Racism and Racial Inequities in Health:

A Data-Informed Primer on Health Disparities in Massachusetts

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The mission of the Blue Cross Blue Shield of Massachusetts Foundation is to expand access to health care for low-income and vulnerable people in the Commonwealth. We collaborate with public and private organizations to broaden health coverage and reduce barriers to care, through grants, research, and policy initiatives. Our work served as a catalyst for the pioneering Massachusetts health care reform law enacted in 2006, and we have sponsored ongoing research on the law's impact.

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TABLE OF CONTENTS

Executive Summary	1
1. The Imperative to Advance Health Equity and Address Structural Racism	4
1.1. The Imperative to Advance Health Equity	4
Primer Goals and Objectives	4
Speaking to Health Equity	6
Race and Ethnicity Data Reporting Limitations	6
1.2. Structural Racism and Implications for Health	8
2. A Look at Massachusetts' Demographic Composition and Social Drivers of Health	11
2.1. Massachusetts Population Overview	11
Population Demographics Composition and Growth by Race and Ethnicity	12
Population Demographics Composition by Age, Race, and Ethnicity	13
Population Demographics by County, Race, and Ethnicity	14
2.2. Social Drivers of Health in Massachusetts: Select Statistics	15
Household Income by Race and Ethnicity	16
Child Poverty Rates by Race and Ethnicity	17
Food Insecurity by Race and Ethnicity	18
Housing Stability by Race and Ethnicity	19
Educational Status by Race and Ethnicity	20
Limited English Proficiency by Race and Ethnicity	21
3. Health and Health Care Inequities and Disparities in Massachusetts: Select Statistics	22
3.1. Access to Coverage and Care	22
Uninsured Rates by Race and Ethnicity	23
Continuity of Health Coverage by Race and Ethnicity	24
Health Insurance Coverage Types by Race and Ethnicity	25

	Difficulty Accessing Care by Race and Ethnicity	26
	Access to a Usual Source of Care by Race and Ethnicity	27
	Unmet Need (Medical and Behavioral Health Care) Because of Cost by Race and Ethnicity	28
	Unmet Need (Dental and Vision Care) Because of Cost by Race and Ethnicity	29
	Provider Workforce by Race and Ethnicity	30
3.2.	Service Utilization	31
	Routine Care and Specialist Utilization by Race and Ethnicity	32
	Behavioral Health Care Utilization by Race and Ethnicity	33
	Emergency Department Utilization by Race and Ethnicity	34
	Maternal Health Care by Race and Ethnicity	35
	Immunizations by Race and Ethnicity	36
3.3.	Quality and Consumer Experience	37
	Health Care Experience Measures by Race and Ethnicity	38
	Select Person-Centered Care Measures in the Home Health Setting, by Race and Ethnicity	39
3.4.	Health Outcomes	40
	Self-Reported Health Status by Race and Ethnicity	41
	• Outcome Measures With Largest Disparities by Race and Ethnicity: HIV Cases, Infection Deaths, and Hospital Admissions for Asthma	42
	Maternal Health Outcomes by Race and Ethnicity	43
	Infant/Neonatal Mortality by Race and Ethnicity	44
	Self-Reported Mental Health Status by Race and Ethnicity	45
	Chronic Disease Prevalence by Race and Ethnicity	46
	Functional Status by Race and Ethnicity	47
	Life Expectancy by Race and Ethnicity	48
	Cause of Death by Race and Ethnicity	49
3.5.	Disparate Impact of COVID-19	50
	COVID-19 Cases, Hospitalizations, and Deaths by Race and Ethnicity	51
	Drivers of COVID-19 Outcomes: Life and Livelihood Factors by Race and Ethnicity	52

 Drivers of COVID-19 Outcomes: Ability to Accommodate Remote Work by Race and Ethnicity 	53
COVID-19 Vaccinations by Race and Ethnicity	54
COVID-19: Mental Health Status by Race and Ethnicity	55
4. Data Limitations, Gaps, and Next Steps	56
4.1. Limitations of Race and Ethnicity Data in Massachusetts and Nationally	56
4.2. Gaps in Race and Ethnicity Data in Massachusetts	57
5. Conclusion	59
Appendix	60
Health Equity Reporting and Activities in Massachusetts	60
Endnotes	62

EXECUTIVE SUMMARY

The COVID-19 pandemic laid bare long-standing racial and ethnic health inequities and disparities across America, including in Massachusetts. Black and Hispanic people in Massachusetts have been disproportionately impacted by COVID-19 relative to White and Asian people. Specifically, they are two to three times more likely to contract COVID-19, twice as likely to be hospitalized for it, and three times more likely to die from it than White and Asian people of similar age. On a national level, the impact of the pandemic has had a similarly adverse impact on the lives of Black and Hispanic people: While average life expectancy declined by 1.36 years for White Americans between 2018 and 2020, it fell by 3.25 years for non-Hispanic Black people and 3.88 years for Hispanic people. The pandemic was singularly responsible for eliminating the nation's progress since 2010 in reducing the life expectancy gap between Black and White people.

The root causes of health inequities among racial and ethnic groups in Massachusetts and nationally, exemplified by the pandemic experience but not limited to it, are multifactorial, complex, and persistent. Structural racism is historical and pervasive through our society and social systems. The effects of historical structural and societal barriers to wealth accumulation among people of color, such as redlining, in which mortgage lending was restricted for Black neighborhoods, thus limiting homeownership by Black people, continue to impact Black families in Massachusetts and beyond. Today, Black people make up 13 percent of the American population but hold only 2 percent of American wealth, and the average net worth of a White family (\$171,000) is nearly 10 times greater than that of a Black family (\$17,150). Much the same is true in Massachusetts. Among Boston-area residents, White households have a median net worth of \$247,500, while the median net worth for Black and Hispanic households is \$12,000 or less, with U.S.-born Black households having a median net worth of \$8 and Dominican households having a median net worth of \$0.

Racial and ethnic bias are also well documented across America's social systems, such as housing, education, employment, and the criminal legal system. 1,2,3,4 These systems and policies have a direct effect on social conditions that impact health and well-being such as poverty, lack of economic opportunity, discrimination, unstable and unsafe housing and neighborhoods, and poor access to and poor quality of education. 5 Nearly one in three Hispanic children and one in four Black children in Massachusetts live below the poverty level. Black and Hispanic people in Massachusetts are three to four times more likely to access food support benefits (e.g., SNAP) than are Asian and White people. And Hispanic and Black people in Massachusetts are less likely to own their homes than White and Asian people. Homeownership is a key source of household stability, as well as a primary pathway for building wealth. Black people are incarcerated at five times the rate of White people and Hispanic people at 1.4 times the rate. Like housing, justice involvement impacts people's—and their families'—ability to maintain stable and healthy lives.

Further, America's health care system, designed by those in historical positions of authority, itself has a history of racism that must be acknowledged and addressed to better understand present health inequities, resulting disparities in health outcomes, and the continued distrust that people of color have toward its diagnoses and treatments. Financial and non-financial barriers to accessing health care, such as inequities in access to health insurance coverage and disparities in care delivery experiences, are well documented. Black and Hispanic people in Massachusetts are more than twice as likely as White people to have incomes less than 138% of the federal poverty level (FPL)—a key Medicaid eligibility threshold level. They are also more likely to be unemployed and, when employed, are less likely to work for employers that offer health insurance. Black and Hispanic people in Massachusetts are more likely to be enrolled in MassHealth or subsidized public coverage (e.g., ConnectorCare) than White people, and they report difficulty obtaining timely access to a doctor or clinic because of the type of insurance they carry. Hispanic people in Massachusetts were nearly twice as likely as other Massachusetts residents to lack a usual source of care, and Black and Hispanic people in Massachusetts used the emergency department more frequently than White people—and more often for non-urgent conditions. When seeing health professionals in Massachusetts—whether for diagnosis or treatment—Black and Hispanic people often confront a workforce that does not reflect their racial, ethnic, and cultural background or experience.

Structural racism and barriers to accessing health-determining and health care resources lead to direct adverse health impacts and outcomes for people of color. While disparities in health outcomes across racial and ethnic groups are often narrower in the Commonwealth than they are in the nation as a whole, clear disparities persist across many key outcome measures in Massachusetts, including:

- White people are more likely to report having "excellent or very good" health than are Black and Hispanic people.⁷
- Black and Hispanic people are more likely report having "fair or poor" mental health than are White people.8
- Rates of both pregnancy-associated mortality and severe maternal morbidity are higher for Black women compared to White, Hispanic, and Asian women.⁹
- Black and Hispanic people have substantially higher infant mortality rates than White and Asian people. 10
- Black and Hispanic people report higher rates of diabetes and asthma than do White people. 11

Additionally, race and ethnicity are only two of many factors that influence the barriers and opportunities people may face in pursuing a healthy life. Structural barriers—historical and present-day—also exist for people of various genders and sexual orientations and according to their disability status, economic status, immigration status, and geography, and these could have similar or compounding influences.

This primer was developed to serve as a foundational resource to broaden the collective understanding of racial and ethnic health inequities and disparities in the Commonwealth. It presents a data-informed reflection of the racial and ethnic health inequities and disparities Massachusetts residents confront today. The information given here is imperfect and incomplete, because the state and federal data resources available for exploring health inequities and disparities are imperfect and incomplete.

The primer organizes and presents select Massachusetts data and, where Massachusetts data does not exist, national data, to provide a picture of the health inequities and disparities that Massachusetts residents confront today. It uses common terminology and definitions to facilitate a better understanding and productive dialogue about the underlying factors that shape and drive health inequities and disparities. There are data gaps, challenges, and limitations (e.g., the data is too narrow, overly broad or generalized, incomplete or not comprehensive) as well as variation in data across systems that constrain or distort understanding of these factors and that may impact the effectiveness of solutions to address them. Improving our understanding of health disparities in Massachusetts and their causes is an essential step if stakeholders are to address persistent inequities. Massachusetts policymakers and other stakeholders have a unique opportunity to conduct a more thorough assessment of data gaps and potential options for filling these gaps with new approaches to data collection (e.g., surveys) and standardization, and new methods of analyzing data (as national and other state stakeholders have begun to explore). Organizations like the Massachusetts Department of Public Health, the Health Policy Commission, and the Center for Health Information and Analysis are well positioned to advance such efforts given their central roles in health care data collection, reporting, and analysis in the Commonwealth. The Commonwealth also could consider facilitating public-private partnerships with health care providers, payers, community-based organizations, and other stakeholders to develop data and measurement standards and/or to strengthen the quality of race and ethnicity data available for public analysis. The Blue Cross Blue Shield of Massachusetts Foundation is eager to participate in initiatives aimed at improving the timeliness, comprehensiveness, and overall quality of race and ethnicity data available in the Comm

Massachusetts data, despite its limitations, reveals deep and pervasive health inequities and disparities experienced by racial and ethnic groups in the Commonwealth today, resulting from a long history of structural racism and health and social systems not designed to support everyone equitably. The evidence of racial and ethnic disparities in the Massachusetts' health care system is clear and disturbing, and compels collective action and accountability. Action must include not only working to improve the data, but crafting and implementing solutions to advance and achieve health equity for all Massachusetts residents. This work includes ensuring that the communities and people harmed by structural racism and the resulting inequities are equal participants in the development of solutions. Achieving health equity is a moral imperative, and it is only through all of us working together that we can begin to fully understand and address the societal systems, structures, and policies that must be changed. Inaction will only perpetuate the long-standing inequities that characterize many of our social and health care systems and result in such unacceptable health disparities.

