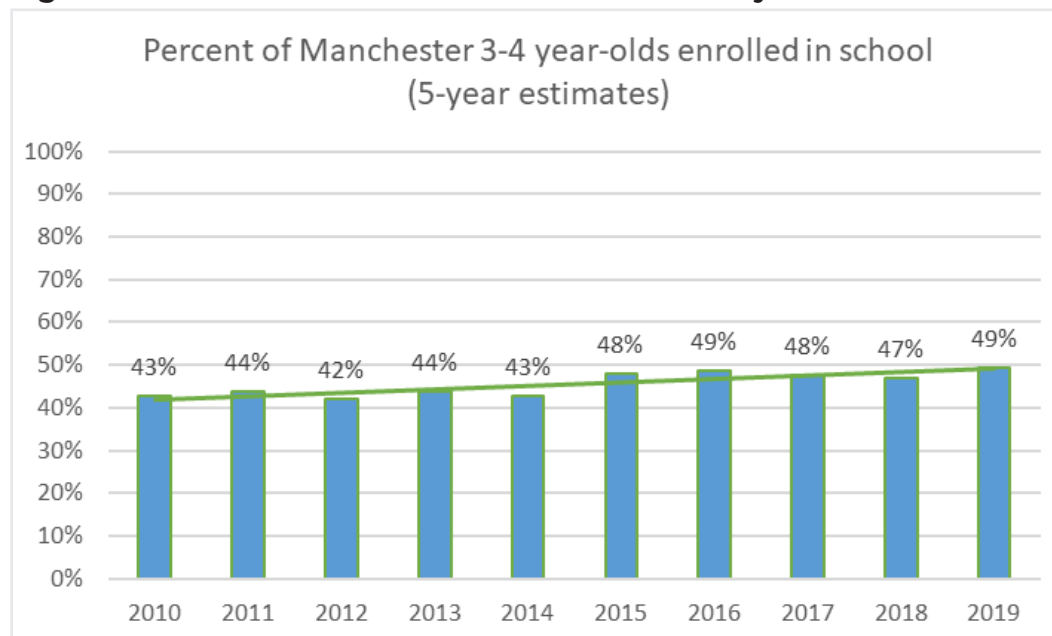
## Early Access to Learning and School Readiness

Improving educational outcomes starts with ensuring children enter school ready to learn. Participation in early education opportunities helps to minimize the gaps in school readiness related to income and race. Enrollment in Kindergarten, while not mandatory in the State of New Hampshire, ensures children have an opportunity to transition from the preschool to elementary school environments in a structured learning environment.

### Preschool Enrollment

Data from the American Community Survey suggest that the proportion of Manchester 3- and 4-year-olds who are enrolled in preschool has risen over the past decade, though the absolute gains are small (Figure 1). Between 2010 and 2019, the percent of children enrolled in preschool increased by approximately 16%, from 42.6% to 49.4%.

**Figure 1. Preschool Enrollment on Slow But Steady Rise in Manchester**



Source: American Community Survey, 5-year Estimates

Preschool enrollment rates vary widely among towns within the Greater Manchester Region, as illustrated in Table 1. In 2019, Goffstown and Hooksett had the highest rates of preschool enrollment, at about 80%, while Londonderry had the lowest enrollment rate at only 41.3%. Fewer than half of Manchester 3- to 4-year-olds were enrolled in preschool in 2019, falling below the averages for both the Greater Manchester Region and the State of New Hampshire as a whole. By comparison, preschool enrollment in the City of Nashua reached 59.7% that same year (data not included in table).



**Table 1. Fewer than Half of Manchester 3-4-year-olds Enrolled in Preschool**  
 Preschool Enrollment by Town in Greater Manchester Region, 2019 (5-year estimates)

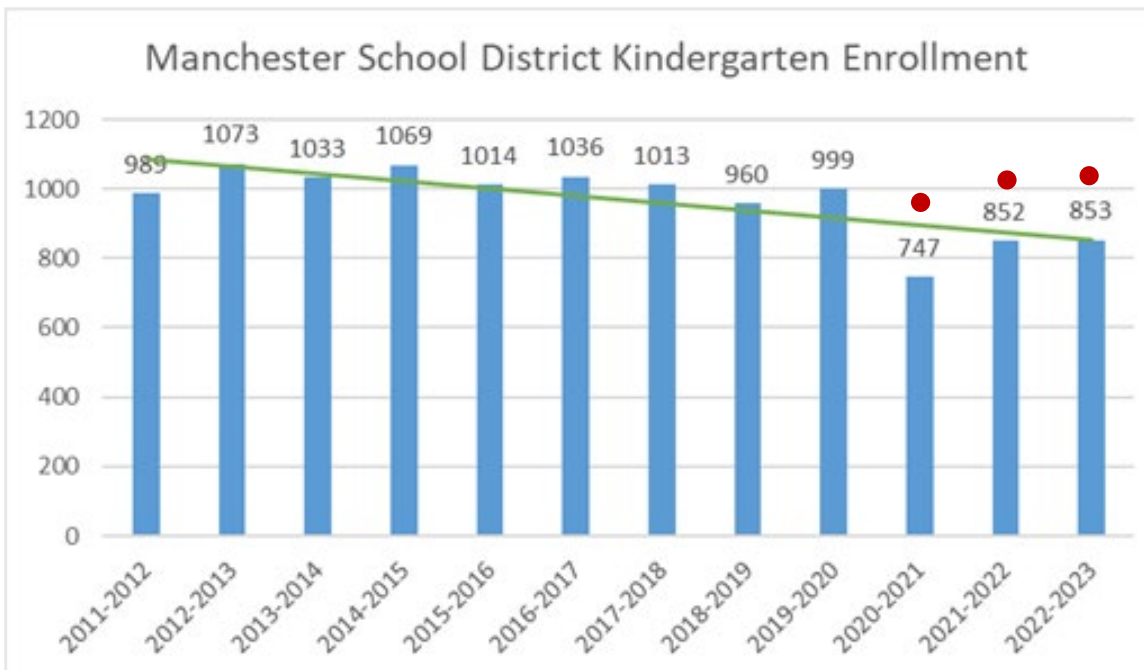
Town	Percent of 3-4 Year-Olds Enrolled in School
Manchester	49.4%
Auburn	55.7%
Bedford	49.2%
Candia	59.6%
Deerfield	59.8%
Goffstown	80.0%
Hooksett	79.5%
New Boston	57.7%
Londonderry	41.3%
Nashua	75.9%
State of NH	53.1%

Source: American Community Survey, 5-year Estimates

### Kindergarten Enrollment

While all New Hampshire school districts are required to offer at least part-time kindergarten to children aged 5 and up, attendance is not mandatory. Not surprisingly, school districts across the state saw dramatic drops in kindergarten enrollment because of the COVID-19 pandemic. In Manchester, the number of students enrolled in kindergarten dropped by more than 25% in 2020-2021 compared with 2019-2020 (Figure 2). While numbers rebounded somewhat during the current school year, they have not returned to pre-pandemic levels.

**Figure 2. Manchester School District Kindergarten Enrollment**



**COVID-19  
 Pandemic  
 Period**

Source: NH Department of Education

## Academic Growth

### 3<sup>rd</sup> Grade English Language Arts (ELA) Proficiency

The percent of students who are reading on grade-level by Grade 3 is a widely accepted indicator of future academic achievement. Third grade marks the transition when children switch from learning to read, to reading to learn.<sup>3</sup> As such, children who reach fourth grade without reading proficiency are more likely than others to struggle academically.

The data in Figure 3 indicate that 3<sup>rd</sup> grade ELA proficiency is trending in the wrong direction in Manchester. Between the 2015-2016 and 2020-2021 school years, the percent of 3<sup>rd</sup> graders who scored at or above proficient in ELA declined from 29% to 19%, a drop of nearly 35%.

While assessment data for 2019-2020 are not available due to COVID-19 restrictions, numerous studies have shown that pandemic-related school closures had a negative impact on school achievement, particularly for younger students, and likely caused a widening in the achievement gap for students living in poverty.<sup>4</sup>

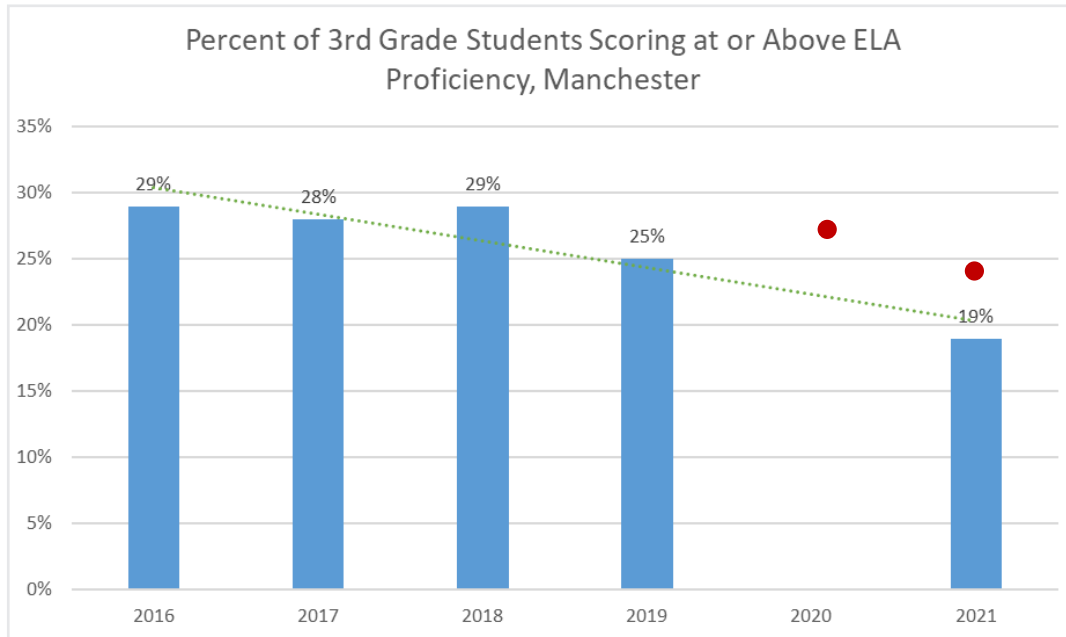
*According to the City Health Dashboard, Manchester's 3<sup>rd</sup> graders scored, on average, at a 1.4-grade reading level in 2017-2018. Male students scored at the 1<sup>st</sup>-grade level, while female students scored close to 2<sup>nd</sup>-grade level.*

<sup>3</sup> <https://cityhealthdashboard.com/metric/15> achievement: a systematic review. *Frontiers in Psychology*, 16, 1-8.

<sup>4</sup> Hammerstein, S., König, C., Dreisorner, T., & Frey, A. (2021). Effects of COVID-19-related school closures on student



**Figure 3. Manchester 3<sup>rd</sup> Grade ELA proficiency down 35% since 2016**



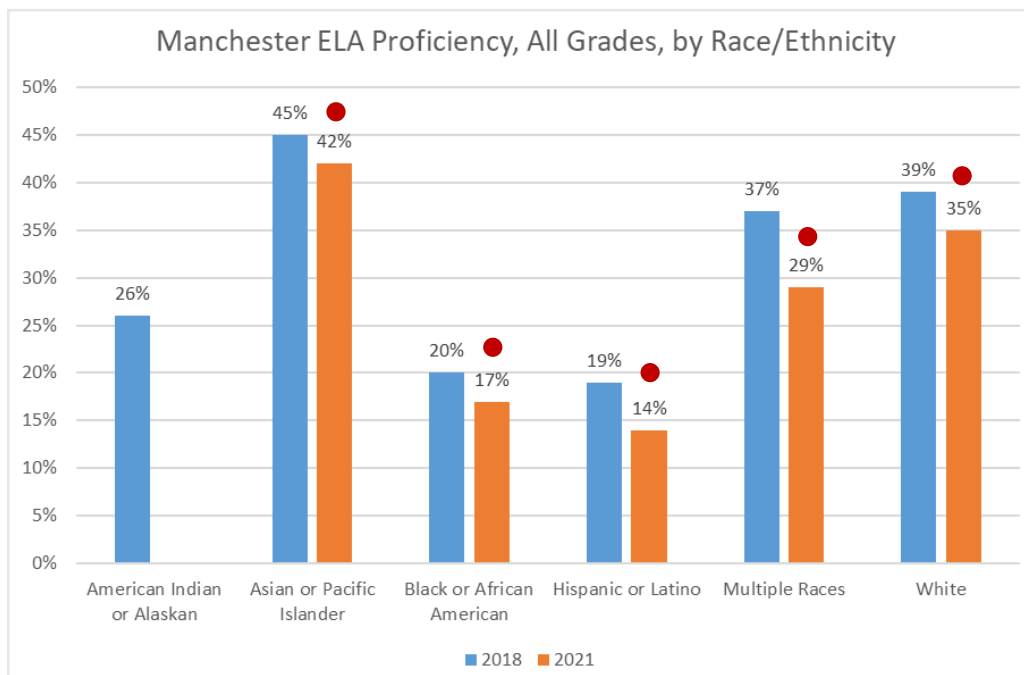
**COVID-19  
Pandemic  
Period**

Source: NH Department of Education

\*data unavailable for 2020 due to pandemic school closures

Figure 4 shows the racial/ethnic differences in ELA proficiency among students in all grades in Manchester between 2018 and 2021. At both time points, Asian/Pacific Islander and White students have the highest levels of ELA proficiency, while Black and Hispanic/Latino students have the lowest levels of proficiency. The gap in achievement between white and black students increased from 48.7% in 2018 to 51.4% in 2021, while the gap between white and Hispanic/Latino students increased from 51.3% to 60.0%

**Figure 4. Racial/Ethnic Differences in ELA Proficiency Expanding**



**COVID-19  
Pandemic  
Period**

Source: NH Department of Education

\*Note: data for American Indian/Alaskan students suppressed in 2021 due to low numbers

## Reading and Math Proficiency

Seventh grade math proficiency is another important predictor of later academic growth and economic stability.<sup>5</sup> According to the Bureau of Labor and Statistics, students who do well in math are more likely to graduate from a 4-year college and achieve financial success.<sup>6</sup>

As Table 2 demonstrates, Manchester students are scoring well below students in other Greater Manchester towns on both 3rd grade ELA and 7th grade math proficiency tests. For example, students in Bedford, Deerfield, Goffstown, Hooksett and Londonderry are achieving 3rd grade ELA proficiency at or above state averages. Students in Auburn, Bedford, Candia, and Hooksett are achieving 7th grade math proficiency above the state rate of 47%. By comparison, Manchester 3rd graders were less than half as likely to score proficient in ELA as students in the State of New Hampshire as a whole. Manchester 7th graders were less than one-quarter as likely as students across the state to score proficient at math.

**Table 2. Manchester Students Score Well Below State Average on ELA, Math Proficiency Tests**

Town	ELA Proficiency, 3 <sup>rd</sup> Grade	Math Proficiency, 7 <sup>th</sup> Grade
Manchester	19%	12%
Auburn	46%	60%
Bedford	76%	64%
Candia	50%	68%
Deerfield	58%	44%
Goffstown	52%	41%
Hooksett	52%	50%
New Boston	50%	N/A
Londonderry	52%	37%
Nashua	30%	23%
State of NH	52%	47%

Source: NH Department of Education

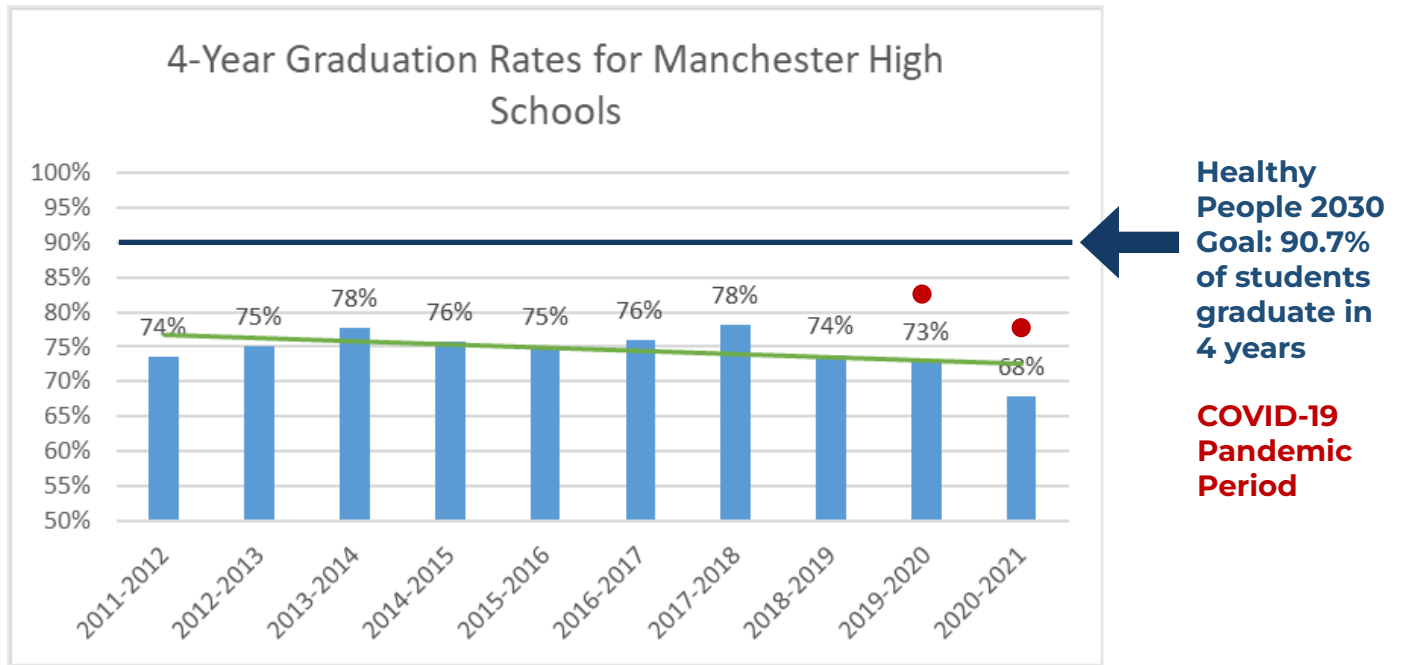
## On-time Graduation

According to Figure 5, high school graduation rates in Manchester have been on the decline for several years. While this trend was apparent before the onset of the COVID-19 pandemic, the larger-than-predicted drop in graduation rates between 2019-20 and 2020-21 suggest that the pandemic likely exacerbated an already negative trend.

<sup>5</sup> <https://www.iyi.org/wp-content/uploads/2021/06/EducationSpotlight.pdf>

<sup>6</sup> <https://www.mathnasium.com/math-proficiency-predicts-financial-success>

**Figure 5. Manchester On-Time Graduation Rates Down for Fourth Year in a Row**

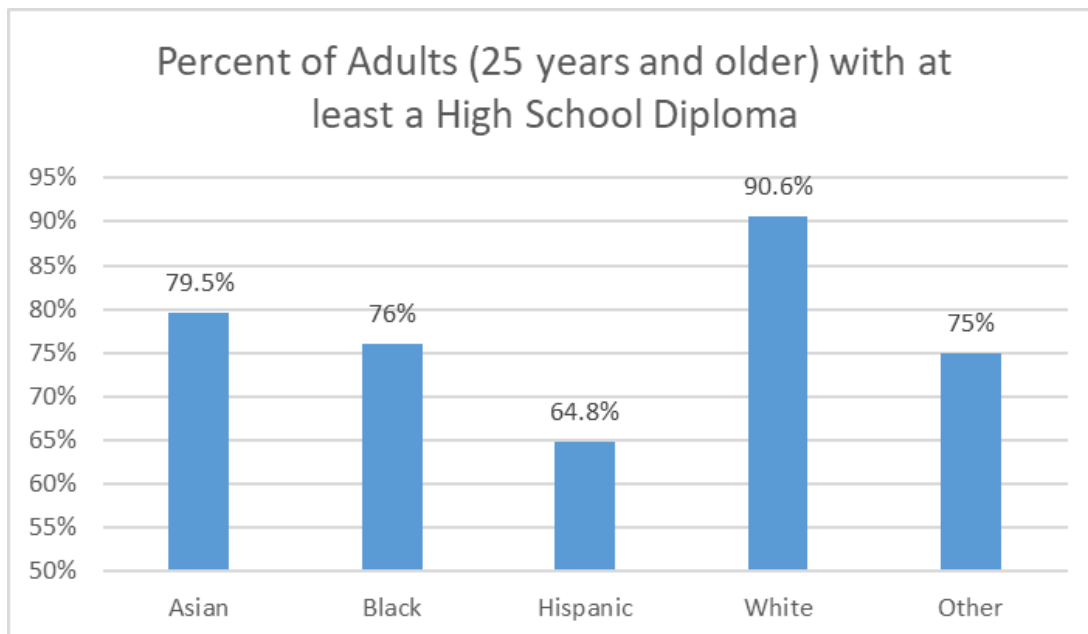


Source: NH Department of Education

### High School Completion

In 2020, the high school completion rate (percent of adults aged 25 years or older with at least a high school diploma or equivalent) was 87.5% in Manchester. However, this rate varied widely among racial and ethnic groups, as achievement barriers contributed to 64.8% of Hispanic adults completing high school compared with 90.6% of white adults (Figure 6). Overall, Manchester’s high school completion rate was similar to the average for the 500 largest cities in the US (88.5%), but lower than Nashua’s rate of 91.2% in 2020.

**Figure 6. Manchester Mirrors National Disparities in High School Completion by Race/Ethnicity**



Source: City Health Dashboard



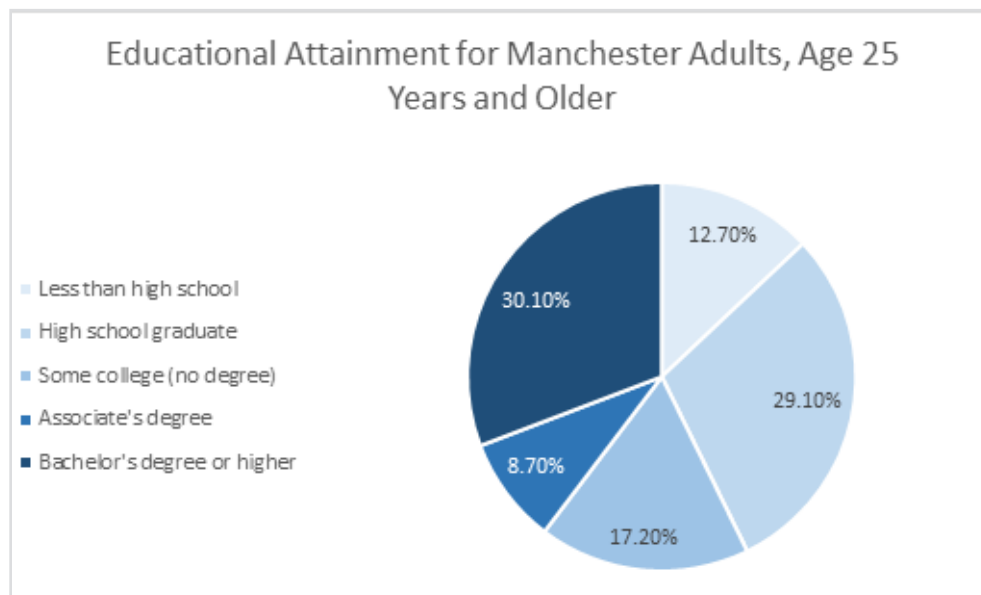
## Workforce Readiness and Success

### Post-secondary Education

According to the US Bureau of Labor Statistics, workers with a bachelor’s degree earned an average of \$524 per week more than those with only a high school diploma or equivalent in 2020.<sup>7</sup> Moreover, a study published by the Center for Society and Health in 2014 demonstrated clear links between higher education and longer life expectancy, lower rates of chronic disease, fewer health risk factors, and a lower likelihood of diminished physical abilities or disabilities.<sup>8</sup>

In 2019, a little more than 30% of Manchester adults aged 25 years and older had a bachelor’s degree or higher level of educational attainment, compared with 37% of adults in the State of New Hampshire as a whole (Figure 7). The proportion of Manchester adults with less than a high school diploma or equivalent was nearly twice as high as the state rate in 2019, at 12.7% and 6.9%, respectively. By comparison, 36.2% of Nashua adults had a bachelor’s degree or higher and 9.2% had less than a high school diploma that same year.

**Figure 7. Fewer Than One-Third of Manchester Adults Have Bachelor Degree or Higher**



Source: US Census Bureau, American Community Survey, 2019 5-year Estimates

<sup>7</sup> <https://www.bls.gov/emp/chart-unemployment-earnings-education.htm>

<sup>8</sup> <file:///C:/Users/mgraham/Downloads/rwjf409883.pdf>

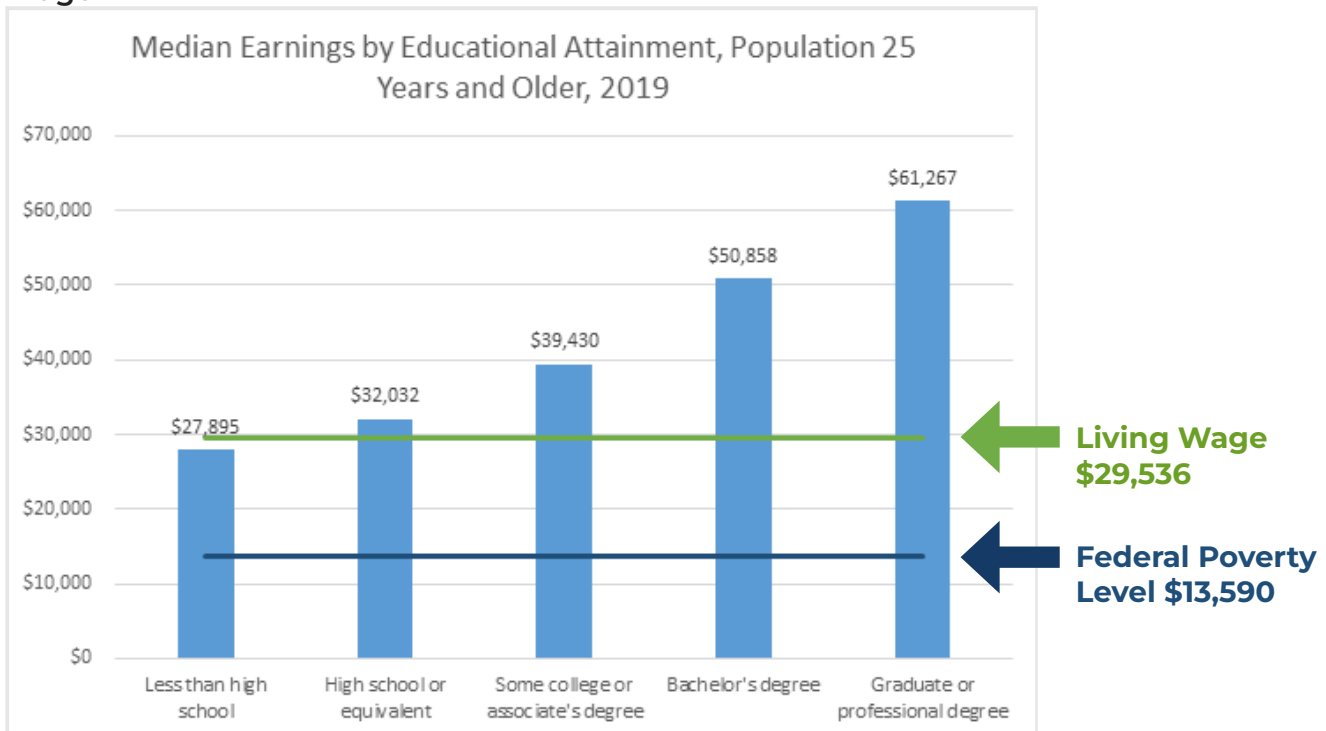
## Wages and Income

The Living Wage calculator, created by the Massachusetts Institute of Technology (MIT), uses publicly available data to estimate the current cost of living in a community. They define a living wage as one that “allows residents to meet minimum standards of living,” including adequate shelter, food, healthcare, transportation, and other basic needs.<sup>9</sup> According to the calculator, the current living wage for an individual living alone in Manchester is \$16.96/hour or \$35,276 annually. For a Manchester family of four with 2 adults working and 2 children, the living wage rises to \$50,502 for each adult.

In contrast to the living wage, the Federal Poverty Level is calculated based only on the cost of a “minimum food diet” and is used as the threshold for eligibility for certain welfare benefits.<sup>10</sup> The Federal Poverty Level has been set at \$13,590 for a single adult in 2022, and a combined household income of \$27,750 for a family of four.<sup>11</sup>

As illustrated in Figure 8, the average Manchester adult with less than a high school education earned below a living wage in 2019. Adults with a high school diploma or equivalent but no college earned just 8% above a living wage. The greatest jump in earnings was between those with some college and those with a bachelor’s degree, with the latter group earning nearly 30% more than the former.

**Figure 8. Manchester Adults with Less Than High School Diploma Earning Below Living Wage**



Sources: US Census Bureau, American Community Survey, 2019 5-year Estimates; Living Wage Calculator, <https://livingwage.mit.edu/metros/31700>

<sup>9</sup> <https://livingwage.mit.edu/pages/about>

<sup>10</sup> <https://www.irp.wisc.edu/resources/how-is-poverty-measured/>

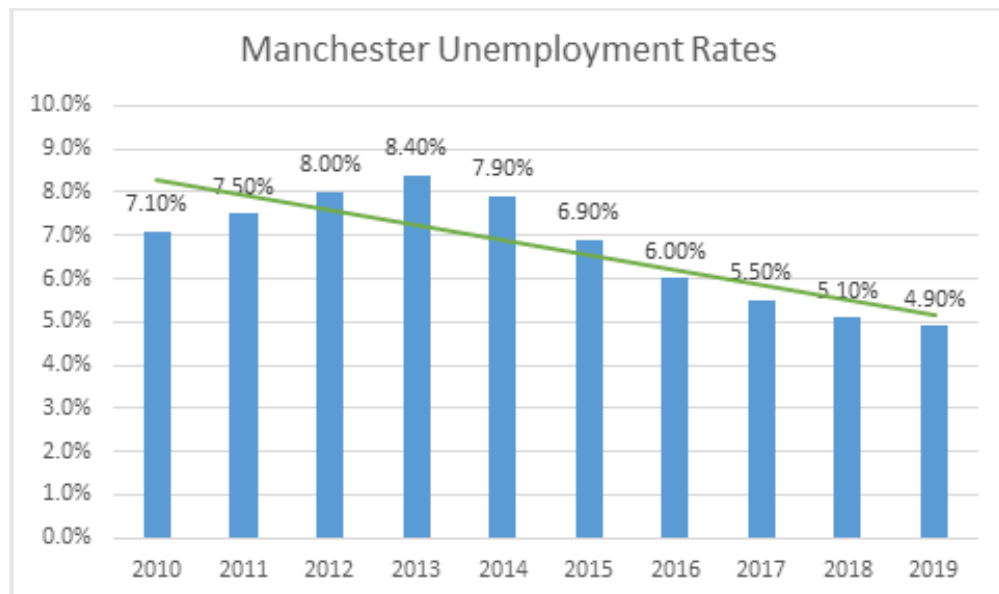
<sup>11</sup> <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>

## Unemployment

According to the US Bureau of Labor Statistics, as individuals achieve higher levels of education, both wages and employment rates improve.<sup>12</sup> In 2015, the rate of unemployment was 16 times higher across the US among individuals with less than a high school diploma or equivalent than in those with a professional degree.

As shown in Figure 9, unemployment has been on a decline since 2013 in Manchester, following similar trends nationally.<sup>13</sup> As of October 2021, unemployment in the city was only 2.3%, much lower than the average rate of 4.6% across the 500 largest cities in the US.<sup>14</sup>

**Figure 9. Manchester Unemployment Rates by Race/Ethnicity**



Source: US Census Bureau, American Community Survey, 2019 5-year Estimates

Despite these encouraging trends, Manchester residents remain more likely to be unemployed compared with residents of other towns in the Greater Manchester Region (Table 3). There is even greater geographic variability within the City of Manchester, with unemployment rates ranging from less than 1% in census tracts 1.01, 7 and 12, to over 10% in census tracts 16, 17, 19, and 21—all located within the center of the city (Figure 10).

<sup>12</sup> <https://www.bls.gov/careeroutlook/2016/data-on-display/education-matters.htm>

<sup>13</sup> <https://www.bls.gov/charts/employment-situation/civilian-unemployment-rate.htm>

<sup>14</sup> <https://www.cityhealthdashboard.com/nh/manchester/metric-detail?metric=1483&metricYearRange=10-2021&dataRange=national>

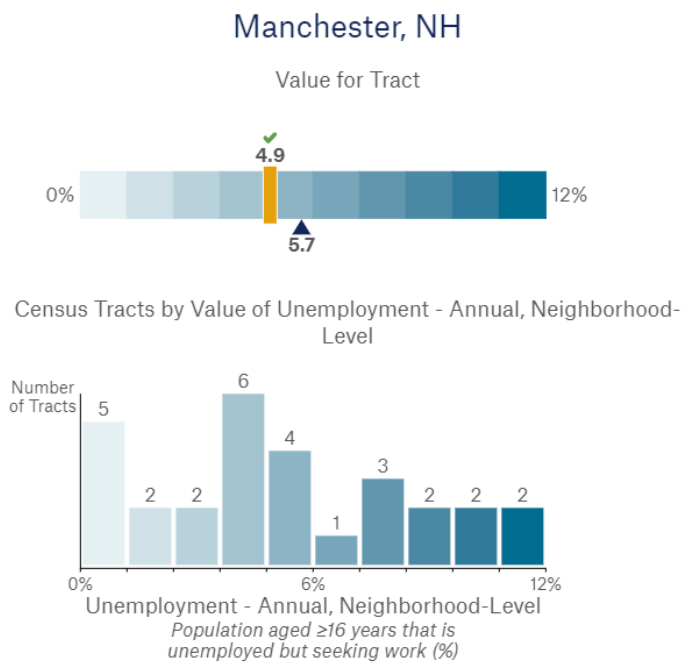
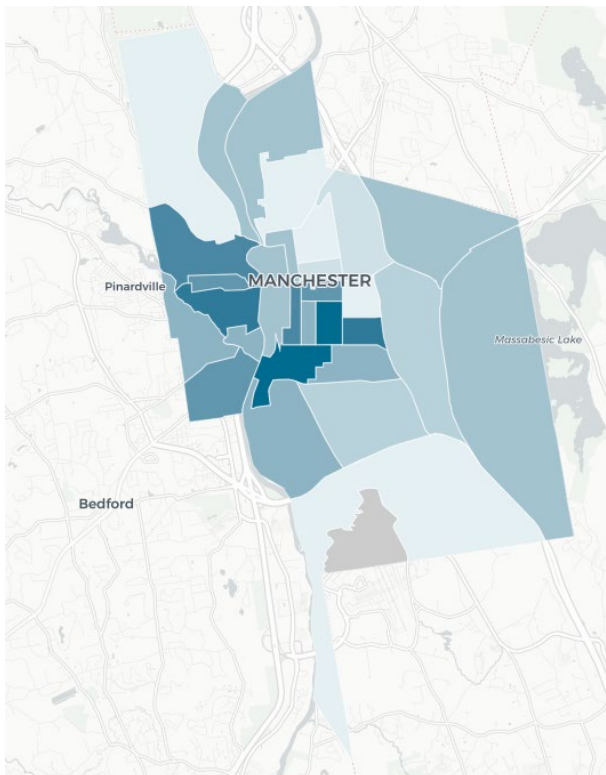


**Table 3. Unemployment Low, but Higher than State Average in Manchester**  
 Unemployment in the Greater Manchester Region, 2019 5-year Estimates

Town	Percent of Civilian Labor Force, 16 years and older, Unemployed
Manchester	4.9%
Auburn	2.7%
Bedford	3.5%
Candia	2.1%
Deerfield	2.0%
Goffstown	3.2%
Hooksett	3.9%
New Boston	1.3%
Londonderry	3.0%
Nashua	4.4%
State of NH	3.6%

Source: US Census Bureau, American Community Survey, 2019 5-year Estimates

**Figure 10. Manchester Unemployment Rates by Census Tract**  
 Manchester Annual Unemployment Rate by Census Tract, 2019 5-year Estimates

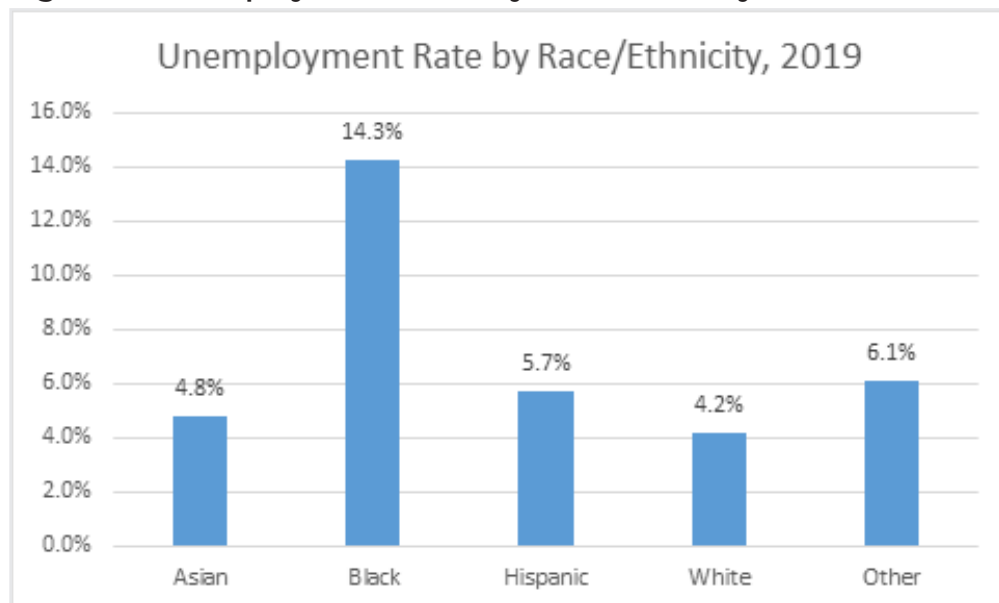


Source: City Health Dashboard

According to the National Equity Atlas, “in an equitable economy, everyone who wants to work would have a good job.”<sup>15</sup> However, there is clear racial and ethnic variation in unemployment, both nationally and in Manchester.

Figure 11 shows annual unemployment by race/ethnicity in Manchester in 2019. Persistent racial inequalities contributed to Black residents being twice as likely as any other racial or ethnic group to be unemployed in 2019.

**Figure 11. Unemployment Rates by Race/Ethnicity**



Source: City Health Dashboard

## Attendance

### Average Daily Attendance

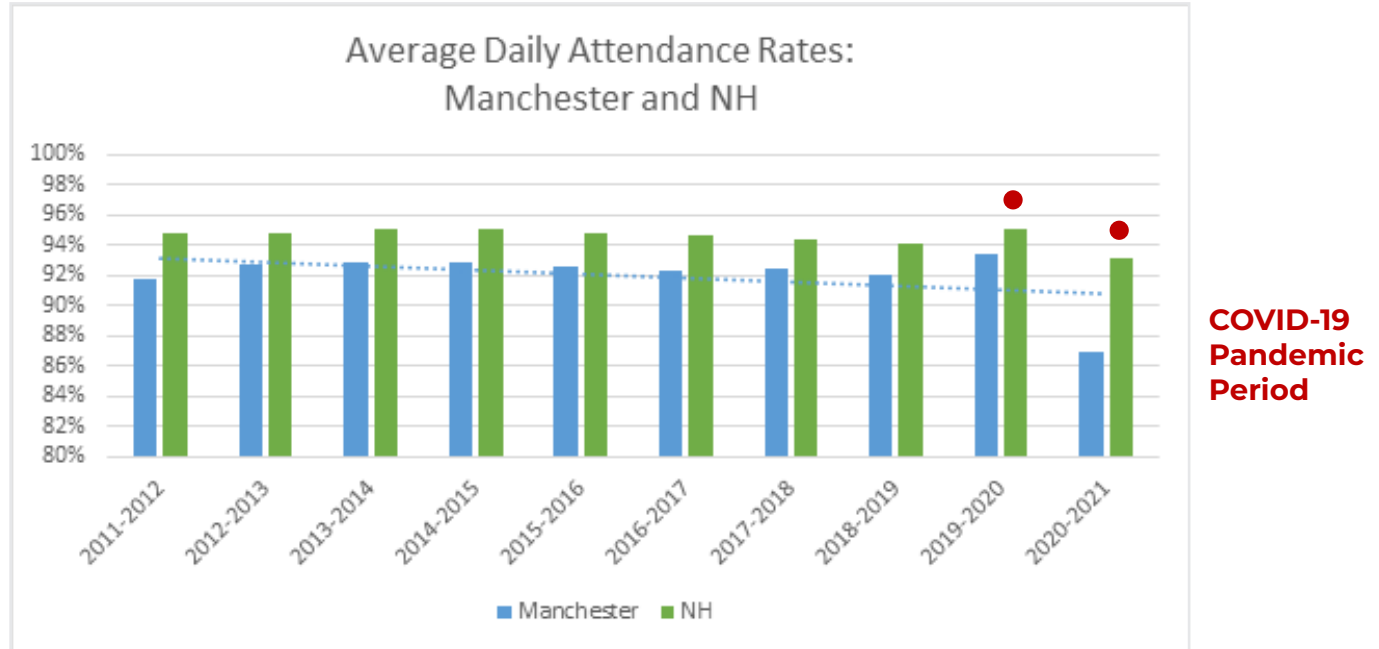
A missed day of school is a missed day of learning. Young children who are frequently absent from school are less likely to read at grade level and risk falling behind both academically and socially. Older students who are chronically absent are at increased risk for substance use, violence, and delinquency.<sup>16</sup>

Table 4 shows average daily attendance rates for Manchester schools compared with schools statewide for the past 10 school years. While there is no doubt that the recent decline in school attendance across the state is the result of the COVID-19 pandemic, students in Manchester are consistently absent from school more often than the state average.

<sup>15</sup> <https://nationalequityatlas.org/indicators/Unemployment#/>

<sup>16</sup> <https://www.cityhealthdashboard.com/metric/52>

**Table 4. Manchester Schools See Dramatic Drop in Daily Attendance Following the COVID-19 Pandemic**



Source: NH Department of Education

Table 5 shows the average daily attendance rates reported for schools in the Greater Manchester Region during 2020-2021. While Bedford and New Boston schools maintained attendance levels at rates of 97% or higher, Manchester’s rate was only 87%, well below the state average of 93.1% and Nashua’s rate of 90.5%. While it is likely this difference is the result of difficulties with remote learning during school closures, it is nevertheless an indicator that, without intervention, gaps in learning outcomes may widen between Manchester students and those attending schools in other towns in the region.

**Table 5. Manchester Schools Have the Lowest Attendance in Greater Manchester Region**  
Average Daily Attendance Rate in the Greater Manchester Region, 2020-21

Town	Average Daily Attendance Rate
Manchester	87.0%
Auburn	95.5%
Bedford	97.6%
Candia	95.0%
Deerfield	94.2%
Goffstown	92.9%
Hooksett	95.6%
New Boston	97.0%
Londonderry	95.1%
Nashua	90.5%
State of NH	93.1%

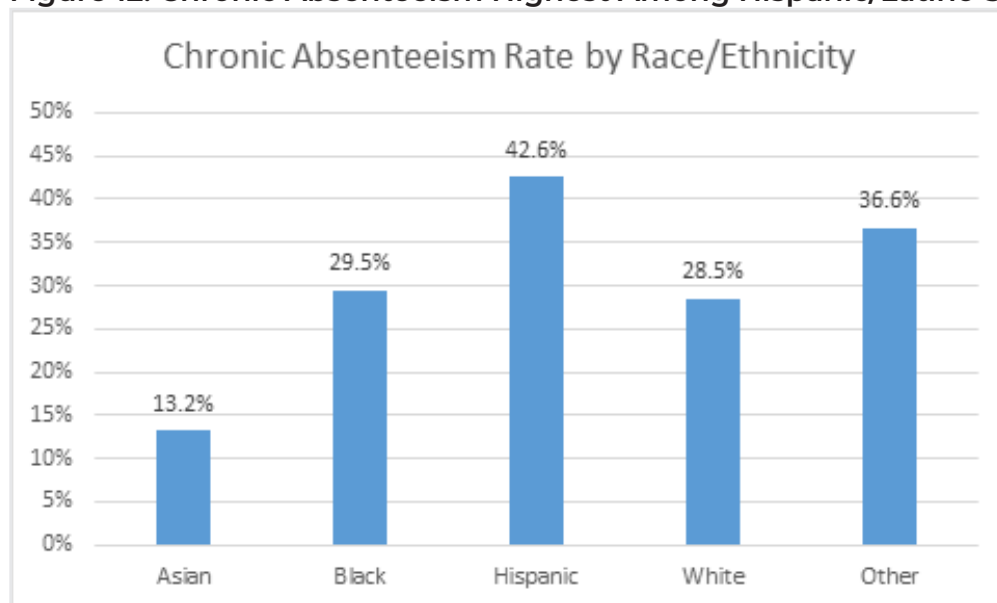
Source: NH Department of Education

## Chronic Absenteeism

Studies show that students who have regular school attendance achieve at higher levels than those who are chronically absent (15 or more missed days of school in an academic year). While there are many causes of chronic absenteeism, systemic inequities by race and ethnicity play an important role.<sup>17</sup> In turn, frequent absences lead to widening gaps in educational achievement between racial/ethnic groups.

According to City Health Dashboard, 31.5% of Manchester's public-school students were chronically absent in 2018. By comparison, only 18.3% of students across the country's largest cities and 19.7% of Nashua students were chronically absent that year. Figure 12 shows that chronic absenteeism was much higher among Hispanic and other racial/ethnic groups similar between White and Black students, and lowest among Asian students.

**Figure 12. Chronic Absenteeism Highest Among Hispanic/Latino Students**



Source: City Health Dashboard

## Free/Reduced School Lunch Eligibility

The National School Lunch Program provides subsidized meals to income-eligible students each school day. The proportion of students who qualify for this program is often used as an indicator of overall poverty within a school district. Children with household incomes at or below 130% of the Federal Poverty Level are eligible for free school lunch, while those with household incomes between 130% and 185% of the Federal Poverty Level are eligible for reduced-price lunch.<sup>18</sup> This measure is also a strong indicator of food insecurity, discussed in Chapter 4 of this report.

The percentage of students eligible for free or reduced-price school lunch is substantially higher in Manchester than in other districts within the Greater Manchester Region (Table 6). In fact, Manchester's rate is more than twice that in every district in the region.

<sup>17</sup> <https://www.cityyear.org/national/stories/education/how-a-focus-on-equity-can-help-address-chronic-absenteeism-in-schools/>

<sup>18</sup> <https://fns-prod.azureedge.net/sites/default/files/resource-files/NSLPFactSheet.pdf>

**Table 6. Nearly Half of Manchester Students Qualify for Free/Reduced Price Meals**  
 Free/Reduced School Lunch Eligibility by District in Greater Manchester Region, 2021-22

Town	% of Students Eligible
Manchester	44.0%
Auburn	5.9%
Bedford	4.5%
Candia	13.8%
Deerfield	7.9%
Goffstown	9.1%
Hooksett	15.0%
New Boston	6.6%
Londonderry	11.1%
Nashua	35.6%
State of NH	20.9%

Source: NH Department of Education

## WHAT DO MANCHESTER RESIDENTS THINK?

Of 204 Manchester residents surveyed, 89.4% said that it is “very important” for Manchester to take action on improving educational outcomes, including ensuring children are ready for school, students graduate on-time, and the community has high paying jobs.

Key stakeholders interviewed said that, while things are improving, Manchester public schools remain underfunded. They suggested looking to the Community Schools Model, already articulated in the school district’s strategic plan, as an option for addressing many of the priority areas described in this report.

## Community Spotlight

### LAUNCH Manchester

Amoskeag Health serves as the lead agency for LAUNCH Manchester, an early childhood initiative that promotes the overall health and well-being of children birth through 8 years and their families, utilizing a cross-sector team focused on improving access to high-quality early education and care, empowering families, identifying and mitigating the effects of Adverse Childhood Experiences, and improving access to health, behavioral health, and specialized medical services. A current priority of LAUNCH Manchester is the Early Learning Collaborative, a partnership among early childhood programs, both public (Manchester School District) and private, in Greater Manchester.



The Collaborative encourages child care and preschool programs to work together, share resources and training, connect with the school district on screenings and transitions and prepare all young children to enter kindergarten ready to learn. Its current key focus is implementation of the Pyramid Model, an evidence-based practice that promotes social-emotional competence, preventing challenging behavior, and addressing challenging behavior appropriately, if it does occur. The programs are able to rely on each other and work together to solve everyday problems that each of them is dealing with, including staffing shortages, waitlists for enrollment and the new Quality Rating and Improvement System.

## Manchester Proud

Manchester Proud is a city-wide movement to unite and engage Manchester in the making of exceptional public schools. We believe that great public schools are essential to all of our futures and can only be achieved through broad and sustained community support.



Since Manchester Proud's founding in 2018, more than 10,000 voices and 300 working volunteers have contributed to the creation and implementation of [Manchester School District's Strategic Plan](#), Our Community's Plan for Manchester's Future of Learning: Excellence and Equity for ALL Learners.

Today, in partnership with the Manchester School District, Manchester Proud's work continues:

- ▶ Making progress on the strategic plan's goals – to Grow Our Learners, Grow Our Educators, and Grow Our System;
- ▶ Cultivating and aligning school-community partnerships with our youth serving organizations and businesses;
- ▶ Building The Compass, Manchester Proud's community portal with a broad range of student and family services and supports: [www.manchesterproudcompass.org](http://www.manchesterproudcompass.org);
- ▶ Planning CelebratED! 2022, our second annual city-wide festival to celebrate our public schools and community.

To learn more or become involved, please visit: [www.manchesterproud.org](http://www.manchesterproud.org)



# HEALTH BEHAVIORS



## PRIORITY: REDUCE AND PREVENT SUBSTANCE MISUSE

Health behaviors account for 30% of an individual's health status, according to research conducted through the County Health Rankings and Roadmaps project.<sup>1</sup> Negative health behaviors, such as tobacco, alcohol, and drug use, account for as many as 40% of premature deaths in the US each year.<sup>2</sup>

The opioid crisis remains, rightfully, at the forefront of public health issues in Manchester as well as the country as a whole. The city has received national attention as “ground zero” for opioid-related deaths in the US.<sup>3</sup>

Despite this fact, tobacco use is the leading cause of preventable deaths in the US, accounting for approximately 1 in every 5 preventable deaths in the US each year.<sup>4</sup> Smoking reduces average life expectancy by 10 years, but smoking cessation is effective at reducing the risk of dying from tobacco-related illness by up to 90%.<sup>5</sup>

As the third leading cause of preventable deaths, excessive alcohol use causes more than 95,000 deaths each year in the US. More than half of these deaths are due to health effects of alcohol misuse over time, including cancer, liver disease, and heart disease.<sup>6</sup>

### Opioid Overdose

Substantial gains have been made in Manchester, New Hampshire, and across the US in the reduction of opioid-related deaths through widespread harm-reduction interventions in the past 5 years. Unfortunately, opioid overdose deaths increased significantly across the US because of the COVID-19 pandemic. This increase, influenced by decades of concentrated poverty and both racial and economic segregation, was most dramatic in “poor, urban neighborhoods, affecting Black and Hispanic communities,” according to a recent report in the *Journal of Urban Health*.<sup>7</sup>

---

<sup>1</sup> <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

<sup>2</sup> Committee on Population; Division of Behavioral and Social Sciences and Education; Board on Health Care Services; National Research Council; Institute of Medicine. *Measuring the Risks and Causes of Premature Death: Summary of Workshops*. Washington (DC): National Academies Press (US); 2015 Feb 24. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK279971/doi:10.17226/21656>

<sup>3</sup> <https://www.usnews.com/news/best-states/articles/2017-06-28/why-new-hampshire-has-one-of-the-highest-rates-of-opioid-related-deaths>

<sup>4</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2015 Aug 17].

<sup>5</sup> [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/health\\_effects/tobacco\\_related\\_mortality/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/index.htm)

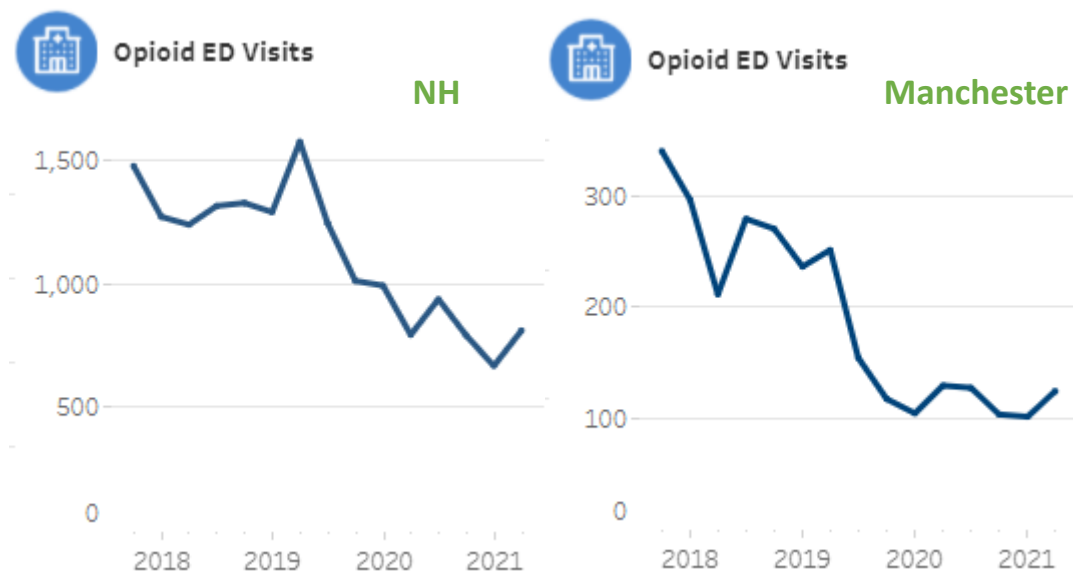
<sup>6</sup> <https://www.cdc.gov/alcohol/features/excessive-alcohol-deaths.html>

<sup>7</sup> Ghose R, Forati AM, Mantsch JR. Impact of the COVID-19 Pandemic on Opioid Overdose Deaths: a Spatiotemporal Analysis. *J Urban Health*. 2022 Feb 18:1–12. doi: 10.1007/s11524-022-00610-0. Epub ahead of print. PMID: 35181834; PMCID: PMC8856931.



Manchester, the largest city in the state, continues to be at the epicenter of New Hampshire's opioid crisis, with the highest number of deaths due to overdose in the state. Trends in opioid-related emergency department visits in Manchester reflect those across the state as a whole (Figure 1).

**Figure 1. Opioid-related Emergency Department Visits on the Rise Again in New Hampshire and Manchester**

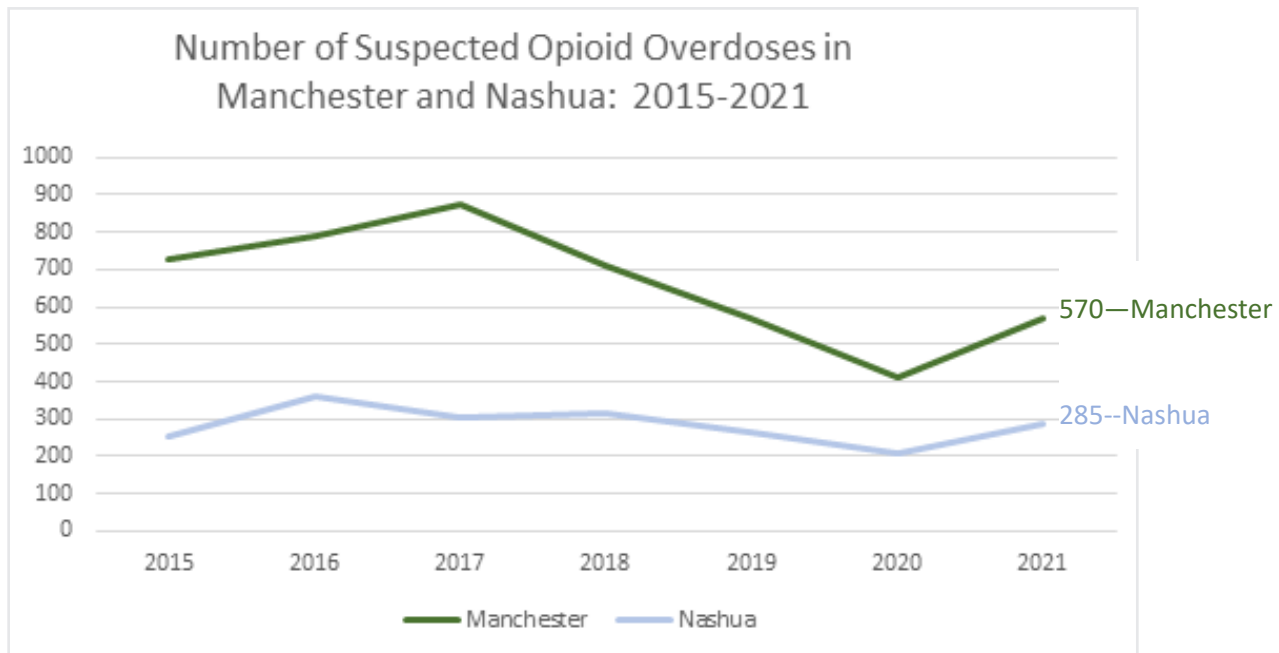


Source: NH Department of Health and Human Services

Rates of suspected opioid overdose are consistently two- to three-times higher in Manchester compared with Nashua, the city with the next highest rate of opioid overdoses in the State of New Hampshire (Figure 2). There were 161 more suspected opioid overdoses in Manchester in 2021 compared with 2020 -- a 39% increase. Individuals with suspected opioid overdoses in Manchester were three times more likely to be men than women (77% versus 23%, respectively), and had an average age of 39 years. Across both Manchester and Nashua, nearly half (49%) of all opioid overdoses were labeled as repeat encounters by first responders.



**Figure 2. Twice as Many Opioid Overdoses in Manchester than in Nashua in 2021**



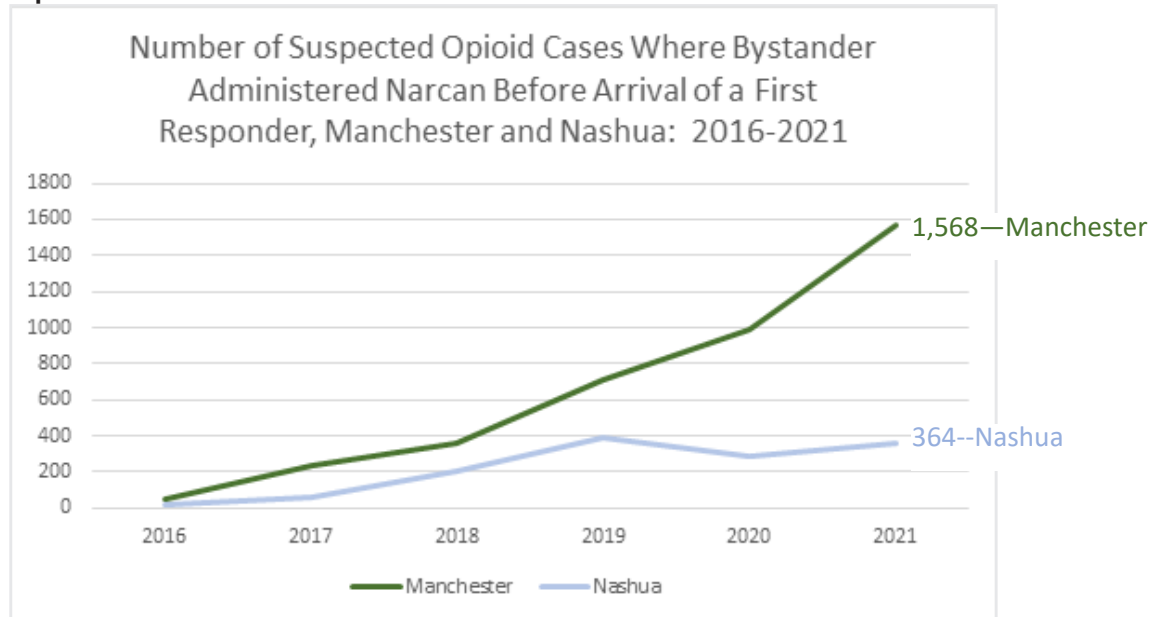
Source: American Medical Response

In 2021, bystanders administered Narcan (naloxone) in a third of all opioid overdoses in Manchester and Nashua combined. Narcan, often administered as a nasal spray, rapidly reverses the effects of opioids, including fentanyl, heroin, and prescription opioid medications. The CDC reports that approximately 27,000 opioid overdoses were reversed by bystanders administering Narcan between 1996 and 2014, demonstrating the impact of this harm-reduction measure.<sup>8</sup>

Figure 3 illustrates a sharp incline in public use of Narcan in cases of suspected opioid overdose in Manchester over the past 5 years. Between 2020 and 2021 alone, the use of Narcan by bystanders increased by more than 58% in Manchester. By comparison, Narcan use prior to the arrival of a first responder increased by only about 25% in Nashua during the same period.

<sup>8</sup> [https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm?s\\_cid=mm6423a2\\_e](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm?s_cid=mm6423a2_e)

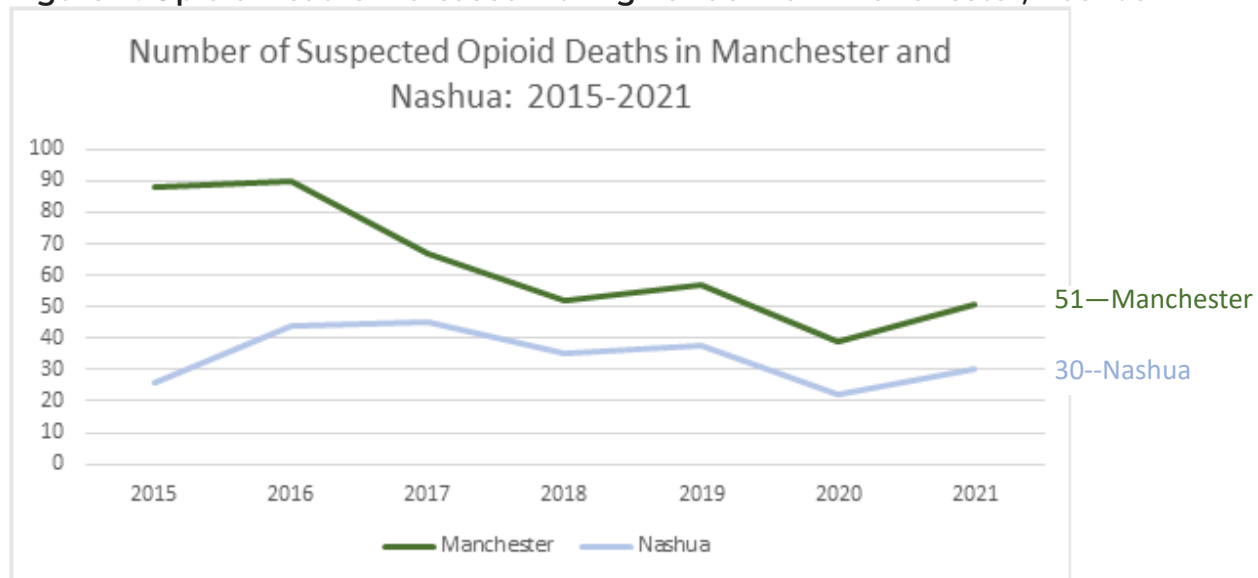
**Figure 3. Use of Narcan by a Bystander Increasing Dramatically in Manchester Suspected Opioid Overdose Cases**



Source: American Medical Response

Unfortunately, suspected opioid overdose deaths also increased in Manchester and Nashua between 2020 and 2021, marking an end to the steady decline in opioid-related deaths in both cities that occurred in the 4 previous years (Figure 4). Between 2020 and 2021, the number of suspected opioid deaths increased by 31% in Manchester and 36% in Nashua. Notably, from 2019 to 2020 in Manchester there was a 28% decrease in opioid overdoses and a 32% decrease in opioid overdose deaths. Additionally, from 2017 to 2019 there was a 34% decrease in opioid overdoses, and a 15% decrease in opioid overdose deaths in Manchester.

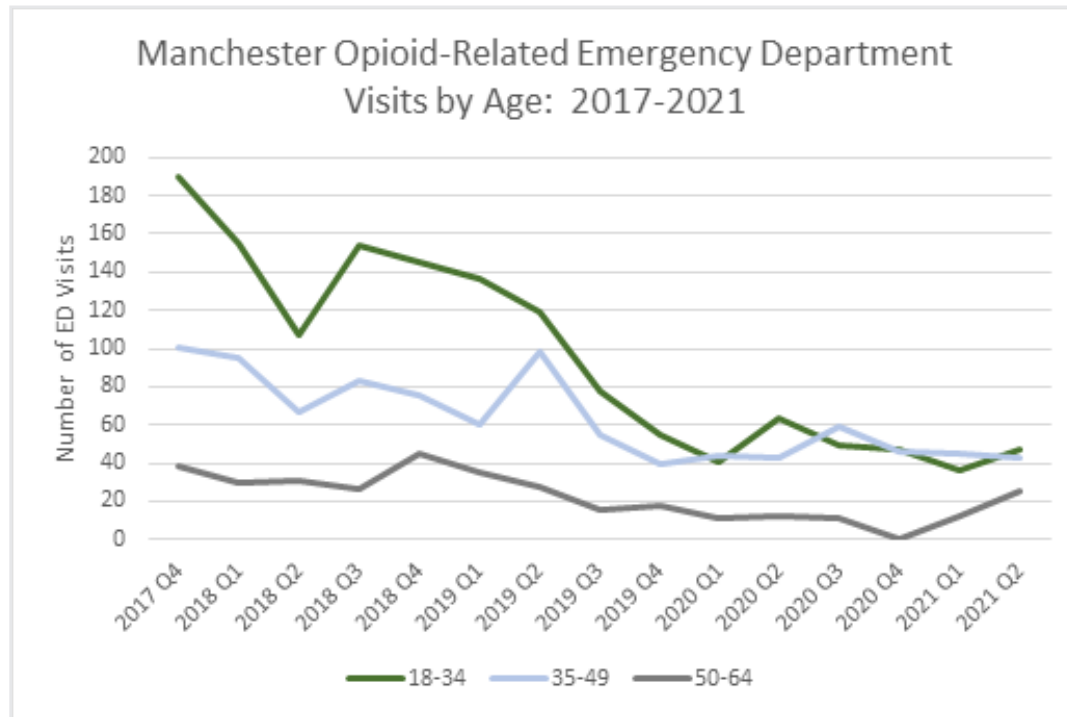
**Figure 4. Opioid Deaths Increased During Pandemic in Manchester, Nashua**



Source: American Medical Response

While most opioid-related deaths occur in the 25- to 54-year-old age group nationally, deaths among individuals aged 55 and older are on the rise.<sup>9</sup> In Manchester, the number of opioid-related emergency department visits in this older age group is on the rise, according to Figure 5. The absolute numbers of events are low, but the trend deserves attention as it may be an early indication of growing opioid-misuse concerns among seniors.

**Figure 5. Sharpest Increase in Opioid-Related ED Visits Among 50-64-year-olds in Manchester**



Source: NH Department of Health and Human Services

Both statewide and in Manchester, treatment for substance use disorder relies heavily on Medication-Assisted Treatment (Figure 6), which is considered the most effective treatment for opioid addiction.<sup>10</sup> According to the Substance Abuse and Mental Health Services Administration (SAMHSA), Medication-Assisted Therapy is a “whole patient” approach to the treatment of substance use disorder that includes medications to help reduce withdrawal and dependence symptoms in combination with both counseling and behavioral therapies.<sup>11</sup>

The relationship between overdoses and brain injury is being explored by the SUD/Brain Injury & Mental Health Task Force which was formed in 2019 by the Brain Injury Association of New Hampshire. During an overdose, the brain can be deprived of oxygen for several minutes,

<sup>9</sup> Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Multiple Cause of Death 1999-2020 on CDC WONDER Online Database. Data from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program.

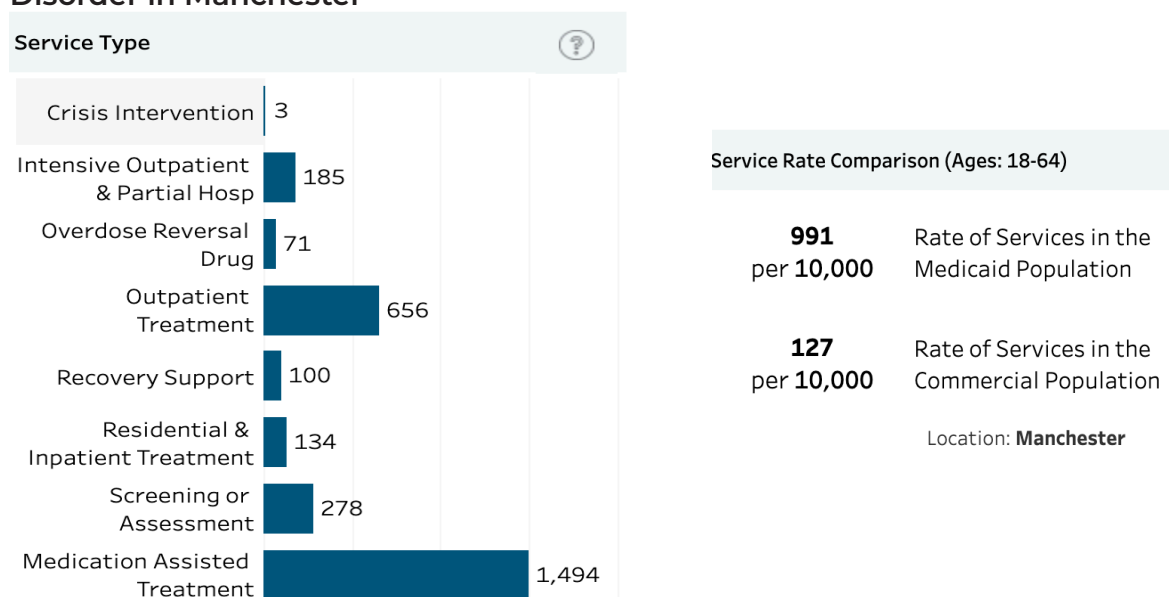
<sup>10</sup> National Academies of Sciences, Engineering, and Medicine, “Medications for Opioid Use Disorder Save Lives” (2019), <https://doi.org/10.17226/25310>.

<sup>11</sup> <https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions>

which can lead to brain injury.<sup>12</sup> If sustained, brain injuries following an overdose can alter recovery and treatment plans as well as an individual's cognitive function.

In Manchester, as well as the state as a whole, opioid use disorder treatment is primarily paid for through Medicaid, supporting calls for commercial insurance companies to play a stronger role in the fight against opioid addiction (Figure 6).<sup>13</sup> Recent increases in opioid-related ED visits, overdoses and deaths, will continue to stretch existing capacity limits on inpatient and outpatient treatment in New Hampshire. With Safe Station closing in Manchester in late 2021, the Doorway was opened to assist residents who would like to seek treatment for substance use. Manchester has several outreach teams including a partnership team between the Health Department and the Police Department which was formed to aid residents who have recently experienced an opioid overdose by offering support and recovery resources.

**Figure 6. Medication-Assisted Therapy Most Widely-Used Service for Substance Use Disorder in Manchester**



Source: NH Department of Health and Human Services

### Adolescent Drug Misuse: Illegal and Prescription Drugs

Adolescence is a critical period for the initiation of drug use, with higher risks of developing drug dependence compared with those who initiate use in adulthood.<sup>14</sup> As such, many drug abuse prevention programs target adolescents with the aim of delaying or preventing use.<sup>15</sup> Even occasional substance use by teens can impact brain development, increase participation in other risky health behaviors, and contribute to the development of high blood pressure and heart disease.<sup>16</sup>

<sup>12</sup> Brain Injury & Substance Use Disorder: "Understanding The Connection" PowerPoint Presentation, Brain Injury Association of New Hampshire

<sup>13</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7546457/>

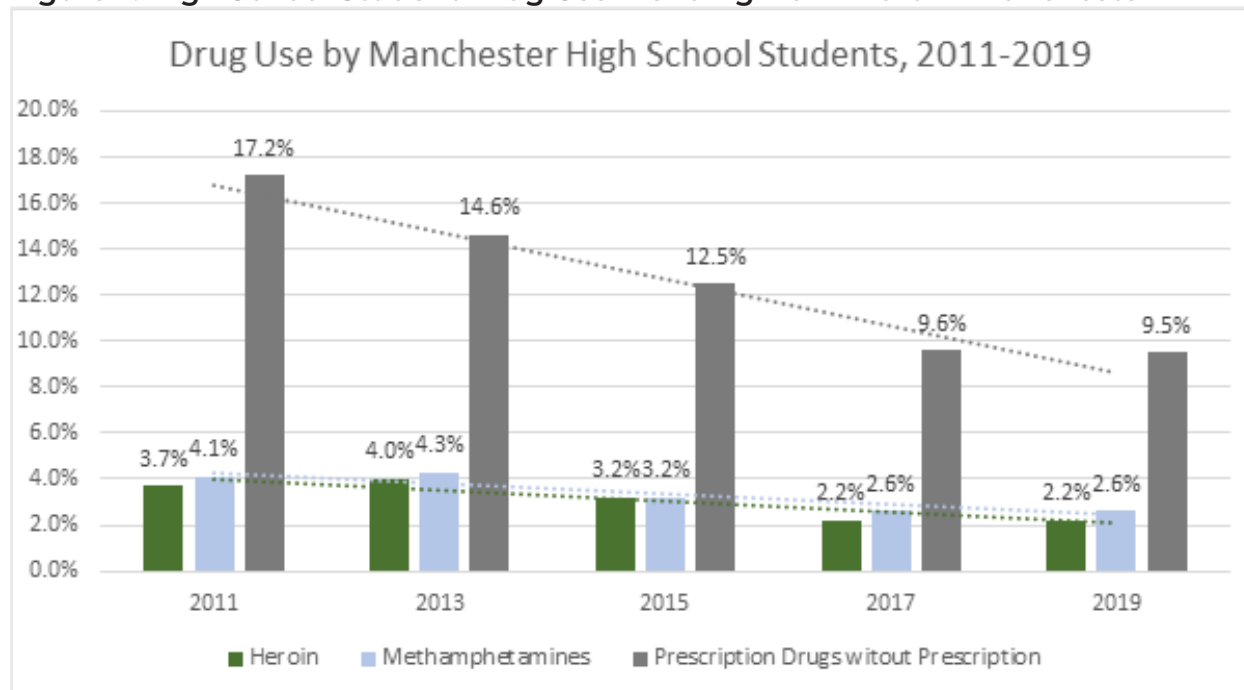
<sup>14</sup> [https://www.samhsa.gov/data/sites/default/files/WebFiles\\_TEDS\\_SR142\\_AgeatInit\\_07-10-14/TEDS-SR142-AgeatInit-2014.pdf](https://www.samhsa.gov/data/sites/default/files/WebFiles_TEDS_SR142_AgeatInit_07-10-14/TEDS-SR142-AgeatInit-2014.pdf)

<sup>15</sup> <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0225384&type=printable>

<sup>16</sup> <https://www.cdc.gov/hcbddd/fasd/features/teen-substance-use.html>

The percentage of Manchester high school students reporting use of illegal and prescription drugs has declined steadily in the past decade, as shown by the trend lines in Figure 7. Between 2011 and 2019, the proportion of high school students reporting heroin use dropped by more than 40%, from 3.7% to 2.2%. The decline in reported methamphetamine use was similar, at 37% during the same period. While use of prescription drugs without a prescription was the highest reported drug use type across the entire period, it also experienced the greatest reduction from 17.2% of all students in 2011 to 9.5% of students in 2019—a 45% difference.

**Figure 7. High School Student Drug Use Trending Downward in Manchester**



Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019



Trends in reported drug use by high school students were similar in Manchester, Greater Manchester, and the State of New Hampshire between 2011 and 2019 (Table 1). However, while Manchester and Greater Manchester students reported similar rates of ever having used heroin in 2019, students in the City of Manchester were nearly 1.5 times more likely to report ever using heroin compared with students in the state as a whole. Manchester students were more than 1.5 times more likely than those across the state to report ever having used methamphetamine in 2019, and nearly 1.4 times more likely than students in the Greater Manchester Region. On the other hand, rates of prescription drug use without a prescription were somewhat lower in Manchester and Greater Manchester high school students than in the state as a whole in 2019.

**Table 1. Teen Drug Use On the Decline Across State, Greater Manchester and City of Manchester**

Percent of students who reported ever using heroin (one or more times)					
City/Region	2011	2013	2015	2017	2019
Manchester	3.7%	4.0%	3.2%	2.2%	2.2%
Greater Manchester	--	--	3.2%	2.7%	1.9%
NH*	3.6%	2.7%	2.4%	1.8%	1.5%
Percent of students who reported ever using methamphetamines (one or more times)					
City/Region	2011	2013	2015	2017	2019
Manchester	4.1%	4.3%	3.2%	2.6%	2.6%
Greater Manchester	--	--	3.0%	3.1%	1.9%
NH*	4.2%	2.9%	2.5%	1.8%	1.7%
Percent of students who reported ever using prescription drugs w/o prescription (one or more times)					
City/Region	2011	2013	2015	2017	2019
Manchester	17.2%	14.6%	12.5%	9.6%	9.5%
Greater Manchester	--	--	13.0%	10.5%	8.9%
NH*	20.8%	16.5%	13.4%	11.5%	10.0%

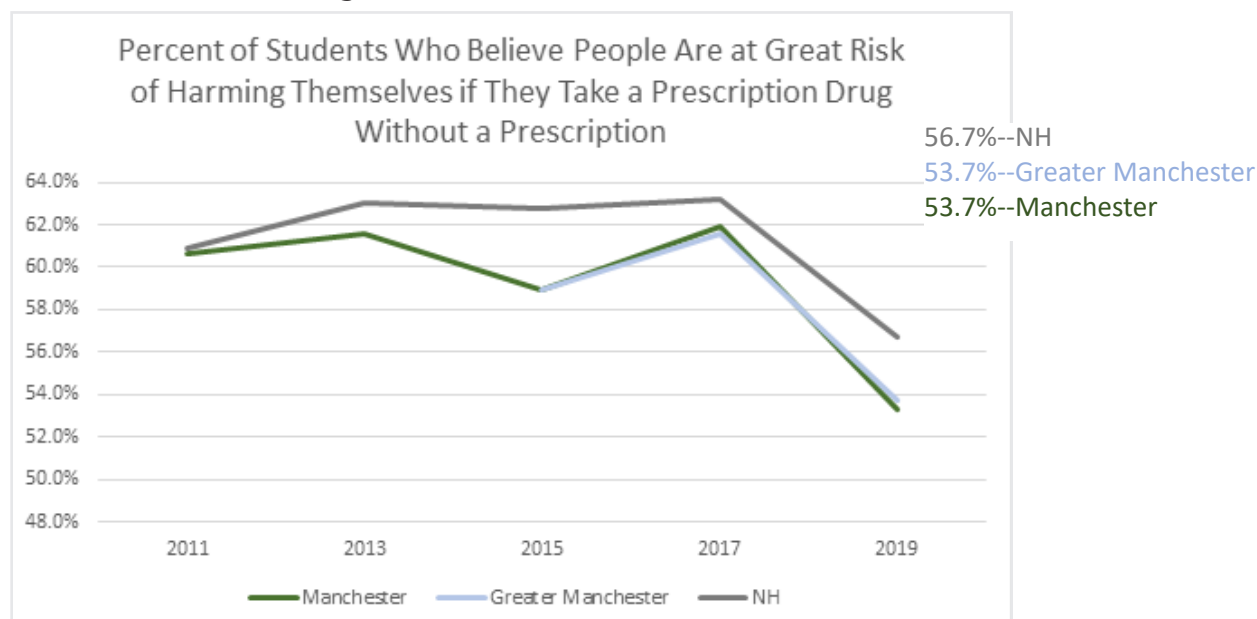
Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019

Note: access to regional-level results is not available prior to 2015

\* NH includes data for entire state

“The likelihood for drug abuse increases as the population perceives little or no harmful risks associated with the drugs,” according to a recent article published in BMC Public Health.<sup>17</sup> Figure 8 shows that only a little more than half of high school students in Manchester, Greater Manchester, and NH believe that people are a great risk of harm if they use prescription drugs without a prescription. Moreover, this percentage is on the decline. In both Manchester and Greater Manchester, the proportion of students who perceived great risk from using prescription drugs without a prescription dropped 13% between 2017 and 2019, from 61.6% to 53.7%. Across the state, the decline was marginally smaller, at 10%, from 63.2% of students in 2017 to 56.7% in 2019.

**Figure 8. High School Students Perceive Less Harm Associated with Prescription Drug Misuse than 2 Years Ago**



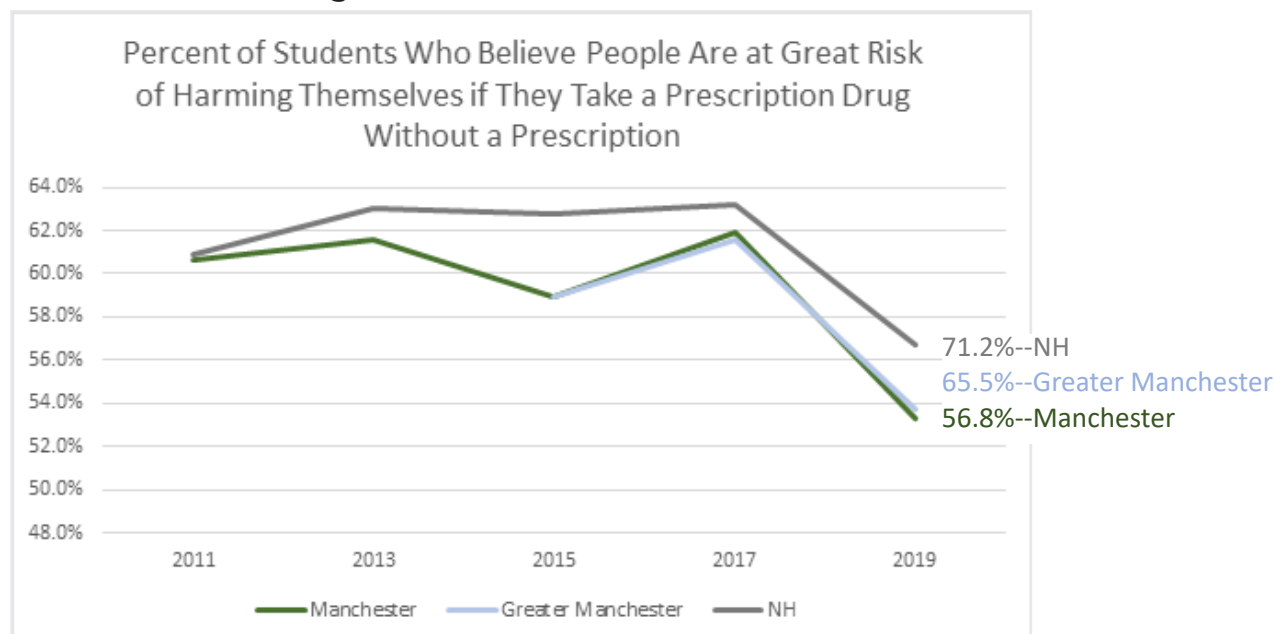
Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019

In 2019, Manchester high school students were 20% less likely to report exposure to some form of public messaging to avoid drugs or alcohol compared with students statewide (Figure 9). While these rates were similar in 2017, the percentage of high school students who reported exposure to anti-drug or -alcohol use messaging decreased in Manchester and Greater Manchester while remaining steady in the state overall. Between 2017 and 2019, reported exposure to messaging to avoid drugs or alcohol dropped by 13% among Manchester high school students and by 10% among those in the Greater Manchester Region.