1. THE IMPERATIVE TO ADVANCE HEALTH EQUITY AND ADDRESS STRUCTURAL RACISM

1.1. THE IMPERATIVE TO ADVANCE HEALTH EQUITY

The COVID-19 pandemic revealed long-standing and stark health inequities and disparities among people of different races and ethnicities in Massachusetts and the nation. Nationally Black and Hispanic Americans were nearly three times as likely to be hospitalized for COVID-19 and twice as likely to die from it relative to White people of similar age. The factors contributing to these differences are wide-ranging and persistent across many aspects of life.

Black, Hispanic, and Indigenous people are more likely than White people, on average, to confront barriers to health care access, including higher rates of uninsurance, inequities in the experience of care delivery, and distrust of the health care system due to historical and systemic racism and related lack of respect and breaches of trust. Many people and communities in these groups are also more likely than White people to face challenges that negatively impact health, including poverty and lack of economic opportunity; discrimination; unstable and unsafe housing and neighborhoods; and poor access to and poor quality of education.¹⁴

These differences—in circumstances and experiences, opportunities and barriers, and lived experience in a society and health care system shaped in part by systemic racism—contribute to health inequities and disparities in Massachusetts. This primer sets out to use available data to describe health disparities that point to underlying inequities in the systems—social, economic, and health-care-related—that impact the health of Massachusetts residents. Achieving health equity is a moral imperative, and as a society we must begin the work to better understand and address inequities and disparities that lead some residents in Massachusetts to receive poorer quality of care and to experience illness and premature death because of their race or ethnicity.

PRIMER GOALS AND OBJECTIVES

The Blue Cross Blue Shield of Massachusetts Foundation (the Foundation) has developed this primer, *Racism and Racial Inequities in Health in Massachusetts*, as a foundational resource to broaden our collective understanding of racial and ethnic health inequities and disparities in the Commonwealth as part of our new focus area of *Structural Racism and Racial Inequities in Health*.¹⁵ The primer is intended to support discussion about how our health care system and other systems that impact health enhance or undermine health, and to facilitate the development of

solutions to strengthen those systems to serve all Massachusetts residents. The primer presents a data-informed reflection of the racial and ethnic health inequities and disparities Massachusetts residents confront today. As described in more detail below, the information given in the primer is imperfect and incomplete, because the state and federal data resources available for exploring health inequities and disparities are imperfect and incomplete. It offers a basis for further discussion and action, including concurrent action to evolve and improve the data resources that shed light on racism and racial inequities in Massachusetts' social and health care systems. The Foundation's work in this focus area will aim to identify and elevate health care policies and practices that may be able to advance health equity and reduce health disparities in the Commonwealth.

To the extent possible in the confines of a data-focused report, the primer acknowledges critical context about the historical and structural contributors to the racial and ethnic health inequities and disparities that exist today. Data limitations and gaps are noted throughout, identifying where new or improved data is needed to provide a comprehensive, cohesive, and actionable set of data to support the Commonwealth's health equity goals.

The primer is presented in four sections:

- The Imperative to Advance Health Equity includes a discussion about what "health equity" is and why we need to work to achieve it, offers a common set of terms and definitions to support discourse, and introduces a brief discussion about what "structural racism" is and why it provides crucial context for understanding health inequities and addressing health disparities.
- A Look at Massachusetts' Demographic Composition and Social Drivers of Health presents high-level information on the racial and ethnic composition of the Commonwealth's changing population demographics and select baseline statistics about how Massachusetts residents across racial and ethnic groups broadly face different health-influencing factors, from income and food insecurity to housing stability.
- Health and Health Care Inequities and Disparities in Massachusetts: Select Statistics presents data on how Massachusetts residents of different racial and ethnic groups broadly experience the health care system across many measures of access, utilization, and consumer experience, and often face divergent outcomes, including through the COVID-19 pandemic. Where appropriate and possible, data comparisons are presented with context of potential structural and systemic contributors.
- Data Limitations, Gaps, and Next Steps shares findings on how existing state and federal data collection and reporting methods limit understanding of health inequities and disparities.
- **Conclusion** offers potential opportunities for Massachusetts to improve the completeness, cohesiveness, and actionability of its data to support a broader understanding of structural racism and its impact on health in the Commonwealth, while encouraging policymakers to "act now" given clear evidence of significant racial and ethnic health inequities in Massachusetts.

The Foundation hopes this primer will serve as a reference for health equity data in Massachusetts, building on other health equity reporting initiatives and activities (see Appendix), and provide an organizing framework for addressing observed data gaps.

SPEAKING TO HEALTH EQUITY

The lack of an agreed upon, standardized set of health equity terminology is a persistent barrier to understanding, effectively communicating about, and developing solutions to address racial and ethnic inequities and disparities in health. Numerous longstanding language conventions have perpetuated racial and ethnic stereotypes, including the inclination to place blame on people or populations rather than to recognize the underlying structural barriers that contribute to health inequities and disparities. Many organizations are now acknowledging the importance of these issues and developing language for productively discussing issues of health inequity and disparities. However, there remains no common set of terms and language conventions for discussing these issues.

To establish common meanings of frequently used words, the primer uses the key terms and definitions developed by the CDC in its Equity Style Guide (see callout). While the CDC Style Guide serves as a useful starting point for this primer, the Foundation looks forward to working with stakeholders to refine its terminology—and welcomes input about doing so—as it continues its work in this area.

RACE AND ETHNICITY DATA REPORTING LIMITATIONS

This primer consolidates key quantitative data points from state and national sources to inform understanding of racial and ethnic health inequities and disparities in Massachusetts. Public health and health care data—as well as data for social drivers of health—that are segmented by characteristics of race and ethnicity are limited and often flawed, yet they remain critical to understanding how existing social, economic, and health care structures, policies, and practices contribute to health inequities by race and ethnicity. Race and ethnicity data is frequently collected and reported in ways that can be misleading, absent context for what the data do and do not represent. Race and ethnicity data may also be reported using overly broad categories with varying or inconsistent definitions of those categories across data sources.

In addition, where racial and ethnicity data are available, they are frequently only available at these broad or summative levels that belie sometimes significant subpopulation variations, tempting readers to overly generalize findings. For example, while "Hispanic" is a common data category in both survey and administrative (e.g., health care claims) data and is an accepted category by many data standards definitions (e.g., the U.S. Office of Management

KEY TERMS AND DEFINITIONS

Racism. A system of structuring opportunity and assigning value based on the social interpretation of how one looks (which is what we call "race"), that unfairly disadvantages some people and communities, unfairly advantages other people and communities, and undermines realization of the full potential of our whole society through the waste of human resources. Racism can be expressed on three levels:

- Interpersonal/personally-mediated racism.
 Prejudice and discrimination, where prejudice is differential assumptions about the abilities, motives, and intents of others by "race," and discrimination is differential actions towards others by "race." These can be either intentional or unintentional.
- Systemic/institutionalized/structural racism.
 Structures, policies, practices, and norms resulting in differential access to the goods, services, and opportunities of society by "race" (e.g., how major systems—the economy, politics, education, criminal justice, health, etc.—perpetuate unfair advantage).
- Internalized racism. Acceptance by members of the stigmatized "races" of negative messages about their own abilities and intrinsic worth.

Health disparity. A particular type of health difference that is closely linked with social, economic, environmental disadvantage [or] other characteristics historically linked to discrimination or exclusion. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; or geographic location.

Health inequity. A health difference or disparity that is unfair, unjust, and avoidable.

Source: "Health Equity Style Guide for the COVID-19 Response: Principles and Preferred Terms for Non-Stigmatizing, Bias-Free Language," Centers for Disease Control and Prevention. Aug. 11, 2020. Available here.

and Budget Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity), it hides variation among Hispanic subpopulations, such as between those who are Puerto Rican and Mexican. These variations can be substantial and are critically important in how people experience health and health-related systems, and thus, what their health outcomes are. Further, in some data sources, categories may be missing, creating uneven depictions of how even these broadly defined populations' experiences differ. For example, the "Asian" category is occasionally dropped from state- and federal-level survey-based reporting due to low sample sizes, and Asian people are counted in a broader "Other" category. 18,19

Race and ethnicity data is also often severely limited by other segmentations needed to make the data as actionable as possible. For example, race and ethnicity data for many of the measures discussed in this primer are not consistently available at the city, town, or county level. Such data is needed to support community-level interventions. What's more, in several instances race and ethnicity data is not even available at the state level, requiring national-level data to be used in its stead.²⁰

Race and ethnicity data segmented by age groups or gender is also frequently unavailable; such data is needed to better understand drivers of disparities and better provide outreach to impacted populations.

Given the important role that race and ethnicity data play in this project, the Foundation sought to limit data included in this report to data:

- That is derived from trusted federal or state data sources that are widely cited and were developed using sound, transparent methodological practices.²¹
- That aligns with findings from other trusted federal or state data sources, or a reasonable explanation exists for why it does not.
- That conveys meaningful information on where racial and ethnic health inequities and disparities do and do not exist in Massachusetts for the populations, as defined.

The data presented in this primer will not be useful for all purposes and all audiences, but it will hopefully serve as a comprehensive baseline resource of statewide statistics for ongoing use and reference by stakeholders as they seek to advance health equity broadly in the Commonwealth (see callout).²²

Data limitations are more comprehensively discussed in Section 4, where specific racial and ethnic data gaps are highlighted.

Data in this primer may be well suited to inform ...

- Policy and program discussions about health inequities and disparities broadly across racial and ethnic groups in Massachusetts, how social drivers of health may contribute to those outcomes, and where additional data may be beneficial.
- The identification of potential social and health care barriers that racial and ethnic groups in Massachusetts may face and that deserve further investigation.

Data in this primer is not well suited to inform ...

- Policy and program discussions about differences among specific sub-state geographies, as federal and state data sources are often limited to broader geographic classifications.
- Policy and program discussions about differences within specific racial and ethnic populations and communities, as common data categories can be overly broad and general, hiding differences and heterogeneity among distinct subpopulations that would become apparent with disaggregated data.
- Community-level action or activity without additional community-level investigation, given the data's previously mentioned geographic and category-level limitations.