<sup>17</sup> Nawi, A.M., Ismail, R., Ibrahim, F. et al. Risk and protective factors of drug abuse among adolescents: a systematic review. *BMC Public Health* 21, 2088 (2021). <https://doi.org/10.1186/s12889-021-11906-2>



**Figure 9. Manchester High School Students Less Likely to be Exposed to Public Messaging About Alcohol or Drugs**



Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019

## Binge Drinking

Alcohol misuse has both long-term and short-term negative impacts on health. In the long-term, excessive alcohol use shortens life expectancy by an average of 29 years in those who die of alcohol-related disorders.<sup>18</sup> In the short-term, binge drinking—defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males—increases the risks of injuries, violence, risky sexual behaviors, and alcohol poisoning.<sup>19</sup> Binge drinking is associated with significant economic, criminal justice, and workplace productivity costs in the United States.<sup>20</sup>

Binge drinking is one of the Leading Health Indicators defined in Healthy People 2030. Among other criteria, leading health indicators are described as those that “address *high-priority public health issues* that have a major impact on public health outcomes.”<sup>21</sup>

Based on data showing that 26.6% of adults in the United States aged 21 years and older reported binge drinking in the past 30 days, Healthy People 2030 sets a target of reducing this number to 25.4% in the next decade.<sup>22</sup>

According to City Health Dashboard, the percent of Manchester adults who reported binge drinking in the last 30 days in 2019 was lower than the Healthy People 2030 target but higher than the average rate across the 500 largest cities in the US in 2018 (Figure 10). The percentage of adults who reported binge drinking in the last 30 days was similar between Manchester and Nashua (18.8% and 18.6%, respectively.)

<sup>18</sup> <https://www.cdc.gov/alcohol/features/excessive-alcohol-deaths.html>

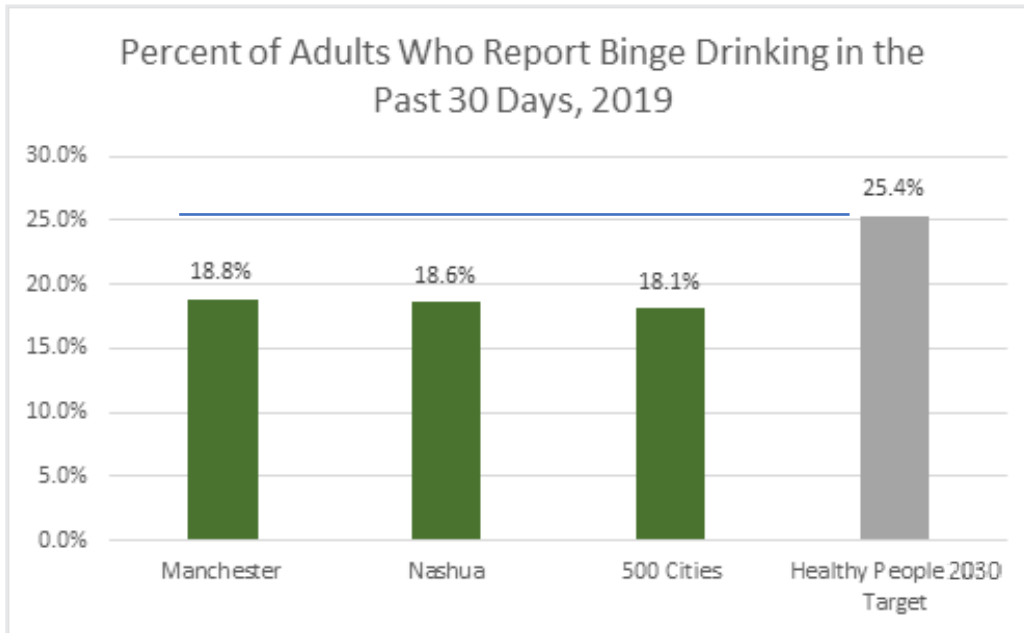
<sup>19</sup> <https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>

<sup>20</sup> <https://www.cityhealthdashboard.com/metric/24>

<sup>21</sup> <https://health.gov/healthypeople/objectives-and-data/leading-health-indicators>

<sup>22</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/drug-and-alcohol-use/reduce-proportion-people-aged-21-years-and-over-who-engaged-binge-drinking-past-month-su-10>

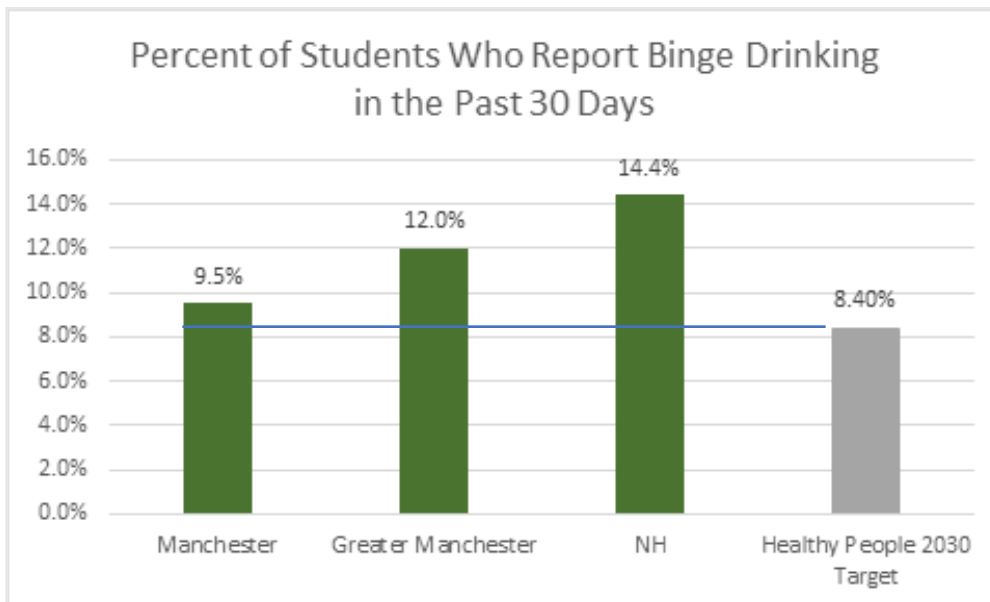
**Figure 10. Adult Binge Drinking Similar Across Manchester, Nashua, State**



Source: City Health Dashboard

Based on previous data, Healthy People 2030 sets a target of 8.4% for students who report binge drinking in the past 30 days. In 2019 (the first year for which these data are available), 14.4% of students statewide reported binge drinking at least once in the past 30 days (Figure 11). Manchester students were a third less likely to binge drink, at 9.5%. Across the Greater Manchester Region, high school students reported binge drinking at rates between the two, at 12.0%. Importantly, all three groups of students reported binge drinking at rates exceeding the Healthy People 2030 benchmark.

**Figure 11. Manchester High School Students Less Likely to Binge Drink than Teens Statewide**



Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019

\*The YRBS defines binge drinking as 4 or more drinks of alcohol in a row for females and 5 or more drinks of alcohol in a row for males.

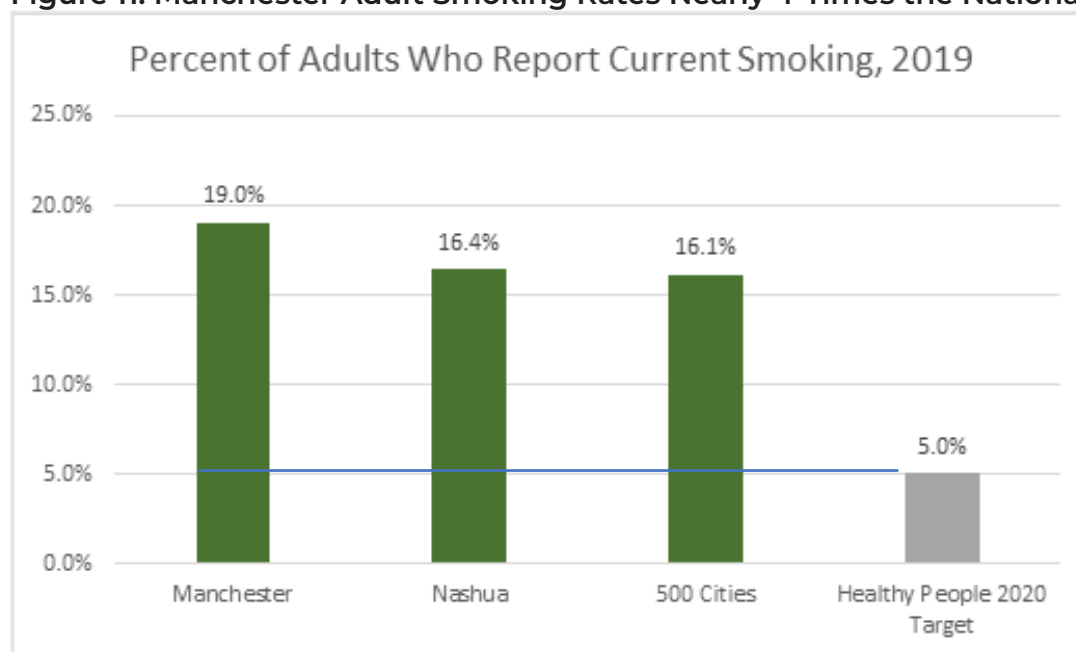
Relative risk perception is one of the strongest predictors of binge drinking among adolescents, according to a recent study published in the journal, *Substance Use and Misuse*.<sup>23</sup> In 2019, more than two-thirds (69.6%) of Manchester students said people are not at great risk of harming themselves (physically or in other ways) from binge drinking once or twice a week. This proportion was similar among students in the Greater Manchester Region (29.1%) and those in NH overall (27.3%).

## Tobacco Use and Vaping

Cigarette smoking in adults and use of any tobacco products in adolescents are leading health indicators for the US, according to Healthy People 2030. The US Government aims to eliminate the initiation of smoking and other forms of tobacco use among adolescents by the year 2030 and reduce the proportion of adults who smoke to 5.0% during that same timeline.<sup>24</sup>

In 2019, 19.0% of Manchester residents reported being current smokers, nearly four times the Healthy People 2030 benchmark (Figure 11). Manchester adults were also 16-18% more likely to smoke than adults in Nashua and in the 500 largest cities in the US combined.

**Figure 11. Manchester Adult Smoking Rates Nearly 4-Times the National Target**



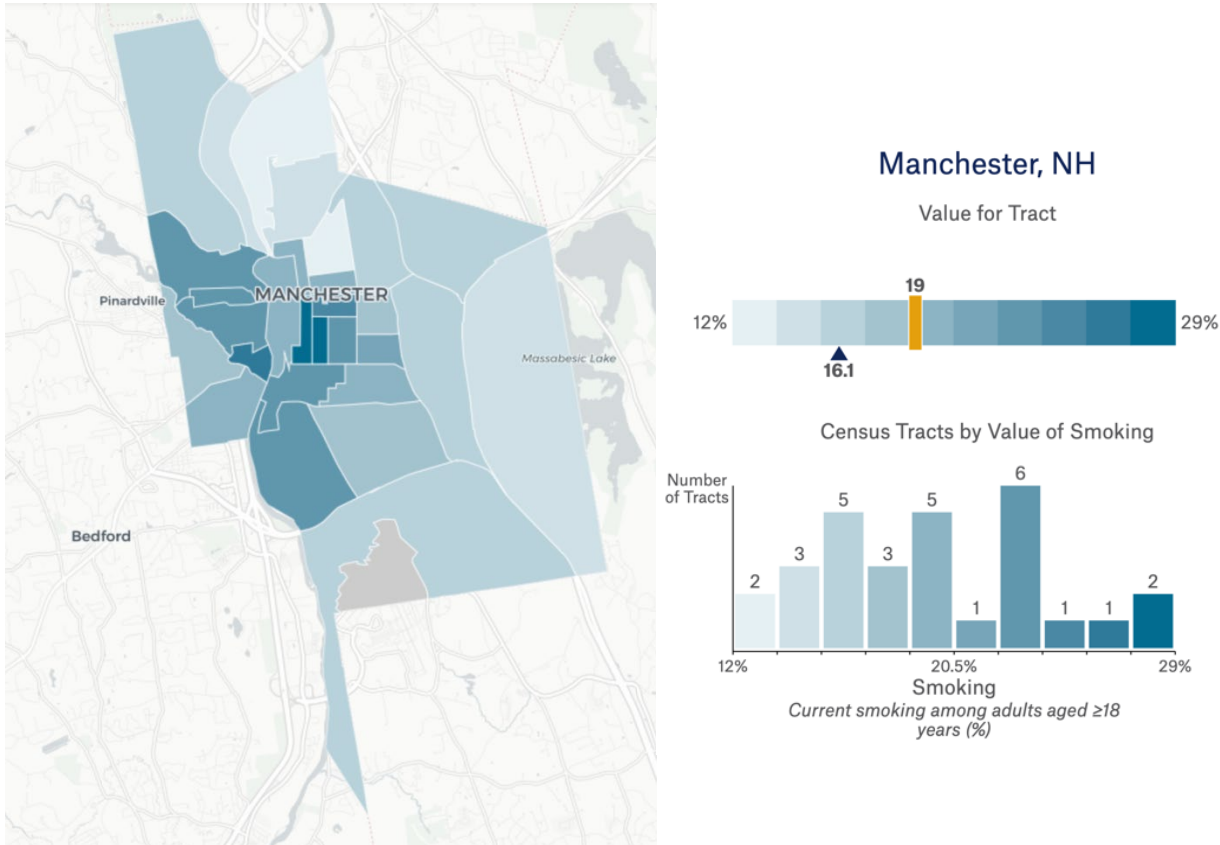
Source: City Health Dashboard

Residents in Manchester's Center City neighborhoods had particularly high rates of current smoking, with 28.4% of adults living in census tract 14 reporting current smoking (Figure 12). More than a quarter of adults reported current smoking in three Center City census tracts: 14, 15, and 20.

<sup>23</sup>Dennis Grevenstein, Christoph Nikendei & Ede Nagy (2020) Alcohol Use, Binge Drinking, and Drunkenness Experience in Adolescence: Complex Associations with Family, Peers, Social Context, and Risk Perceptions, *Substance Use & Misuse*, 55:11, 1834-1845, DOI: 10.1080/10826084.2020.1766504

<sup>24</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/tobacco-use/eliminate-cigarette-smoking-initiation-adolescents-and-young-adults-tu-10>

**Figure 12. Adult Cigarette Smoking Highest in Manchester’s Center City Neighborhoods**

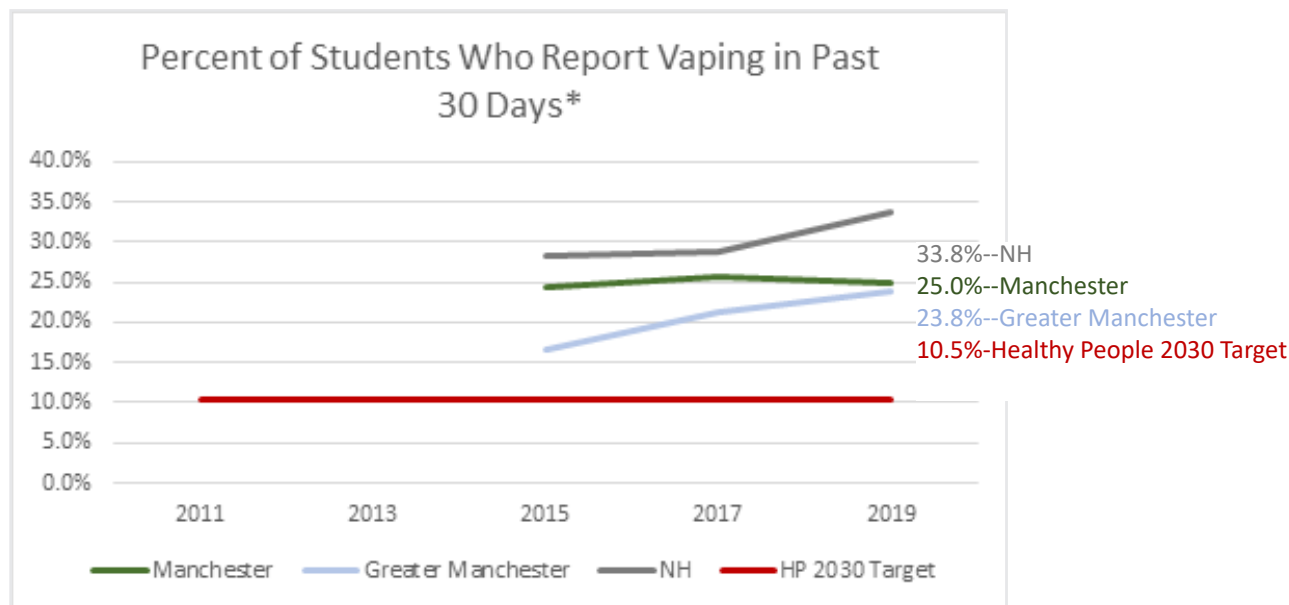
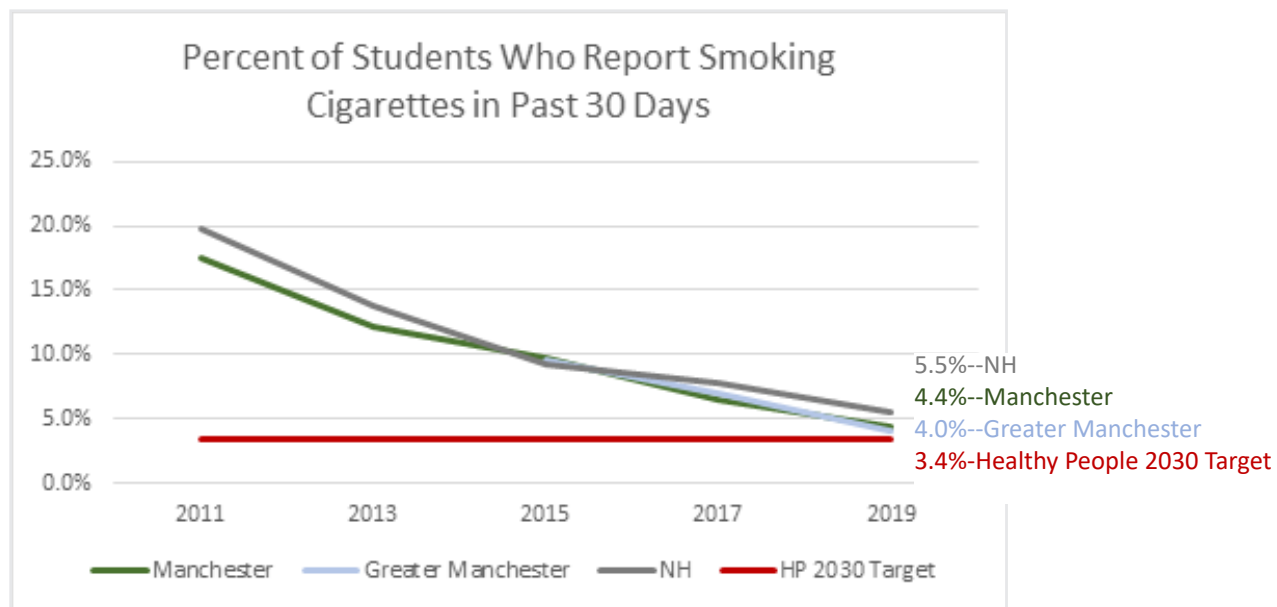


Source: City Health Dashboard

Figure 13 shows the rates of self-reported smoking and vaping during the past 30 days among students who participated in the NH Youth Risk Behavior Survey. While significant gains have been made across the state in reducing youth cigarette smoking since 2011, it is clear that vaping among high school students is on the rise.

In Manchester, the proportion of students who report smoking cigarettes in the past 30 days dropped nearly 73% between 2011 and 2019. However, the percent of Manchester students who report vaping in the past 30 days is now far above the 2011 rate of smoking in this population. In 2011, 17.5% of Manchester students reported current use of cigarettes, while in 2019 4.4% of students reported smoking and 25.0% reported current vaping. In both cases, Manchester’s 2019 rates of youth tobacco use exceed the targets set by Healthy People 2030. Of note, 11.9% of Manchester students who reported current vaping in 2019 said they had purchased vaping products themselves in stores. Comparable rates in Greater Manchester and New Hampshire were 15.6% and 10.6%, respectively.

**Figure 13. Smoking Cigarettes Down, but Vaping Up in Manchester, Greater Manchester and NH Teens**



Source: NH DHHS, Youth Risk Behavior Surveillance Survey 2011-2019

\*data on this indicator not available prior to 2015

## WHAT DO MANCHESTER RESIDENTS THINK?

Manchester residents identified substance use as their third priority for action by the city, with 92.4% saying that it is “very important” to reduce and prevent substance misuse, including overdoses and deaths due to drugs, tobacco use and vaping, binge drinking, and youth risk behaviors.

Substance misuse was tied with trauma as the top priority for action among key stakeholders in Manchester. They described substance misuse as a “highly visible” challenge in Manchester, with not enough services available to meet the high demand. Some called for dedicated housing units for those in recovery, while others suggested diversion programs for youth and hiring more program staff who are themselves in recovery. Stakeholders highlighted the stigma associated with substance misuse as an important barrier to addressing this issue.

## Community Spotlight

### The Doorway of Greater Manchester



The Doorway has changed how New Hampshire helps people with opioid use disorder or other substance use disorders. There are nine Doorway locations, providing single points of entry for people seeking help for substance use. The Doorway of Greater Manchester is administered by Catholic Medical Center. Services offered include screening and evaluation; treatment, including Medication Assisted Treatment; prevention, including naloxone; supports and services to assist in long-term recovery; and peer recovery support services. On average, The Doorway of Greater Manchester consistently served approximately 200 unique individuals per month for substance use disorder throughout 2021. In addition, from October 2021 – April 2022, the Doorway of Greater Manchester distributed nearly 5,000 Naloxone kits to community partners for public use.

The Doorway of Greater Manchester is located at 60 Rogers Street, Suite 210, and is open Monday-Friday, 8 AM-5 PM. 24/7 access to services is also available by dialing 211. To learn more: <https://www.thedoorway.nh.gov/doorway-greater-manchester>

### Manchester Crisis Response Unit (CRU)

The CRU conducts post-overdose outreach focused on harm reduction and secondary prevention by targeting high-risk/influencer populations to reduce the risk of repeat overdose and the overall rate of overdose deaths. During outreach visits, the CRU:

- ▶ Provides linkages to care and resources, including access to the Doorway, Medication Assisted Treatment, physical and mental health care, food, housing and other immediate needs as determined by the individual;

- ▶ Provides naloxone, overdose prevention training and overdose prevention materials (“Leave Behind Kits”) to loved ones/family/friends; and
- ▶ Reduces stigma about substance use disorder through education and offering hope about recovery.

The Crisis Response Team’s goal is to inform and motivate participants, and ultimately, prevent future overdoses through compassionate outreach. Through proactive and reactive interactions, the team, composed of 2 police officers, a community health worker from the Manchester Health Department and peer outreach specialists, has been able to support individuals recently affected by overdose as well as those who are in their social networks. Since the start of the program, there have been 580 outreach attempts resulting in 189 successful contacts..

## Harm Reduction

Harm reduction (HR) is programs, policies, and practices that aim to minimize negative health impacts. They include things like using a seatbelt, wearing a motorcycle helmet, or applying sunscreen. Currently, common harm reduction practices include wearing a face covering, social distancing, and hand washing to reduce the risks of contracting and being harmed by COVID-19.

For those with Substance Use Disorder, harm reduction services save lives. When using clean needles, people avoid spreading infectious diseases, such as HIV and Hepatitis. In addition, the following are also important elements of a strong HR model. Other harm reduction services include:

- ▶ Connecting people to primary care and mental health services
- ▶ Giving them access to Naloxone (Narcan)
- ▶ Providing treatment instead of incarceration
- ▶ Offering screening and vaccinations for treatment for sexually transmitted diseases
- ▶ Helping people enroll in health insurance



According to the CDC, over the past 30 years, harm reduction programs have had the following benefits:

- ▶ Harm reduction services save lives by lowering the likelihood of deaths from overdoses.
- ▶ Providing testing, counseling, and sterile injection supplies helps prevent outbreaks of other diseases. For example, Harm reduction services are associated with a 50% decline in the risk of HIV transmission.
- ▶ Users of harm reduction services were three times more likely to stop injecting drugs.
- ▶ Law enforcement benefits from reduced risk of needle sticks, no increase in crime, and the ability to save lives by preventing overdoses.
- ▶ When two similar cities were compared, the one with harm reduction services had 86% fewer syringes in places like parks and sidewalks.

In early 2021, the Greater Manchester Region rolled out a Harm Reduction Strategy document. It can be viewed on [makinithappen.org](http://makinithappen.org).

# CLINICAL CARE





## PRIORITY: IMPROVE ACCESS TO QUALITY PREVENTIVE HEALTHCARE

People have the best overall health outcomes when they have the ability to obtain the right care, at the right time, and in the right setting. Unfortunately, many people face barriers that prevent or limit their access to needed clinical services, leading to poorer health outcomes and contributing to racial and ethnic disparities in wellbeing.<sup>1</sup>

The most common barrier to healthcare access is cost. Either people lack health insurance or their deductibles and copays are so high that they would need to forgo other basic needs—like utilities or food—in order to pay for clinical services. Other common barriers include transportation and/or lack of providers in a geographic area and language. Importantly, those without regular access to quality providers and care are often diagnosed at later, less treatable stages of a disease than those with insurance. Overall, those who lack access to quality healthcare have worse health outcomes, lower quality of life, and higher mortality rates.

### Access to Medical Care

#### Uninsured

Health insurance status is a key indicator of a population's access to care. The unequal distribution of health insurance coverage is a major contributor to health disparities in the US.<sup>2</sup> Uninsured adults are less likely to receive preventive services for chronic conditions such as diabetes, cancer, and heart disease, while uninsured children are less likely to receive routine well-child visits to track developmental milestones, timely immunizations, and other important preventive services. According to the US Census Bureau, individuals without health insurance were nearly three times more likely than the insured to have medical debt exceeding 20% of their household's annual income.<sup>3</sup>

The proportion of Manchester residents who lack health insurance has decreased steadily since 2013 (Figure 1). Specifically, the percent of uninsured dropped more than 30% in Manchester, from 16% of residents under the age of 65 (when universal Medicare coverage begins) in 2013 to 11% of residents in 2019. While this trend is encouraging, the percent of Manchester residents without health insurance remains higher than the Healthy People 2030 goal of 7.9%.

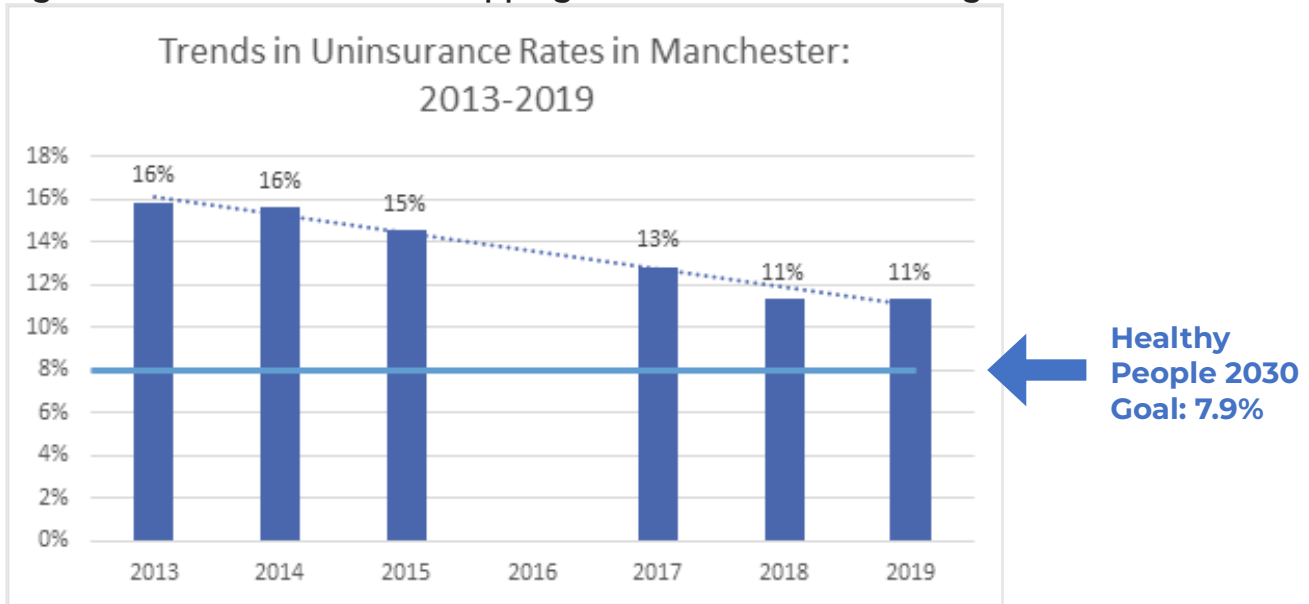
---

<sup>1</sup><https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/access-health-services>

<sup>2</sup> Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Smedley BD, Stith AY, Nelson AR, editors. *Unequal treatment: confronting racial and ethnic disparities in health care*. Washington (DC): National Academies Press (US); 2002.

<sup>3</sup><https://www.census.gov/library/stories/2021/04/who-had-medical-debt-in-united-states.html>

**Figure 1. Uninsurance Rates Dropping in Manchester but Still Higher Than National Goal**



Source: City Health Dashboard

The vast majority of towns in the Greater Manchester Region have rates of uninsured well below the Healthy People 2030 Goal of 7.9%. (Table 1) One notable exception is Candia, which has the highest rate in the region, at 13.1% in 2020. The percent of Manchester residents who are uninsured is more than 63% higher than in the State of NH and 48% higher than in Nashua.

**Table 1. Candia has Highest Uninsured Rate in Greater Manchester Region**

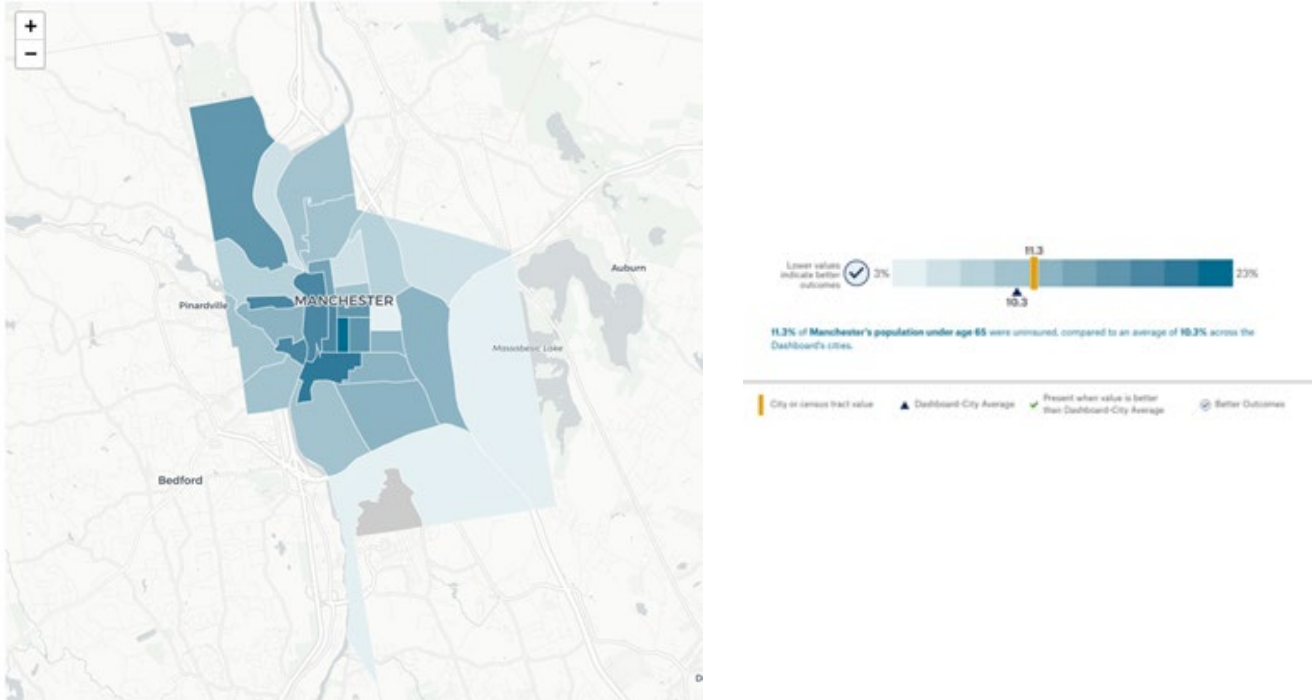
Uninsured Rates by Town in Greater Manchester Region, 2020 (5-year estimates)

Town	Percent of Residents Uninsured
Manchester	9.8%
Auburn	4.4%
Bedford	1.7%
Candia	13.1%
Deerfield	5.2%
Goffstown	4.8%
Hooksett	4.3%
New Boston	4.3%
Londonderry	3.2%
Nashua	6.6%
State of NH	6%

Source: 2020: ACS 5-Year Estimates

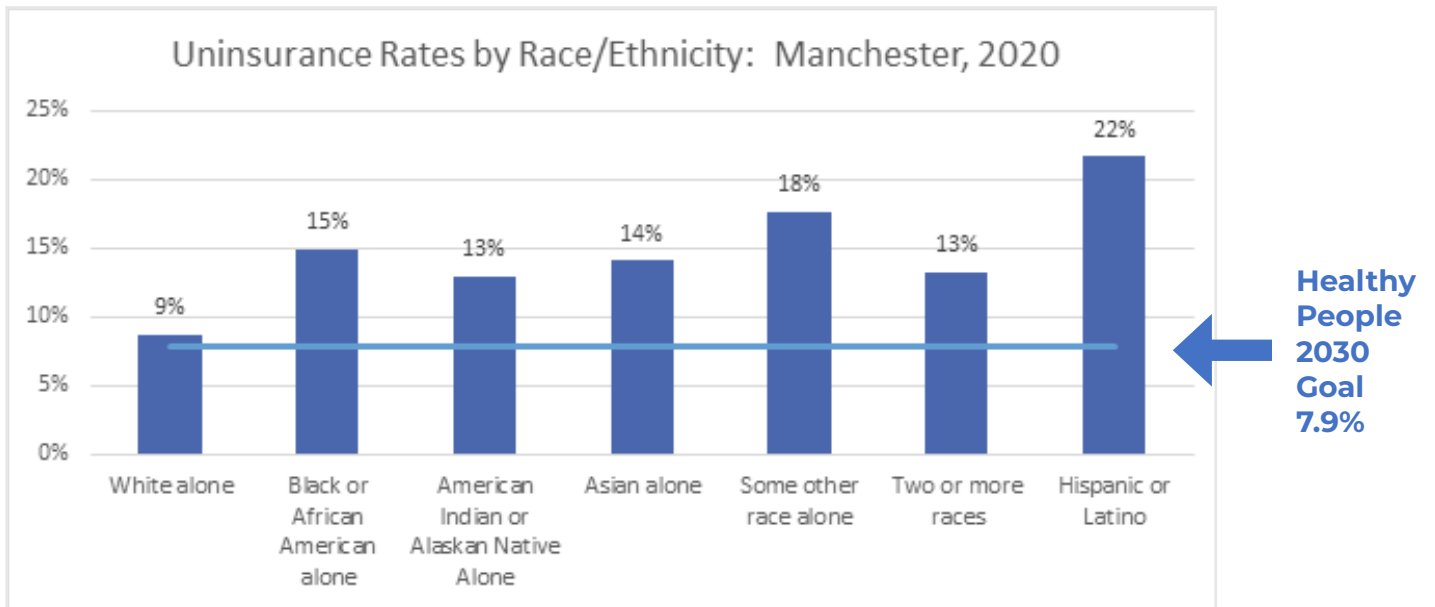
**Figure 2. Manchester's Center City Residents Most Likely to be Uninsured**

Source: City Health Dashboard; Data from American Community Survey, 2019, 5 Year Estimate



The proportion of Manchester residents who lack health insurance varies widely by census tract, from a low of 3% to as much as 23%--nearly three times the Healthy People 2030 Goal of 7.9%. Residents of Manchester's center-city neighborhoods are particularly more likely to be uninsured, with more than one in five residents in center city tracts 15 and 19 having no health insurance in 2019 (22.2% and 20.9%, respectively).

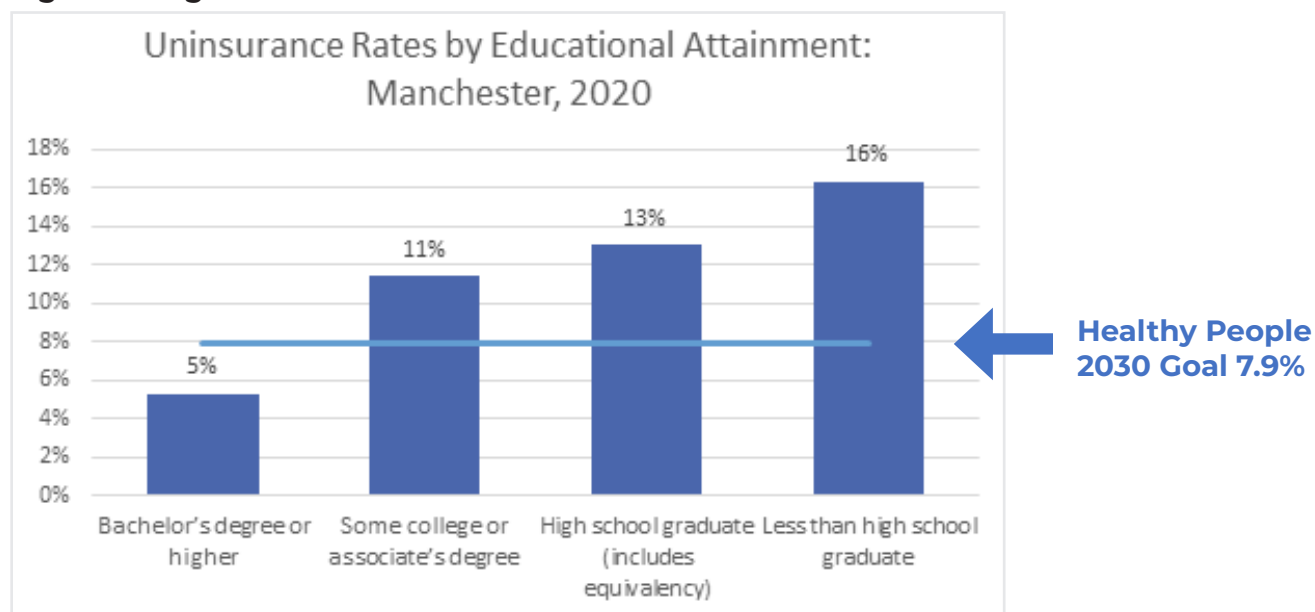
**Figure 3. Hispanic/Latino Residents Most Likely to be Uninsured in Manchester**



Source: US Census Bureau, ACS 5-year estimates

Figure 3 illustrates the variation in insurance rates by race and ethnicity in Manchester in 2020. These differences largely reflect national disparities in health insurance coverage, with people of Hispanic or Latino origins having some of the highest rates of uninsurance nationwide (20% in 2019), and individuals identifying as white having some of the lowest rates (7.8%).<sup>4</sup> Of note, Asian people may face unique barriers that make them more likely to lack health insurance in New Hampshire than in the country as a whole where they have the lowest uninsurance rate nationally at 7.2%. Conversely, American Indians have the highest rate of uninsurance nationally, at 21.7%, compared with much lower rates in NH.

**Figure 4. Higher Education Associated with Lower Uninsurance Rates**



Source: US Census Bureau, ACS 5-year estimates

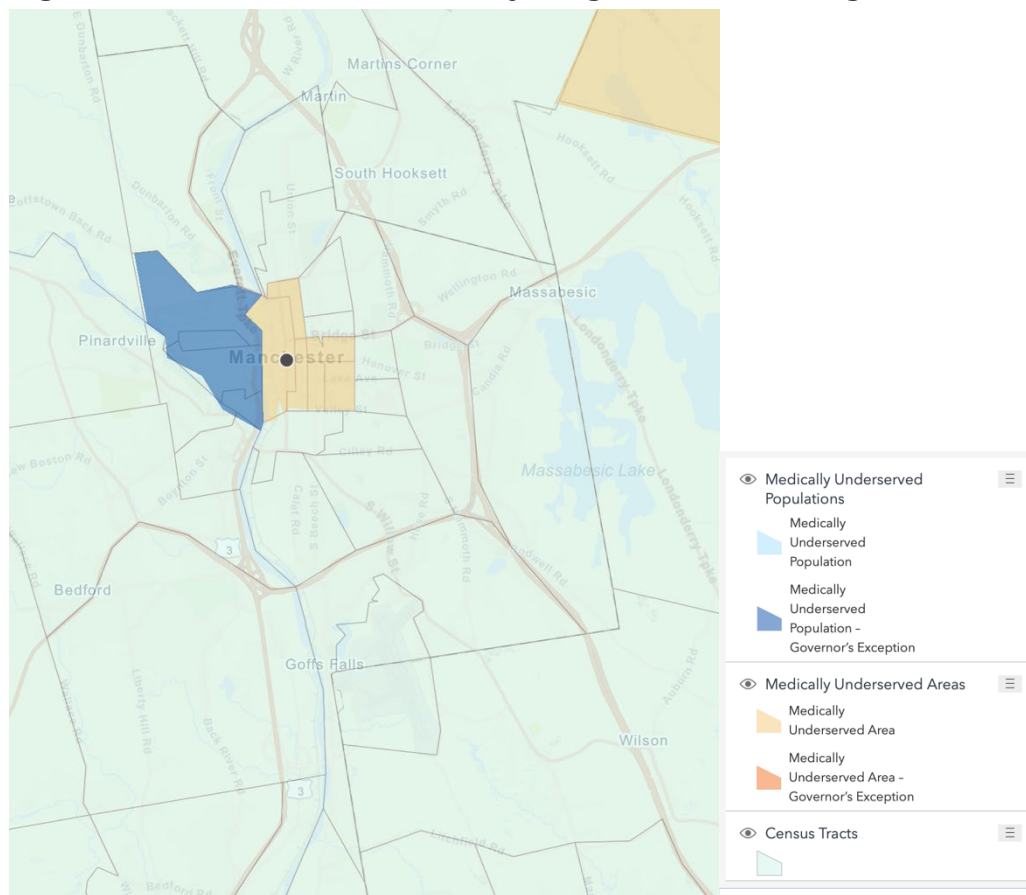
The likelihood of being uninsured also varies substantially by educational attainment (Figure 4). In Manchester, residents with less than a high school diploma or equivalent are more than three times more likely than those with a Bachelor's degree or higher to lack health insurance.