1.2. STRUCTURAL RACISM AND IMPLICATIONS FOR HEALTH

On April 8, 2021, Rochelle Walensky, director of the U.S. Centers for Disease Control and Prevention (CDC), declared racism a "serious public health threat that directly affects the well-being of millions of Americans." She noted:

Racism is not just the discrimination against one group based on the color of their skin or their race or ethnicity, but the structural barriers that impact racial and ethnic groups differently to influence where a person lives, where they work, where their children play, and where they worship and gather in community. These social determinants of health have life-long negative effects on the mental and physical health of people in communities of color.²³

American society and its systems for supporting the public good have often been designed or evolved to tilt in favor of those historically in power, including White men and their families, people who are affluent, and others favored by social and cultural norms. While there is no consensus definition of "structural racism," most definitions speak to the historical structural bias embedded in societal systems—economic, educational, justice, political, and health, among others—which, deeply ingrained and compounded over generations, results in divergent access to opportunities for individual and familial advancement and to the goods and services that support health and well-being. Examples of systemic or structural racism that directly and indirectly influence health disparities include:

• American financial structures and systems that preserve and perpetuate the wealth gap between people (or communities) of color and White people. Black and Hispanic families in America are less likely than White families to own assets such as homes and businesses or to have financial savings and retirement assets, and those who do have, on average, less valuable assets. ^{24,25} Divergent financial endowments are a product of historical and residual structural and societal barriers to wealth accumulation. For example, even after the end of American slavery in 1865—a system which, by definition, suppressed Black agency—federal and state policies and private-sector actions have persistently created barriers to Black wealth accumulation—from sharecropping²⁶ to Jim Crow laws²⁷ to redlining²⁸ to mass incarceration.²⁹

Homeownership is a singularly important vehicle for accumulating wealth, getting access to capital, and establishing a stable household environment. America's housing policies—from redlining to restrictive covenants in residential contracts³⁰—have structurally embedded a legacy of uneven treatment into present financial means and community investment. Nationally, Black people still own homes at rates 30 percentage points below White people (71%) and Hispanic people at rates 26 percentage points below White people; and the homes owned by Black and Hispanic people are, on average, worth less.^{31,32} The average value of homes owned by Black and Hispanic people is half to two-thirds of that of homes owned by White people, at \$150,000 and \$200,000 respectively, compared with \$310,000.³³ Lower homeownership rates contribute to lesser asset growth but—like lower home values—also contribute to the public educational resources available to families living in those homes, in a system designed to fund school districts through residential tax dollars. Housing and housing stability directly determine the access families have to foundational supportive resources—such as schools, public transportation, and healthy food options, which, in turn, influence outcomes of health and well-being—as well as the access they have to the health care system.^{34,35} Accordingly, wealth is strongly correlated with health outcomes—people with higher net worth at midlife are at substantially lower risk of premature death than people with less wealth.³⁶

Today, Black people make up 13 percent of the American population but hold only 2 percent of American wealth, and the average net worth of a White family (\$171,000) is nearly 10 times greater than that of a Black family (\$17,150). 37,38,39 Hispanic families and families of recent immigrants face similar barriers to wealth accumulation—including structural racism and discriminatory housing and immigration policies—though quantitative evidence of these barriers is still emerging. 40,41 Financial resources and stability allow families to invest in better lives, including homes in safer communities with better schools, better jobs, healthier foods, and better health care.

• Structurally unequal treatment in the American justice system that undermines familial and community stability, and the health, of Black people. Racial and ethnic bias has been well documented across America's criminal legal system, with Black people "experiencing harsher outcomes in relation to police encounters, bail setting, sentencing length and capital punishment" than White people. America's criminal justice system—including its laws and law-enforcement culture—remain shaped by its past, from early 18th-century colonial slave patrols to the 20th-century War on Crime and War on Drugs, with structural racism resulting in disparate treatment of Black people continuing into the present day. Today, Black people are incarcerated at five times the rate of White people and Hispanics at 1.4 times the rate. Asked Research suggests that disparities in incarceration rates and sentence lengths in Massachusetts are largely driven by differences in charging decisions (i.e., Black and Hispanic people tend to be charged with more serious offenses than White people). These differences are not entirely explained by contextual factors.

Like housing, justice involvement impacts people's—and their family's—ability to maintain stable and healthy lives. For example, people may experience physical and emotional trauma while incarcerated and face permanent bias and structural barriers to finding employment and housing after leaving incarceration, and they may face interrupted access to health care before, during, and after serving their sentence. Previously incarcerated people are more likely to experience a drug overdose, to die by suicide, and die prematurely than people who have never been incarcerated.

• Access to quality health care that is not equitably available to all Americans. America's health care system, designed by those in historical positions of authority, itself has a history of racism that must be acknowledged and addressed to better understand present inequities in the health care system and disparities in health outcomes. Early leaders in American medicine—almost exclusively White males—have shaped a health care system designed to sustain existing governance structures and positions for people of similar backgrounds, promote false claims of innate differences in intelligence, disease susceptibility, and character between White people and people of color, and provide the best access to high-quality health care services to predominantly White communities. The Flexner Report, for example, published in 1910, sharply critiqued Black medical schools while advancing standards that only two of the 10 existing Black medical schools across the South and Mid-Atlantic were able to meet in the succeeding years; the other eight closed. Racism in medical practice is evident in numerous trials and experiments that the medical community conducted on Black people through the 20th century, the most notorious of which may be the Tuskegee experiments, in which Black people were denied treatment for syphilis without their consent as part of a medical study. But research also documents that Black people continue to face implicit bias, prejudice, and stereotyping by medical professionals. For example, Black people are significantly more likely to have medical professionals dismiss claims of pain or discomfort, misdiagnose a range of conditions, and withhold

necessary treatment.^{53,54} Both egregious and more subtle instances of mistreatment of Black people by the medical establishment have led to persistent distrust of health care systems, still evident today with lower rates of Black medical professionals in diagnosing and treating positions and increased rates of hesitancy regarding the COVID-19 vaccines among the Black community.⁵⁵

Race and ethnicity are only two of many factors that may influence the structural barriers and opportunities one may face in pursuing a healthy life; other factors including gender, sexual orientation, disability status, economic status, and geography all may have similar or compounding influences. "Intersectionality" refers to the concept that a person's social, economic, political, physical, and other identities act in combination to create experiences of oppression or privilege that are unique to that person. For example, a Black woman may experience discrimination that is different from that faced by a White woman or a Black man. In recent years, medical professionals, policymakers, researchers, and other stakeholders have increasingly applied this framework to help understand the causes behind racial and ethnic disparities in health and to design policy solutions that account for a broader range of circumstances and experiences. While the focus of this primer is on consolidating data that sheds light on racial and ethnic disparities in health in Massachusetts, it will be important for users of this information to consider the interaction among race and ethnicity and other social and economic factors when crafting policies or programs designed to address identified disparities.⁵⁶

2. A LOOK AT MASSACHUSETTS' DEMOGRAPHIC COMPOSITION AND SOCIAL DRIVERS OF HEALTH

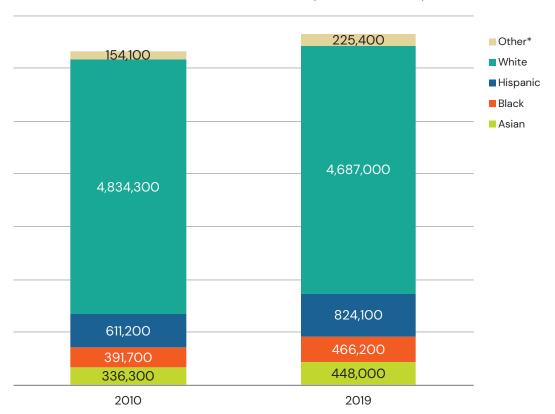
2.1. MASSACHUSETTS POPULATION OVERVIEW

In order to contextualize the data trends in Massachusetts, it is important to begin with an understanding of the racial and ethnic makeup of Massachusetts and how it is evolving. Massachusetts has a predominantly White population (70%), though—like much of the nation—its people are growing more diverse over time. Over the past decade, Massachusetts' population growth (5%) has been driven exclusively by a net increase in the state's Asian, Black, and Hispanic populations, largely in the Greater Boston region. The Commonwealth's Asian, Black, and Hispanic populations also are younger than the state's White population, indicating the state's diverse future and the imperative for its social and health systems to accommodate a diversity of experiences and equitably address the needs of all Massachusetts residents.

POPULATION DEMOGRAPHICS COMPOSITION AND GROWTH BY RACE AND ETHNICITY

The Massachusetts population has grown by 5% over the past decade, driven by growth in the state's Hispanic, Asian, and Black populations, consistent with national trends.

POPULATION DISTRIBUTION BY RACE AND ETHNICITY, MASSACHUSETTS, 2010-2019



- From 2010 through 2019, the Black, Hispanic, and Asian populations in Massachusetts grew by 19.0%, 34.8%, and 33.2%, respectively, as the White population declined by 3%.
- Black, Hispanic and Asian populations in Massachusetts are growing at considerably faster rates than these populations are growing nationally (7.3%, 19.2%, and 26.1% for Black, Hispanic, and Asian people, respectively).⁵⁷
- Nationally, population growth for the White population has remained flat while the population of Black, Hispanic, Asian, and other people of color has increased by nearly 17%.

^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other.

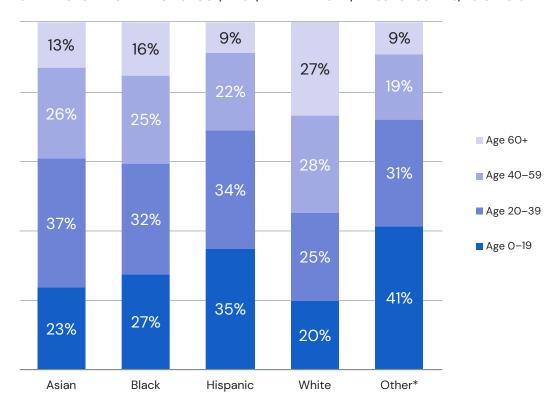
Note: 2020 Census data was released in late April 2021. Population data by race and ethnicity was not available for use in this report.

Source: "State Health Facts," Kaiser Family Foundation. Available here.

POPULATION DEMOGRAPHICS COMPOSITION BY AGE, RACE, AND ETHNICITY

Massachusetts' growing Asian, Black, and Hispanic populations are younger than its White population.

STATE POPULATION BY AGE GROUP, RACE, AND ETHNICITY, MASSACHUSETTS, 2015-2019



[•] The majority of Asian, Black, and Hispanic people (60%, 59%, and 69%, respectively) in Massachusetts are under the age of 40, compared with less than half the White population (45%).

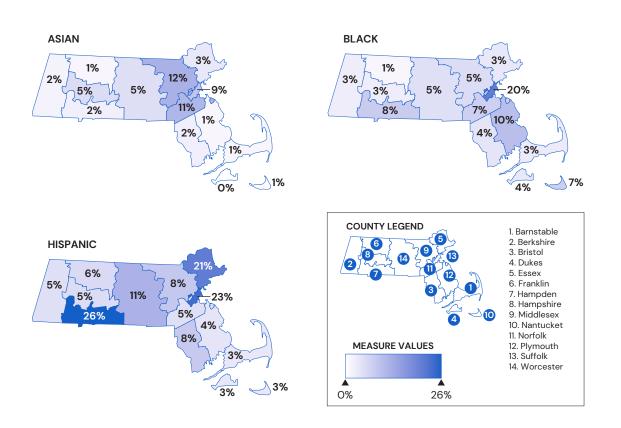
^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other. Note: Figures represent the average population across five years (2015–2019).

Source: Manatt analysis of 2019 American Community Survey data, five-year estimate

POPULATION DEMOGRAPHICS BY COUNTY, RACE, AND ETHNICITY

The majority of Black and Hispanic people in Massachusetts live in counties in the Greater Boston area—Essex, Middlesex, Norfolk, and Suffolk—despite the fact that these counties represent only 40% of the total population of Massachusetts.