### Medically-Underserved Areas

The federal government provides two designations for geographic areas lacking adequate access to preventive healthcare services: Medically-Underserved Areas (MUAs) and Medically-Underserved Populations (MUPs). MUAs have a shortage of primary care providers within a geographic area that can be defined as large as a county or as small as a census tract. MUPs have a shortage of primary healthcare services available to a specific subpopulation, such as persons experiencing homelessness, the elderly, and individuals or families living below the federal poverty level. Often, these groups face additional economic, structural, cultural, and/or language barriers to health care.

<sup>4</sup><https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-coverage-by-race-and-ethnicity/>

**Figure 5. Manchester's Center City Neighborhoods Designated as Medically Underserved**



Source: US Health Resources and Services Administration, <https://data.hrsa.gov/maps/map-tool/>

Much of Manchester's center city is designated as Medically underserved. Six east-side census tracts are designated as Medically Underserved Areas: 6, 13, 14, 15, 16, and 2004. In addition, four census tracts on the City's west side are designated as Medically Underserved Populations: 2.02, 3, 20, and 21.

### Prevention Quality Indicators (PQIs)

Prevention Quality Indicators (PQIs) are clinical conditions or complications that typically result from inadequate access to quality primary care services. Hospital admissions for these conditions can generally be avoided through appropriate access to quality, outpatient care. As such, the PQIs are an important indicator of both healthcare access and overutilization of hospitals for chronic disease management.<sup>5</sup>

PQIs are similar to ambulatory-care sensitive conditions, an indicator used in previous Greater Manchester Community Health Needs Assessments, but represent a more robust measure of access to quality outpatient care.

<sup>5</sup> [https://qualityindicators.ahrq.gov/measures/pqi\\_resources](https://qualityindicators.ahrq.gov/measures/pqi_resources)

The Chronic Conditions composite measure for PQIs includes hospital visits for certain short- and long-term complications of diabetes, chronic obstructive pulmonary disease or asthma, hypertension, and heart disease. The Acute Conditions composite measure for PQIs includes hospital visits for dehydration, bacterial pneumonia, and urinary tract infection. A detailed list of PQIs can be found at: [https://qualityindicators.ahrq.gov/measures/pqi\\_resources](https://qualityindicators.ahrq.gov/measures/pqi_resources).

**Table 2. Drop in Emergency Department Visits for PQIs Could Mean Better Access to Preventive Care**

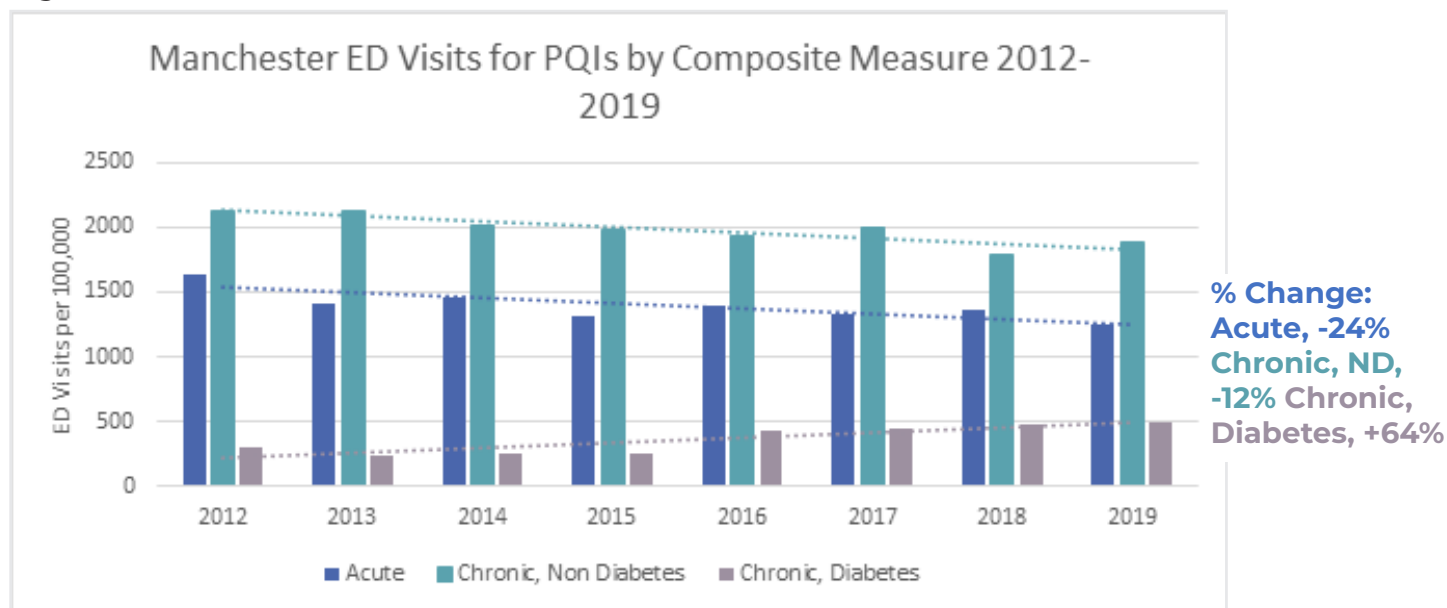
Trends in Emergency Department Visits for PQIs, Age-Adjusted Rates per 100,000

Emergency Department Visits for PQIs per 100,000: All Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	4071	3779	3731	3553	3760	3769	3625	3620	-11.1%
Greater Manchester	3262	2986	2928	2839	2889	2916	2859	2841	-12.9%
NH	2876	2654	2587	2403	2443	2492	2489	2560	-11.0%
Emergency Department Visits for PQIs per 100,000: Acute Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	1636	1412	1460	1313	1401	1325	1357	1243	-24.0%
Greater Manchester	1388	1163	1196	1084	1101	1065	1086	1019	-26.6%
NH	1374	1204	1152	1109	1122	1120	1105	1129	-17.9%
Emergency Department Visits for PQIs per 100,000: Chronic Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	2435	2367	2272	2241	2358	2444	2268	2377	-2.4%
Greater Manchester	1873	1822	1732	1755	1788	1851	1773	1822	-2.8%
NH	1502	1450	1434	1294	1321	1372	1383	1432	-4.7%

Source: NH Department of Health and Human Services

Table 2 details rates of Emergency Department (ED) visits for PQIs per 100,000 residents between 2012 and 2019. ED admissions for all PQIs have been declining slowly, but steadily, in Manchester, Greater Manchester and the State of NH since 2012. When broken down into admissions for either Acute or Chronic PQIs, it is clear that this decline is due in large part to reductions in ED admissions for Acute PQIs between 2012 and 2019. During this period, admissions for Acute PQI's dropped by 24% among Manchester residents, while visits for Chronic PQIs declined only slightly, by 2.4%.

**Figure 6. Preventable ED Visits for Diabetes-Related Conditions on the Rise in Manchester**



Source: NH Department of Health and Human Services

Figure 6 further breaks down trends in ED admissions for PQI Chronic Conditions in Manchester into those that are diabetes-related and non-diabetes-related. While ED visits for PQIs unrelated to diabetes declined by 12% between 2012 and 2019, those for diabetes-related chronic conditions increased by 64%.



**Table 3. Hospital Inpatient Visits for Preventable Acute Causes Down More than 25% in Past 7 years**

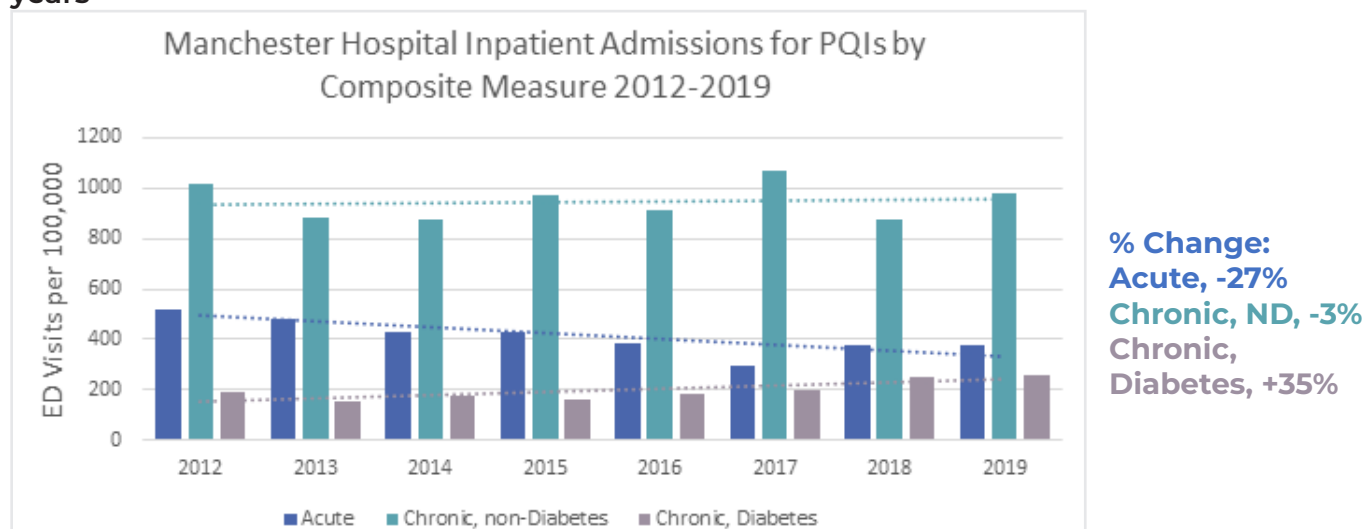
Trends in Hospital Inpatient Visits for PQIs, Age-Adjusted Rates per 100,000

Hospital Inpatient Visits for PQIs: All Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	1730	1522	1480	1561	1482	1565	1503	1620	-6.3%
Greater Manchester	1447	1312	1229	1334	1227	1291	1262	1337	-7.6%
NH	1054	981	937	965	931	975	933	920	-12.7%
Hospital Inpatient Visits for PQIs: Acute Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	520	479	429	432	387	297	377	379	-27.2%
Greater Manchester	474	431	378	383	346	280	314	334	-29.5%
NH	378	336	302	309	287	266	269	250	-33.9%
Hospital Inpatient Visits for PQIs: Chronic Conditions, 2012-2019									
City/Region	2012	2013	2014	2015	2016	2017	2018	2019	% Change
Manchester	1210	1043	1050	1129	1094	1267	1126	1242	+2.6%
Greater Manchester	973	881	851	951	881	1011	948	1003	+3.0%
NH	675	646	634	657	644	709	664	670	-0.8%

Source: NH Department of Health and Human Services

Table 3 shows similar trends in Manchester, Greater Manchester and the State of NH when measuring rates of hospital inpatient admissions for PQIs over time. While inpatient admissions for Acute PQIs dropped by approximately one-quarter to one-third in all three regions, admissions for Chronic PQIs changed little, or even increased slightly, during the same period.

**Figure 7. Hospital Admissions for Preventable Diabetes Complications Up 35% in Past 7 years**



Source: NH Department of Health and Human Services



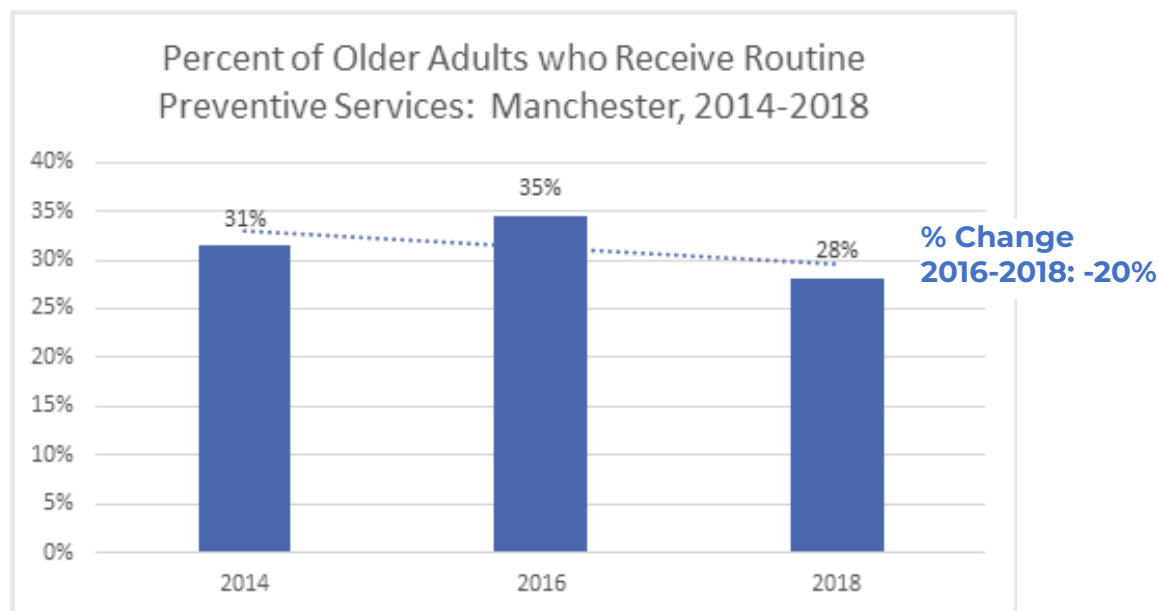
When inpatient hospital admissions for Chronic PQIs are further broken down into those that are diabetes-related and those that are non-diabetes-related, we see that admissions for Chronic Diabetes PQIs are again on the rise in Manchester, while those for non-diabetes-related Chronic PQIs are relatively unchanged. These data point to a disturbing trend in Manchester residents being hospitalized for diabetes-related complications that could be prevented with better access to outpatient diabetes management services. Further attention to this trend is warranted to identify potential barriers to accessing care by this population and potential solutions to improving outpatient diabetes management in Manchester.

### Routine Preventive Health Screenings, Ages 65+

The Centers for Disease Control and Prevention estimate that preventive care, including immunizations and routine cancer screenings, could save an estimated 100,000 lives in the U.S. per year.<sup>6</sup> Yet, each year, millions of people do not receive the preventive services recommended by national experts for their age group.

The City Health Dashboard created a metric to monitor access to preventive healthcare among older adults, ages 65 and older. The metric measures the percentage of older adults who are up-to-date on a core set of preventive services that are widely recommended for their age and gender.<sup>7</sup> Though small gains were made in the percent of older adults receiving core preventive services in Manchester between 2014 and 2016, Figure 8 illustrates an overall reduction between 2014 and 2018. Between 2016 and 2018, the proportion of older adults receiving core preventive services dropped by 20% in Manchester.

**Figure 8. Utilization of Preventive Care Services Down Among Manchester's Older Adults**



Source: City Health Dashboard

<sup>6</sup>Centers for Disease Control and Prevention. CDC Prevention Checklist. <https://www.cdc.gov/prevention/>. Updated May 31, 2017. Accessed February 26, 2018.

<sup>7</sup><https://www.cityhealthdashboard.com/metric/32>

A similar, though less dramatic, decline was observed across the 500 Cities included in the City Health Dashboard, and in Nashua during the same period (Table 4). Additional attention to barriers to preventive care access among older adults in Manchester is warranted.

**Table 4. Routine Health Screenings by Older Adults Drop More in Manchester than in Other Cities**

Percent of Older Adults Who Receive Routine Health Screenings: Manchester, Nashua and 500 Cities

Region	2014	2016	2018	% Change
Manchester	31%	35%	28%	-11%
Nashua	33%	36%	30%	-9%
500 Cities	31%	32%	30%	-2%

Source: City Health Dashboard

**Late or No Prenatal Care**

One of the best ways to ensure a healthy pregnancy, and therefore a healthy birth, is through early and adequate prenatal care. The American College of Obstetricians & Gynecologists (ACOG) recommends that prenatal care services begin in the first trimester of pregnancy and continue throughout the pregnancy until birth.<sup>8</sup> Early initiation of care allows clinicians to identify risk factors for poor birth outcomes and facilitates intervention as needed.

**Table 5. Majority of Manchester Women Receive Early Prenatal Care During Pregnancy**

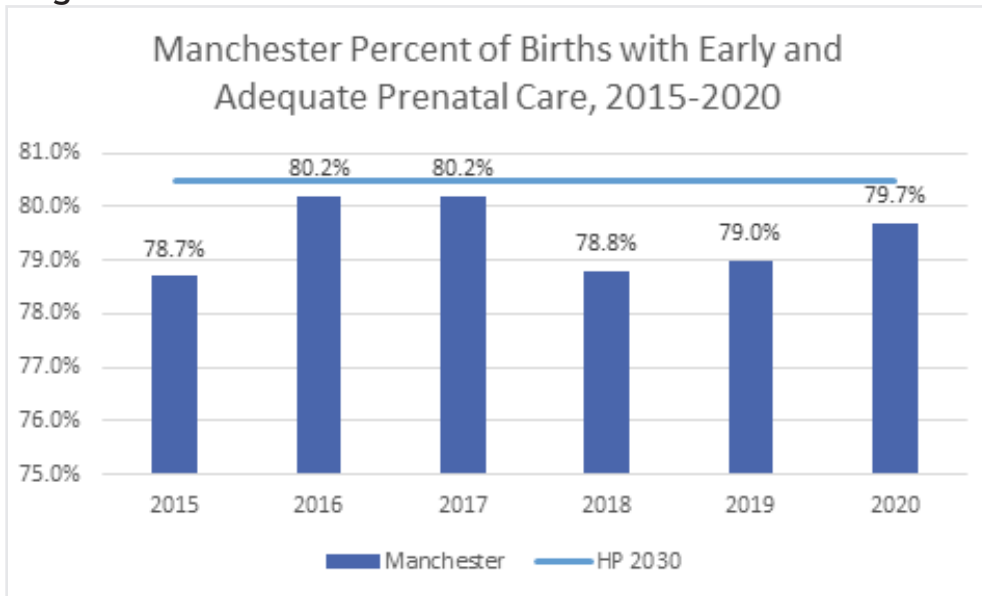
Early prenatal care: started in 1 <sup>st</sup> /2 <sup>nd</sup> trimester	
Manchester	94.1%
Greater Manchester PHR	94.8%
State of NH	95.4%
Late prenatal care: started in the 3 <sup>rd</sup> trimester	
Manchester	4.5%
Greater Manchester PHR	3.9%
State of NH	3.2%
No prenatal care	
Manchester	1.0%
Greater Manchester PHR	0.9%
State of NH	0.6%

Source: NH Department of Health and Human Services

<sup>8</sup> <https://www.acog.org/clinical-information/physician-faqs//media/3a22e153b67446a6b31fb051e469187c.ashx>

Table 5 indicates that the vast majority of births to women in Manchester, Greater Manchester, and the State of NH had prenatal care initiated in the first trimester of pregnancy in the years 2016-2020 combined. However, 4.5% of births did not initiate prenatal care until the third trimester in Manchester, a rate that is 41% higher than in the State of New Hampshire and 15% higher than in the Greater Manchester Region. Overall, 5.5% of births had either late or no prenatal care in Manchester in the 5-year period.

**Figure 9. Manchester Births with Early and Adequate Prenatal Care Approaching National Target**

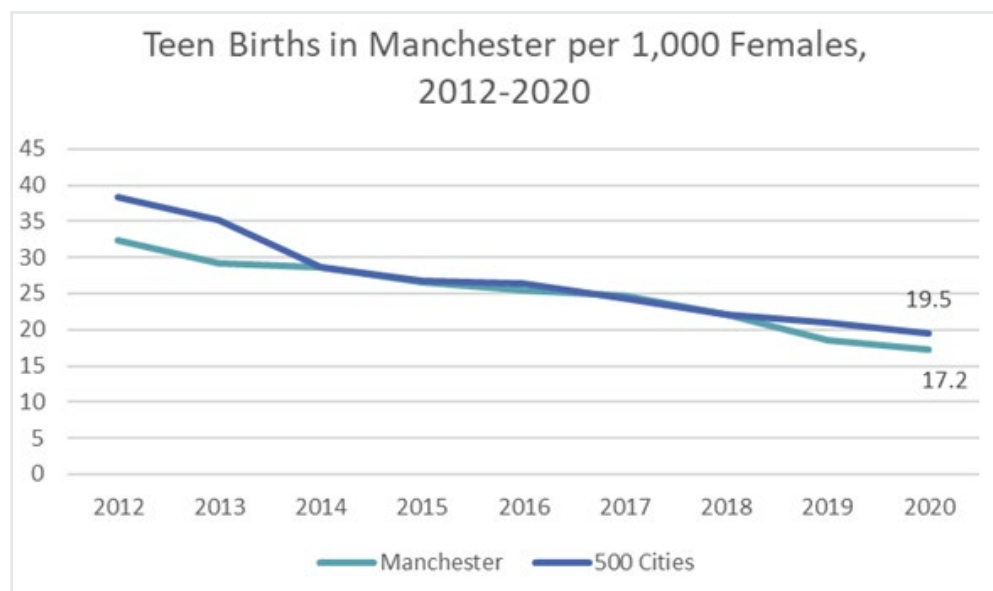


Source: City Health Dashboard



ACOG stresses the importance of both early and adequate prenatal care during pregnancy, defined as care initiated during the first trimester and includes nine or more visits for a pregnancy lasting 36 weeks or longer. Healthy People 2030 uses this definition for reaching its goal of achieving early and adequate prenatal care of 80.5% of births by the year 2030. Data from the City Health Dashboard indicates an upward trend toward reaching this goal in Manchester. In 2020, 79.7% of births to Manchester women included early and adequate prenatal care, higher than the average of 77.8% of births across the 500 Cities project.

**Figure 10. Teen Births in Manchester per 1,000 Females**



Teen births have been on a steady decline in Manchester as well as the 500 largest cities in the US. From 2012 to 2020, the teen birth rate per 1,000 females between the ages of 15-19 in Manchester have decreased by nearly half from 32.3 to 17.2 per 1,000 females. Measuring and monitoring the teen birth rates help in identifying need for evidence-based interventions. These interventions can include sexual health education and promotion of contraceptive use, as well as social, economic, and health care support for teen parents.<sup>9</sup>

## Access to Behavioral/Mental Healthcare

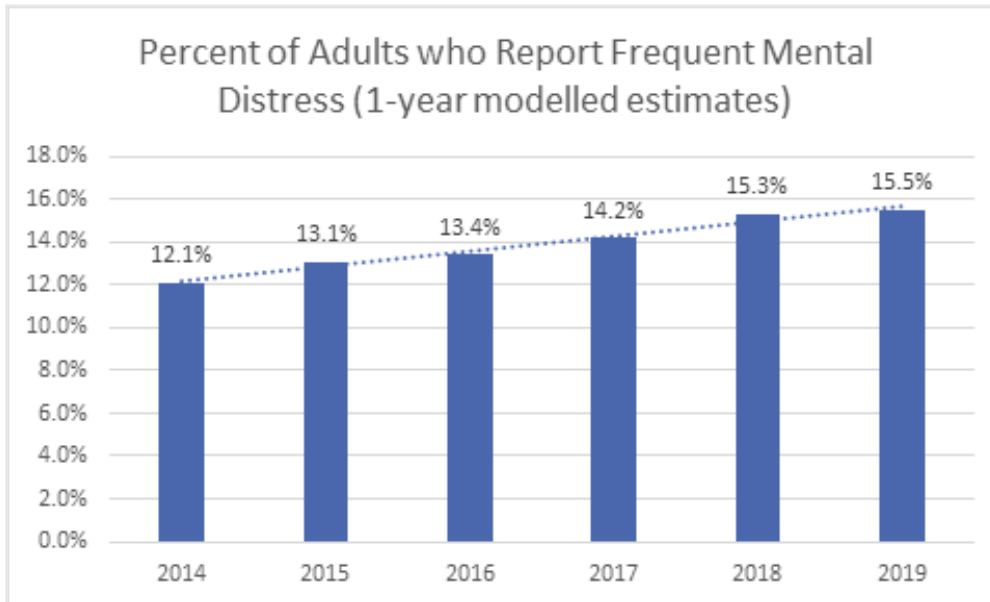
Health-related quality of life is measured by asking people how they would characterize their physical and mental health in the past month. Frequent mental distress is defined as experiencing 14 or more days of poor mental health in the prior 30 days.<sup>10</sup> Consistently poor mental health is linked to difficulties in daily life activities, like work or school, and an increased risk of behaviors that can have a negative impact on overall health and wellbeing.

The proportion of Manchester adults aged 18 years and older who report frequent mental distress is on a steady rise, according to data reported by City Health Dashboard (Figure 11). Between 2014 and 2019, the proportion of adults experiencing frequent mental distress increased by more than 28%, from 12.1% to 15.5%. A similar trend is occurring in Nashua and across the 500 Cities. However, rates of frequent mental distress have been consistently higher in Manchester than in the other two regions.

<sup>9</sup> Centers for Disease Control and Prevention. *Social Determinants and Eliminating Disparities in Teen Pregnancy*. <https://www.cdc.gov/teenpregnancy/about/social-determinants-disparities-teen-pregnancy.htm>

<sup>10</sup> <https://www.cityhealthdashboard.com/metric/30>

**Figure 11. Frequent Mental Distress on the Rise in Manchester Adults**



Source: City Health Dashboard

**Table 6. Manchester, Nashua Adults Report Similar Increase in Rates of Frequent Mental Distress**

Percent of Adults Who Report Frequent Mental Distress, 2014-2019

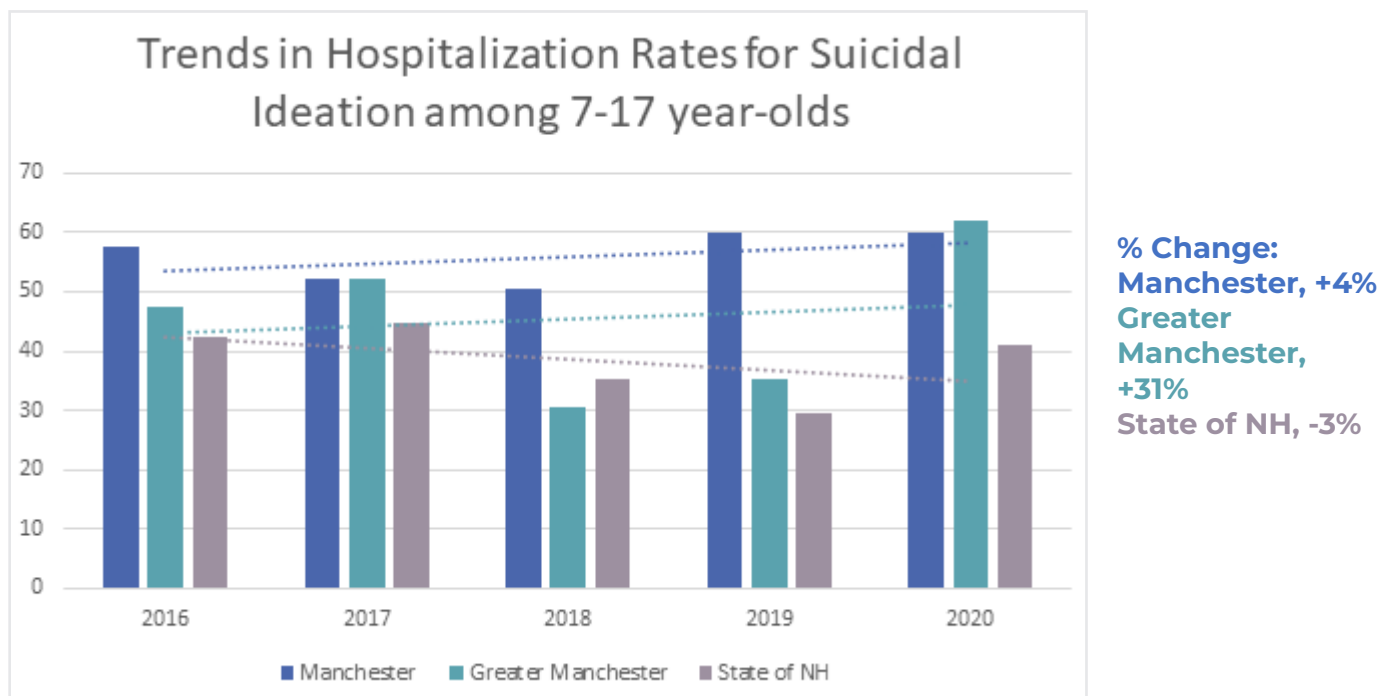
Region	2014	2015	2016	2017	2018	2019	% Change
Manchester	12.1%	13.1%	13.4%	14.2%	15.3%	15.5%	+28.1%
Nashua	11.0%	11.8%	12.1%	12.8%	13.7%	13.8%	+25.5%
500 Cities	12.3%	12.6%	12.8%	13.7%	14.0%	14.5%	+17.9%

Source: City Health Dashboard

**Youth Hospitalized for Suicidal Ideation**

Suicide attempt or suicidal ideation has been among the top five reasons for hospital admission among 7-17 year-olds in New Hampshire since 2016. In 2019, it was the 2nd most common reason for hospital admission in this age group in Manchester, the 4<sup>th</sup> most common in the Greater Manchester Public Health Region, and the 3<sup>rd</sup> most common reason for hospitalization in the State of New Hampshire.

**Figure 12. Hospitalization Rates for Suicide Attempt/Suicidal ideation/Self-harm Jump 75% among Greater Manchester 7-17 year-olds**



While the rate of hospitalizations for suicidal ideation/suicide attempt/self-harm in 7–17-year-olds is on the decline across the State of New Hampshire as a whole, this rate is on the rise among Greater Manchester youth (Figure 12). Rates of hospitalization increased by more than 30% in Greater Manchester between 2016 to 2020, with an increase of 75% in the last year of that period. In the City of Manchester, this increase was much smaller, at only 4% from 2016 to 2020.

**Table 7. Greater Manchester Shows Sharp Increase in Suicide-Related Hospitalizations Among Youth Compared with Manchester, State of NH**

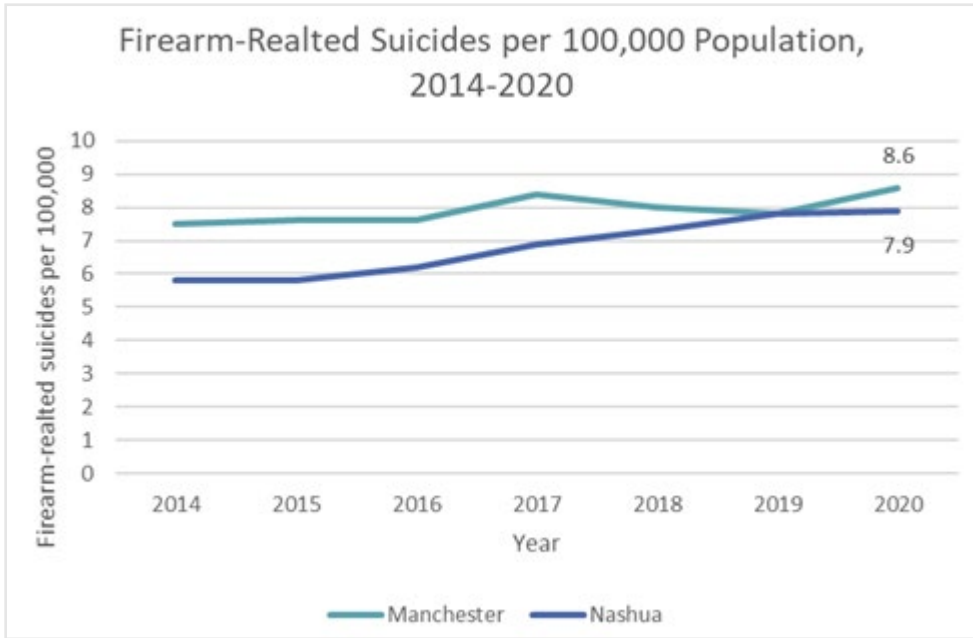
Region	2016	2017	2018	2019	2020	% Change
Manchester	57.6	41.8	50.6	59.8	59.8	+4%
Greater Manchester	47.4	52.3	30.6	35.4	61.9	+31%
<b>State of NH</b>	<b>42.5</b>	<b>44.8</b>	<b>35.3</b>	<b>29.6</b>	<b>41.1</b>	<b>-3%</b>

Source: NH Department of Health and Human Services

Table 7 further details the recent upward trend in hospital admissions for suicidal ideation/suicide attempt/self-harm among Manchester youth. These data provide a clear indication that increased mental health services are needed for youth in Manchester.

Manchester had 8.6 firearm suicides per 100,00 population compared to an average of 7.9 in Nashua, and 7.3 across the 500 largest cities in the US in 2020. While the amount of firearm related suicides has stayed fairly constant in Manchester since 2014, there was an increase from 7.8 to 8.9 per 100,000 from 2019 to 2020.

Figure 13: Firearm Related Suicides in Manchester per 100,000 Population



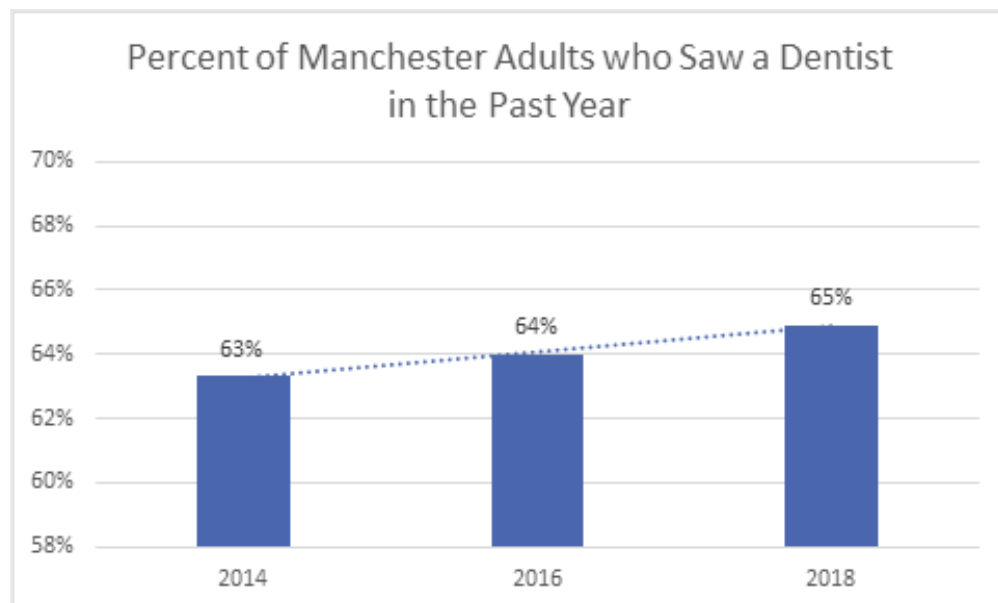
## Access to Oral Healthcare

Routine oral healthcare is important to maintaining a healthy mouth, teeth and gums. Diseased or missing teeth not only affect your appearance and self-esteem, but can also make chewing your food properly difficult and painful, leading to malnutrition and digestive problems. Oral infections and inflammation have been linked to endocarditis, cardiovascular disease, pneumonia, and certain complications of pregnancy.<sup>11</sup> Moreover, “children with tooth decay might have noticeable difficulty in eating, speaking, and sleeping, experience distress and pain, and smile less—which in turn affect their development, wellbeing, family and social life, and school performance,” according to an article recently published in *The Lancet Child and Adolescent Health*.<sup>12</sup>

### Routine Dental Care

The US Department of Health and Human Services has prioritized access to oral health care in Healthy People 2030, with a goal of reducing the number of people who are unable to obtain or delay needed dental care to fewer than 4.1% by the year 2030.<sup>13</sup>

**Figure 14. Only Two-Thirds of Manchester Adults Saw a Dentist in the Past Year**



Source: City Health Dashboard

The proportion of Manchester adults who report visiting a dentist in the past year for any services has been rising incrementally since 2014, according to data reported by City Health Dashboard (Figure 14). The percent of adults with routine dental visits have been similarly steady in Nashua and across the Dashboard’s 500 Cities. In 2018, the proportion of adults who reported at least one dental visit in the past year was slightly lower in Manchester than in Nashua (65% versus 67%, respectively), but slightly higher than in the 500 Cities combined (64%).

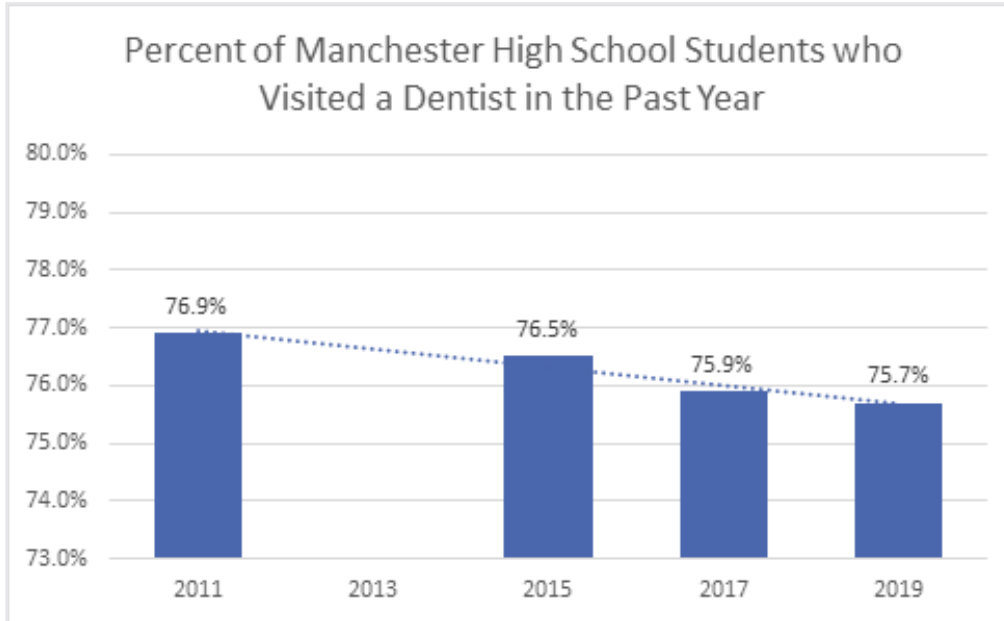
<sup>11</sup> <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475>

<sup>12</sup> <https://www.thelancet.com/action/showPdf?pii=S2352-4642%2819%2930275-5>

<sup>13</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/reduce-proportion-people-who-cant-get-dental-care-they-need-when-they-need-it-ahs-05>



**Figure 15. 25% of Manchester High School Students Say They Did Not See a Dentist in the Past Year**



Source: NH Department of Health and Human Services

Conversely, data from the Youth Risk Behavior Surveillance Survey indicate that Manchester high school students were somewhat less likely to have a recent dental visit in 2019 compared with earlier years (Figure 15). Between 2011 and 2019, the proportion of Manchester high school students who said they had seen a dentist in the past year decreased slightly, from 76.9% to 75.7%.

**Table 8. Manchester Teens Less Likely to Visit a Dentist than Nashua, State of NH as a Whole**

Percent of High School Students Who Report Visiting a Dentist in the Past Year, 2011-2019

Region	2011	2013	2015	2017	2019
Manchester	76.9%	**	76.5%	75.9%	75.7%
Greater Manchester PHR	**	**	80.3%	82.3%	82.6%
<b>State of NH</b>	<b>79.6%</b>	<b>**</b>	<b>82.7%</b>	<b>82.8%</b>	<b>83.6%</b>

Source: NH Department of Health and Human Services

\*\*data not available

By comparison, the percentage of high school students reporting routine oral health care appears to be on the rise in the Greater Manchester Region and the State of NH. Between 2015 (the earliest year for which data are available) and 2019, the percent of students in the Greater Manchester Public Health Region who had a dentist visit in the past year increased from 80.3% to 82.6%. In the State of NH, the proportion of students reporting a recent visit to the dentist increased from 79.6% in 2011 to 83.6% in 2019.

## WHAT DO MANCHESTER RESIDENTS THINK?

More than 9 in 10 Manchester residents surveyed said that it is “very important” for Manchester to take action to improve access to quality, preventive health care, including primary care, prenatal care, dental care, and mental health services. Almost one-quarter said they had trouble accessing dental care for adults in the past 3 years and 13% said they had trouble accessing mental health services for adults in the same period.

Key stakeholders interviewed identified the number of healthcare facilities in Manchester as an asset but described access to dental and mental health services as poor in the city. Some pointed to the state’s Integrated Delivery Networks as a model for coordinating care but expressed concern about the sustainability of those networks now that funding has ended. Others pointed to insurance coverage and reimbursement practices as important barriers to expansion of services that could be overcome with legislative action.

## Community Spotlight

### NH Rapid Response Mobile Crisis Response Team



For adults and seniors experiencing a time of crisis, a Rapid Response Team deploys mental health clinicians and peer support and recovery coaches directly to the individual, or individuals, in need.