POPULATION BY COUNTY AND RACE AND ETHNICITY, MASSACHUSETTS, 2015-2019



- Counties in Western and Central Massachusetts tend to be disproportionately White, apart from Hampden County, which is over 25% Hispanic.
- Hampden County is home to nearly 15% of the Commonwealth's Hispanic population, despite that its overall population is just 6% of the state's total.
- Counties in southeastern Massachusetts—
 Barnstable, Bristol, Dukes, Nantucket, and Plymouth—
 are also disproportionately White (82% compared
 with 72% statewide).

Source: Manatt analysis of 2019 American Community Survey data, five-year estimates.

2.2. SOCIAL DRIVERS OF HEALTH IN MASSACHUSETTS: SELECT STATISTICS

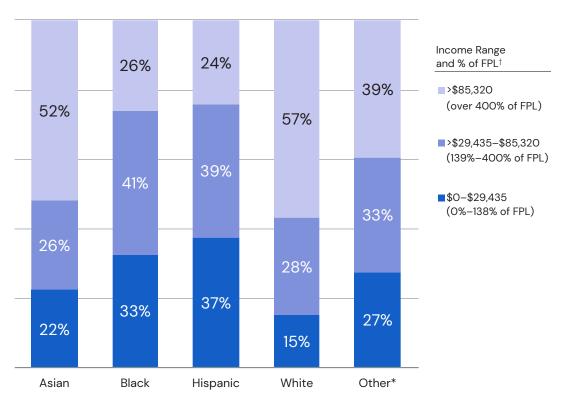
Social drivers of health, also known as social determinants, are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect health, functioning, and quality-of-life risks and outcomes. Research demonstrates that such socioeconomic factors, physical environments, and health behaviors drive health outcomes more than medical care. Social drivers such as food and housing insecurity, jobs that do not provide paid family or medical leave, and limited access to transportation are also associated with emergency department overuse and higher rates of missed medical appointments. Black and Hispanic people in Massachusetts are also more likely to have one or more unmet social need than are White people, adversely impacting their health and well-being. Black and Hispanic residents are also more likely than White residents to be food insecure, to live in rented units (as opposed to owner-occupied units), and to work in low-paying jobs. Understanding these social drivers of health—and the social and economic structures, policies, and practices that shape social circumstances—is critical to understanding health and health care inequities and disparities in Massachusetts and, ultimately, addressing the broader societal factors that contribute to our health and well-being.

Population Social Drivers Access to Coverage Overview Access to Coverage and Care Service Quality and Consumer Health Disparate Impact Experience Outcomes of COVID-19

HOUSEHOLD INCOME BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are more than twice as likely as White people to have incomes below 138% of the federal poverty level (FPL) (\$29,435 for a family of three in 2019). Income influences food security, housing stability, educational status, and other socioeconomic conditions that are linked to health outcomes.

HOUSEHOLD INCOME FOR A FAMILY OF THREE BY RACE AND ETHNICITY, MASSACHUSETTS, 2019



- White people in Massachusetts have more wealth than other populations. Among Boston-area residents, White households have a median net worth⁶⁰ of \$247,500, while the average net worth for Black and Hispanic households is \$12,000 or less, with U.S.-born Black households having a median net worth of \$8 and Dominican households having a median net worth of \$0.61
- Black and Hispanic people in Massachusetts are substantially more likely to report being worried about being able to pay for expenses or pay bills.⁶²
- People with lower incomes, on average, experience:
- Higher rates of chronic physical health conditions, including heart disease, diabetes, and stroke.
- Less access to primary and specialty health care.
- Higher rates of behavioral risk factors, such as smoking and substance use.⁶³

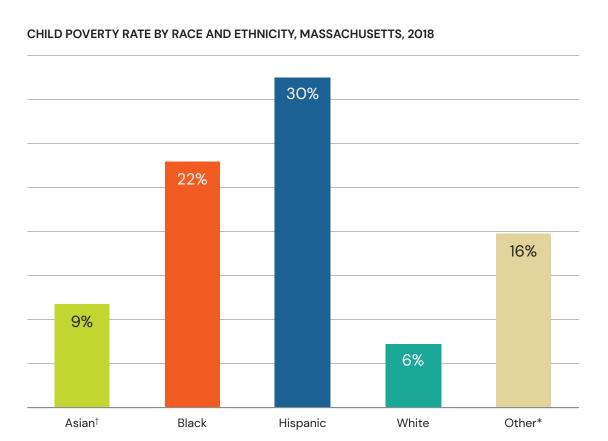
Source: "State Health Compare," State Health Access Data Assistance Center. Available here.

^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other.

Note: Dollar amounts correspond to 2019 federal poverty guidelines. "Poverty Guidelines," U.S. Office of the Assistant Secretary for Planning and Evaluation. Available here.

CHILD POVERTY RATES BY RACE AND ETHNICITY

One in eight children in Massachusetts live below the poverty level, including nearly one in four Black children and nearly one in three Hispanic children. Childhood poverty has been found to have long-term health implications, including disrupting neurologic, metabolic, and immunologic system development and leading to poorer developmental outcomes.⁶⁴



- Massachusetts' overall child poverty rate is four percentage points lower than the national average of 16.2%.
- Black children in Massachusetts have a lower rate of poverty than Black children nationally (22.4% in MA vs. 30.1% nationally)
- Hispanic children in Massachusetts have a higher rate of poverty than Hispanic children nationally (30.1% in MA vs. 23.7% nationally).⁶⁵

^{†&}quot;Asian" includes Asian, Native Hawaiian, and Other Pacific Islander.

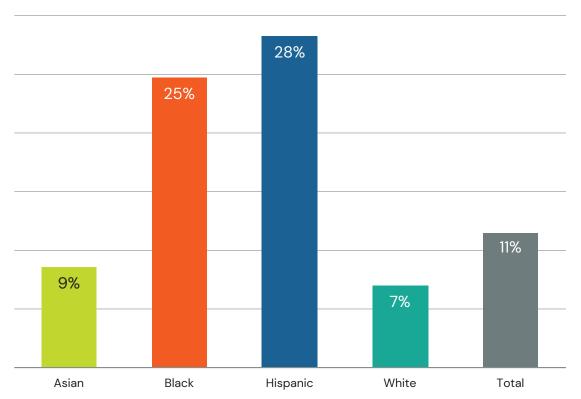
^{*&}quot;Other" includes Two or More Races.

Sources: "The State of America's Children 2020," Children's Defense Fund. Available here. "A Roadmap to Reducing Child Poverty," National Center for Biotechnology Information. Feb. 28, 2019. Available here.

FOOD INSECURITY BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts experience higher levels of food insecurity than do White and Asian people. Food insecurity is strongly associated with a range of adverse health outcomes.

USE OF FOOD STAMPS/SNAP BY RACE AND ETHNICITY, MASSACHUSETTS, 2019*



Sources: "The State of Hunger in Massachusetts: Massachusetts Trends & East Boston Community Snapshot," Project Bread. May 2020. Available here. Manatt analysis of 2019 American Community Survey data.

- Black and Hispanic people in Massachusetts
 historically have had higher levels of food insecurity
 than White and Asian people. Disparities narrowed
 for the Black population and widened for the
 Hispanic population following the 2008 financial
 crisis and the Great Recession.
- Food insecurity is strongly associated with poorer health outcomes across age groups.
- Food-insecure children have higher rates of asthma than do food-secure children.
- Among adults, food insecurity is also associated with increased rates of mental health problems and hypertension.⁶⁶
- The Supplemental Nutrition Assistance Program (SNAP) attempts to mitigate food insecurity by providing food assistance to low-income families.⁶⁷
- Black and Hispanic people in Massachusetts were three to four times more likely to access SNAP benefits during 2019 than were Asian and White people.

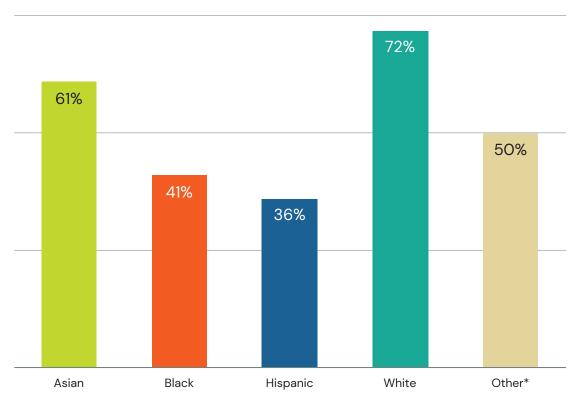
^{*}Data for American Indian/Alaskan Native, Native Hawaiian/Other Pacific Islander, Multiple Races, and Other Non-Hispanic population categories not shown, but included in Total.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

HOUSING STABILITY BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are less likely to own their homes than are White and Asian people. Housing stability, quality, safety, and affordability have a significant impact on health outcomes.⁶⁸

HOUSING: OWNER-OCCUPIED, MASSACHUSETTS, 2019



- Nationally, 17% of renter households are "severely rent-burdened," defined as spending more than 50% of their income on housing. Severely rent-burdened people are at higher risk of eviction. In addition to contributing to housing instability, a rent-burdened status may directly impact people's ability to access and pay for necessary health care services.
- Among Boston-area homeowners, White people are more likely to own their home outright, while Black and Hispanic people are more likely to have mortgage debt.⁷⁰
- Homeownership historically has been a principal vehicle for middle-class wealth building in the United States. Wealth is critical for protecting against financial emergencies, allows for economic growth over time, and can be transferred from generation to generation.⁷¹
- For much of the 20th century Black Americans were excluded from homeownership in desirable neighborhoods both through explicit government policies (most notably, "redlining") and private exclusionary practices that prevented Black families from purchasing homes in certain predominantly White neighborhoods (known as restrictive covenants).72
- Even today, a significant share of Black people report unfair treatment or judgment when attempting to obtain housing.⁷³
- As a result of these discriminatory policies, Black and Hispanic people are more likely to reside in neighborhoods with underfunded schools,⁷⁴ less access to healthy food,⁷⁵ and less access to convenient public transit.⁷⁶

^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other.