Rapid Response is a 24/7/365 service providing direct access to risk assessment, crisis intervention, stabilization, and connection to a comprehensive array of mental health and substance misuse treatment. The goal of Rapid Response is to assist community members with these services outside of a hospital or emergency room whenever possible.

The Mobile Crisis Response Team (MCRT) is now a part of the larger statewide Rapid Response system. Calls are triaged through the Rapid Response Access Point, and Mobile Crisis Teams are deployed to the community through the Access Point. The Mobile Crisis Response Team through The Mental Health Center of Greater Manchester works closely with the Manchester Police Department, Manchester Fire, and AMR, as well as our many community partners. The Manchester team facilitates Crisis Intervention Training (CIT) and Certification to members of the Manchester Police Department, and a CIT officer is embedded within the mobile team seven nights per week. The mobile crisis team serves community members of all ages and responds to homes, community based settings, schools, community partner settings, etc.

The MCRT has served over 1,000 individuals in the first 5 months of 2022, with 28% of those individuals being children and youth under the age of 18. In 2020 and 2021, the team served 4,785 Manchester residents, of whom 942 were children and youth.

To learn more please visit [www.mhcgm.org](http://www.mhcgm.org) or [www.nh988.com](http://www.nh988.com)

The 24/7/365 number for NH Rapid Response is 1-833-710-6477

## Healthcare for the Homeless

Health Care for the Homeless (HCH) is a program of the Manchester Health Department based at Catholic Medical Center. HCH is a designated Federally Qualified Health Center for men, women, teens, and children in the City of Manchester who do not have a regular or adequate place to call home.

HCH offers a variety of services including primary medical care, medical case management, chronic disease management, integrated behavioral health services, counseling and medication-assisted treatment for substance use disorders, easily accessible clinics, outreach, and street medicine, testing and treatment for STD/HIV, health screenings and phlebotomy, prescription medication assistance, telehealth, transportation coordination, referrals to specialty care, and social work/case management.

In 2021, HCH served 1,283 total patients, with 7,284 total visits (medical, mental health, oral health, substance use disorder treatment, and enabling service visits). All people experiencing homelessness in the City of Manchester are welcome--no one is turned away due to an inability to pay.

Health Care for the Homeless has three locations across Manchester:

- ▶ Adult Emergency Shelter Practice/Families in Transition located at 199 Manchester Street, Manchester, NH 03103 (603)-663-8718
- ▶ The Family Place Practice/Families in Transition located at 177 Lake Avenue, Manchester, NH 03103 (603)-782-7414
- ▶ Wilson Street Integrated Health Practice located at 293 Wilson Street, Suite 102, Manchester, NH 03103 (603)-665-7450

## The City of Manchester Health Department Oral Health Program

The Manchester Health Department's School-Based Oral Health Program provided complete preventative dental services. It is the largest program in NH, serving an average of 600 students each school year at all 21 public schools in Manchester. Students who qualify for the program receive a dental screening, fluoride treatment, sealants and temporary fillings (as needed), oral health education, and a referral for additional and regular dental care. This care is provided by a public health dental hygienist on the mobile dental van during school hours, and when billable, Medicaid reimbursement is processed. In order to qualify for services through this program, families must not have a current dental home and must meet financial eligibility criteria. For more information, call the Manchester Health Department at 603-624-6466.



# NUTRITION AND FOOD SECURITY



## **PRIORITY: IMPROVE ACCESS TO HEALTHY FOODS**

Each year, chronic diseases account for 70% of all deaths in the United States.<sup>1</sup> In New Hampshire, the five major diet-related chronic diseases—cardiovascular disease, diabetes, hypertension, stroke, and cancers—accounted for more than 6,500 deaths in 2020.<sup>2,3</sup>

A healthy diet includes “a variety of fruits, vegetables, grains, protein foods, and dairy and fortified [dairy] alternatives,” according to the US Department of Agriculture.<sup>4</sup> However, many NH residents, particularly those in low-income and minority communities, lack access to fresh, healthy nutritious food. When healthy foods are not available, people often settle for foods that are higher in calories and lower in nutritional value.

### **Limited Access to Healthy Foods**

Living in a “food desert” is strongly associated with higher levels of obesity and nutrition-associated chronic diseases. Food deserts are neighborhoods with limited access to affordable healthy foods due to low income, low proximity to a full-service grocery store, or both. The USDA considers individuals who live less than ½ mile from a supermarket or grocery store to have limited access to healthy foods.

Figure 1 shows that nine of Manchester’s center city census tracts were considered food deserts in 2019: 6, 8, 13, 16, 18, 20, 21, 24, and 25. These neighborhoods have both significant rates of poverty and are at least ½ mile from the nearest grocery store. Without easy access to a vehicle or public transportation, families living in these communities end up paying higher prices for produce at a corner store or choosing less-healthy options to stretch their food budgets.

Overall, 63.1% of Manchester residents had limited access to healthy food in 2019, down almost 20% from 77.4% of residents in 2015. Manchester residents are less likely to have limited access to healthy food than Nashua residents, 73.5% of whom had limited access in 2019.

---

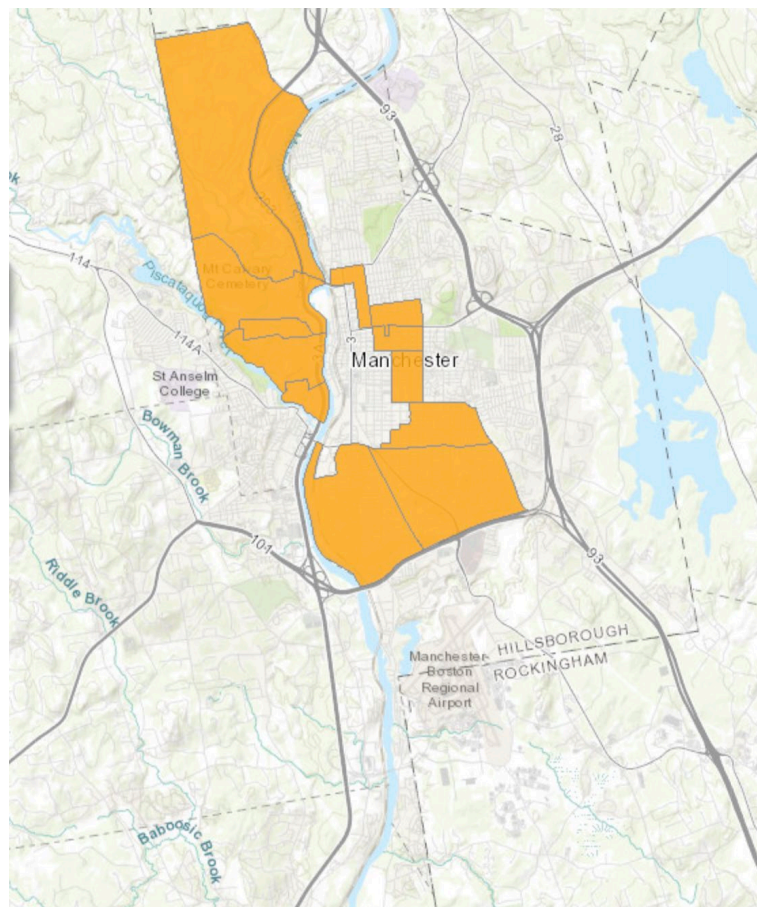
<sup>1</sup> <https://www.cdc.gov/nutrition/healthy-food-environments/improving-access-to-healthier-food.html>

<sup>2</sup> <https://www.cdc.gov/nchs/pressroom/states/newhampshire/nh.htm>

<sup>3</sup> <http://journals.sagepub.com/doi/pdf/10.1177/15648265010224S209>

<sup>4</sup> <https://ask.usda.gov/s/article/What-is-a-healthy-diet>

**Figure 1. Many Manchester Center-City Neighborhoods Are Food Deserts**



LI (low income): census tracts with 20% or more residents living in poverty or where the median family income is less than 80% of the state average.

LA (low access): distance to the closest grocery store for urban (½ mile) and rural (10 miles) communities.

Source: USDA Food Atlas

Food access is closely tied to vehicle access in communities without a close full-service grocery store. In Manchester, 8.3% of households had no access to a vehicle in 2020, while another 40.6% of households shared one vehicle among all residents. City residents were much less likely to have access to a vehicle compared with households in the Greater Manchester Area, as shown in Table 1. The percentage of households with no access to a vehicle was 66% higher in Manchester than in the state as a whole in 2020.



**Table 1. More than 8% of Manchester Households have No Vehicle Access**

Percent of Occupied Housing Units with no Vehicle Access, Greater Manchester, 2020

Town	Households with no Vehicle	Sharing one Vehicle
Manchester	8.3%	40.6%
Auburn	0.0%	14.1%
Bedford	4.1%	16.3%
Candia	1.0%	17.7%
Deerfield	4.2%	12.9%
Goffstown	4.3%	35.3%
Hooksett	0.0%	33.4%
New Boston	0.0%	0.0%
Londonderry	2.6%	23.2%
Nashua	7.9%	35.2%
<i>State of NH</i>	<i>5.0%</i>	<i>29.7%</i>

*Source: US Census Bureau, 2020 5-year estimates*

### Factors Associated with Food Insecurity

Several household characteristics are consistently associated with higher rates of food insecurity, according to research conducted by the USDA. Female-headed households with children, black- and Hispanic-headed households, and households with a low income-to-poverty ratio are at particular risk of food insecurity. (Figure 2). Job segregation, gender and economic inequality, and racial/ethnic discrimination all increase the likelihood that women will be poor.<sup>5</sup>

In 2020, there were 4,980 female-headed households with children in Manchester, representing nearly one-quarter (24.3%) of all households with children. Overall, 26.8% of households in Manchester were female-headed with no spouse or partner present that year. In addition, 20.7% of Manchester households had income-to-poverty ratios below 185% in 2020—the standard criteria used for many food insecurity benefits including free school meals—with 9.3% of households living below 100% the national poverty rate.

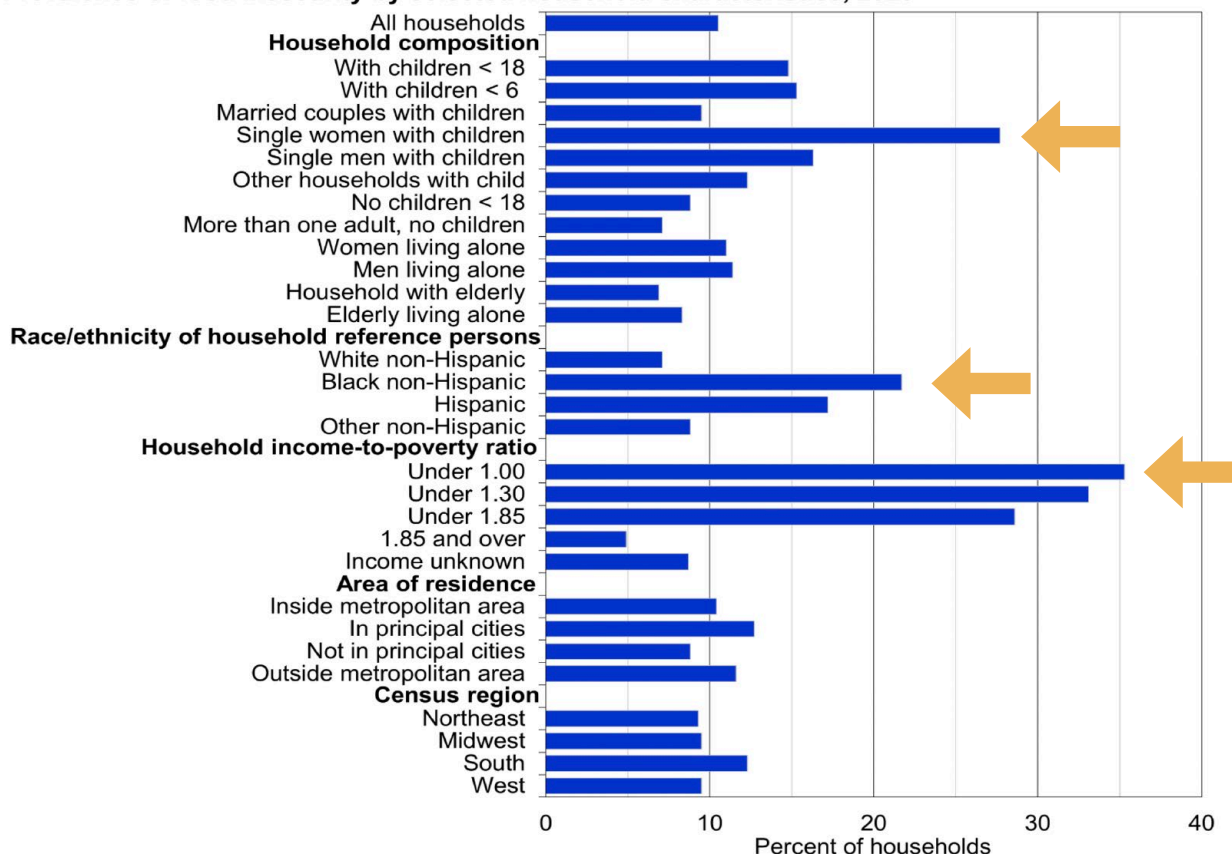
---

<sup>5</sup> <https://www.projectbread.org/research/barriers-to-snap>

## Figure 2. Single Moms with Children, Black and Hispanic Households Most Likely to Experience Food Insecurity

Prevalence of Food Insecurity by Selected Household Characteristics in the US, 2020

Prevalence of food insecurity by selected household characteristics, 2020



Source: USDA, Economic Research Service, using data from the December 2020 Current Population Survey Food Security Supplement, U.S. Census Bureau.

Source: USDA Economic Research Service

### Supplemental Nutrition Assistance Program (SNAP)

The SNAP program, also known as food stamps, is the national food insecurity safety net for low-income households. While other criteria apply, households generally must have net incomes at or below 100% of the federal poverty level to qualify. Importantly, not everyone who qualifies for SNAP actually receives those benefits, with computer access, stigma, and application difficulties cited as the most prominent barriers to participation.<sup>6</sup>

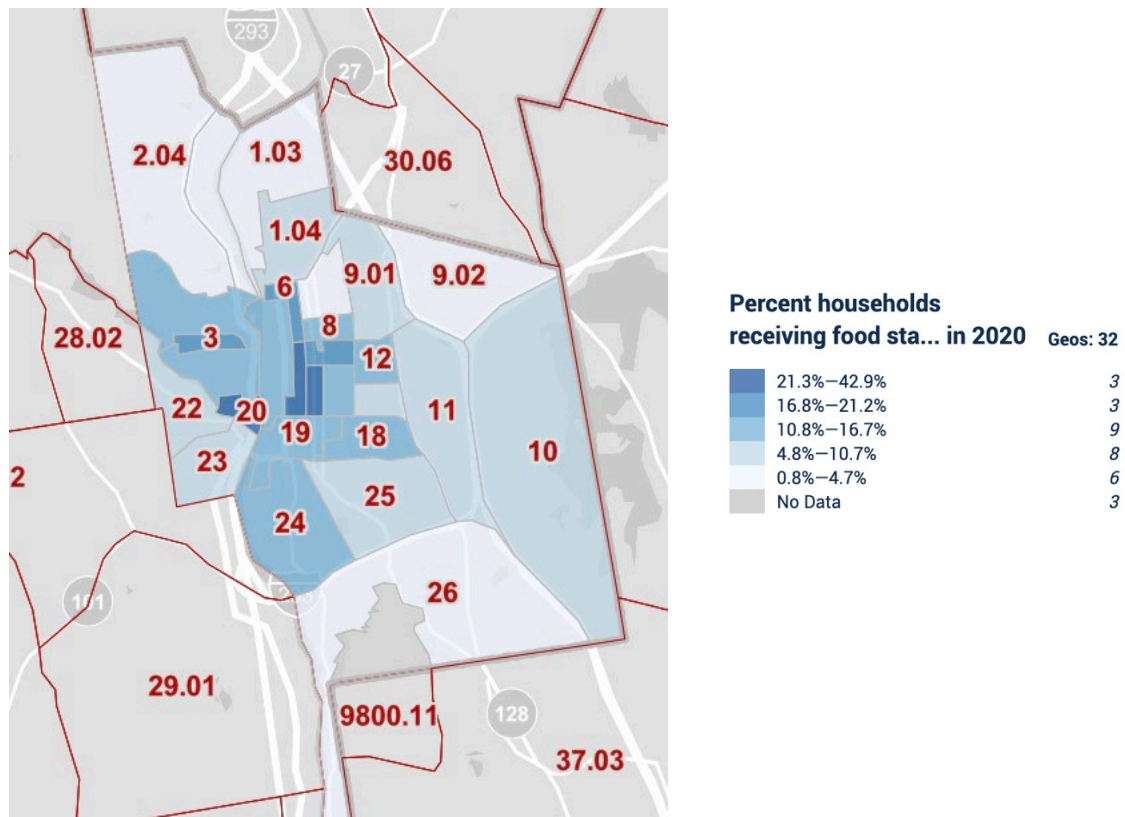
Overall, 11.5% of Manchester households received SNAP benefits in 2020 (Table 2). However, the proportion of families receiving food assistance was twice this rate in three center city census tracts—14, 15, and 20—where up to 42.9% of households were receiving SNAP assistance that year (Figure 3).

<sup>6</sup> <https://www.projectbread.org/research/barriers-to-snap>



### Figure 3. Up to 40% of Families Receive SNAP Benefits in Manchester Center-City Neighborhoods

Percent of Households Receiving SNAP Benefits, Manchester, 2020



Source: US Census Bureau

Manchester residents were 80% more likely to be receiving SNAP benefits in 2020 than residents across the State of New Hampshire as a whole (Table 2). Participation in this program also varied widely among towns in the Greater Manchester Area, with rates ranging from a low of 0.0% in New Boston to a high of 5.7% in Candia. Manchester families were 35% more likely than those living in Nashua (8.5%) to be receiving food stamps in 2020.



**Table 2. Percent of Households Receiving Food Assistance Varies Widely in Greater Manchester**

Percent of Households Receiving SNAP Benefits, Greater Manchester, 2020

Town	Households Receiving SNAP/Food Stamps
Manchester	11.5%
Auburn	1.9%
Bedford	1.5%
Candia	5.7%
Deerfield	3.3%
Goffstown	3.5%
Hooksett	2.3%
New Boston	0.0%
Londonderry	4.4%
<i>Nashua</i>	8.5%
<i>State of NH</i>	6.4%

Source: US Census Bureau, 2020 5-year estimates

## Obesity

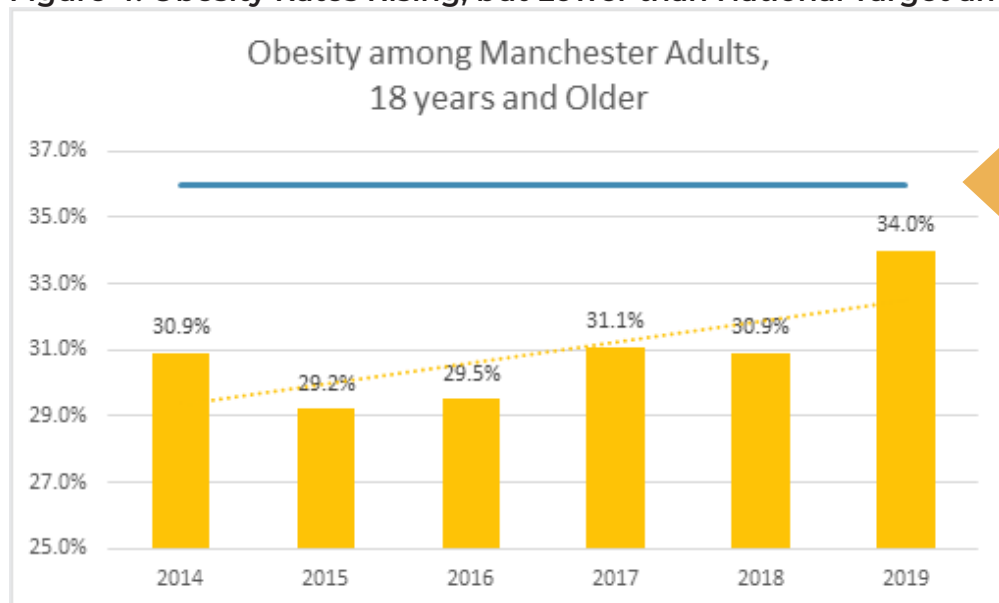
Residents of neighborhoods with lower access to healthy foods have higher rates of obesity than those living in neighborhoods with easy access to a grocery store.<sup>7</sup> Obesity increases the risk of other nutrition-associated chronic diseases, poor mental health, and overall reduced quality of life.<sup>8</sup> Rates of obesity are increasing across the nation in all age groups—children, adolescents and adults. Reversing this trend is a top objective in Healthy People 2030.

Figure 4 shows that obesity rates among Manchester adults are below the Healthy People 2030 goal of 36.0%, but will not be for long if current trends continue. Between 2014 and 2019, the percent of Manchester residents who are obese increased by 10%, from 30.9% to 34.0% (Figure 3). While the proportion of Manchester adults with obesity was lower than the national target in 2019, it was higher than in Nashua (32.5%) and across the City Health Dashboard’s 500 cities (30.8%).

<sup>7</sup>Babey SH, Diamant AL, Hastert TA, Harvey S. *Designed for disease: the link between local food environments and obesity and diabetes*. Los Angeles: UCLA Center for Health Policy Research; 2008 Apr 1.

<sup>8</sup>Centers for Disease Control and Prevention. *Adult Obesity Causes & Consequences*. <https://www.cdc.gov/obesity/adult/causes.html>. Updated August 29, 2017. Accessed February 16, 2018.

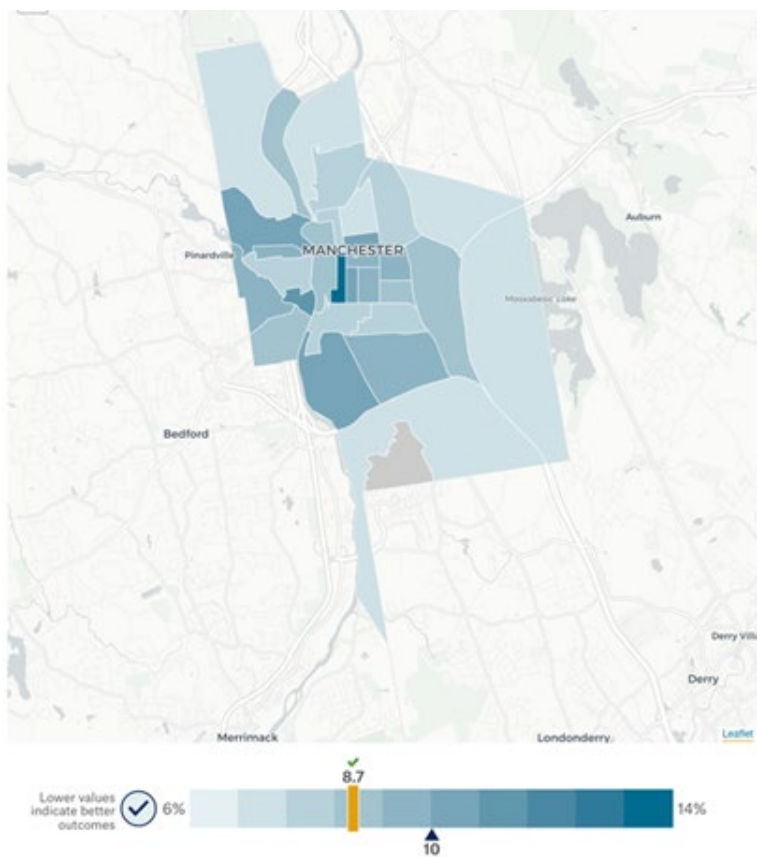
**Figure 4. Obesity Rates Rising, but Lower than National Target among Manchester Adults**



Source: City Health Dashboard

As shown in Figure 5, obesity rates are higher in Manchester’s center city than in the surrounding areas. The highest proportions of adults with obesity are located in census tracts 14 and 15, where the obesity rates were 42.1% and 40.8%, respectively, in 2019.

**Figure 5. Adult Obesity Rates Highest in Manchester’s Center City Neighborhoods**



8.7% of Manchester’s adults reported having diabetes, compared to an average of 10% across the Dashboard’s cities.

Source: City Health Dashboard

## Brain Health

Research shows that longitudinal brain health is closely linked to a healthy diet. Incorporating leafy greens and healthy fats while simultaneously reducing consumption of red meat and processed sugars is associated with reduced cognitive decline and reduced risk of dementia.<sup>9</sup> Research suggests that dietary changes that reduce the risks of developing a chronic illness such as type 2 diabetes and heart disease have considerable benefits to brain health.

Alzheimer's is the most common form of dementia and has consistently been in the top ten leading causes of death in Manchester. From the years 2000 to 2016, the rate of Alzheimer's disease deaths was 26.7 per 100,000 in Manchester.<sup>10</sup> Notably, the rate of Alzheimer's mortality for females was slightly higher than males in Manchester during this time period at 28.9 and 21.5 per 100,000 respectively.

## Nutrition-related Chronic Disease: Diabetes

Diabetes was the 8<sup>th</sup> leading cause of death in New Hampshire in 2020, with a rate of 19.2 deaths per 100,000 residents.<sup>11</sup> Diabetes is closely tied to obesity, with approximately 90% of adults with diabetes also diagnosed as obese or overweight.<sup>12</sup> People with diabetes have an increased risk of complications associated with reduced quality of life, including eye damage, foot ulcers, and amputations. Complications of diabetes are responsible for a considerable proportion of preventable emergency department and hospital admissions in Manchester (see Access to Clinical Care).

Figure 6 shows an increase in the prevalence of diabetes among adults living in Manchester from 2014 to 2018, followed by a decline from 2018 to 2019. Overall, the proportion of adults with diabetes declined 2.2% during this period in Manchester and 4.5% in Nashua, while rising slightly (1.0%) across the 500 Cities.

---

<sup>9</sup>Flanagan, Emma, et al. "Nutrition and the ageing brain: Moving towards clinical applications." *Aging Research Reviews*, vol. 62, Sept. 2020, doi:<https://doi.org/10.1016/j.arr.2020.101079>

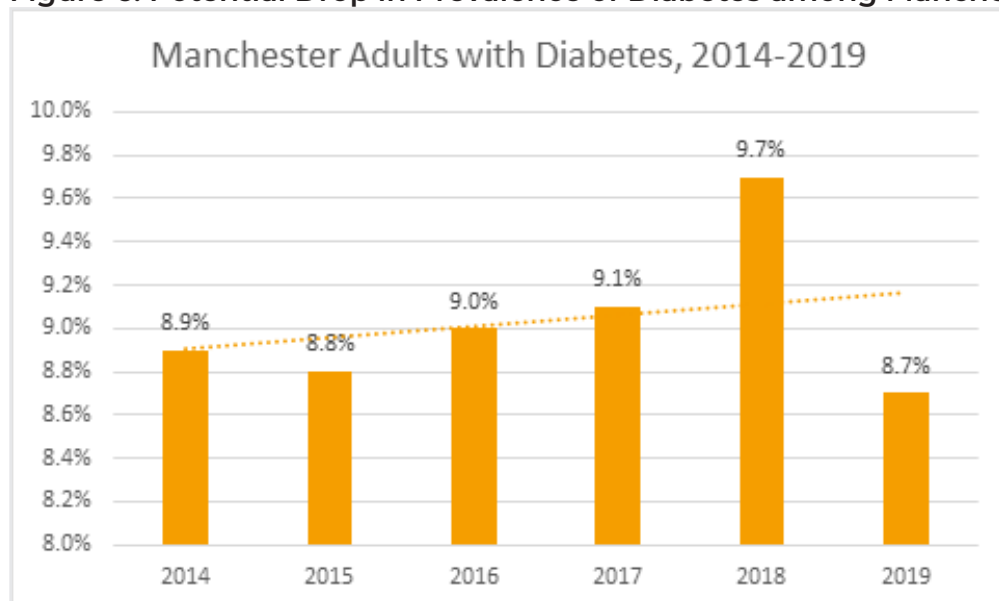
<sup>10</sup> [https://wisdom.dhhs.nh.gov/wisdom/dashboard.html?category=chronic-health-conditions&topic=heart-disease-and-stroke&subtopic=leading-causes-of-death&indicator=death:-leading-causes-\(all-ages\)](https://wisdom.dhhs.nh.gov/wisdom/dashboard.html?category=chronic-health-conditions&topic=heart-disease-and-stroke&subtopic=leading-causes-of-death&indicator=death:-leading-causes-(all-ages))

<sup>11</sup> [https://www.cdc.gov/nchs/pressroom/sosmap/diabetes\\_mortality/diabetes.htm](https://www.cdc.gov/nchs/pressroom/sosmap/diabetes_mortality/diabetes.htm)

<sup>12</sup> Dutko, Paula, Michele Ver Ploeg, and Tracey Farrigan. *Characteristics and Influential Factors of Food Deserts*, ERR-140, U.S. Department of Agriculture, Economic Research Service, August 2012.



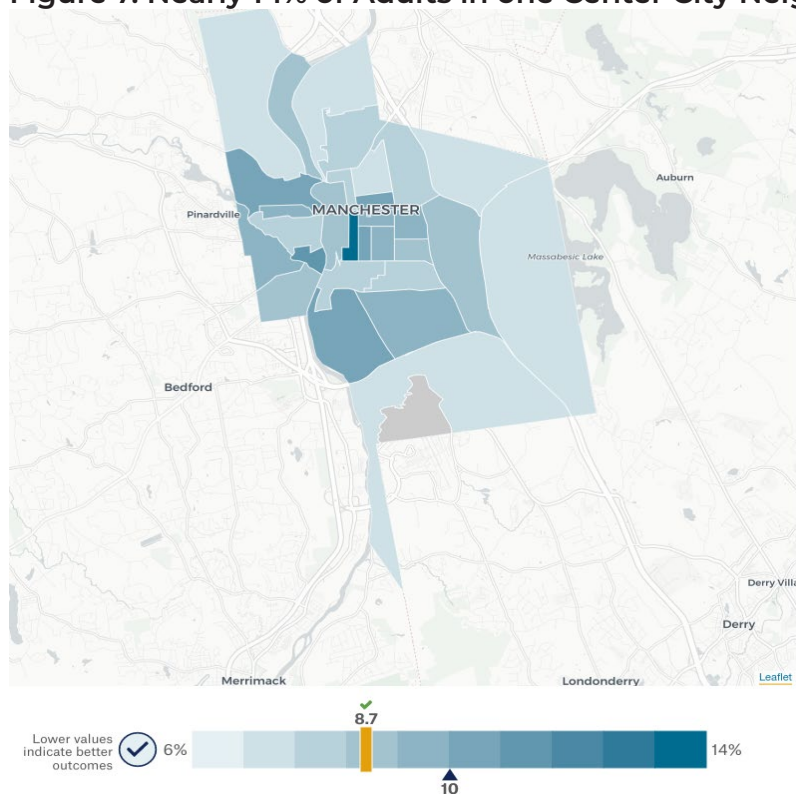
**Figure 6. Potential Drop in Prevalence of Diabetes among Manchester Adults**



Source: City Health Dashboard

Like obesity, diabetes prevalence is highest in Manchester’s center city neighborhoods (Figure 7). Six census tracts—2.02, 8, 14, 15, 20, and 24—have diabetes rates above 10% of adults, with the highest rate seen in tract 14, at 13.7%.

**Figure 7. Nearly 14% of Adults in one Center City Neighborhood have Diabetes**



8.7% of Manchester’s adults reported having diabetes, compared to an average of 10% across the Dashboard’s cities.

City or census tract value ▲ Dashboard-City Average ✓ Present when value is better than Dashboard-City Average ✓ Better Outcomes

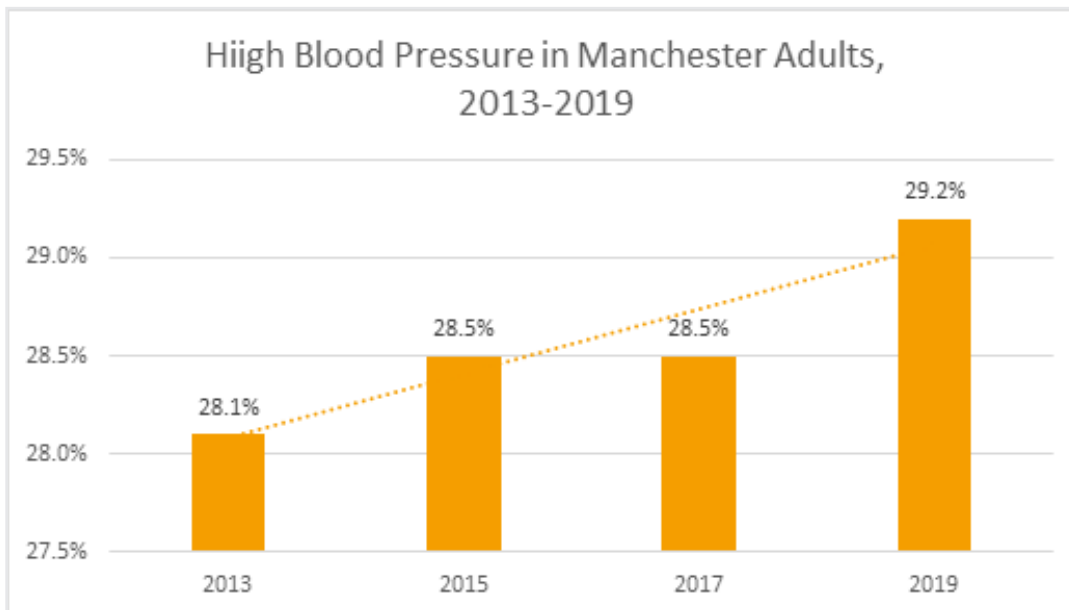
Source: City Health Dashboard

## Nutrition-related Chronic Disease: High Blood Pressure

A diet low in fats and sodium and high in fiber is key to maintaining a healthy blood pressure. This translates to more fresh fruits and vegetables and fewer processed foods, which are typically high in sodium, saturated fat, and sugars. Poorly managed blood pressure increases the risk of heart attack, stroke, kidney disease, and vision loss.<sup>13</sup>

Unfortunately, the proportion of Manchester adults with a diagnosis of high blood pressure has risen slowly but consistently in the past several years (Figure 8). Between 2013 and 2019, the prevalence of high blood pressure in Manchester rose by 4%, while declining slightly (1%) across the 500 Cities, and remaining the same over time in Nashua. The US Department of Health and Human Services has set a goal of lowering the rate of adult high blood pressure to 27.7% by 2030.

**Figure 8. Hypertension on the Rise in Manchester Adults**

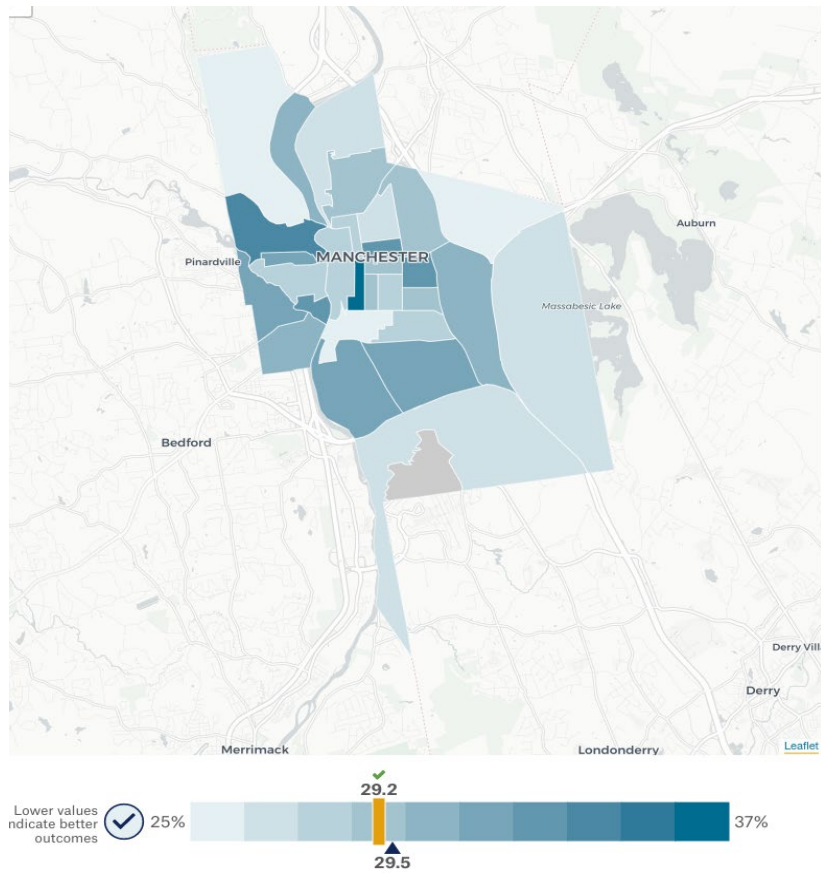


Source: City Health Dashboard

Figure 9 demonstrates that the prevalence of high blood pressure varies throughout Manchester, from a low of 25.2% in census tract 9.02 to a high of 36.2% in center city census tract 14—a 44% difference.

<sup>13</sup> <https://www.heart.org/en/health-topics/high-blood-pressure/health-threats-from-high-blood-pressure>

**Figure 9. High Blood Pressure Rates Highest in Center City and West Side Neighborhoods**



9.2% of Manchester's adults reported having high blood pressure, compared to an average of 29.5% across the dashboard's cities.

City or census tract value    ▲ Dashboard-City Average    ✓ Present when value is better than Dashboard-City Average    ☑ Better Outcomes

Source: City Health Dashboard

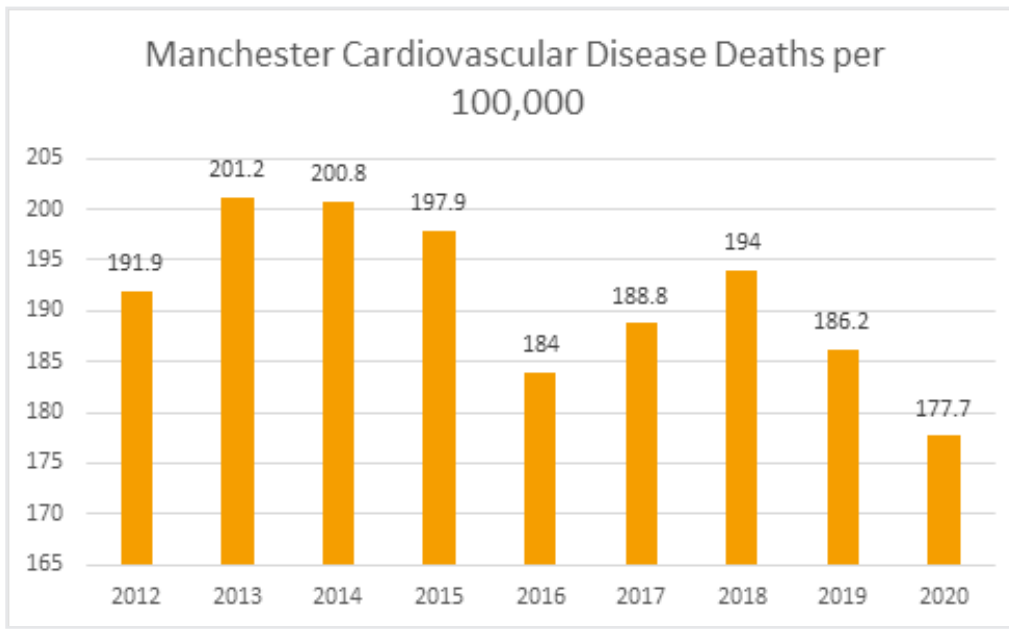
### Nutrition-related Chronic Disease: Cardiovascular Disease

Cardiovascular disease is the leading cause of death in Manchester, the State of New Hampshire, and the country as a whole. However, the City of Manchester accounts for a disproportionate fraction of the state's deaths due to heart disease, with 12% of deaths occurring in Manchester while the city's residents represent only 9% of the state's population.<sup>14</sup>

The rate of deaths due to cardiovascular disease in Manchester was 177.7 per 100,000 in 2020, continuing a multi-year decline in rates starting in 2018 (Figure 10). The cardiovascular disease death rate for Manchester in 2020 was 17% lower than the 500 Cities average (211.5 deaths/100,000), but notably 30% higher than Nashua (131.4 deaths/100,000).

<sup>14</sup> <https://www.manchesternh.gov/Departments/Health/Services/Chronic-Disease-Prevention#:~:text=Heart%20disease%20is%20the%20number,the%20State%20of%20New%20Hampshire>

**Figure 10. Cardiovascular Disease Deaths per 100,000 May be Decreasing in Manchester**



Source: City Health Dashboard

## WHAT DO MANCHESTER RESIDENTS THINK?

More than 91% of Manchester residents survey said that it is “very important” for Manchester to take action to increase access to healthy, affordable food sources, including addressing health conditions such as obesity and diabetes, lack of access to fresh fruits and vegetables, and food deserts. More than one in ten residents (11.3%) reported having trouble getting access to food/meals in the past 3 years.

Key stakeholders pointed to the Organization for Refugee and Immigrant Success (ORIS) as a key leader in addressing healthy food access in Manchester. Though food has not historically been a priority for funding in the city, they noted that the COVID-19 pandemic raised awareness of food insecurity and brought funding and other resources to address this issue. Several stakeholders pointed to Manchester’s West Side as a food desert, lacking both full-service grocery stores and adequate transportation. Some suggested a model of subsidized grocery stores to help encourage development in targeted neighborhoods.