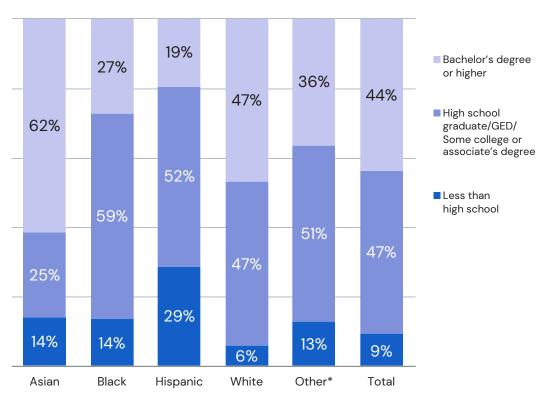
Sources: Manatt analysis of 2019 American Community Survey data. "Request for Applications for NASHP's Second Health and Housing Institute," National Academy for State Health Policy. Apr. 2, 2021. Available here. "Five States Break Down Interagency Silos to Strengthen Their Health and Housing Initiatives," National Academy for State Health Policy. Dec. 22, 2020. Available here.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

EDUCATIONAL STATUS BY RACE AND ETHNICITY

More than one in four Hispanic adults in Massachusetts have less than a high school diploma, twice the rate of Black and Asian people and more than four times the rate of White people. Higher levels of education are linked to decreased risk of certain chronic conditions, including heart disease and diabetes.⁷⁷

HIGHEST LEVEL OF EDUCATION BY RACE AND ETHNICITY, PEOPLE AGES 25 AND OVER, MASSACHUSETTS, 2019



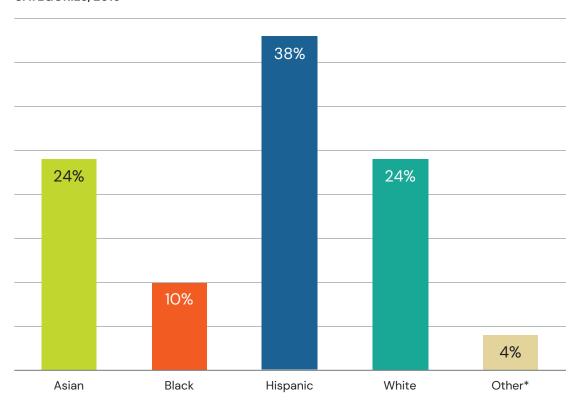
- Black and Hispanic adults are substantially less likely to have received a bachelor's degree or higher than are White and Asian adults.
- National research finds that school districts predominated by Black and Hispanic students are chronically underfunded. Districts where more than half of students are Black or Hispanic are nearly twice as likely to have less funding than is needed to achieve average student outcomes compared to districts where more than half of students are White.^{78,79}
- While the level of public funding for schools is far from the only factor impacting student educational outcomes, research demonstrates that this level is strongly associated with educational performance.⁸⁰

^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other. Source: Manatt analysis of 2019 American Community Survey data, five-year estimates.

LIMITED ENGLISH PROFICIENCY BY RACE AND ETHNICITY

Hispanic residents make up nearly 40% of the Commonwealth's residents with limited English proficiency (LEP), but make up only 12% of the population. Patients with LEP often experience worse quality of health care than those who speak English "well."

MASSACHUSETTS ADULTS WITH LIMITED ENGLISH PROFICIENCY † ACROSS RACE AND ETHNICITY CATEGORIES, 2016



- In 2016, about 530,000 (8%) Massachusetts' adults had LEP.⁸¹
- In Massachusetts, the most commonly spoken languages among those with LEP are Spanish, Portuguese, Chinese, and Vietnamese.⁸²
- Patients with LEP often experience worse quality of health care than those who speak English "well;" they have lower rates of understanding of treatment plans, lower satisfaction with care, and a higher incidence of medical errors (page 39).⁸³
- Providers who receive federal funds, such as Medicaid or Medicare payments, are required to provide services in a language that a patient with LEP can understand.⁸⁴

[†]Self-report speaking English less than "very well."

^{*&}quot;Other" category not defined.

Source: "Demographic Profile of Adult Limited English Speakers in Massachusetts," Boston Planning & Development Agency. Available here.

3. HEALTH AND HEALTH CARE INEQUITIES AND DISPARITIES IN MASSACHUSETTS: SELECT STATISTICS

3.1. ACCESS TO COVERAGE AND CARE

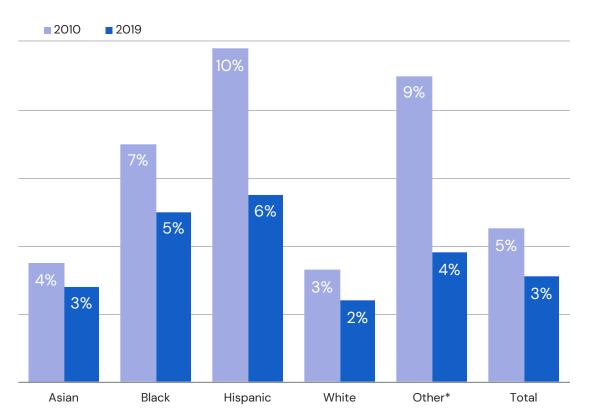
Access to health care coverage and services, along with other social factors and the structures, systems, and policies that drive them, can have a significant impact on health outcomes. While Massachusetts has one of the lowest uninsured rates in the country, uninsured rates for Black and Hispanic people remain twice as high as for Asian and White people, and Black and Hispanic people are more likely to experience disruptions in health insurance coverage. On average, Black and Hispanic people have a harder time accessing health care services than White people, potentially due to the types of jobs they have, the type of health insurance they possess, and the transportation barriers they face (see Section 3.5). Hispanic people are less likely than White or Black people to have a usual source of care, potentially stemming from lower rates of insurance due to immigration status. The treating health care professionals in Massachusetts, including physicians and registered nurses, are also disproportionately White and Asian, suggesting that Black and Hispanic residents—even those who are insured—may struggle to access culturally appropriate care in the Commonwealth.⁸⁵

Population Social Drivers Access to Coverage Overview Of Health Access to Coverage and Care Service Quality and Consumer Health Disparate Impact Experience Outcomes of COVID-19

UNINSURED RATES BY RACE AND ETHNICITY

State and federal health care reforms—and a strong local advocacy community—have contributed to sustained improvements in health insurance coverage rates for Black and Hispanic people in Massachusetts, though significant disparities remain.

UNINSURED RATES (POINT IN TIME) BY RACE AND ETHNICITY, MASSACHUSETTS, 2010-2019†



- [†]Uninsured rates at point in time of survey responses during survey period and will differ in method and timing from the data presented on the following page.
- *Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other. Source: "State Health Compare," State Health Access Data Assistance Center. Available here.

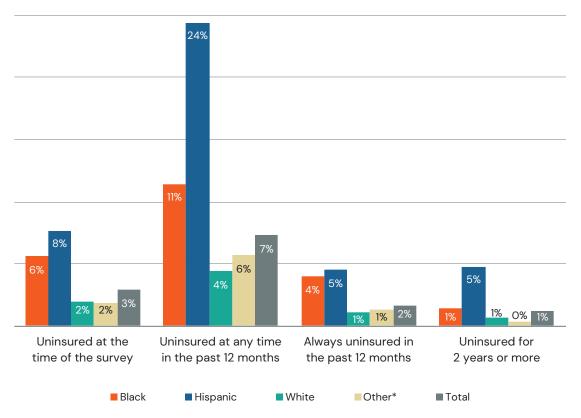
- Health insurance coverage is strongly associated with positive health outcomes and more appropriate use of health care services.⁸⁶
- Uninsured rates across all Massachusetts racial and ethnic groups declined following the state's implementation of Chapter 58 in 2006 and declined further following implementation of the Affordable Care Act in 2014.^{87,88}
- Despite these improvements, Black and Hispanic people remain more than twice as likely to be uninsured as White people.
- Differences in uninsured rates may be attributable to a combination of factors, including public coverage ineligibility based on immigration status, application hesitancy resulting from "public charge" actions,⁸⁹ and reduced federal efforts to educate people on coverage options during the survey period.⁹⁰
- The uninsured rates of Hispanic people are partially driven by the higher rates of coverage ineligibility based on immigration status. Immigrants have more limited access to employer-sponsored and public health insurance options (e.g., Medicare, Medicaid, CHIP, subsidized Marketplace coverage).91

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

CONTINUITY OF HEALTH COVERAGE BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are more likely than White people to experience both short-term and long-term disruptions in health insurance coverage, with Hispanic people facing the most frequent and longest duration gaps in coverage, on average.

UNINSURED RATES BY RACE AND ETHNICITY, MASSACHUSETTS, 2019



- In Massachusetts, Hispanic people were six times more likely than White people to be uninsured at any point in 2019, and Hispanic people were five times more likely than any other group to be uninsured for two years or more.
- National research finds that continuous health insurance coverage increases preventive and acute health care service utilization.⁹²

^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

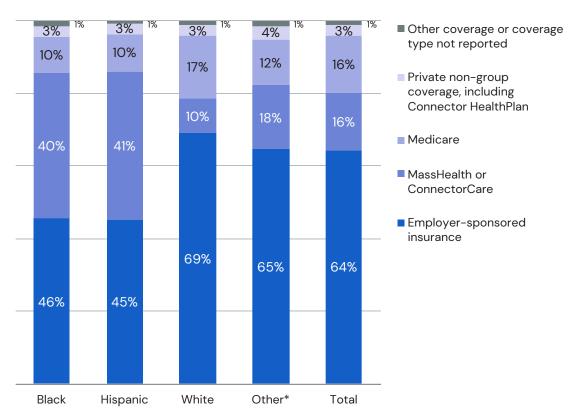
Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

HEALTH INSURANCE COVERAGE TYPES BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are more likely to be enrolled in MassHealth or ConnectorCare (subsidized private health insurance) than are White people, who are more likely to be covered through employer-sponsored insurance.

PRIMARY SOURCE OF HEALTH INSURANCE COVERAGE BY RACE AND ETHNICITY, INSURED PEOPLE, MASSACHUSETTS, 2019



Note: ConnectorCare provides additional state-financed subsidies for low to moderate income people to purchase a private health plan through the Massachusetts Health Connector.

Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

- National data shows similar trends as Massachusetts data, with White people more likely to be enrolled in employer-sponsored coverage (nationally, White people are 9 and 13 percentage points more likely than Black and Hispanic people, respectively, to be enrolled in employer-sponsored coverage).⁹³
- Nationally, Black and Hispanic people are more likely to work in lower-paying service jobs in the production, transportation, and material moving sectors (e.g., food processing worker, truck driver, hand laborer), and these are less likely to offer health insurance. Asian and White people are more likely to work in higher-paying professional or managerial jobs (i.e., white collar office jobs requiring post-secondary education).^{94,95}
- Undocumented immigrants—who are disproportionately Hispanic in Massachusetts often work for employers that do not offer health insurance.⁹⁶
- While Medicaid (including MassHealth) provides robust coverage, Medicaid enrollees have greater difficulty finding providers who will accept their insurance than do people with private insurance (see page 26).97

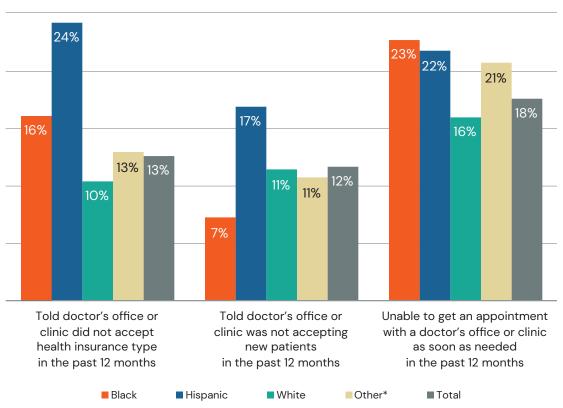
^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

DIFFICULTY ACCESSING CARE BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts more often struggle to obtain timely access to a doctor or clinic and are more frequently told that a doctor or clinic does not accept their insurance than are White people.

DIFFICULTY ACCESSING CARE, MASSACHUSETTS, 2019



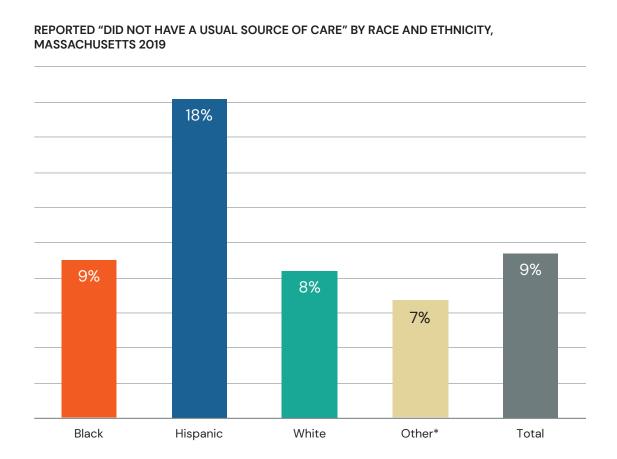
- Increased difficulty in accessing medical appointments among Black and Hispanic people may be related to higher rates of enrollment in public coverage (e.g., Medicaid) and higher uninsured rates.⁹⁸
- National data shows that providers are less likely to accept new patients with Medicaid than to accept those with private insurance: 91% of pediatricians and general/family practice physicians will accept new patients with private insurance, but only 78% of pediatricians and 68% of general/family practice physicians will accept new patients with Medicaid. One of the leading reasons for this is that payment rates are generally lower in Medicaid.⁹⁹

Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

^{*} "Other" defined as "other or multiple races, non-Hispanic."

ACCESS TO A USUAL SOURCE OF CARE BY RACE AND ETHNICITY

Hispanic people in Massachusetts are nearly twice as likely as other racial and ethnic groups in Massachusetts to lack a usual source of care.



- Having a usual source of care has been found to result in an increased likelihood that patients will receive appropriate care and experience lower rates of premature death.¹⁰⁰
- Hispanic people may have more limited access to a usual source of care as a result of higher uninsured rates relative to the total population (see page 24).
- Their limited access may also be driven by lack of culturally and linguistically aligned providers. Nationally in 2019, Hispanic people made up approximately 19% of the population but only 9% of physicians (see page 30).¹⁰¹
- Nationally, 26% of Hispanic adults do not have a usual source of care.¹⁰²

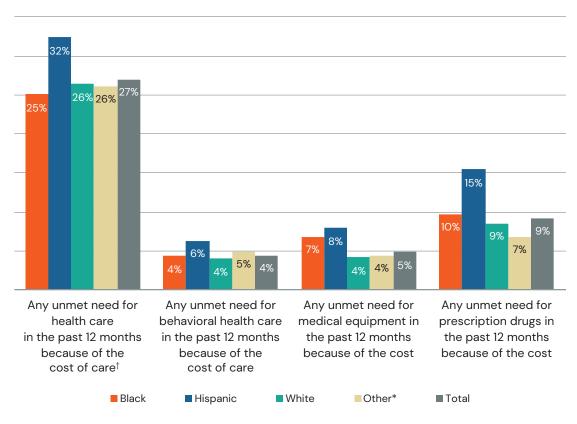
^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

UNMET NEED (MEDICAL AND BEHAVIORAL HEALTH CARE) BECAUSE OF COST BY RACE AND ETHNICITY

Hispanic people in Massachusetts report higher levels of unmet health care need as a result of cost compared to all other Massachusetts residents.

TYPE OF UNMET NEED BECAUSE OF COST OF CARE BY RACE AND ETHNICITY, MASSACHUSETTS, 2019



- †Includes medical and behavioral health care.
- *"Other" defined as "other or multiple races, non-Hispanic."

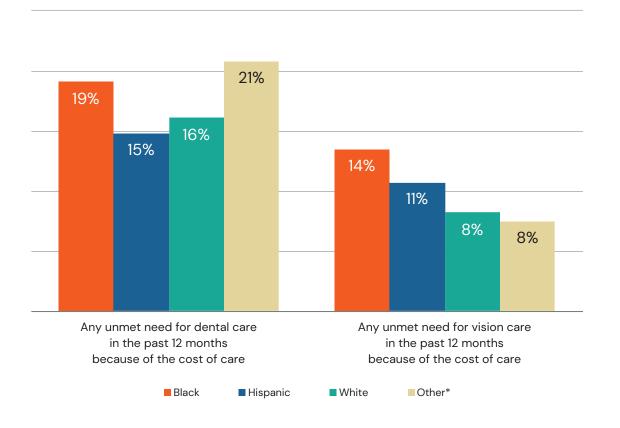
Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

- In Massachusetts, higher levels of unmet need among Hispanic people may be the result of higher rates of uninsurance and lower rates of access to a usual source of care.
- Uninsured people—who are disproportionately Black and Hispanic—are more likely than people with private coverage to face cost-related barriers to care or to delay or forgo health care due to costs. 103,104

UNMET NEED (DENTAL AND VISION CARE) BECAUSE OF COST BY RACE AND ETHNICITY

Black people report greater unmet need for dental care than White people in Massachusetts, while Black and Hispanic people in Massachusetts report greater unmet need for vision care.

ACCESS TO DENTAL AND VISION CARE BY RACE AND ETHNICITY, MASSACHUSETTS, 2019



- These findings are consistent with national data, which suggests that Black and Hispanic people are less likely to utilize vision and dental care due to barriers to access, and they have worse health outcomes.^{105,106}
- Recent evidence suggests that factors such as cultural norms, income level, unemployment, and transportation barriers can impact access to oral and vision care.^{107,108}
- Both oral and eye health are strongly associated with physical and mental health outcomes.¹⁰⁹
- Poor oral health is associated with serious physical health conditions, including diabetes, heart disease, and stroke.¹¹⁰
- Early treatment of common eye diseases including cataracts, diabetic retinopathy, glaucoma, and macular degeneration can prevent permanent vision loss or blindness.¹¹¹

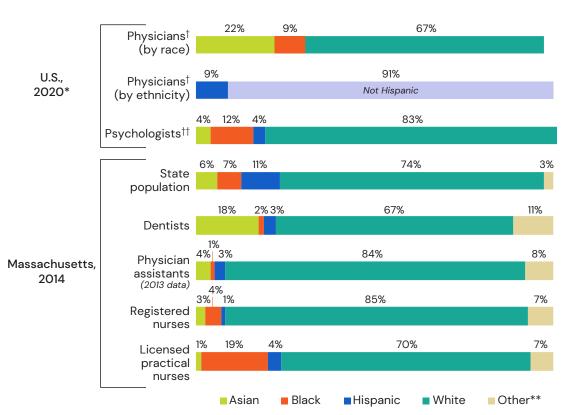
Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

PROVIDER WORKFORCE BY RACE AND ETHNICITY

Health professionals, whether diagnosing or treating, do not reflect Massachusetts' racial and ethnic demographics.

SELECTED PROVIDER WORKFORCE OCCUPATIONS BY RACE AND ETHNICITY, UNITED STATES, 2020 AND PROVIDER WORKFORCE BY RACE AND ETHNICITY, MASSACHUSETTS, 2013/2014



^{*}Does not treat Hispanic and Black people as mutually exclusive categories (i.e., a person may be both considered Black and Hispanic for reporting purposes and be included in both categories). Therefore, totals may exceed 100%. "Other" category not available.

Sources: "Health Professions Data Series," Commonwealth of Massachusetts. Available here. "Sex, Race, and Ethnic Diversity of U.S. Health Occupations (2011-2015)," U.S. Department of Health and Human Services, Health Resources and Service Administration. Aug. 2017. Available here. "Labor Force Statistics from Current Population Survey," U.S. Bureau of Labor Statistics. Available here. "Occupational Employment and Wage Statistics," U,S. Bureau of Labor Statistics. Available here.

- Research suggests that the quality of patient communication, preventive care, and patient satisfaction are improved when patients and providers share a racial and/or ethnic identity.
- Across the United States, health diagnosing and treating professionals—including physicians, registered nurses, physician assistants, and others are overwhelmingly White and Asian people.
 Diagnosing and treating professionals are often the most well compensated in the medical field.¹¹³
- Conversely, certain medical support professionals—including medical technicians, licensed practical and vocational nurses, medical assistants, home health aides, and personal care aides—are disproportionately Black and Hispanic people.
 Medical support and related professions are often paid substantially lower wages than professionals who diagnose and treat conditions.¹¹⁴

^{**&}quot;Other" category not defined.

[†]Excludes certain specialists, including chiropractors, optometrists, radiologists, surgeons, and podiatrists.

^{††}OEWS Category is "Psychologists, All Other."

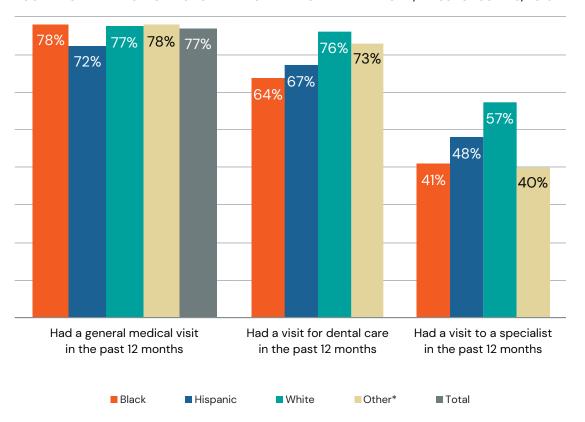
3.2. SERVICE UTILIZATION

Differences in how racial and ethnic populations use the health care system may reflect clinical need, which may be impacted by the social drivers of health previously discussed, such as the person's job, the flexibility in their work schedule, and access to transportation to and from appointments. The differences may also relate to differences in populations' insurance coverage, the availability of culturally appropriate care, and diagnosis rates, among other factors. Black and Hispanic people in Massachusetts are less likely to use routine or specialist care, more likely to use the emergency department for care (including for non-emergency conditions), and are more likely to have elevated levels of unmet need for specialist care relative to White people. Black people in Massachusetts are also less likely to have received recommended immunizations, with higher rates of concern about flu vaccine side effects and safety, potentially stemming from a long history of medical system distrust, contributing to vaccine hesitancy.

ROUTINE CARE AND SPECIALIST UTILIZATION BY RACE AND ETHNICITY

Hispanic people are less likely than other Massachusetts residents to have had a general medical visit within the past year. Additionally, Black and Hispanic people in Massachusetts are less likely than White people to have had a specialist or dental visit during 2019.

ROUTINE CARE AND SPECIALIST UTILIZATION BY RACE AND ETHNICITY, MASSACHUSETTS, 2019



^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

Sources: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here. "The Uninsured and the ACA: A Primer—Key Facts about Health Insurance and the Uninsured amidst Changes to the Affordable Care Act," Kaiser Family Foundation. Jan. 25, 2019. Available here. "Physician Acceptance Of New Medicaid Patients: What Matters And What Doesn't," Health Affairs. Apr. 10, 2019. Available here.