## Community Spotlight

### Manchester Food Collaborative

Manchester has high rates of food and nutrition insecurity with over 46% of Manchester students in grades K-12 qualifying for free and reduced school meals. As a result of the pandemic, Manchester community organizations led by Families in Transition and Dartmouth Health created the Manchester Food Collaborative (MFC) to address food and nutrition insecurity when people were losing income and feeling unsafe to go to the grocery store. The pandemic highlighted the need for collaboration around food and nutrition supports in Manchester. MFC was able to address the immediate needs of pantries, because of increased demand, through small grants provided by funds from Dartmouth Health. These funds have also provided staff time for NH Hunger Solutions to coordinate and facilitate MFC and co-create a strategic plan to address food and nutrition insecurity in Manchester.

MFC's Vision: We envision a future where all of Manchester can access nutritious, affordable, culturally relevant, and sustainable food in a dignified way. A future where people's needs are met. A future where communities and a resilient local food system provide a strong foundation that allows everyone to thrive.

MFC's Mission: To increase food security through sharing resources, expanding equitable access, providing nutrition education, reducing food waste, eliminating stigma, and empowering communities to shape our food system. MFC meets the 4th Tuesday of the month 10:30am-12pm.

To learn more and get involved visit: <https://nhhungersolutions.org/>

### Fresh Choice Manchester, The City of Manchester Healthy Corners Program

The purpose of the Healthy Corners Program is to expand healthy food access in Manchester with a focus on areas known as "food deserts" where the nearest grocery store is more than a half mile away. We will work with corner and convenience stores throughout the City that accept Supplemental Nutrition Assistance Program (SNAP) benefits, thereby helping low-income families afford healthier food. In partnership with Organization for Refugee and Immigrant Success (ORIS) and Fresh Start Farms who will serve as the Food Hub, the program will provide:

- ▶ Fresh produce and healthy snacks at wholesale prices (with an emphasis on culturally appropriate foods);
- ▶ Training and technical assistance to storeowners;
- ▶ Marketing and merchandising support;
- ▶ Infrastructure, equipment, and produce displays; and
- ▶ Nutrition education for shoppers.



We are currently working with six pilot stores with food deliveries beginning Summer 2022.

For more information, please contact the Manchester Health Department at 603-624-6466.

# HEALTHY HOMES AND NEIGHBORHOODS



## PRIORITY: IMPROVE ACCESS TO HEALTHY, AFFORDABLE HOUSING

“Overall, the research supports the critical link between stable, decent, and affordable housing and positive health outcomes,” according to the Center for Housing Policy in Washington, DC.<sup>1</sup> Their research identifies numerous pathways through which quality, affordable housing can have a positive impact on health. For example, affordable housing makes more household financial resources available to pay for healthy food and health care services. Stable housing results in fewer household moves and related stressors that take a significant toll on mental health.

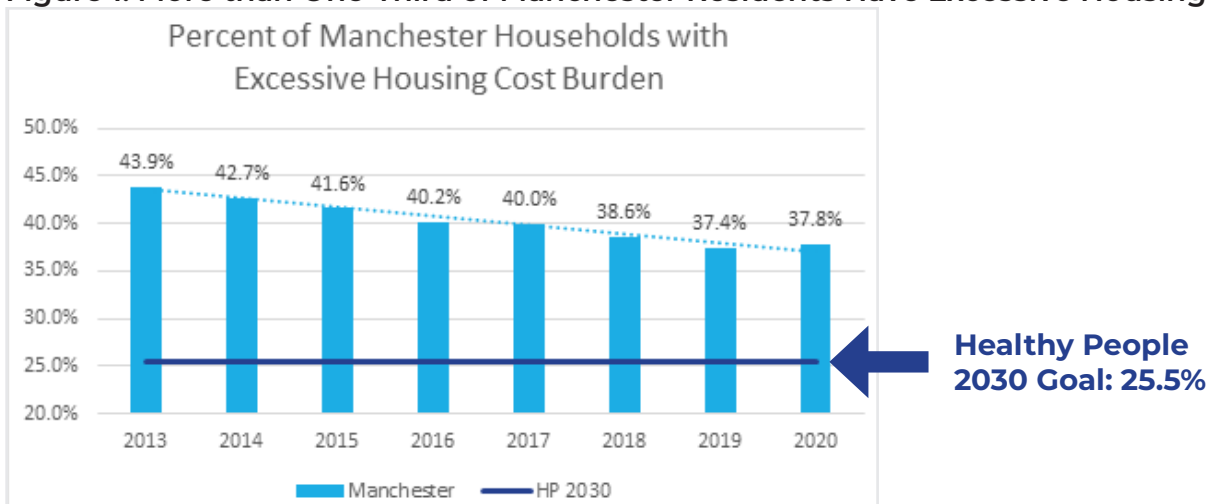
Overcrowding, such as “doubling up” two families in a housing unit intended for one family, increases the spread of respiratory illnesses like COVID-19 and influenza. Poorly maintained housing can expose residents to toxins such as lead or environmental allergens, including mold and pests.

### Excessive Housing Cost Burden

Families with excessive housing costs have fewer resources to support healthy living and are often forced to make difficult choices between paying for rent and utilities or healthcare and healthy food. The US Department of Housing and Urban Development (HUD) defines excessive housing cost burden as spending more than 30% of a household’s combined income on housing.<sup>2</sup> As housing prices climb across the country, this threshold is becoming increasingly more difficult for many families to achieve.

While Figure 1 shows a decline in the proportion of households with excessive housing cost burden in Manchester, the rate remains well above the Healthy People 2030 goal of 25.5%. In addition, 2020 5-year estimates from the US Census Bureau indicate that the percent of Manchester renters whose gross rent payments exceed 30% of their income topped 50% in 2020. Rates of excessive housing cost burden were similar, though somewhat lower, in Nashua and the 500 Cities in 2020 (34.9% and 34.2%, respectively).

**Figure 1. More than One-Third of Manchester Residents Have Excessive Housing Cost**



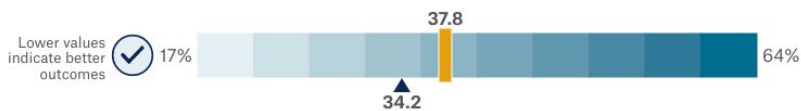
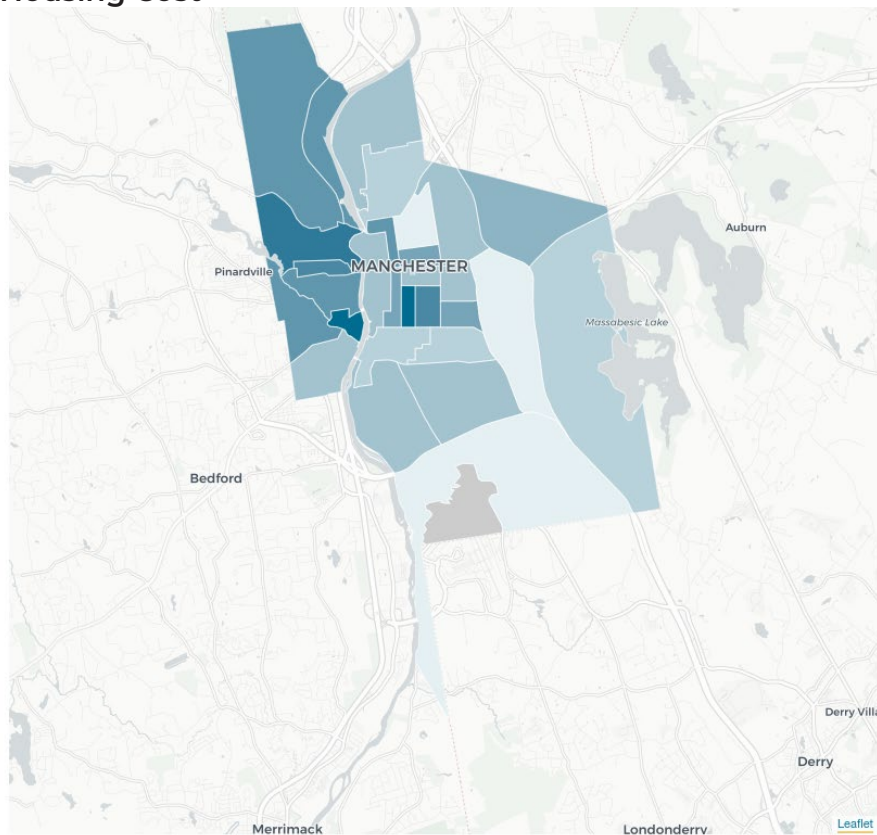
Source: City Health Dashboard

<sup>1</sup> <https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf>

<sup>2</sup> [https://www.huduser.gov/portal/pdredge/pdr\\_edge\\_featd\\_article\\_092214.html](https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html)

Figure 2 illustrates the variability in excessive housing cost by neighborhood in Manchester, with the highest rates seen in the center city and west side. More than 60% of residents living in census tract 15 have excessive housing cost, while in three census tracts—2.02, 6 and 20—between 50% and 60% of residents have excessive housing costs.

**Figure 2. More than Half of Residents in Some Center-City Neighborhoods Have Excessive Housing Cost**



**37.8% of Manchester's households** had excessive housing costs, compared to an average of **34.2%** across the Dashboard's cities.

- City or census tract value
- Dashboard-City Average
- Present when value is better than Dashboard-City Average
- Better Outcomes

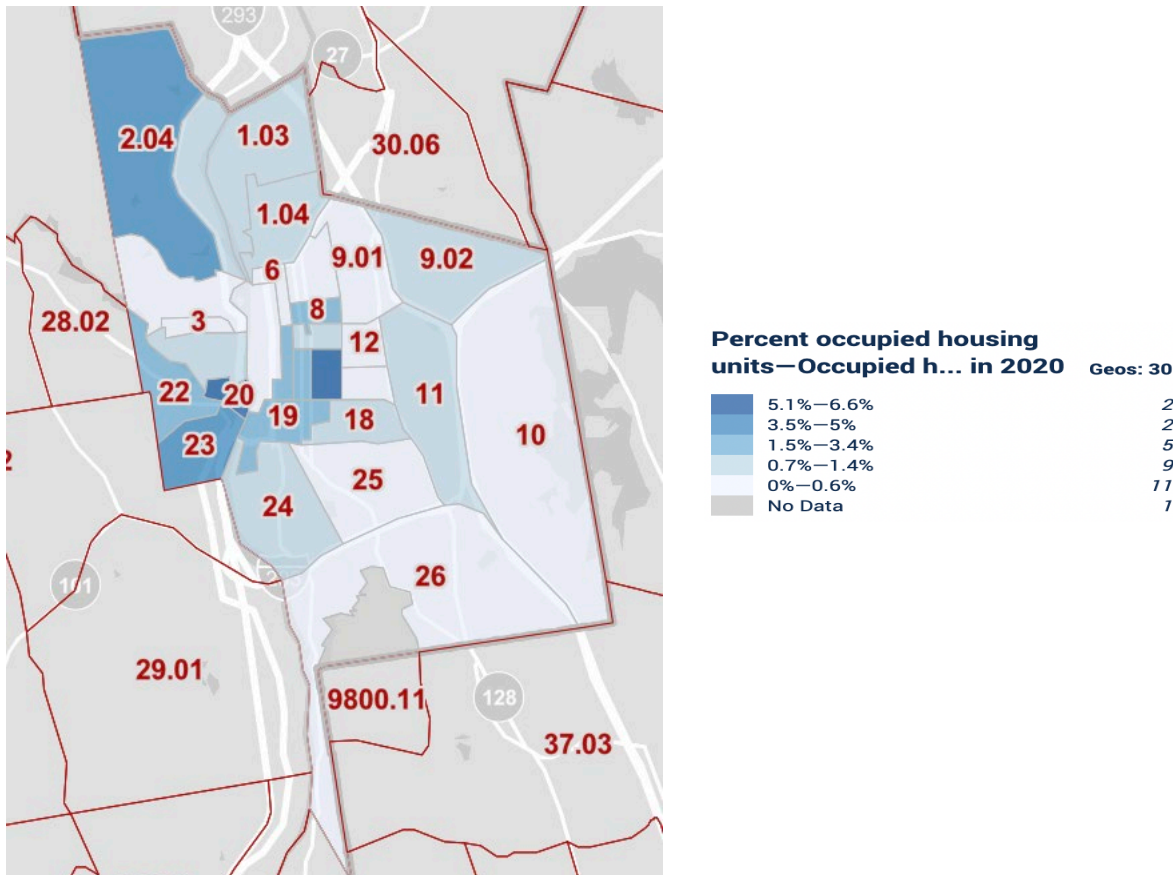
Source: City Health Dashboard

## Overcrowded Housing

Living in overcrowded housing is associated with poor mental health, higher rates of asthma and infectious diseases, and overall physical stress. In children, a higher risk of childhood injuries and poor school performance can be added to this list of negative impacts.<sup>3</sup> The most common definition of overcrowding is based on the persons-per-room living in a housing unit. Crowding is defined as more than one person per habitable room (excluding bathrooms, balconies, porches, foyers, hallways, and half-rooms), while severe crowding is defined as more than 1.5 persons per habitable room.<sup>4</sup>

In 2020, 2.6% of Manchester housing units were crowded or severely crowded. Renter-occupied units were 7 times more likely to be crowded or severely crowded than owner-occupied units, at 4.9% and 0.7% of units, respectively. Figures 3 and 4 show the distribution of crowded and severely crowded housing in Manchester by census tract in 2020. Two census tracts—16 and 20—had the highest rates of crowding in Manchester, at 6.6% and 6.3%, respectively. Three census tracts—20, 15, and 2004--were in the highest fifth of severely crowding rates in 2020, at 6.5%, 4.2%, and 4.5%, respectively. Notably, census tract 20 topped both of these lists, with a combined total of 12.8% of housing units characterized as crowded or severely crowded in 2020.

**Figure 3. Center-City, West Side Residents More Likely to Live in Crowded Housing Units**

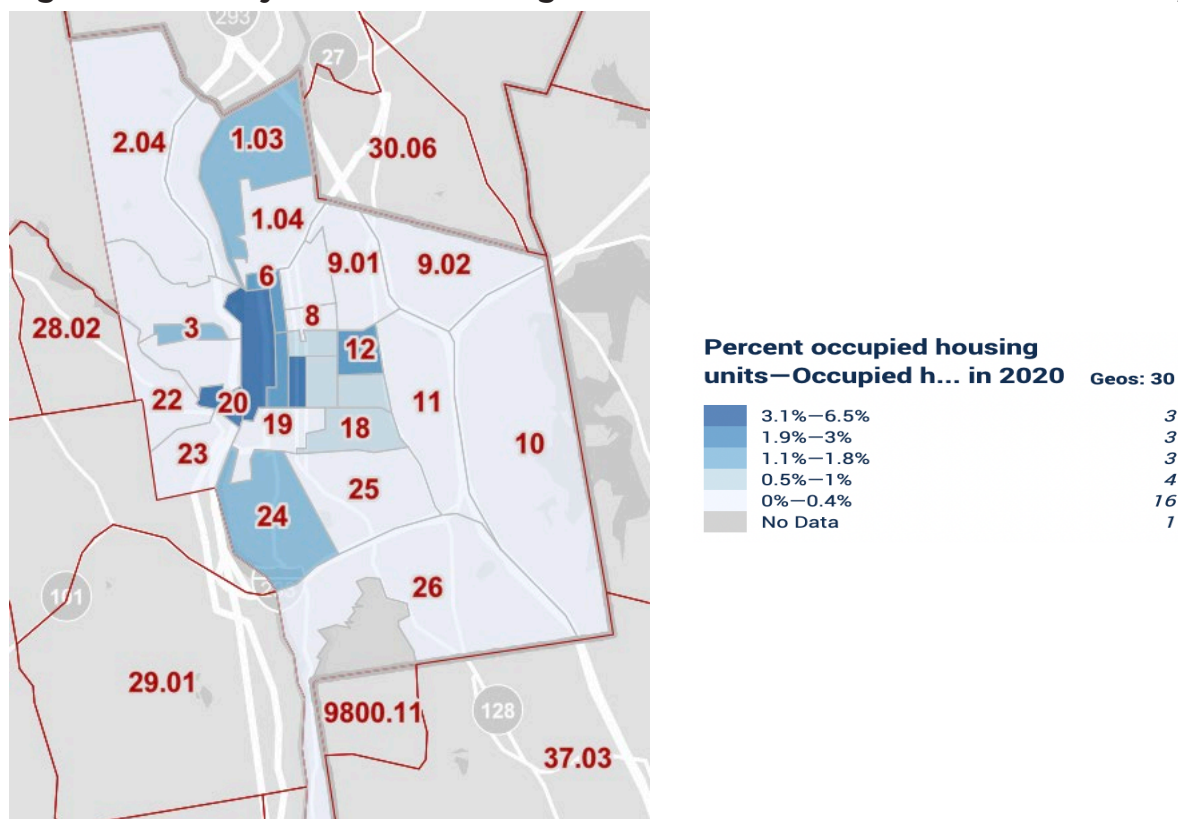


Source: US Census Bureau

<sup>3</sup> Inglis D. J. (2015). Crowding as a possible factor for health outcomes in children. *American journal of public health*, 105(2), e1–e2. <https://doi.org/10.2105/AJPH.2014.302458>

<sup>4</sup> WHO Housing and Health Guidelines. Geneva: World Health Organization; 2018. Table 3.1, Measures of crowding. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/>

**Figure 4. Severely Crowded Housing Concentrated in Manchester’s Center City**



Source: US Census Bureau

### Credit Insecurity

In general, people who own their homes have better physical and mental health outcomes than those who rent.<sup>5</sup> For the vast majority of individuals, buying a home means borrowing money from a mortgage lender. Credit insecurity can be a critical barrier to borrowing, resulting in lower buying power and higher interest rates. The City Health Dashboard recently started reporting the Credit Insecurity Index, which “reflects the proportion of local residents who have limited access to credit, either because they have no credit history or have negative credit outcomes.”<sup>6</sup> The Index is a community-based measure, with a higher score indicating that the community is more credit constrained.

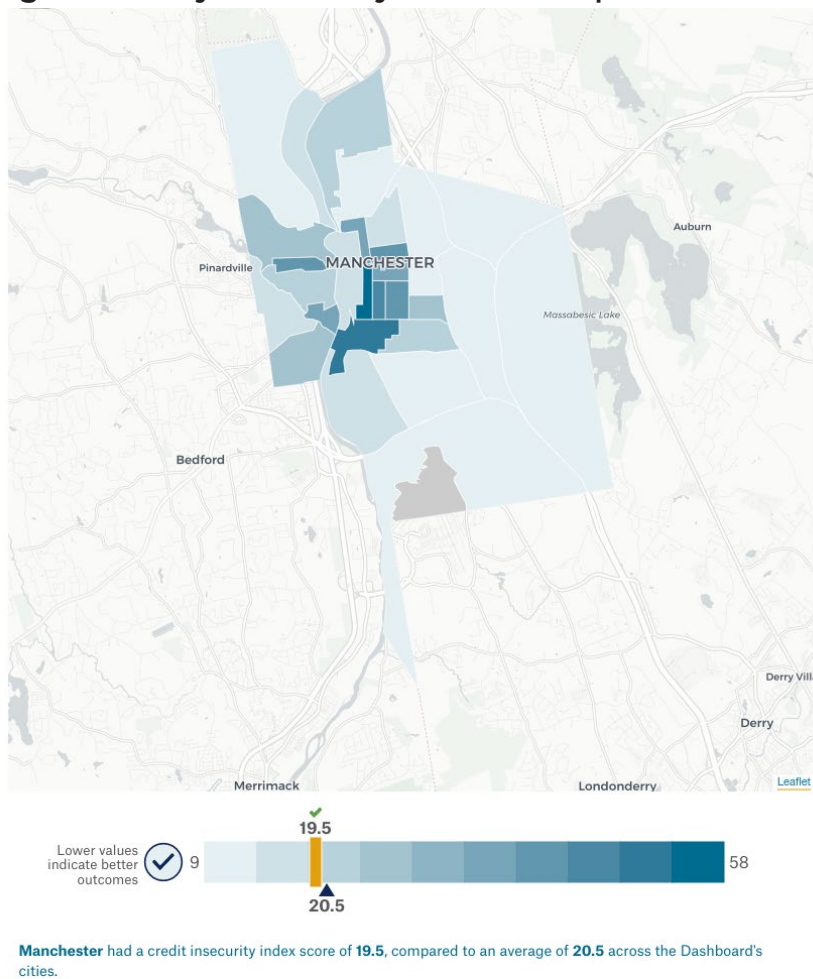
In 2020, Manchester had a Credit Insecurity Index of 19.5, slightly lower than the average of 20.5 across the Dashboard’s 500 cities. Concentrations of people with limited access to credit may also be indicative of communities that are under-resourced as a whole. These communities often have fewer opportunities for economic mobility and financial resilience.<sup>7</sup> Manchester’s index was nearly 25% higher than Nashua’s, indicating that Nashua residents, in general, have better access to credit than those in Manchester. Credit insecurity is highest in Manchester’s center city neighborhoods, with the highest Index scores in census tracts 14, 19, 15, and 16, at 57.2, 49.1, 45.6, and 42.7, respectively (Figure 5).

<sup>5</sup> <https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf>

<sup>6</sup> <https://www.cityhealthdashboard.com/metric/1608>

<sup>7</sup> <https://www.newyorkfed.org/outreach-and-education/community-development/unequal-access-to-credit-hidden-impact-credit-constraints>

**Figure 5. Many Center-City Residents Experience Credit Insecurity**



■ City or census tract value    
 ▲ Dashboard-City Average    
 ✓ Present when value is better than Dashboard-City Average    
 ✓ Better Outcomes

Source: City Health Dashboard

### Rental Vacancy Rate and Cost

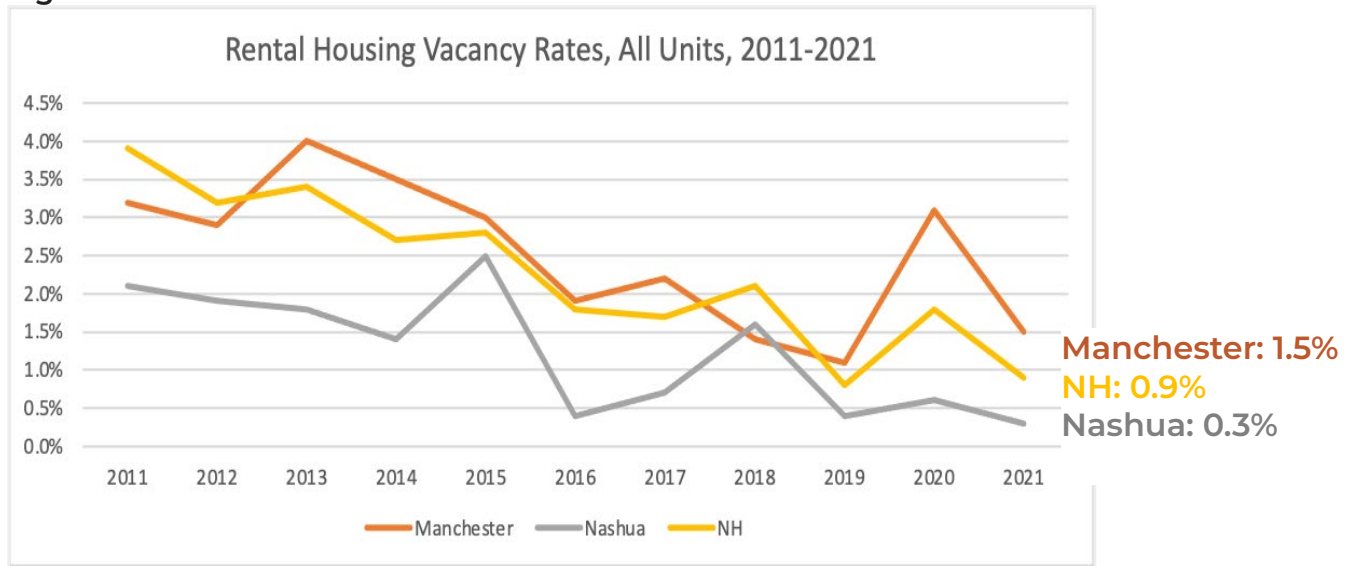
The rental vacancy rate is the fraction of homes for rent that are not occupied. In a “balanced” rental market, the vacancy rate is approximately 5.0%, according to NH Housing.<sup>8</sup> In a limited rental market with few affordable vacancies, low-income households may be forced to rent substandard housing, such as that with high lead risk, mold, or pests. A low rental vacancy rate can also lead to housing instability, as families face excessive housing costs or overcrowding.<sup>9</sup>

The proportion of rental units available for rent dropped by more than 50% in Manchester during the past decade, from 3.2% in 2011 to 1.5% in 2021 (Figure 6). During the same period, vacancy rates across the state dropped by more than 85%, from 3.9% to 0.9%. In 2021, the rental housing vacancy rate was approximately 50% higher in Manchester than in the State, and five times higher than in Nashua.

<sup>8</sup> <https://www.nhhfa.org/wp-content/uploads/2021/07/NH-Housing-Rental-Survey-Report-2021.pdf>

<sup>9</sup> <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/housing-instability>

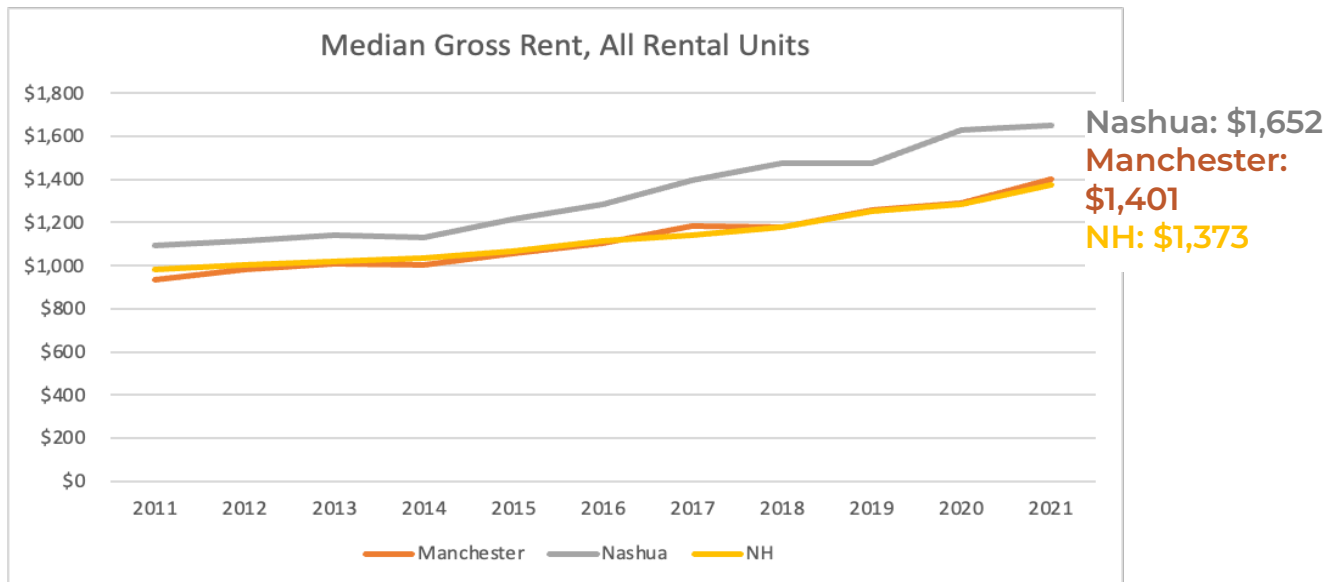
**Figure 6. Rental Market Far from Ideal in Manchester**



Source: NH Housing

At the same time vacancy rates have dropped across the state, median rent costs have risen (Figure 7). In both Manchester and Nashua, rent prices increased by 50% between 2011 and 2021, from \$935/month to \$1,401/month in Manchester and from \$1,095/month to \$1,652/month in Nashua. In contrast, the average monthly rent was \$1,373 in NH, during that same year.

**Figure 7. Rental Costs up 50% in Last Decade**



Source: NH Housing



## Subsidized Housing

In a rental market with low vacancy and high cost, subsidized housing assistance can make a critical difference between finding a stable, healthy home and housing instability. Unfortunately, as of February 2020, the waiting list for housing cost vouchers was more than six years in Manchester, according to the Manchester Housing and Redevelopment Authority (MHRA).<sup>10</sup> When families do receive Section 8 Housing Vouchers, their options may be limited as New Hampshire law permits landlords to consider income source when determining whether to rent a unit to a particular family.

MHRA prioritizes Veterans and their families, people with disabilities, and families who are currently considered homeless and unsheltered for housing assistance.

## Housing Stock with Potential Lead Risk

In a market with low available housing and high rental costs, low-income families may be forced to accept low quality housing as an alternative to homelessness. Oftentimes, this means older, poorly maintained homes with a higher risk of lead exposure.

According to the CDC, there is no safe blood lead level for children.<sup>11</sup> Children are most likely to be exposed to lead in older housing with lead-based paint. Lead can permanently damage children's kidneys and brains, resulting in slowed development, behavior problems, and poor academic achievement. At high levels, lead poisoning can result in coma, seizures, and death.<sup>12</sup>

City Health Dashboard reports on two metrics correlated with the risk for elevated blood lead levels in children: the percent of housing stock with potential lead risk and the lead exposure risk index.

The "housing with potential lead risk" metric takes into account the relative proportions of older housing units—those most likely to have lead paint—and newer units. Housing units are categorized by five time periods, and then counts of those built within each period are weighted by the likelihood of lead exposure in housing during that era.<sup>13</sup>

Figure 8 shows that nearly one-third of Manchester's housing stock has a high potential lead risk. This proportion was 49% higher than in Nashua and 73% higher than in the Dashboard's 500 Cities in 2020. While the proportion of Manchester housing stock with high lead risk declined by 12% between 2013 and 2020, more needs to be done to ensure Manchester children have safe places to live.

---

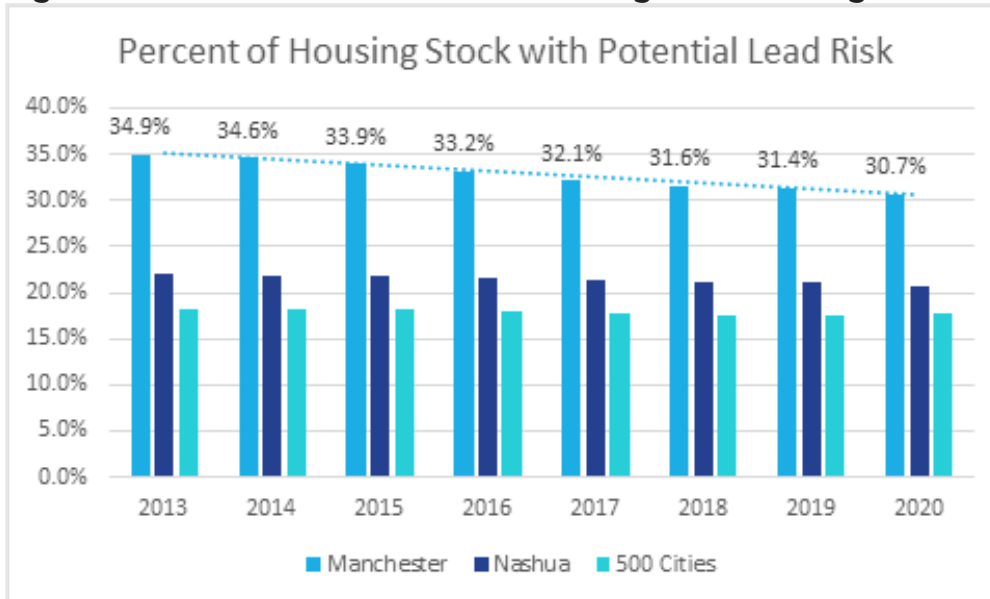
<sup>10</sup> <https://manchesterhousing.org/waiting-lists/>

<sup>11</sup> [https://nchh.org/resource-library/fact-sheet\\_childhood-lead-poisoning\\_what-you-should-know\\_english.pdf](https://nchh.org/resource-library/fact-sheet_childhood-lead-poisoning_what-you-should-know_english.pdf)

<sup>12</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/housing-and-homes/reduce-blood-lead-levels-children-aged-1-5-years-eh-04>

<sup>13</sup> <https://www.cityhealthdashboard.com/metric/46>

**Figure 8: One-third of Manchester Housing Stock has High Lead Risk**

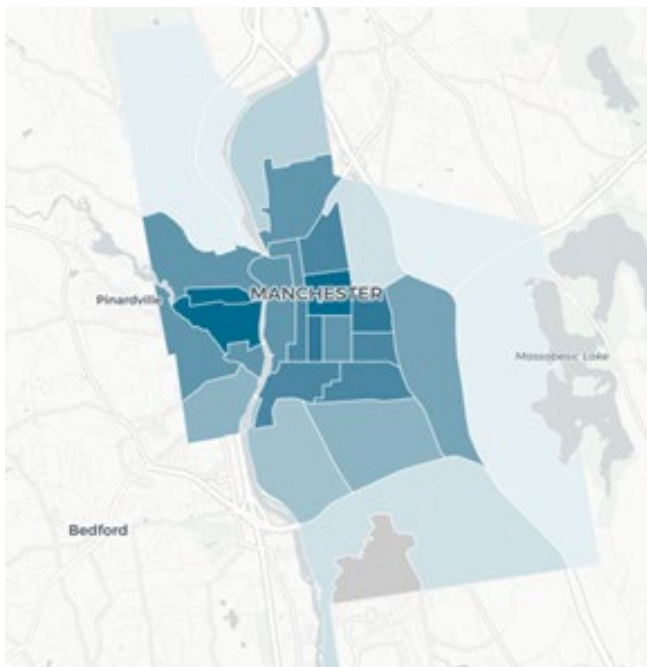


**Manchester: 30.7%**  
**Nashua: 20.6%**  
**500 Cities: 17.7%**

Source: City Health Dashboard

The proportion of housing stock with potential lead risk varies widely by census tract in Manchester, from a low of 5.9% to a high of 58.5%--a 10-fold difference. The highest concentrations of housing with lead risk are in Manchester’s center-city neighborhoods, with four east-side census tracts and 2 west-side census tracts having levels above 50%.

**Figure 9: Housing with Potential Lead Risk Concentrated in Center-City**

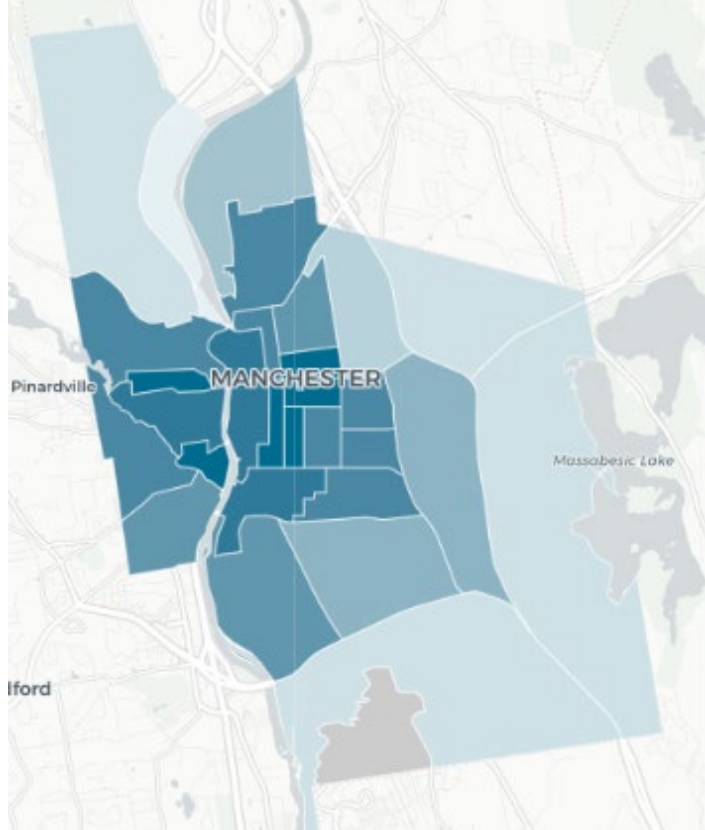


Source: City Health Dashboard

The “lead exposure risk index” score is calculated by combining the housing with potential lead risk information with the percent of people who live in poverty in the city or census tract, since both housing age and poverty are major predictors of lead exposure.<sup>14</sup> Scores range from 0 (lowest risk) to 10 (highest risk).

As expected, the lead exposure risk index scores follow the same pattern as housing with potential lead risk, with the highest scores seen in Manchester’s center-city census tracts (Figure 10). In 2020, Manchester overall had a lead exposure risk index of 8, compared with 5 in Nashua and 5.5 in the Dashboard’s 500 cities. Six center-city census tracts—3, 8, 13, 14, 15, and 20—received scores of 10, indicating the “highest risk” of lead exposure.<sup>15</sup>

**Figure 10. Center City Neighborhoods Receive “Highest Score” for Lead Exposure Risk**



*Source: City Health Dashboard*

## Homelessness

Homelessness is a complex social problem with a variety of underlying economic and social factors such as poverty, lack of affordable housing, uncertain physical and mental health, addictions, and community and family breakdown. It may be people living unsheltered, “doubling up” with family and friends, or moving back and forth between shelters and transitional housing. It takes on many forms and is related to a number of structural, individual, and systemic factors. There is a well-established link between homelessness and health, with poor health increasing the risk of homelessness, and homelessness exacerbating existing health conditions and increasing the risk of exposure to infectious disease.<sup>16</sup>

<sup>14</sup> <https://www.cityhealthdashboard.com/metric/46>

<sup>15</sup> <https://www.cityhealthdashboard.com/metric/46>

<sup>16</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3766254/>

In New Hampshire, like elsewhere, the COVID-19 pandemic compounded this problem. As the number of shelter spaces decreased due to social distancing requirements, the number of unsheltered homeless increased.<sup>17</sup> This was particularly evident in Manchester, as officials repurposed old buildings to increase available beds and found creative ways to improve access to basic hygiene with handwashing stations and portable bathrooms at existing encampments.

Between 2018 and 2020, the number of homeless individuals increased by 16% in New Hampshire, from 1,450 to 1,675, according to point-in-time counts. Unsheltered individuals accounted for 86% of this increase. In 2020, nearly 40% of homeless individuals in the state fell within the Manchester Continuum of Care (CoC), while only 17% fell within the Greater Nashua Continuum of Care (Table 1). The proportions of individuals with chronic homelessness—who “utilize the costliest crisis services, including emergency rooms, jails, and prisons”—were similar, with 36% of chronic homeless within the state residing in Manchester’s CoC, compared with only 13% living in Greater Nashua’s CoC.<sup>18</sup> In 2020, 40% of the State’s unsheltered homeless also lived in Manchester, compared with only 3% of that population living in Greater Nashua.

**Table 1. Manchester Home to a Disproportionate Number of State’s Homeless**

Continuum of Care (CoC) Region	Overall Homeless	Chronic Homeless	Unsheltered
Manchester CoC	1,739	211	164
Greater Nashua CoC	778	78	14
Balance of NH CoC	2,139	308	233
<b>Statewide Total</b>	<b>4,451</b>	<b>580</b>	<b>411</b>

Source: NH Coalition to End Homelessness

Significant proportions of New Hampshire’s homeless families also call Manchester their residence, with 33% of people in homeless families living in Manchester and 19% living in Greater Nashua (Table 2). A lower proportion, one-in-four, of the state’s homeless students live in Manchester, compared with 16% living in Nashua and the vast majority, 60%, living outside these two urban areas. Importantly, student homelessness decreased by nearly 20% in New Hampshire between the 2018-19 and 2019-20 school years. In Manchester, the number of homeless students decreased by 15% during that period, while the number increased slightly, by 5%, in Greater Nashua. As of April 25, 2022, the count of homeless students in the Manchester School District was 706, comprising 297 (42%) elementary school students, 183 (26%) middle school students, and 226 (32%) high school students.

<sup>17</sup> <https://www.nhceh.org/wp-content/uploads/2021/03/2020-State-of-Homelessness-in-NH-Report-Online-Final-compressed-1.pdf>

<sup>18</sup> <https://www.nhceh.org/wp-content/uploads/2021/03/2020-State-of-Homelessness-in-NH-Report-Online-Final-compressed-1.pdf>

**Table 2. Majority of NH’s Homeless Students Live Outside Urban Areas**

Continuum of Care (CoC) Region	Family Homelessness	Student Homelessness
Manchester CoC	516	797
Greater Nashua CoC	304	501
Balance of NH CoC	758	1,918
<b>Statewide Total</b>	<b>1,577</b>	<b>3,216</b>

Source: NH Coalition to End Homelessness

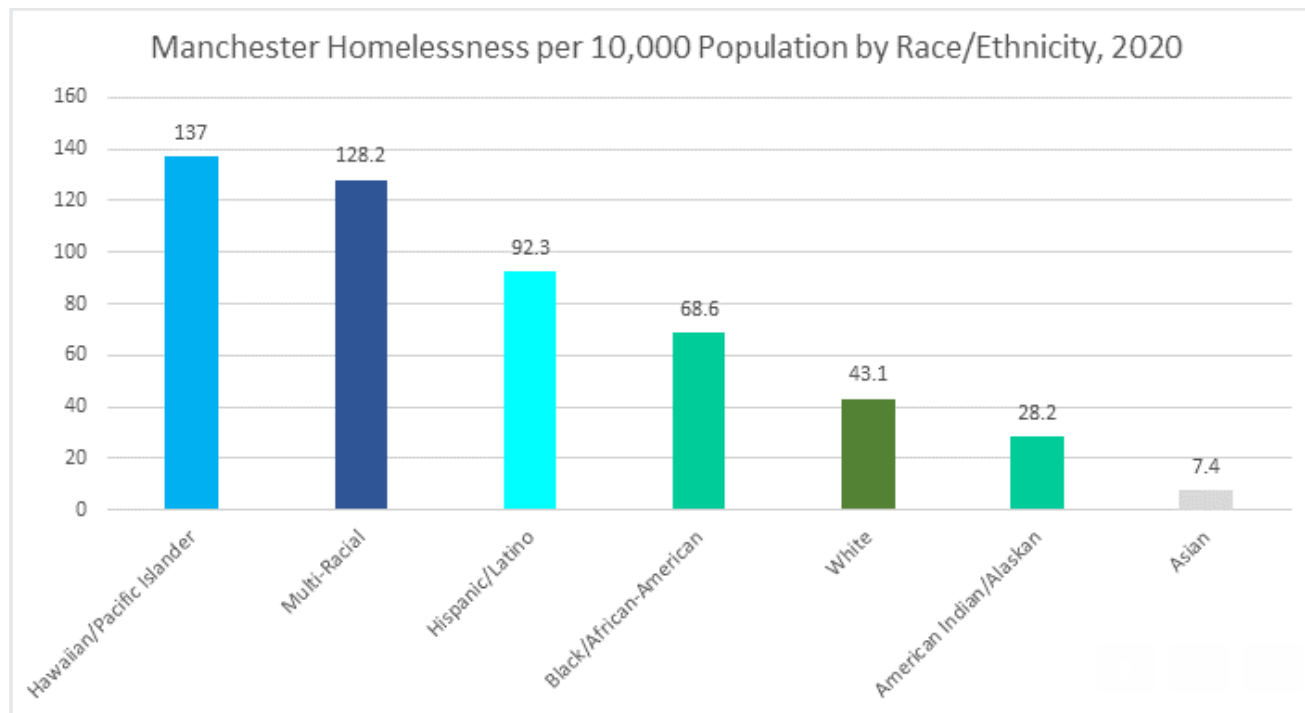
In 2020, the State of New Hampshire counted 348 homeless veterans, of whom the vast majority were living in transitional housing where they were connected to critical support services.<sup>19</sup> Approximately one-third of these veterans were living in Manchester.