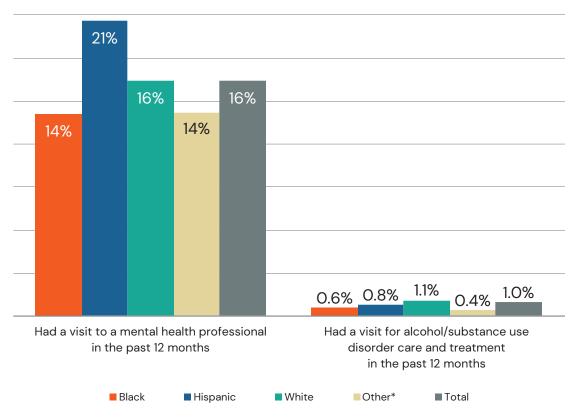
- Lower rates of routine care utilization among the Hispanic population may reflect higher uninsured rates and lack of access to a routine source of care.
- National research shows that Black patients are, on average, referred to specialists less frequently than White patients.¹¹⁵
- Research suggests that access to specialty care is often a challenge for uninsured people, potentially contributing to lower utilization levels of needed specialist care.¹¹⁶
- Additionally, certain specialists, such as psychiatrists, are less likely to accept new patients with Medicaid than to accept those with private insurance (see page 26).¹¹⁷
- Specialist and dental care use may also be driven, in part, by differences in age: White people in Massachusetts are, on average, older than Black or Hispanic people (see page 13).

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

BEHAVIORAL HEALTH CARE UTILIZATION BY RACE AND ETHNICITY

Hispanic people in Massachusetts were more likely to report having utilized mental health services than White and Black people.

BEHAVIORAL HEALTH CARE UTILIZATION, MASSACHUSETTS, 2019*



- This finding departs from national research, which suggests that Black, Hispanic, and Asian people may be less likely than White people to utilize behavioral health services.¹¹⁸
- Higher use of mental health services by Hispanic people in Massachusetts than by White or Black people may be attributable to lower self-reported mental health status (see page 45). How higher use of these services aligns with lower reported access is unclear (see page 26.)

^{*}Mutually exclusive categories, with Non-Hispanic Black and Non-Hispanic White presented; Other includes Non-Hispanic people of other races (e.g., Asian) and multiple races.

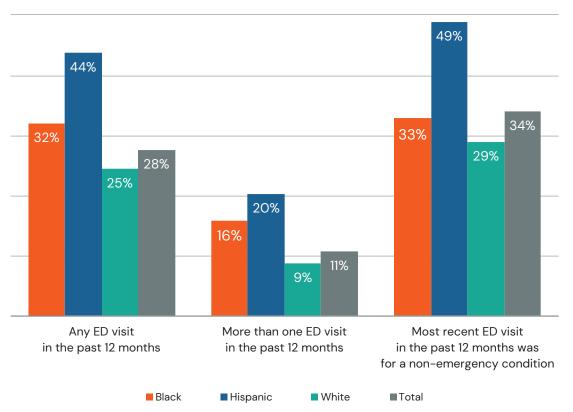
Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

EMERGENCY DEPARTMENT UTILIZATION BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are more likely to report having used the emergency department (ED) for non-emergency conditions than White people.

ED* UTILIZATION, MASSACHUSETTS, 2019



- Non-emergency care delivered in an ED is often more costly and less effective than care delivered by a primary care clinician or specialist at a clinic or in an office setting. In general, people may choose to visit the ED for non-emergency treatment for a variety of reasons, including convenience (e.g., flexible hours, location), physician referral, and negative perceptions of primary care.¹⁹
- Evidence also suggests that higher levels of mistrust of the health care system among Black people is a significant factor driving disparities in ED (vs. primary care) utilization between Black and White people. 120,121

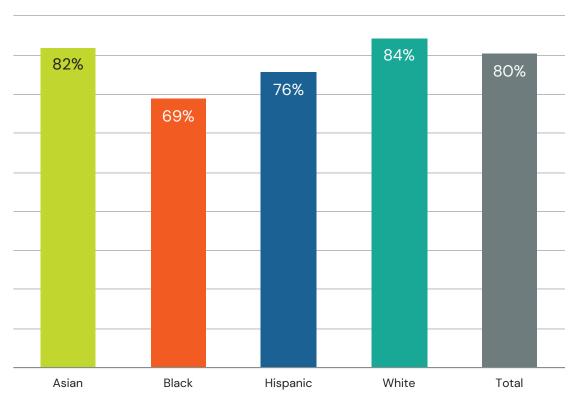
^{*&}quot;ED" used interchangeably with "emergency room" throughout this report.

Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

MATERNAL HEALTH CARE BY RACE AND ETHNICITY

Black and Hispanic mothers in Massachusetts are less likely to report receiving adequate prenatal care than White and Asian mothers are.

BIRTHS WITH ADEQUATE PRENATAL CARE, MASSACHUSETTS, 2017



- Infants whose mothers do not receive prenatal care are three times more likely to have a low birth weight and five times more likely to die before their first birthday.¹²²
- Racial and ethnic inequities in receiving prenatal care are linked to a variety of factors, including income, differences in insurance coverage, and proximity to prenatal care facilities.¹²³
- Receiving adequate prenatal care—which is defined as initiation of prenatal care by the 4th month of pregnancy and completion of 80% or more of recommended visits—has been linked with better health outcomes for both mothers and infants.¹²⁴

^{*}The Adequacy of Prenatal Care Utilization Index is an assessment of the timing and number of prenatal care visits and not an evaluation of the quality of care delivered.

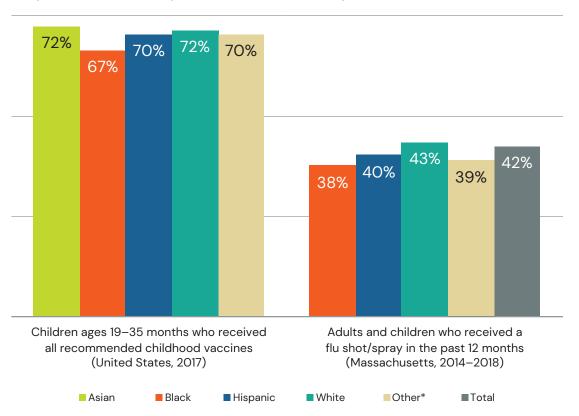
Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

IMMUNIZATIONS BY RACE AND ETHNICITY

Nationally, a lower proportion of Black children receive recommended childhood vaccinations than White and Hispanic children do. Black people in Massachusetts are also less likely to receive an influenza vaccination.

VACCINATION RATES BY RACE AND ETHNICITY, ALL CHILDHOOD VACCINATIONS (UNITED STATES, 2017), FLU IMMUNIZATIONS (MASSACHUSETTS, 2014–2018)



*"Other" includes non-Hispanic Asian, Pacific Islander, and American Indian or Alaska Native.

Source: "Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and doses, race/ethnicity, and poverty level," Centers for Disease Control and Prevention. Available here. "Behavioral Risk Factors Surveillance System," Centers for Disease Control and Prevention. Available here.

- Among the Black population, there is significant longstanding mistrust of the medical profession, largely driven by America's history of racist and unethical medical research and treatment practices toward Black Americans. Research has linked this mistrust to lower rates of vaccination.¹²⁵
- National research finds that concerns about flu vaccine side effects and safety among Black and Hispanic people contribute to lower vaccination rates.¹²⁶
- These concerns are also reflected in COVID-19 vaccine hesitancy among Black and Hispanic people (see page 54).

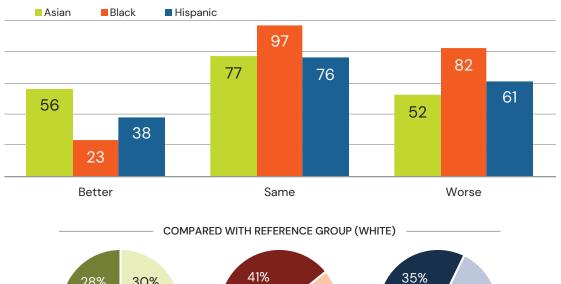
3.3. QUALITY AND CONSUMER EXPERIENCE

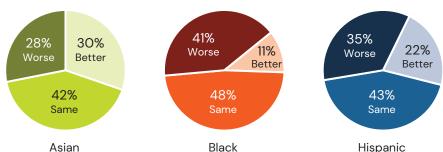
Inequities in the quality of care received by Black and Hispanic people relative to White people have been well documented in the medical literature over the past several decades. The most recent national data suggests that these inequities persist. National data from 2019 show that Black and Hispanic people reported receiving "worse" care across four times as many health care quality measures as did White people; Asian people were also more likely than White people to report that their care was not appropriately person-centered. While inequities may be partially explained by the structural contributors to health care access and use—such as differences in income, the neighborhood in which a person lives, underlying health status, and health insurance type—research finds that inequities remain even after controlling for these factors, particularly for Black people.¹²⁷

HEALTH CARE EXPERIENCE MEASURES BY RACE AND ETHNICITY

Nationally, Black people report receiving "worse" care than White people for more than 40% of surveyed measures of health care quality and experience.

NUMBER OF QUALITY MEASURES FOR WHICH MEMBERS OF SELECTED GROUPS EXPERIENCED BETTER, SAME, OR WORSE QUALITY OF CARE COMPARED WITH REFERENCE GROUP (WHITE) FOR THE MOST RECENT DATA YEAR (DATA FROM 2014, 2016, 2017, OR 2018), UNITED STATES





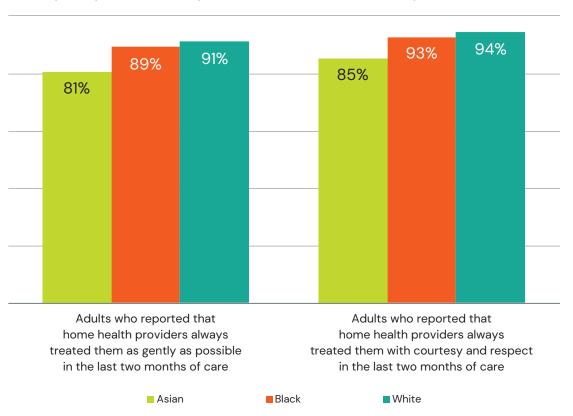
Note: AHRQ Healthcare Quality and Disparities Report uses White as the reference group for all comparisons. Source: "2019 National Healthcare Quality & Disparities Report," Agency for Healthcare Research and Quality. Dec. 2020. Available here.

- Quality measures examined include personcentered care, patient safety, healthy living, effective treatment, care coordination, and affordable care.
- Massachusetts is in the 1st (highest, best) quartile for overall quality of care. However, even states with high overall quality may still see inequities across specific racial and ethnic groups.¹²⁸
- Nationally, Black people are significantly less likely than White people to be treated in hospitals that are high performers on key indicators of patient safety.¹²⁹ Black people also have worse safety outcomes even when treated in the same hospital as White people with similar conditions.¹³⁰
- There are also significant national inequities in quality by place of residence; residents of suburban areas perform better on a range of quality measures than residents of urban areas or rural areas.^[3]

SELECT PERSON-CENTERED CARE MEASURES IN THE HOME HEALTH SETTING, BY RACE AND ETHNICITY

Nationally, Asian people are more likely to report poorer treatment and a lack of courtesy and respect by caregivers in the home health setting.