Figure 11 shows a comparison of homelessness rates by racial and ethnic groups in Manchester in 2020. As with the State of New Hampshire as a whole, non-Hispanic Whites and Asian-Americans have the lowest per capita rates of homelessness. Homelessness rates are highest among Native Hawaiian/Pacific Islanders in Manchester, New Hampshire, and across the US. In addition, those who identify as multi-racial, Hispanic-Latino, and Black/African American have higher rates of homelessness than Whites and Asian-Americans. Structural and economic inequities often mean that Hispanic-Latino and Black/African American populations are disproportionately represented in these figures as compared to the rest of the state.

<sup>19</sup> <https://www.nhceh.org/wp-content/uploads/2021/03/2020-State-of-Homelessness-in-NH-Report-Online-Final-compressed-1.pdf>



Figure 11. Manchester Homelessness by Race/Ethnicity



### WHAT DO MANCHESTER RESIDENTS THINK?

Housing was the #1 priority for Manchester residents surveyed, with 93.4% agreeing that it was “very important” for Manchester to increase access to quality, affordable housing, identifying housing conditions such as crowding, environmental concerns such as lead exposure, rental costs for housing, and lack of supportive/transitional housing. Just over 14% of residents reported having trouble getting access to programs to help with paying for housing and utilities in the past 3 years.

Many stakeholders interviewed identified homelessness as a top priority in Manchester. They pointed out that homelessness places a large strain on the city’s resources and projects a negative image of the city. Several stakeholders looked to other cities and states leveraging public-private partnerships for housing development as a promising practice that should be pursued in Manchester. Others suggested that a coordinated plan was needed to bring community resources together to work toward a common vision.

## Community Spotlights

### Families in Transition

Families in Transition is committed to preventing and breaking the cycle of homelessness, offering programs and services to assist families and individuals through integrated case management, affordable housing, emergency homelessness services, food programs, and substance use treatment. As a state-wide 501c3 non-profit, Families in Transition has headquarters and operations in Manchester, NH, and locations in Concord, Dover, and Wolfeboro.

The organization provides a continuum of housing and emergency shelter in Manchester, including the State's largest adult emergency shelter, a family emergency shelter, and over 200 affordable and permanent supportive housing units. Utilizing a housing-first approach to assist people experiencing homelessness, they use a proven model pairing housing with case management and other supportive services. A recently completed project in Manchester features 11 apartment units offering permanent supportive housing prioritized for individuals utilizing emergency shelter services.

To learn more or get involved, visit [www.fitnh.org](http://www.fitnh.org) or call (603) 641-9441



### Neighborworks Southern New Hampshire

NeighborWorks Southern New Hampshire impacts positive health by offering quality, well-maintained, safe housing that is affordable to income level and also providing education and counseling services to help individuals/households understand the homeownership process and prepare for home purchase in stronger financial position so they are better able to maintain and retain a home. Neighborworks also offers financial education and counseling services for those seeking to move out of a pattern of financial instability and struggle in their daily lives.

Neighborworks has a total of 267 affordable rental apartments in Manchester, and deliver unbiased programs and services relative to homeownership and financial education that help participants adopt practices that will lead to improved financial health and sustained financial stability. For more information about renting an apartment or registering for a homeownership or financial confidence workshop, visit [www.nwsnh.org](http://www.nwsnh.org).



# TRAUMA AND HEALTH OUTCOMES





## PRIORITY: PREVENT AND ADDRESS TRAUMA

Trauma has biological effects, causing the body to produce adrenaline and cortisol—the “fight or flight” neurochemicals. Over time, repeated trauma can actually change brain chemistry and result in the development of anxiety and depression, as well as chronic stress-related illness, such as hypertension, diabetes and cancer. People who are repeatedly exposed to trauma often develop unhealthy coping mechanisms, such as overeating, alcohol misuse, and drug and tobacco use.

Persistent trauma also impacts an individual’s ability to engage with healthcare. People under chronic stress often miss medical appointments and may lack trust in the healthcare system. Individuals living in poverty are more likely to experience multiple forms of trauma, further eroding their ability to prioritize their health.

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines trauma as resulting from “an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being.”<sup>1</sup> Trauma is often categorized into three main types: acute (a single incident), chronic (prolonged and repeated trauma), and complex (exposure to multiple traumatic events).

### Poverty

“Beginning before birth and continuing throughout an individual’s life, poverty can significantly impact health and health outcomes,” according to a position paper by the American Academy of Family Physicians.<sup>2</sup> People living in impoverished neighborhoods are at increased risk of mental illness and chronic disease and have overall higher mortality and lower life expectancy.<sup>3</sup>

People living in poverty are more likely than others to experience multiple forms of trauma. However, poverty can be a form of trauma in and of itself, particularly among children.<sup>4</sup> Children who are born into poverty are more likely than others to be poor as adults, drop out of high school, and become teen parents.<sup>5</sup>

Figure 1 shows that child poverty is on a slow decline in Manchester, with rates decreasing by 11% between 2013 and 2019. However, child poverty remains high in Manchester, at nearly 20% in 2019, compared with 12% in Nashua and 19% across the 500 Cities. Child poverty is also declining at a higher rate in Nashua, dropping by 25% between 2013 and 2019.

---

<sup>1</sup> <https://www.samhsa.gov/trauma-violence>

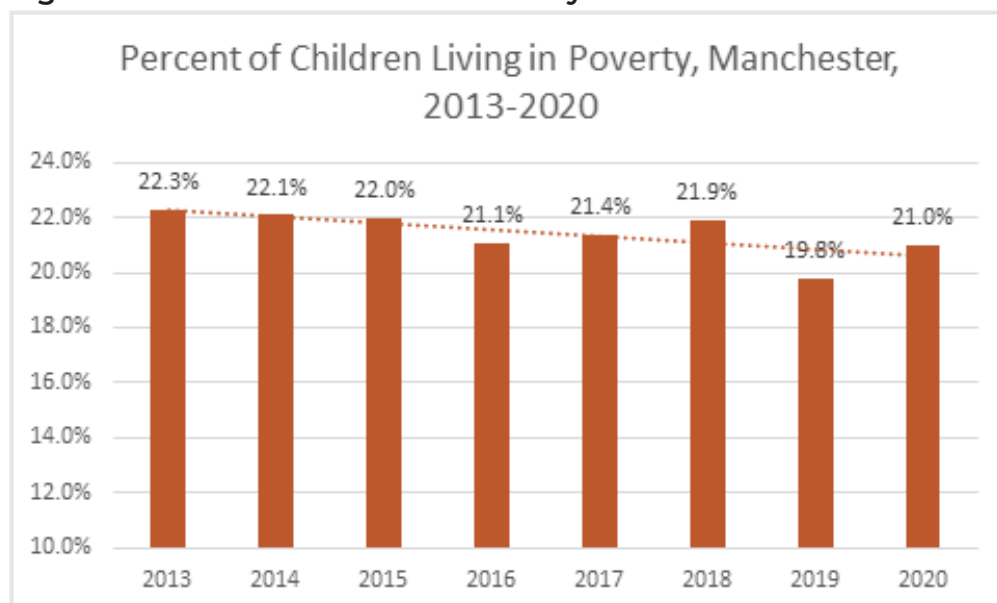
<sup>2</sup> <https://www.aafp.org/about/policies/all/poverty-health.html>

<sup>3</sup> <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

<sup>4</sup> [https://www.nctsn.org/sites/default/files/resources/resource-guide/understanding\\_impact\\_trauma\\_urban\\_poverty\\_family\\_systems.pdf](https://www.nctsn.org/sites/default/files/resources/resource-guide/understanding_impact_trauma_urban_poverty_family_systems.pdf)

<sup>5</sup> <https://www.urban.org/sites/default/files/publication/32926/412126-childhood-poverty-persistence-facts-and-consequences.pdf>

**Figure 1. Slow Decline in Child Poverty in Manchester**



Source: City Health Dashboard

While child poverty rates are dropping in Manchester as a whole, this is not the case in many neighborhoods (Table 1). In fact, child poverty increased in 11 of the City’s 29 census tracts between 2013 and 2020.

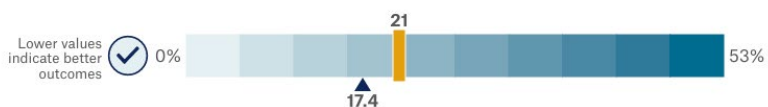
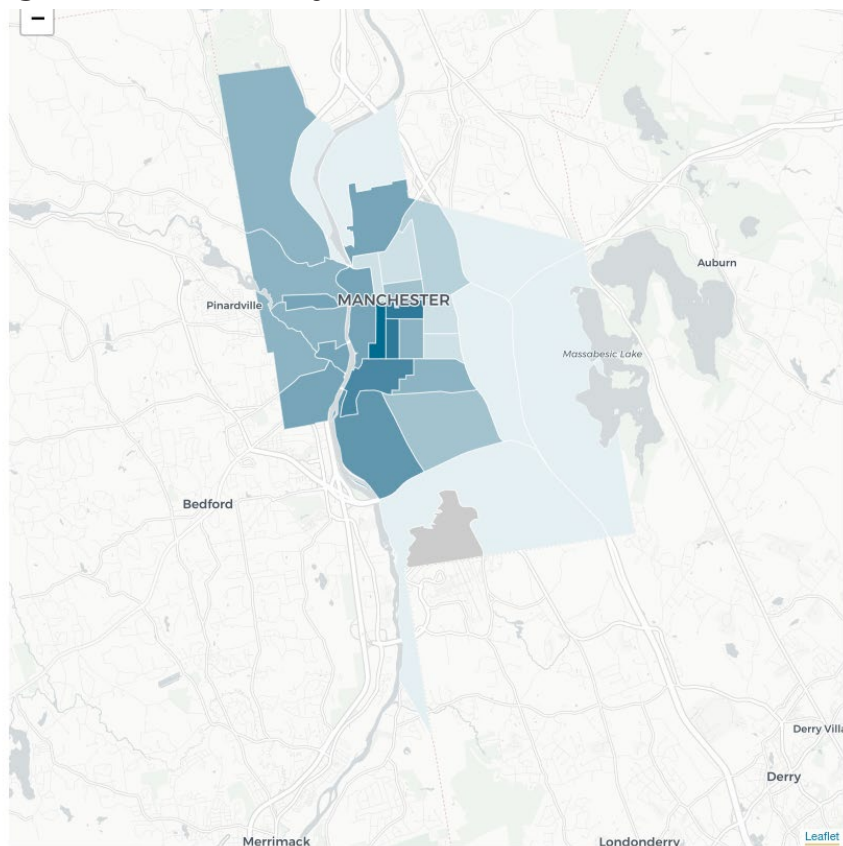
**Table 1. Child Poverty on the Rise in 11 Census Tracts**

Census Tract	2013	2020
2.04	17.0%	22.8%
8	6.7%	16.5%
9.01	9.8%	12.6
10	0.0%	1.7%
13	32.2%	43.6%
14	33.1%	52.1%
18	20.4%	26.3%
19	37.1%	39.5%
22	19.7%	22.5%
23	1.0%	26.8%
24	18.1%	36.9%

Source: City Health Dashboard

Figure 2 shows that the highest rates of child poverty were concentrated in Manchester’s center-city neighborhoods in 2020, with more than half of the children in census tract 14 (52.1%) living in families with incomes below the federal poverty level.

**Figure 2: Child Poverty Concentrated in Manchester’s Center City (2020)**



21% of Manchester’s children were in poverty, compared to an average of 17.4% across the Dashboard’s cities.

■ City or census tract value    
 ▲ Dashboard-City Average    
 ✓ Present when value is better than Dashboard-City Average    
 ✓ Better Outcomes

Source: City Health Dashboard

Geographic areas in which 20% or more of the population lives in poverty are considered high poverty areas. Persistent poverty exists when a community experiences high poverty for 30 years or more.<sup>6</sup> Several of Manchester’s center-city neighborhoods meet this definition of persistent poverty (Table 2), putting residents at risk of even greater morbidity and mortality compared with areas without sustained high poverty.<sup>7</sup>

<sup>6</sup> <https://www.transit.dot.gov/02-what-%E2%80%99Carea-persistent-poverty%E2%80%9D#:~:text=An%20area%20of%20persistent%20poverty,recent%20Small%20Area%20Income%20and>

<sup>7</sup> <https://aacrjournals.org/cebpa/article/29/10/1949/124425/Persistent-Poverty-and-Cancer-Mortality-Rates-An>

**Table 2. Residents of Manchester’s Center City Experiencing Persistent Poverty**

Manchester census tracts with 20% or more residents living in poverty, 1990-2020				
Census Tracts	1990 Census	2000 Census	2010 Census	2020 Census
14	X	X	X	X
2004	X	X	X	
6		X	X	
15		X	X	X
20		X	X	X
13			X	X
16			X	
3			X	
2.02				
21				
19				

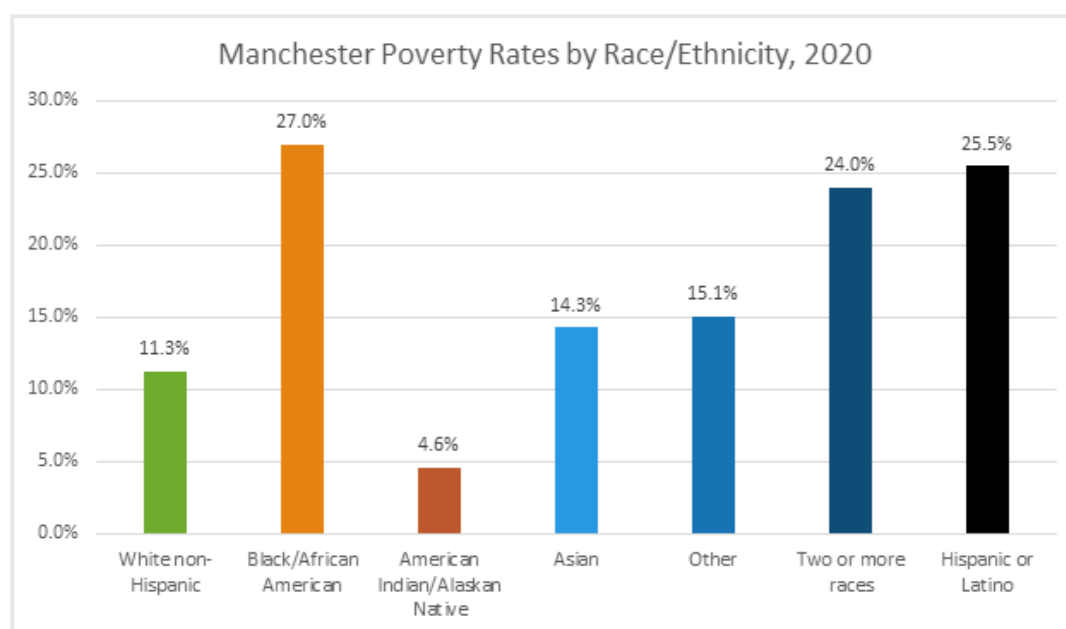
Source: US Census Bureau

Note: The highlighted cells in yellow signify census tracts that are persistently impoverished.



Deep racial and ethnic disparities in poverty are related to social class stratification through mechanisms like societal disadvantage and discrimination. These disparities exist in poverty in Manchester, as in the rest of New Hampshire and the country as a whole. In 2020, American Indian/Alaskan Natives, non-Hispanic Whites, Asians, and “other” races had the lowest poverty rates in Manchester (Figure 3). Compared with non-Hispanic Whites, Black/African American residents were 2.4 times more likely to be living in poverty, multiracial residents were 2.1 times more likely, and Hispanic/Latino residents were 2.3 times more likely to be living in households with incomes below the federal poverty level. This disproportionate racial makeup in neighborhoods with high levels of poverty suggest that societal factors beyond income contribute to how poverty is “produced” both locally and nationally.<sup>8</sup>

**Figure 3: Manchester’s Black, Hispanic/Latino and Multi-Racial Residents are More Than Twice as Likely as Whites to Live in Poverty**



Source: US Census Bureau

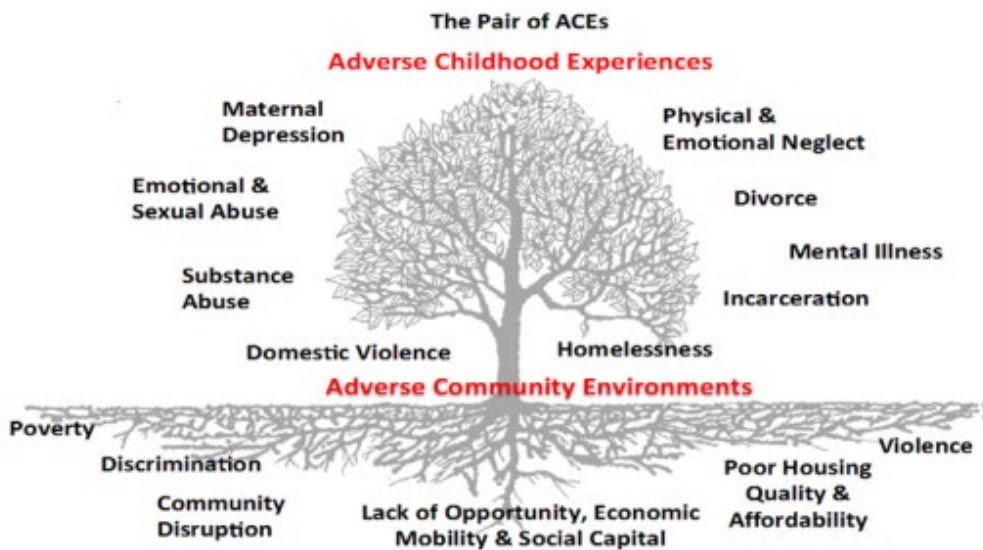
### Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are traumatic events that occur in childhood that include exposure to violence, mental illness, and substance use, having a family member incarcerated, emotional or physical neglect, and divorce.<sup>9</sup> According to the CDC, 5 of the 10 leading causes of death in the US are linked to toxic stress associated with ACEs.<sup>10</sup> Adults with a history of ACEs are also at higher risk of mental illness and substance misuse.

<sup>8</sup> Lin, Ann Chih, and David R. Harris. "The colors of poverty: Why racial & ethnic disparities persist." *Ann Arbor* 1001.48109 (2009): 43091.

<sup>9</sup> <https://acestoohigh.com/got-your-ace-score/>

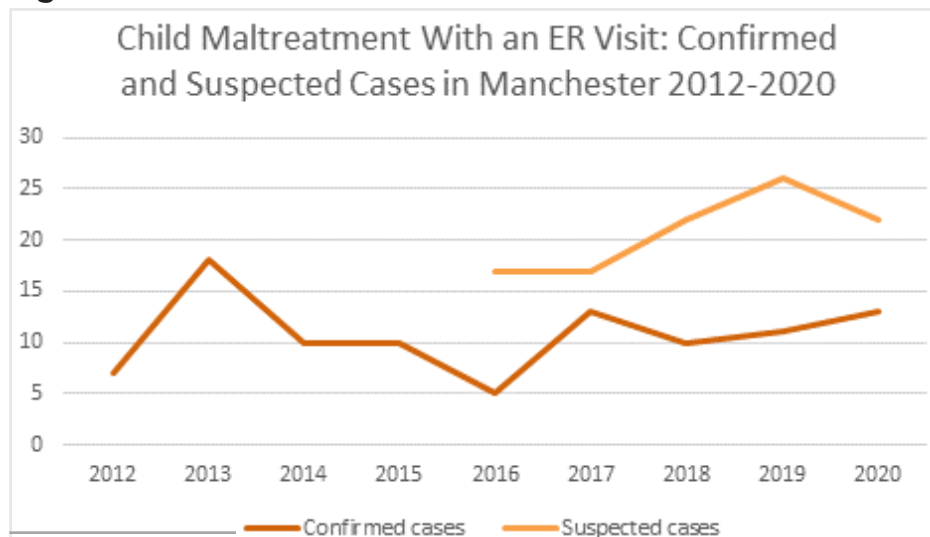
<sup>10</sup> <https://www.cdc.gov/vitalsigns/aces/index.html>



Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. *Academic Pediatrics*. 17 (2017) pp. S86-S93. DOI information: 10.1016/j.acap.2016.12.011

The Pair of ACEs tree model was designed to specifically articulate the difference between addressing individual trauma and community/neighborhood level trauma.<sup>11</sup> Adverse childhood experiences are stressors that can increase a person’s risk of developing heart disease, chronic depression, obesity, and substance misuse disorders. ACEs are often chronic but can be acute. They include events such as parental divorce, incarceration, physical and emotional neglect, substance abuse, and domestic violence. ACEs are portrayed as the part of the tree that is above ground—its leaves, stems, and trunk. These are not the only kind of adverse experiences that can affect outcomes. There are also adverse community environments, which represent the roots and soil in which our ‘tree’ is planted. When the tree is planted in nutrient poor soil steeped in systemic inequities such as discrimination, violence, poor housing quality, and lack of opportunity, it creates poorer community resilience and increases ACEs for the community. It is crucial to address both individual trauma as well as community level trauma to prevent a community from repeating the negative cycles of ever worsening adversity.

**Figure 4. Child Maltreatment Cases in Manchester**



<sup>11</sup> [https://publichealth.gwu.edu/sites/default/files/downloads/Redstone-Center/Resource%20Description\\_Pair%20of%20ACEs%20Tree.pdf](https://publichealth.gwu.edu/sites/default/files/downloads/Redstone-Center/Resource%20Description_Pair%20of%20ACEs%20Tree.pdf)

<sup>12</sup> <https://www.cdc.gov/brfss/index.html>

Cases and suspected cases of child maltreatment in Manchester from 2012-2020 are shown in the figure above. This data only includes children that visited the emergency department or were hospitalized due to maltreatment. This data does not capture all cases of maltreatment, and does not capture all injuries. These data show a steady incidence of confirmed child maltreatment in Manchester with an average of 10 confirmed cases and 20 suspected cases a year.

### **BRFSS ACEs and Mental Health**

The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collects state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.<sup>12</sup>

The most recently available BRFSS data for Manchester regarding ACEs indicates that, from 2015 to 2016, 8.9% of Manchester adults (who responded to the BRFSS survey) reported being hit, beat, kicked, or physically hurt by a parent or adult in the home more than once when they were under the age of 18, while 68% of respondents reported never being physically hurt by a parent or adult in their home. In addition, from 2015 to 2016, 12% of respondents reported that, on more than one occasion when they were under the age of 18, parents or adults in their home slapped, hit, kicked, punched, or beat each other up.

In Manchester, the Adverse Childhood Experiences Response Team (ACERT) is a partnership between the Police Department, YWCA-NH, and Amoskeag Health working collaboratively to provide assistance to families and their children who have had recent police involvement. ACERT has connected a total of 1,660 children and 887 families to services. Slightly over 35% of ACERT's referrals were Domestic Violence related, which is the most common incident type to which Manchester children are exposed. So far in 2022, ACERT has connected 88 families with 140 children to support and services.

Additionally, BRFSS collects data on mental health, specifically poor mental health days. BRFSS describes poor mental health days as a quality of life measure which documents the average number of mentally unhealthy days reported in the past 30 days (age-adjusted).

From 2014 to 2019, an average of 15% of Manchester residents reported experiencing 14 to 30 days of poor mental health over the past 30 days, 23% reported 1 to 13 days of poor mental health, and, on average, 59% of residents reported having no poor mental health days within the past 30 days.

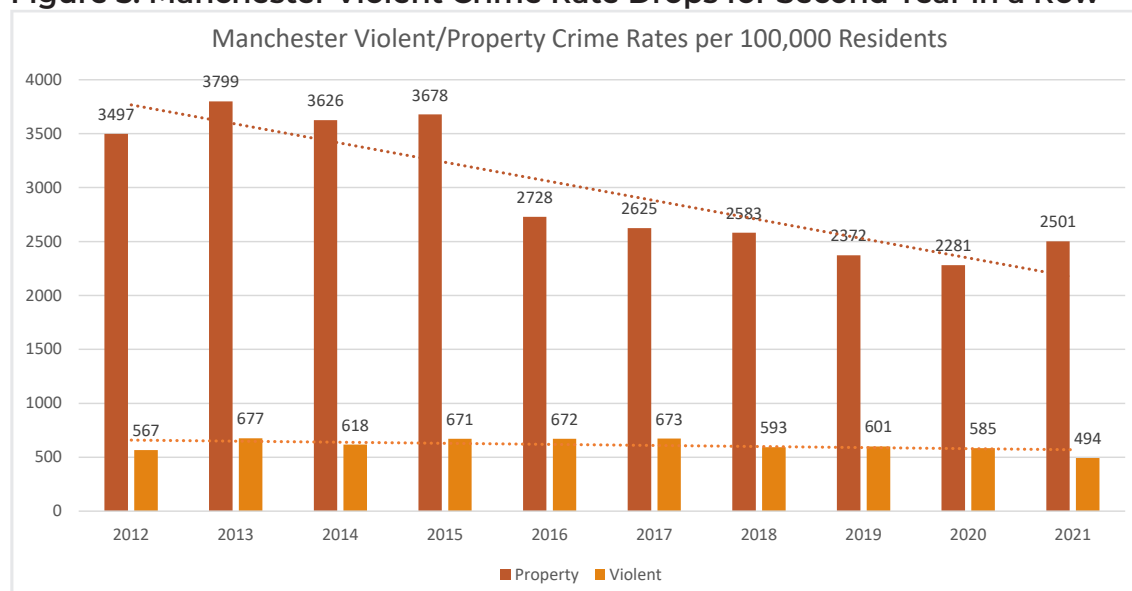


## ACEs: Community Crime and Violence

The impact of community violence extends beyond the immediate victims and perpetrators. Living in a high-crime neighborhood is a significant source of toxic stress, which has long-term effects on neural development resulting in poorer overall health and well-being.<sup>13</sup> Exposure to community violence is associated with a range of adverse health consequences, including increased risks of cancer, chronic lung disease, diabetes, hepatitis, gastrointestinal disorders, heart disease, hypertension, and stroke.<sup>14</sup>

Crimes are typically categorized as either violent crimes or property crimes. Violent crimes include murder, aggravated assault, robbery, and rape, while property crimes include those in which someone's property is stolen or destroyed without any threat of direct force against the victim.<sup>15</sup> The violent crime rate has been on the decline in Manchester since 2019, dropping nearly 18% between 2019 and 2021 (Figure 5). Figure 5 also shows a downward trend in the rate of property crimes in Manchester, though the past year saw a small uptick in property crimes from 2,281 per 100,000 population in 2020 to 2,501 in 2021. The overall crime rate in Manchester has been showing a slow but steady decline since 2016, according to the Manchester Police Department.

**Figure 5. Manchester Violent Crime Rate Drops for Second Year in a Row**



Source: Manchester Police Department Annual Report 2021

More than 45,000 people were killed by gun violence across the US in 2020—the highest number of gun fatalities in any year on record.<sup>16</sup> While the overall crime rate is decreasing in Manchester, 2020 marked the second year in a row of increasing numbers of gun crimes, with an overall increase of 62% between 2018 and 2020 (Figure 6). This trend began to reverse in 2021, with a 28% drop in the number of overall gun crimes. However, this decline was largely due to a drop in gun crimes in which firearms were not discharged, as the proportion in which a firearm was discharged increased from 34% to 45%.

<sup>13</sup> Violence Policy Center. (July, 2017). *The Relationship Between Community Violence and Trauma: How violence affects learning, health, and behavior*. Available at: <https://vpc.org/studies/trauma17.pdf>.

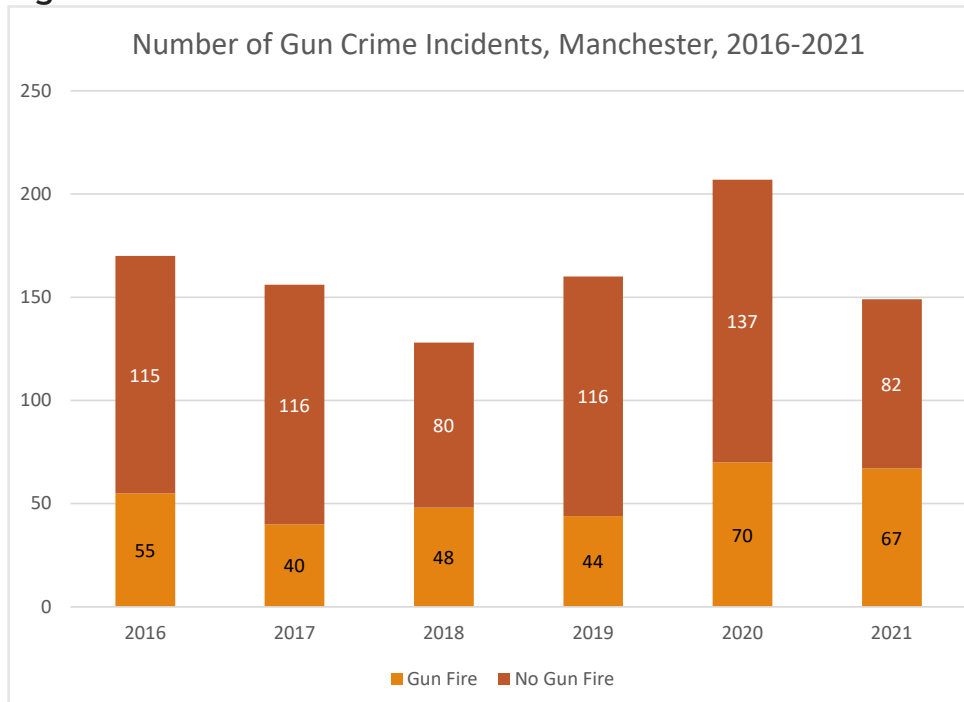
<sup>14</sup> Violence Policy Center. (July, 2017). *The Relationship Between Community Violence and Trauma: How violence affects learning, health, and behavior*. Available at: <https://vpc.org/studies/trauma17.pdf>.

<sup>15</sup> <https://nij.ojp.gov/topics/crime/property-crimes>

<sup>16</sup> <https://www.bbc.com/news/world-us-canada-41488081>



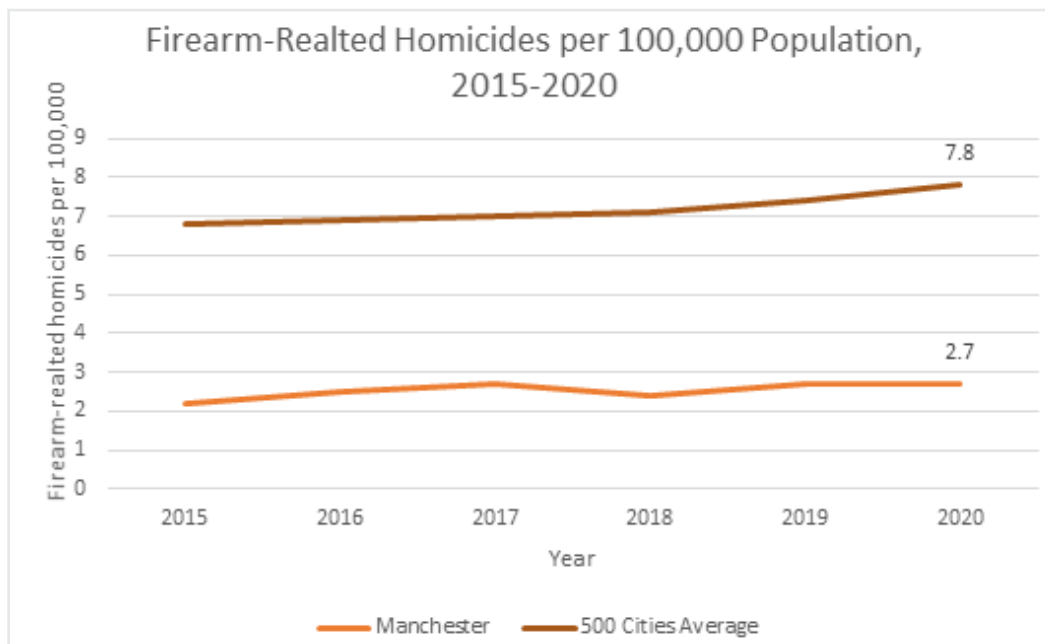
**Figure 6. Manchester Gun Crimes Down 28% in 2021**



Source: Manchester Police Department Annual Report 2021

Manchester’s firearm related homicides have consistently been lower than the average for the 500 largest cities in the US. With the most recent data indicating that in 2020 Manchester had 2.7 firearm related homicides per 100,000 compared to an average of 7.8 per 100,000 across the 500 largest cities.

**Figure 7: Firearm Related Homicides in Manchester per 100,000 Population**



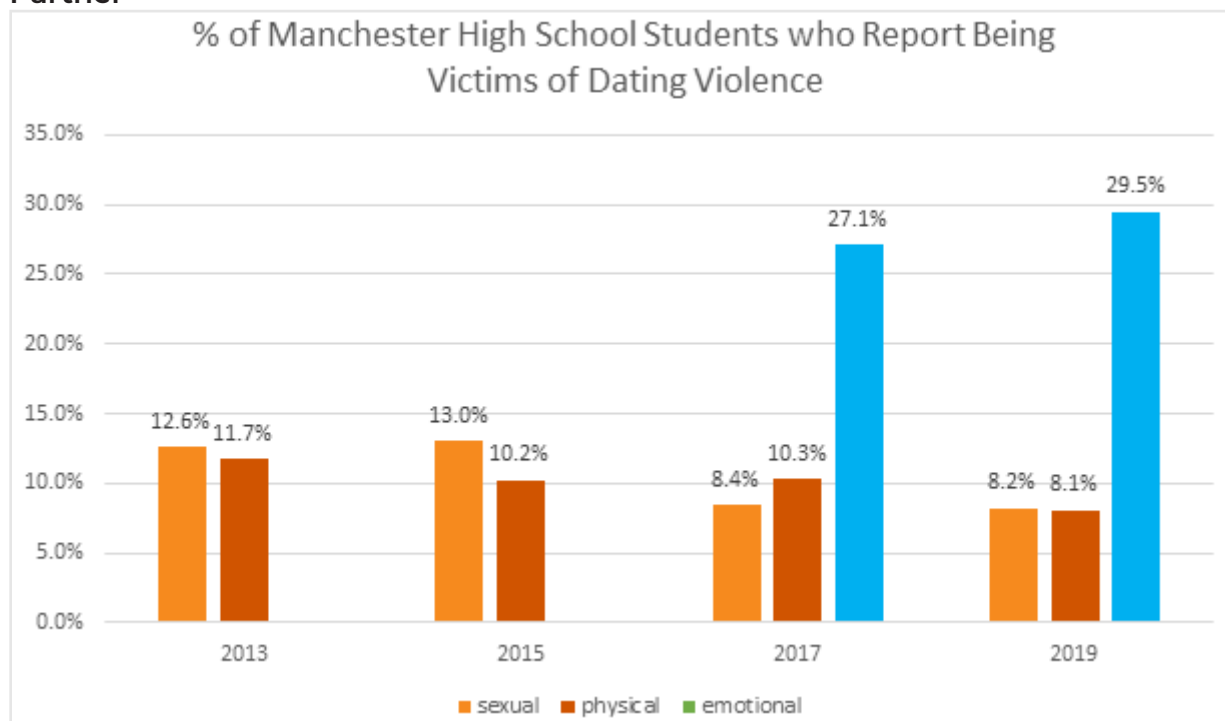
## ACEs: Dating violence

Exposure to ACEs in childhood has been linked to an increased risk of later violent experiences in adulthood. In particular, several studies have demonstrated a higher risk of dating violence victimization and perpetration among youth exposed to ACEs.<sup>17</sup>

In 2019, nearly one-third of Manchester high school students reported that a dating partner had “purposely tried to control them or emotionally hurt them” in the past year, according to the Youth Risk Behavior Surveillance Survey (Figure 8). This proportion was approximately 11% higher than reported by high school students across the state as a whole (26.5%). While only two years of data are available on this outcome measure, it appears that emotional dating violence is on the rise in both Manchester and the state.

More than 8% of students reported having been victims of physical dating violence in Manchester in 2019, compared with 7% of high school students across the state, a 12.5% difference. The proportion of students reporting having experienced sexual dating violence in the past year was slightly higher, at 8.2% in Manchester and 7.8% in the state (5% difference). Reports of physical and sexual dating violence decreased in both Manchester and the state as a whole between 2013, with rates dropping by 30% and 36%, respectively, in Manchester.

**Figure 8. Nearly One-third of Manchester Teens Report Emotional Abuse by a Dating Partner**



Source: NH DHHS

<sup>17</sup> Davis, J.P., Ports, K.A., Basile, K.C. et al. Understanding the Buffering Effects of Protective Factors on the Relationship between Adverse Childhood Experiences and Teen Dating Violence Perpetration. *J Youth Adolescence* 48, 2343–2359 (2019). <https://doi.org/10.1007/s10964-019-01028-9>

## Social Vulnerability Index

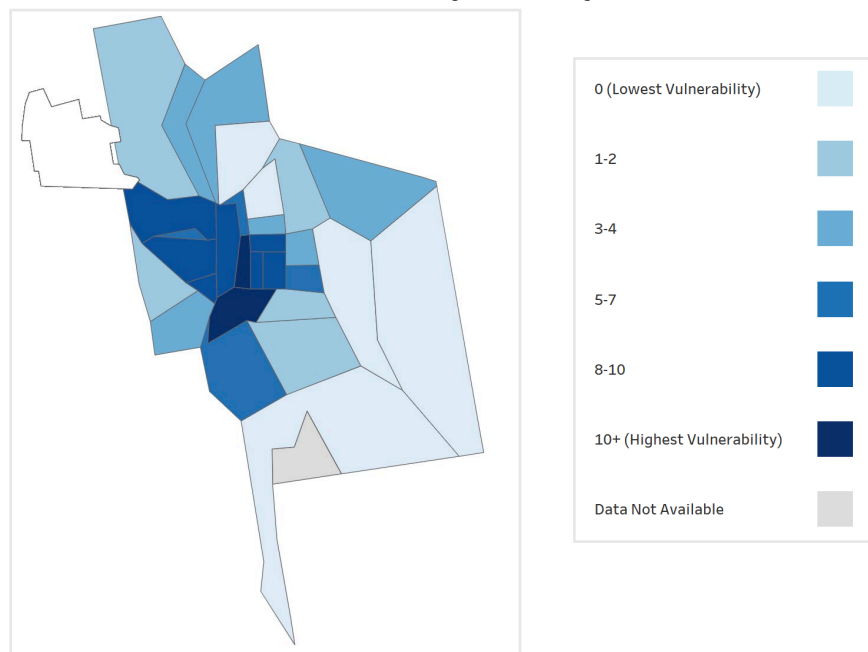
The Federal Emergency Management Agency (FEMA) uses the Social Vulnerability Index to identify communities likely to suffer “disproportionate death, injury, loss, or disruption of livelihood,” as a result of natural or human-caused disasters, or disease outbreaks.<sup>18</sup> These communities have fewer resources available to aid in responding to emergencies, such as transportation, financial resources, and access to healthcare. Residents of communities with a high Social Vulnerability Index are also more likely to die from traumatic events, such as incidents of violence, and experience higher levels of psychological stress and stress-related illness than those living in higher-resourced areas.<sup>19,20</sup>

“The Social Vulnerability Index uses NH population data from the U.S. Census and American Community Survey to calculate a summary index score for 16 measures to assess the social vulnerability of every Census Tract,” according to NH Health Wisdom.<sup>21</sup> The Index is a count of the number of these measures that score above the 90% percentile for vulnerability, with a maximum Social Vulnerability Index Score of 16.

During the 3-year period of 2015-2018, nine Manchester neighborhoods scored at or above 90% on at least half of the measures in the Social Vulnerability Index (Figure 7). Four center-city census tracts scored in the highest range of social vulnerability, with at least 10 of 16 measures scoring at or above the 90th percentiles: tracts 13, 14, 15, and 19.

### Figure 7. Manchester Center-City Neighborhoods Have Highest Rates of Social Vulnerability

Manchester Social Vulnerability Index by Census Tract, 2015-2018



Source: DHHS, NH Wisdom

<sup>18</sup> <https://hazards.fema.gov/nri/social-vulnerability>

<sup>19</sup> Phelos, Heather M. MPH; Deeb, Andrew-Paul MD; Brown, Joshua B. MD, MSc Can social vulnerability indices predict county trauma fatality rates?, *Journal of Trauma and Acute Care Surgery: August 2021 - Volume 91 - Issue 2 - p 399-405*. doi: 10.1097/TA.0000000000003228

<sup>20</sup> Basile Ibrahim, B., Barcelona, V., Condon, E. M., Crusto, C. A., & Taylor, J. Y. (2021). The Association Between Neighborhood Social Vulnerability and Cardiovascular Health Risk Among Black/African American Women in the InterGEN Study. *Nursing research, 70*(5S Suppl 1), S3-S12. <https://doi.org/10.1097/NNR.0000000000000523>

<sup>21</sup> [https://wisdom.dhhs.nh.gov/wisdom/dashboard.html?category=community-health&topic=social-determinants-of-health&subtopic=social-determinants-of-health&indicator=social-vulnerability-index-\(svi\)](https://wisdom.dhhs.nh.gov/wisdom/dashboard.html?category=community-health&topic=social-determinants-of-health&subtopic=social-determinants-of-health&indicator=social-vulnerability-index-(svi))

## WHAT DO MANCHESTER RESIDENTS THINK?

Trauma was the second highest priority among Manchester residents surveyed, with 92.9% saying that it is “very important” for Manchester to address and prevent trauma, including persistent poverty, adverse childhood experiences such as abuse and neglect, mental/physical distress and suicide, and neighborhood crime and family violence.

Trauma was tied with substance misuse as the top priority for key stakeholders interviewed. Many pointed to the Adverse Childhood Experiences Response Team (ACERT) as a national model for reducing the long-term impact of traumatic experience on youth. However, several pointed to the need to invest in universal, primary prevention approaches, including family supports and programs promoting positive child development. Key stakeholders also identified the rise in poor mental health and suicidality, particularly among Manchester’s youth, as a significant concern.

## Community Spotlight

### Adverse Childhood Experiences Response Team (ACERT)

The Adverse Childhood Experiences Response Team (ACERT) is a multi-disciplinary, collaborative approach to addressing the negative effects of childhood trauma. The ACERT model acts as a referral mechanism that connects families and their children to local trauma-informed mental health services and social supports. In Manchester, the ACERT core partnership includes the Police Department, YWCA-NH, and Amoskeag Health who work collaboratively to provide assistance to families, and their children, who have had recent police involvement. This referral program is voluntary and offers connections to a variety of therapies, youth support groups, domestic violence services, athletic enrichment programs, home visiting, and many other child/family-based resources. The ACERT model has been touted as a best-practice secondary health prevention program by former California Surgeon General Dr. Nadine Burke-Harris and has been replicated in multiple other communities across New Hampshire. To learn more, please visit our website at [www.acert.us](http://www.acert.us). If you have questions for the team, please contact [ACERT@AmoskeagHealth.org](mailto:ACERT@AmoskeagHealth.org).



## Public Health and Safety Team (PHAST)

The Manchester Health Department's Public Health and Safety Team's Community Health Workers (CHWs) address public safety and health issues within the City's 12 Wards through a partnership with the Manchester Police Department. The CHWs assist the MPD in addressing repeat "check condition" calls for service, of which most of these calls are more related to health, social and economic issues than crime or violence. CHWs are also working towards increasing neighborhood-based resident engagement via improvement projects and events.

In addition to working directly with the MPD, the CHW team:

- ▶ Serves as a City point of contact for policy makers and residents with neighborhood concerns, such as crime and safety issues.
- ▶ Assists residents in linking with services and local resources to meet their needs, such as food, jobs, and health care; and
- ▶ Connects with community groups to support neighborhood enhancement and engagement projects, such as clean-up or block party events.

Care coordination services by the CHW team include but are not limited to:

- ▶ Access to basic resources, such as food, navigating health care and other support services,
- ▶ Assistance with basic housing and safety concerns, and
- ▶ Help with enrolling in programs/services.

The team is multicultural and collectively speaks 12 languages, in addition to English (Spanish, French, Nepali, Hindi, Swahili, Kinyarwanda, Kirundi, Lingala, Mandinka, Fula, Wolof, and Yoruba). The Community Health Workers serve the entire City and the program does not have eligibility criteria, such as income or age. The team has the desire to assist those in need, leading them to work for equity and social justice or equal access to essential health resources, such as housing, healthy food, education, employment, and health care.

To learn more please visit <https://www.mymanchesternh.com/Resources/PHAST>

## Manchester Gun Violence Reduction Strategy

The Manchester Gun Violence Reduction Strategy is a community centered approach to identifying, analyzing, and developing evidence-based responses to the gun violence public safety issue in the Manchester community. Through work with community stakeholders, a problem solving team identifies the circumstances and conditions that could be influencing the gun violence problem.

Manchester Police partnered with the National Policing Institute to adopt the CompStat360 problem solving model in an attempt to integrate these community needs and feedback on public safety issues. This process began with a community assessment conducted by the Policing Institute, which identified several priority areas. The issue of gun violence and fear of gun violence was identified as the most significant problem area.

Through this work, four focus areas were identified: Focus on Youth, Focus on Place, Building Community, and Focused Policing.

Community-based interventions and responses were identified for each focus area and a data-informed strategy to reduce gun violence and fear of gun violence in Manchester was created. This strategy strives to incorporate on-going services coupled with new programs and resources. Through focusing efforts on youth, the community, neighborhoods, and precision policing, Manchester can become safer and healthier for all members of the community.

Read more about the Manchester Police Department's Gun Violence Reduction [here](#).



# CONCLUSION



## CONCLUSION

### Next steps

Improving health in the community is fundamentally a shared responsibility and often takes comprehensive, multifaceted approaches to quantifiably change neighborhood conditions and opportunities for the better. The City of Manchester has a long standing history of valuing a commitment to health for its constituents and has benefited from many stakeholders who have come together to positively affect population health. Community leaders have collaboratively tackled tough issues such as decreasing adolescent pregnancy, increasing access to oral health care, preventing childhood lead poisoning, asthma, and violence in center city neighborhoods. The 2022 Community Health Needs Assessment should serve as a call to action by the community, including the residents who make Manchester or its region their home, to build neighborhoods of opportunity and resilience. Our success will be measured when all Manchester families and individuals thrive and give back to the greater good. Next steps include:

1. Reconvene a leadership council comprised of key community stakeholders dedicated to improving health that meets regularly to set long-term health improvement goals and monitor short-term metrics between community needs assessments.
2. Practice authentic resident engagement in finding and implementing community solutions.
3. Adopt a unified theory of change such as results-based accountability and train community leaders and stakeholders in its application.
4. Institute community performance monitoring to include data dashboards to advance health and equity.
5. Update the Community Health Improvement Plan to address the priority areas identified in the Community Needs Assessment and develop issue-specific action plans for unmet needs that warrant unique exploration.
6. Harness the use of technology to expand the reach of public health through real-time surveillance, program management and communication. This includes the use of forecasting techniques and predictive analytics in decision making for health.
7. Form a funding hub with health care charitable trusts, banks and funding agencies to co-fund, blend and braid investments what can bring neighborhood health improvement strategies to scale.
8. Transform the City of Manchester Health Department into a local academic/teaching health department and provide real-world learning opportunities for current and future public health professionals.
9. Establish an Urban Health Research Institute with academic partners to contribute to the science and evidence base of neighborhood health improvement.
10. Strengthen evaluation on public health intervention strategies to determine which program variants work best, whether the public is getting the best possible value for its investment, and how to increase the impact of existing programs.<sup>1</sup>

---

<sup>1</sup> [https://samples.jblearning.com/0763738425/38425\\_CH18\\_495\\_544.pdf](https://samples.jblearning.com/0763738425/38425_CH18_495_544.pdf)



# RESIDENT INPUT SUMMARY



## RESIDENT INPUT SUMMARY

Key leaders reported that, in terms of health and wellness, Manchester is doing the same or worse than it was 5 years ago. Overall, they believe the COVID-19 pandemic exacerbated and/or highlighted inequities among city residents associated with housing, food security, technology access for educational and other domains, and substance misuse. Despite these impacts, more than one-third of Manchester residents scored as “thriving” in the wellness assessment, with only 10.5% scoring in the lowest, “suffering,” range on this measure. In fact, Manchester residents rated their overall physical and mental health as positive, with few reporting health-related limitations on their daily activities.

Both residents and key leaders ranked housing as the highest priority for action in Manchester. Education and healthcare were the next two highest priorities for key leaders, while trauma and substance misuse were among the top priorities for residents. Residents identified crime and safety, racism, transportation, and climate considerations as additional priorities for action. Key leaders also noted challenges with transportation and racism. Leaders also recommended more attention to effective partnerships to develop and implement solutions, wrap-around care models, the needs of older adults, and workforce development.

Key leaders identified access to health care from high-quality service providers as assets in Manchester, with few residents reporting an inability to access healthcare services in the city. Leaders reflected on the opportunities that have arisen due to strong partnerships between community leaders in areas such as housing and family support. Named health care partners included the Manchester Health Department, area hospitals, and primary care clinics. However, many residents reported barriers to accessing adult dental care, with the expense being the primary barrier.

Unfortunately, many health and wellness measures have worsened in the city over the last five years. Though COVID-19 is one of the most significant factors in this change, city politics, financial constraints, and a limited and strained workforce are also affecting health and wellness. Key leaders identified both short-term COVID-19 impacts on financial and food security, as well as longer-term impacts as concerns. Long-term and potentially far-reaching negative impacts of the pandemic included child safety, stress and mental health, substance misuse, drug overdose, housing accessibility and affordability, educational disparities, food access, and transportation. In addition to COVID, racism was also noted as a key concern impacting the wellness of Manchester residents, with several key leaders reporting its pervasiveness at all levels of the community and its systems of care.

Key leaders suggested increased funding, expanded and more effective partnerships, wrap-around and community-centered approaches, workforce investments, private-public partnerships for housing expansion, and more supportive housing models as opportunities for improvements across the priorities outlined in this report.

## Methods

The Manchester Health Department in Manchester, New Hampshire, contracted with a public health consulting firm, JSI Research and Training Institute, Inc. (JSI), to collect community input as a component of their community health needs assessment (CHNA). Data were collected from two groups: key community leaders and local residents. Key leaders were recruited through community partnerships and were invited to participate in two data gathering activities: a pre-interview survey and an interview conducted via video conference over the internet. Local residents were invited to participate in a 32-question survey that was available online or in person with the guidance of a community health worker who was provided a script to assist residents with accessing and completing the online survey. Residents were offered a \$10 gift card as an incentive for their participation. Data collection focused on perspectives associated with well-being and with the six priority areas established during the 2019 Manchester CHNA.

Twenty (20) leaders and 204 residents provided their perspectives on health and wellness in Manchester. Overall, leaders felt that housing was the highest priority currently impacting health and wellness in the city, followed by education and food. Residents ranked access to dental care and childcare as their greatest challenges now, with the most common barriers across multiple services and supports being cost and a lack of awareness of how to access the particular service or support.

The full report from JSI is available from the Manchester Health Department.

## Key Stakeholder Interviews

Twenty key leaders were interviewed. These interviewees were chosen by the Manchester Health Department as representatives of the six priority areas. Table 1 shows the number of key leader interviewees representing each priority area. Note that some interviewees represented more than one priority area.

**Table 1. Key Leader Priority Areas**

Number of Key Leader Interviewees Representing Priority Areas	
Education	7
Health Care	5
Substance misuse	3
Food	2
Housing	4
Trauma	5

Key leaders were asked to rank order the six priority areas of the Manchester Health Department. Many people struggled with this activity and noted that the priorities were interrelated. Key leaders' rankings of the priority areas were averaged and organized from highest priority (average ranking closest to 1) to lowest priority (highest average ranking). Table 2 features the results of the ranking analysis from highest priority (housing) to lowest priority (substance misuse and trauma tied).

**Table 2. Housing the Top Priority for Manchester Key Stakeholders**

Priority Area Rankings	
Priority Area	Average Ranking
Housing	2.2
Education	3.2
Health care	3.3
Food	3.6
Substance misuse	4.3
Trauma	4.3

Within each priority area, leaders were asked to describe current assets, challenges and opportunities, as well as the impact they felt COVID had on that priority area. Results of these interviews area summarized above.

As only 12 of the 20 Key Leaders interviewed responded to the pre-interview survey (60%), the results are not broadly representative and, therefore, not included in this summary.

### Resident Surveys

The resident survey was designed to gather information on resident priorities for action, barriers to accessing services related to the social determinants of health, and overall wellness. A web link to the survey was shared with the Manchester Health Department who provided it to community health workers for dissemination. A flyer in English and Spanish that included a QR code was also used to promote the survey. The survey was limited to participants who were at least 18 years of age and currently living in Manchester. The first 200 residents to complete the survey received a \$10 gift card as an incentive.

Community health workers were allowed to capture the participants' answers and enter them on-line as needed. The Manchester Health Department set a goal of 200 residents participating in the survey. Between April 11 and May 17, 2022, there were 204 completed responses. The survey was then closed since the goal for the total number of respondents was reached.

### Characteristics of Respondents

Table 3 shows the self-reported race/ethnicity of respondents. While more than one-quarter of respondents choose not to disclose their race or ethnicity, the results indicate a diverse sample. Of those who indicated their gender, 63% were female. Most residents who responded to the survey lived in Manchester for more than 3 years (63%). The average age of respondents was 38.

**Table 3. Respondent Race/Ethnicity**

Race	
White	27%
Black	30%
Asian	14%
American Indian/Alaskan Native	1%
Choose not to disclose	28%
Ethnicity	
Hispanic/Latino	28%
Non-Hispanic/Latino	45%
Choose not to disclose	28%

### Resident Priorities

Residents were asked to rank each of the following priority areas as Not very Important, Somewhat Important, or Very Important for Manchester to take action. Residents were not limited in the number of priorities they could rate as Very Important. Table 4 summarizes resident responses. While residents clearly thought all six priority areas addressed in this report were very important for Manchester to take action, they rated safe and affordable housing the highest, with 93.4% of residents saying this was a very important priority for action.

**Table 4. Residents Rate Housing as Highest Priority for Action**

Please tell us how important you think it is for Manchester to take action in the areas below. (n=198)			
	Not very important	Somewhat important	Very important
Improve educational outcomes, including ensuring children are ready for school, students graduate on-time, and the community has high paying jobs.	1.5% (N=3)	9.1% (N=18)	89.4% (N=177)
Improve access to quality, preventive health care, including primary care, prenatal care, dental care, and mental health services.	<1% (N=1)	8.1% (N=16)	91.4% (N=181)

Reduce and prevent substance misuse, including overdoses and deaths due to drugs, tobacco use and vaping, binge drinking, and youth risk behaviors.	1.0% (N=2)	6.6% (N=13)	92.4% (N=183)
Increase access to healthy, affordable food sources, including addressing health conditions such as obesity and diabetes, lack of access to fresh fruits and vegetables, and food deserts.	0% (N=0)	8.6% (N=17)	91.4% (N=181)
Increase access to quality, affordable housing, including housing conditions such as crowding, environmental concerns such as lead exposure, rental costs for housing, and lack of supportive/transitional housing.	<1.0% (N=1)	6.1% (N=12)	93.4% (N=185)
Address and prevent trauma, including persistent poverty, adverse childhood experiences such as abuse and neglect, mental/physical distress and suicide, and neighborhood crime and family violence.	1.0% (N=2)	6.1% (N=12)	92.9% (N=184)

Residents were also asked to identify top priorities not included in the above list. Participants identified the following additional priorities for action:

- ▶ Crime and safety
- ▶ Transportation
- ▶ Recycling/access to clean communities and green spaces
- ▶ Support for small businesses
- ▶ Elderly assistance
- ▶ Racism
- ▶ Access to domestic violence shelters
- ▶ Climate health
- ▶ Cost of utilities

### Resident Barriers to Services

Residents were asked to list which items, services, or programs they or their families have had trouble getting in the last three years. Whenever respondents answered yes, they were given a list of specific types of barriers and asked to select all that applied. Table 5 lists the top 10 services residents reported having trouble getting in the past 3 years, with adult dental care and childcare topping that list. Table 6 shows that the most common barriers to getting services were “I don’t know where to go to get the services I need” and “services were too expensive.”

**Table 5. Nearly One-Quarter of Manchester Adults Have Trouble Getting Dental Care**

<b>Top 10 items, services, or programs Manchester residents had trouble getting in the last three years.</b>	<b>% of Responses</b>	<b># of Responses</b>
Dental care for adults	23.7%	42
Childcare	15.8%	28
Scholarships or financial help for college	14.7%	26
Programs to help with paying for housing and utilities (gas, electric, oil)	14.1%	25
Help finding work	13.6%	24
Health insurance	13.6%	24
Mental health counseling/therapy for adults	13.0%	23
After school programs and sports for children and teens	12.4%	22
Job training programs	11.3%	20
Help with accessing food/meals	11.3%	20



**Table 6. Many Manchester Residents Don't Know Where to Go to Get Services They Need**

<b>What were the barriers to getting this item/service/program?</b>	<b>Most Frequently Selected Barriers - # of Responses</b>
Dental care for adults	Services were too expensive (32) No health insurance (14)
Childcare	Services were too expensive (15) I do not qualify for the services that I need (7)
Scholarships or financial help for college	I don't know where to go to get the services that I need (15) I do not qualify for the services that I need (3)
Programs to help with paying for housing and utilities (gas, electric, oil)	I don't know where to go to get the services that I need (16) I do not qualify for the services that I need (7)
Help finding work	I don't know where to go to get the services that I need (7) I do not qualify for the services that I need (7)
Health insurance	I do not qualify for the services that I need (11) Services were too expensive (9)
Mental health counseling/therapy for adults	I don't know where to go to get the services that I need (12) Services were too expensive (5)
After School programs and sports for children and teens	Services were too expensive (8) I don't know where to go to get the services that I need (7)
Job training programs	I don't know where to go to get the services that I need (9) I do not qualify for the services that I need (4)
Help with accessing food/meals	I don't know where to go to get the services that I need (10) I don't have transportation (7)

## Resident Well-Being

Resident well-being was assessed using the 100 Million Healthier Lives 12-item Adult Well-Being Assessment.<sup>1</sup> This tool provides two composite measures, Life Evaluation and Affect Balance, as well as 8 individual measures of overall well-being.

The first composite measure uses the Cantril Self-Anchoring Scale, known as Cantril's Ladder, to measure present and future overall well-being. These two measures are scored together to reveal an overall Life Evaluation Well-Being Score with three categories of well-being: Thriving, Struggling, and Suffering.<sup>2</sup> While Figure 1 shows that most Manchester residents scored

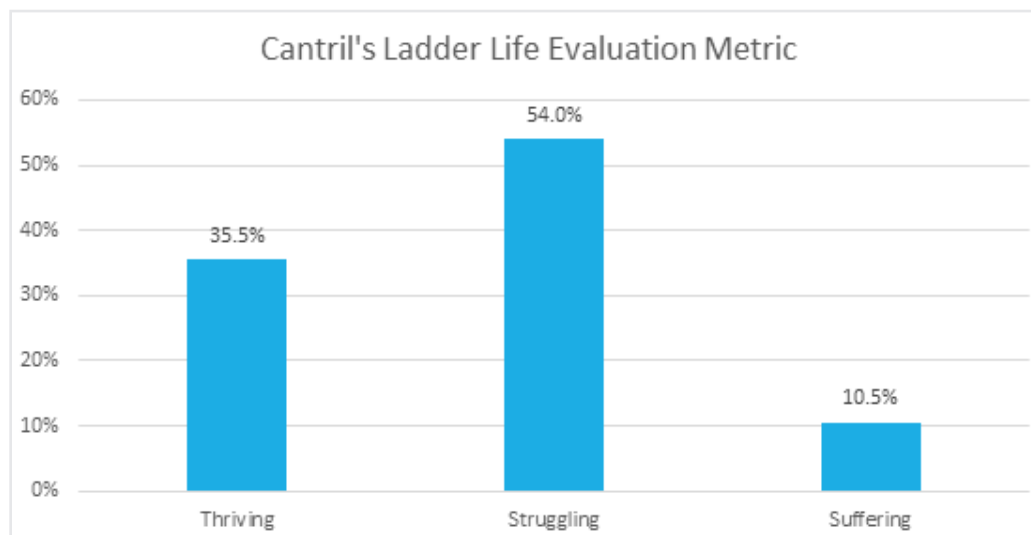
<sup>1</sup>Stiefel MC, Riley CL, Roy B, McPherson M, Nagy JM. *Health and Well-being Measurement Approach and Assessment Guide. Boston: 100 Million Healthier Lives, convened by the Institute for Healthcare Improvement; 2020. (Available at [www.ihl.org/100MLives](http://www.ihl.org/100MLives))*

<sup>2</sup><https://news.gallup.com/poll/122453/understanding-gallup-uses-cantril-scale.aspx>



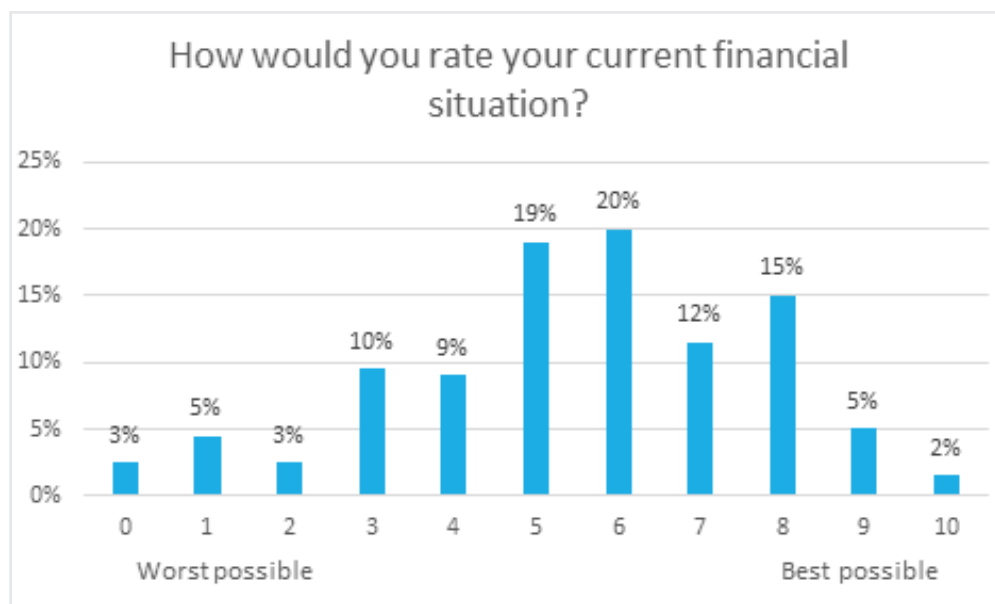
within the Struggling range (well-being that is moderate or inconsistent), more than one-third scored as Thriving (well-being that is strong, consistent, and progressing). One in ten residents scored at the lowest rating of Suffering on this metric (well-being that is at high risk).

**Figure 1. One-Third of Manchester Residents Report They are Thriving**



The Cantril's ladder scale was also used to assess Manchester residents' views of their current financial situation. Most residents scored in the middle of the range from "worst possible" financial situation to "best possible" (Figure 2). However, 30% of residents characterized their current financial situation as below the midpoint (5) of the scale.

**Figure 2. Most Manchester residents feel their current financial situation is neither the "best", nor the "worst"**



The second composite measure, Affect Balance, is measured by two items drawn from the Scale of Positive and Negative Experiences that measure the frequency of positive and negative emotions in the past two weeks.<sup>3</sup> To calculate the overall Affect Balance score, the negative emotions rating is subtracted from the positive emotions rating. Higher scores represent a stronger prevalence of positive emotions to negative ones.

Manchester residents scored 0.24 overall for Affect Balance, suggesting they are experiencing positive emotions only slightly more frequently than negative ones (Figure 3). The average score on a range from 0 to 10 for the frequency of positive emotions in the past 2 weeks was 6.59 among Manchester residents, while the average score for the frequency of negative emotions was 6.34.

**Figure 3. Manchester Residents Experience Similar Levels of Positive and Negative Emotions**

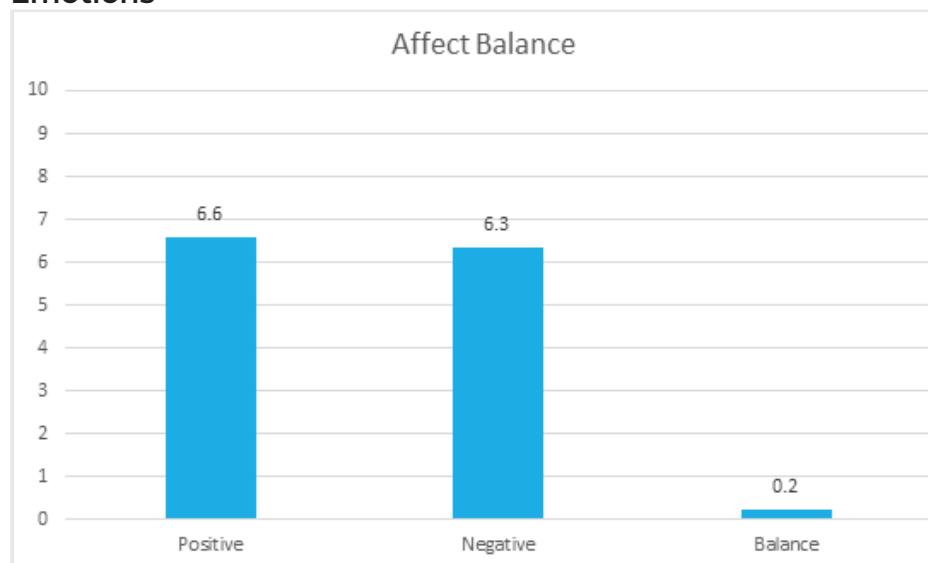
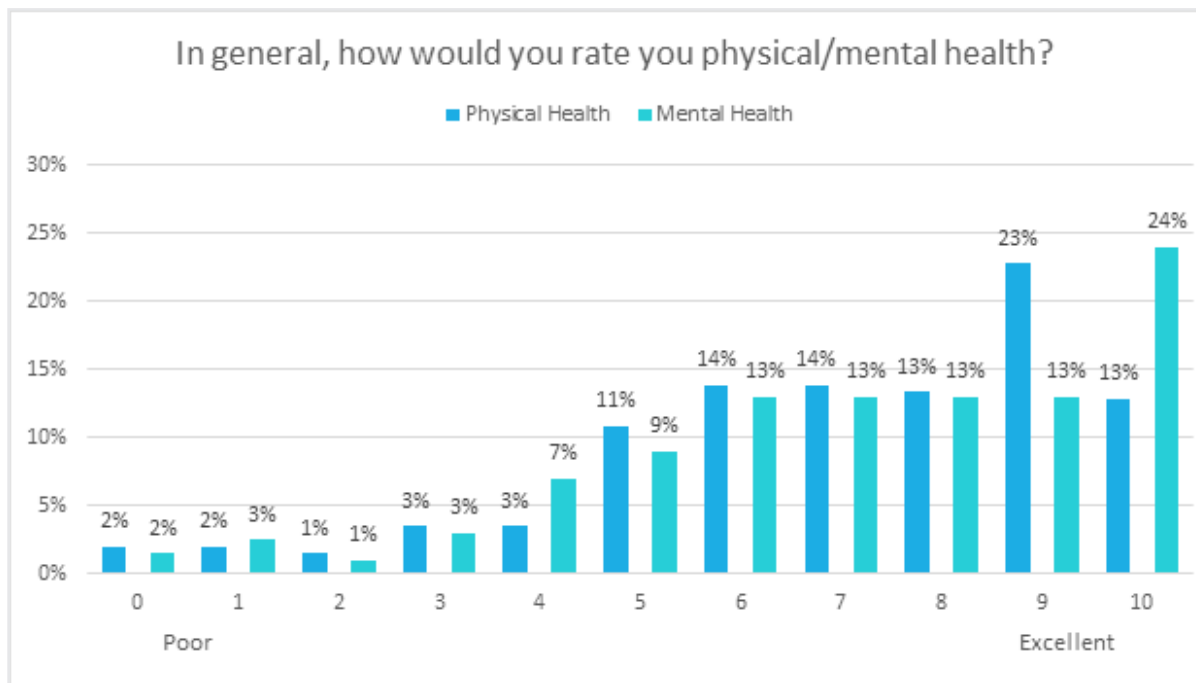


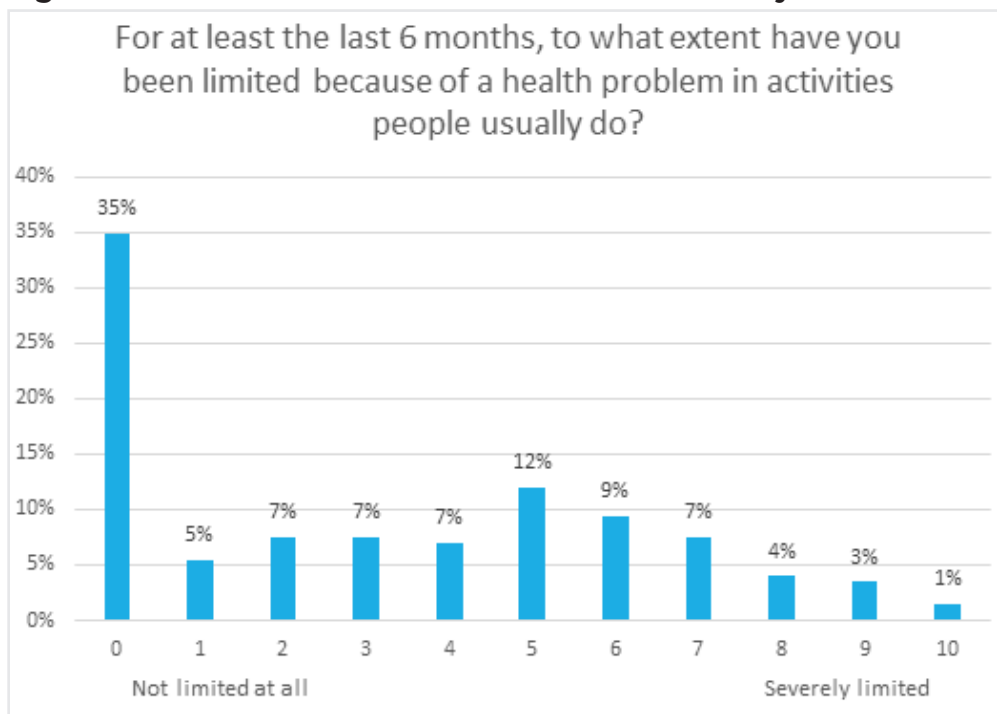
Figure 4 shows that most Manchester residents rate their physical and mental health as excellent or close to excellent. The following figure (5) indicates that very few of the respondents feel their normal activities are limited by a health problem.

<sup>3</sup>Li, F., Bai, X., & Wang, Y. (2013). *The Scale of Positive and Negative Experience (SPANE): psychometric properties and normative data in a large Chinese sample*. *PLoS one*, 8(4), e61137. <https://doi.org/10.1371/journal.pone.0061137>

**Figure 4. Physical/ Mental Health**



**Figure 5. Few Manchester Residents Feel Limited by Health Problems**



Figures 6 through 9 show residents’ responses to questions about their overall social and emotional well-being. The results paint an overall positive picture, with most residents feeling like they have a purpose in life and few residents reporting feeling lonely all or most of the time. While there is a range in residents’ reports of community belonging, most residents feel they have someone who can help them when they are in need.

Figure 6. Most Manchester Residents Feel They Have Purpose in Life

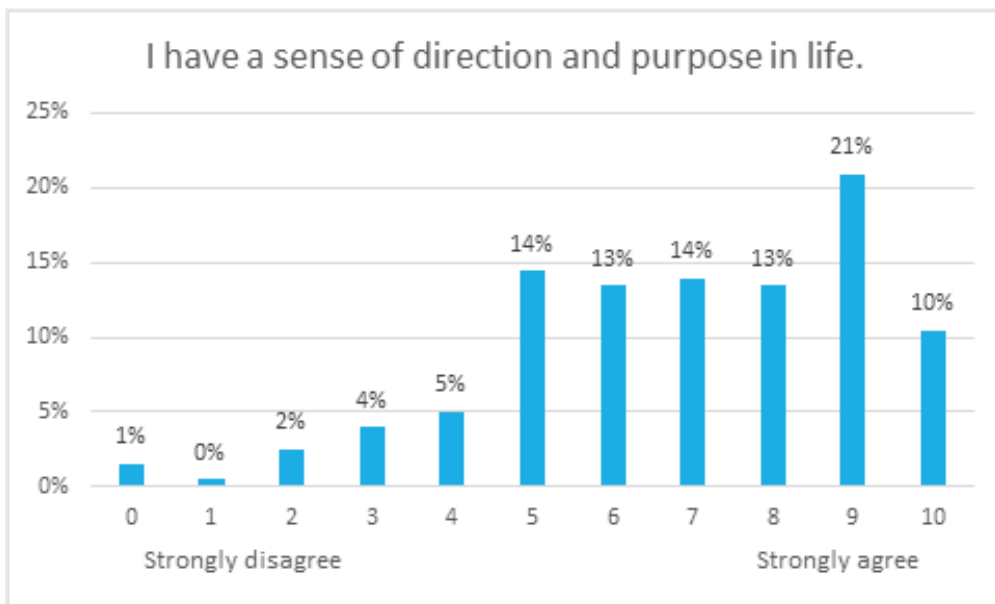
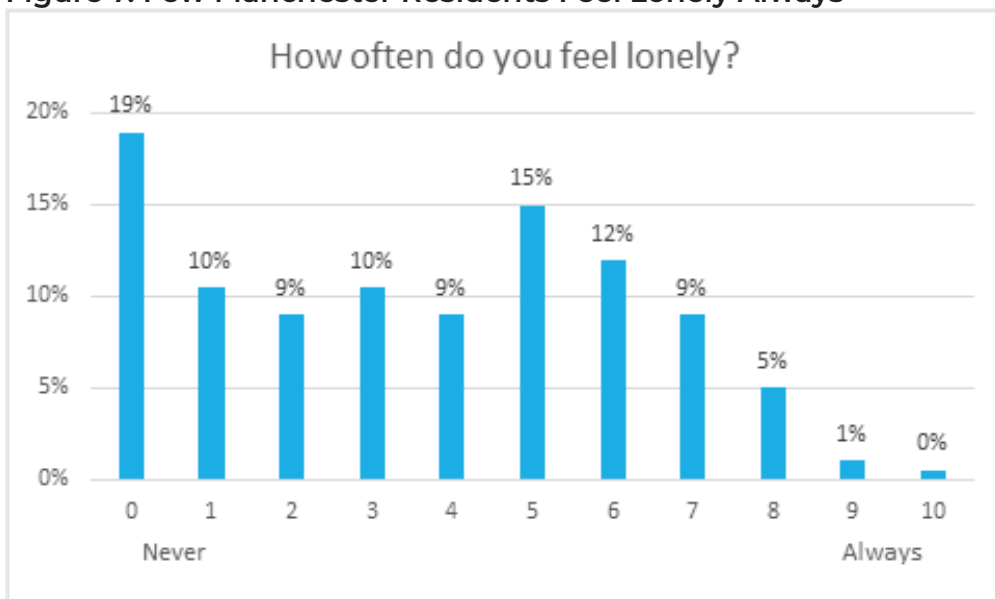
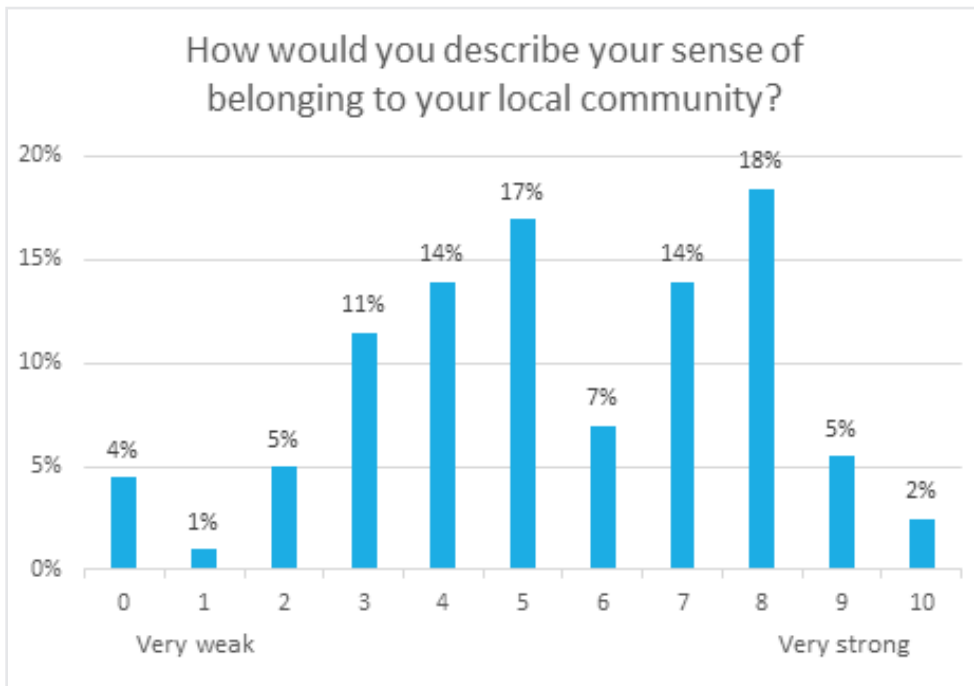


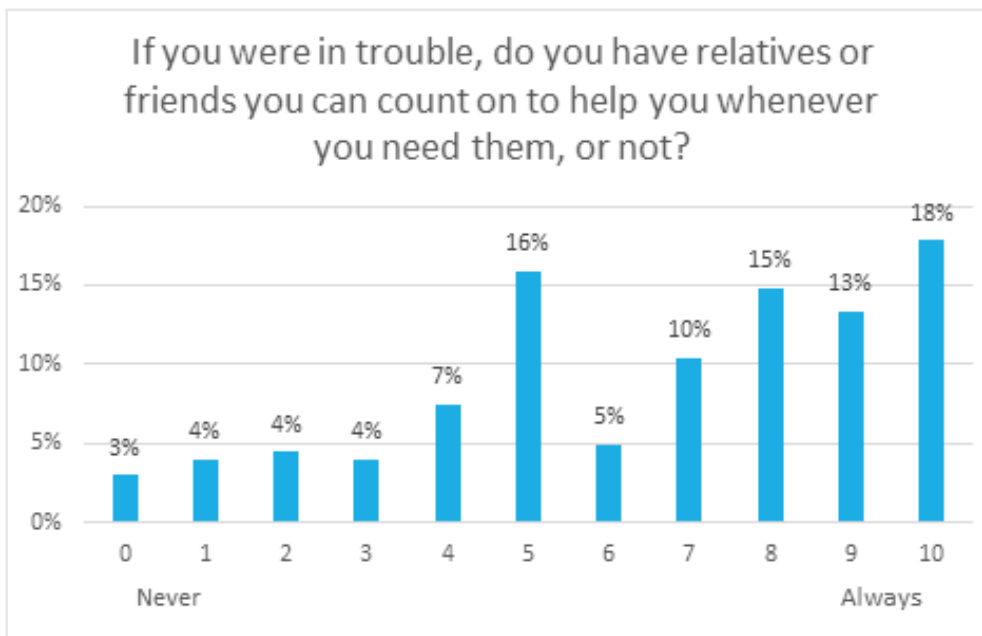
Figure 7. Few Manchester Residents Feel Lonely Always



**Figure 8. Manchester Residents Report a Range of Belonging to their Communities**

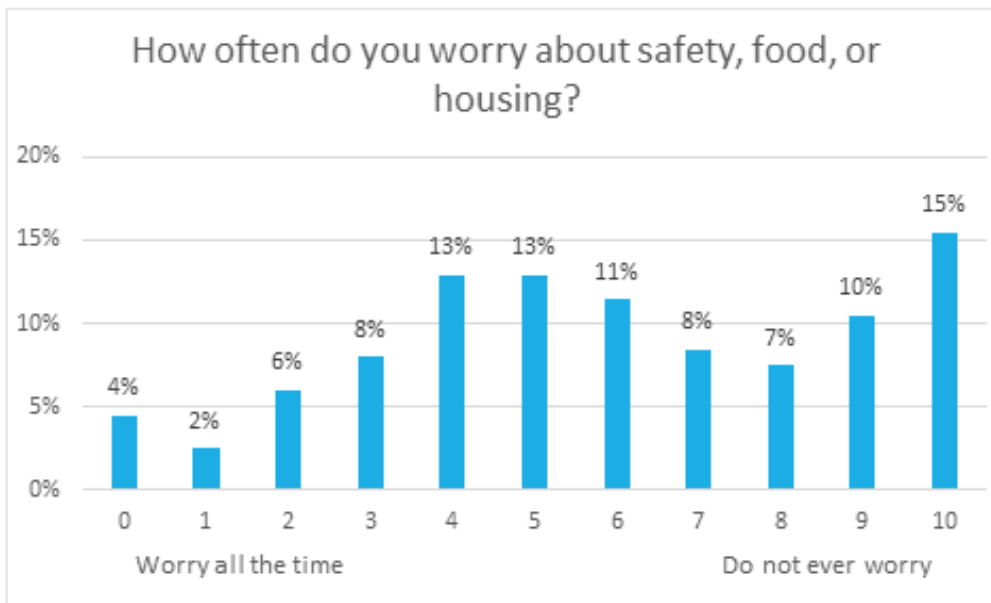


**Figure 9. Manchester residents have people they can count on, more often than not**



The final two questions on resident well-being, shown in Figures 10 and 11, were not part of the 100 Million Healthier Lives assessment but were added by the Manchester Health Department. Only 15% of respondents said they do not ever worry about safety, food, or housing, while 4% said they worry all the time about these issues. The average score on this question was 5.9. Twelve percent of residents said they do not every worry about meeting their regular monthly living expenses, while 6% said they worry about this all the time. The average score on this question was 5.6.

**Figure 10. Most Manchester Residents Worry Sometimes about Safety, Food, or Housing**



**Figure 11. Many Manchester Residents Worry Sometimes about Meeting Normal Monthly Living Expenses**