QUALITY MEASURES WITH LARGEST DISPARITIES BY RACE/ETHNICITY RELATIVE TO THE REFERENCE GROUP (WHITE), UNITED STATES (DATA FROM 2014, 2016, 2017, OR 2018)



Note: Data for Hispanic population not available.

Sources: "2019 National Healthcare Quality & Disparities," Agency for Healthcare Research and Quality. Dec. 2020. Available here. "2019 National Healthcare Quality and Disparities Report," Agency for Healthcare Research and Quality. Available here. "HIV and African American People," Centers for Disease Control and Prevention. Available here. "Quick Facts, United States," U.S. Census Bureau. Available here. "2019 National Healthcare Quality & Disparities Report, Data Sources," Agency for Healthcare Research and Quality. Available here.

- Asian people are significantly less likely than White people to report that they are treated well by home health providers. Being treated with courtesy, dignity, and respect is positively associated with an improvement in patient care and outcomes.¹³²
- Asian people are also more likely than White people to face language-related barriers to care. Languagerelated barriers can negatively impact patient satisfaction as well as quality outcomes.¹³³

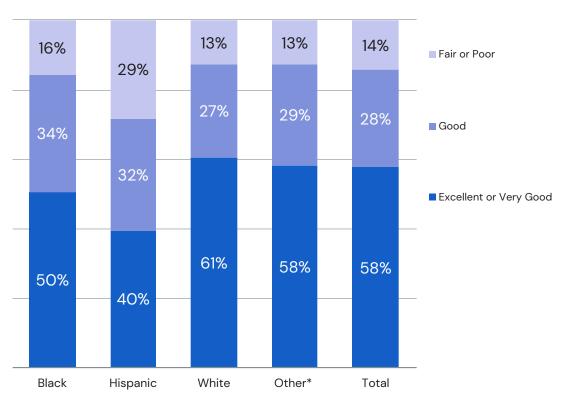
3.4. HEALTH OUTCOMES

Black and Hispanic people bear a disproportionate burden of preventable disease, death, and disability relative to White people, driven by many of the social factors—and policies, practices and structures associated with those—that have been previously discussed. It should be noted, as described earlier, that due to low sample sizes the "Asian" category is occasionally dropped from state- and federal-level survey-based reporting and Asian people are counted in a broader "Other" category. Therefore, this section does not allow us to speak to the experience of disease, death, and disability of Asian people relative to other racial and ethnic groups. Nonetheless, while the Commonwealth often has narrower disparities in health outcomes across racial and ethnic groups than the nation as a whole, disparities persist across many key outcome measures. White people are more likely to report "Excellent or Very Good" health in Massachusetts than are Black and Hispanic people, while Black and Hispanic people report higher rates of "Fair or Poor" mental health. Black and Hispanic people in Massachusetts report higher rates of diabetes and asthma than White people do, while White people report higher rates of angina and coronary artery disease. Despite these adverse clinical conditions, life expectancies for Massachusetts residents across race and ethnicity categories—but particularly for Black and Hispanic people—exceed national averages. Both nationally and in Massachusetts, Hispanic life expectancies exceed those of all other reported racial and ethnic groups, though that advantage declines the longer the people have resided in America. ¹³⁴ Furthermore, recent data suggests that life expectancy for Black and Hispanic people may have been disproportionately impacted by the COVID-19 pandemic relative to White people.

SELF-REPORTED HEALTH STATUS BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are less likely to report "Excellent or Very Good" health than White people.

SELF-REPORTED HEALTH STATUS, MASSACHUSETTS, 2014-2018



- Hispanic people were more than twice as likely as White people to report "Fair or Poor" health.
- White people, despite being older, on average, had higher rates of self-reported "Excellent or Very Good" health.

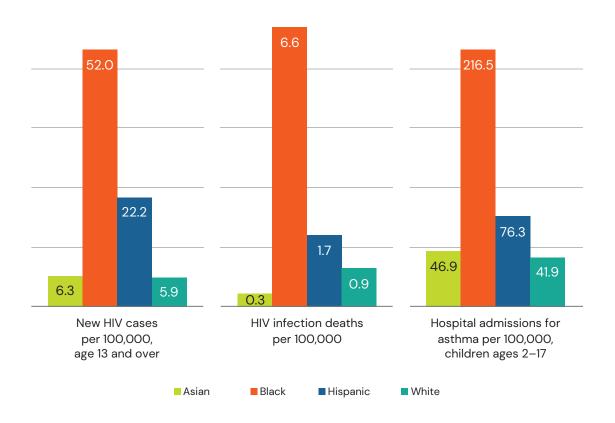
^{*&}quot;Other" includes non-Hispanic Asian, Pacific Islander, and American Indian or Alaska Native.

Source: "Behavioral Risk Factor Surveillance System," Centers for Disease Control and Prevention. Available here.

OUTCOME MEASURES WITH LARGEST DISPARITIES BY RACE AND ETHNICITY: HIV CASES, INFECTION DEATHS, AND HOSPITAL ADMISSIONS FOR ASTHMA

Nationally, Black and Hispanic people are more likely to be diagnosed with or die from HIV than White people are.

OUTCOME MEASURES WITH LARGEST DISPARITIES BY RACE/ETHNICITY RELATIVE TO THE REFERENCE GROUP (WHITE), UNITED STATES (DATA FROM 2014, 2016, 2017, OR 2018)



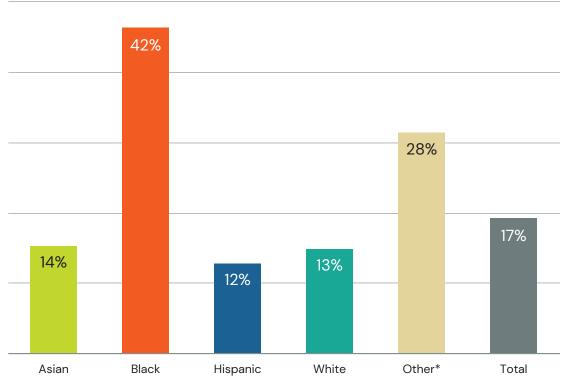
- Black and Hispanic Americans are disproportionally impacted by HIV. In 2018, Black Americans made up 13% of the population but 41% of people with HIV; Hispanic Americans made up 18% of the population but 23% of people with HIV.³⁶ While Black Americans experience a higher rate of new HIV cases than White Americans, the disparity in HIV infection-related deaths between Black and White Americans is narrowing.³⁷
- Black children are four times more likely to be hospitalized for asthma than White children. Research shows that poorer quality housing, poverty, and exposure to air pollution are significant contributors to this disparity (see pages 18 and 46).

Source: "2019 National Healthcare Quality & Disparities," Agency for Healthcare Research and Quality. Dec. 2020. Available here.

MATERNAL HEALTH OUTCOMES BY RACE AND ETHNICITY

Nationally, the rate of pregnancy-related mortality is over three times higher for Black women as it is for White, Asian, and Hispanic women. Black and Hispanic women are also more likely to experience severe maternal morbidity than White women are. 138,139

PREGNANCY-RELATED MORTALITY RATIO BY RACE/ETHNICITY, UNITED STATES, 2014–2017



- Severe maternal morbidity includes a range of unexpected outcomes of childbirth that result in significant short- or long-term consequences to a woman's health.¹⁴⁰
- Research finds a strong association between race and maternal mortality, even after controlling for factors such as maternal age, income, hypertension, and receipt of maternal care.¹⁴¹
- Earlier data from Massachusetts (2000–2007)
 suggests that disparities in maternal mortality and morbidity are similar to national patterns.¹⁴²

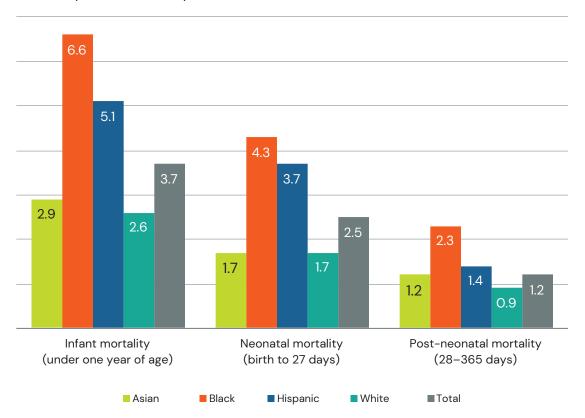
^{*&}quot;Other" includes non-Hispanic American Indians and Alaska Natives.

Source: "Pregnancy Mortality Surveillance System," Centers for Disease Control and Prevention. Nov. 2020. Available here.

INFANT/NEONATAL MORTALITY BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts have substantially higher infant mortality rates than White and Asian people.

INFANT, NEONATAL, AND POST-NEONATAL MORTALITY RATES PER 1,000 LIVE BIRTHS BY RACE AND ETHNICITY, MASSACHUSETTS, 2017



neonatal and post-neonatal outcomes.

National data show similar trends, with 10.8 deaths

 Black infants in Massachusetts have the highest rate of infant mortality, with consistent disparities in

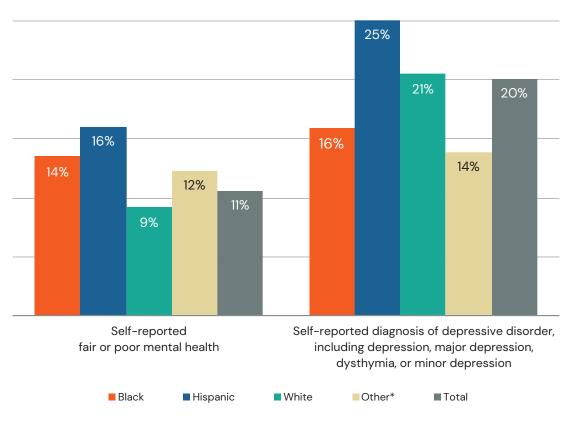
- per 1,000 live births among Black infants versus 4.6 deaths per 1,000 live births among White infants.¹⁴³
- Nationally, Black infants are more likely to die from complications related to low birth weight or sudden infant death syndrome than White infants.¹⁴⁴

Note: Data for "Other" category eliminated due to suspect data without enough publicly available context Source: "Massachusetts Deaths 2017 Report," Commonwealth of Massachusetts, Department of Public Health. Oct. 2019. Available here.

SELF-REPORTED MENTAL HEALTH STATUS BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts reported higher rates of "Fair or Poor" mental health than White people.

SELF-REPORTED MENTAL HEALTH STATUS, MASSACHUSETTS, 2019



- In Massachusetts, White people have the highest suicide rate (11 per 100,000), despite generally having lower self-reported rates of "fair or poor" mental health. This disparity is consistent with national trends, which show that Black, Asian, and Hispanic people have lower rates of suicide than White people do. 146
- Explanations for this disparity include higher levels of religiosity, increased levels of family caregiver responsibility, closer family and social networks, and lower levels of gun ownership among Black and Hispanic people as compared with White Americans, and potential misclassification of Black and Hispanic American deaths.^{147,148}
- Similar to overall self-reported health status, Hispanic people in Massachusetts consistently report the highest levels of "fair or poor" mental health and depression.

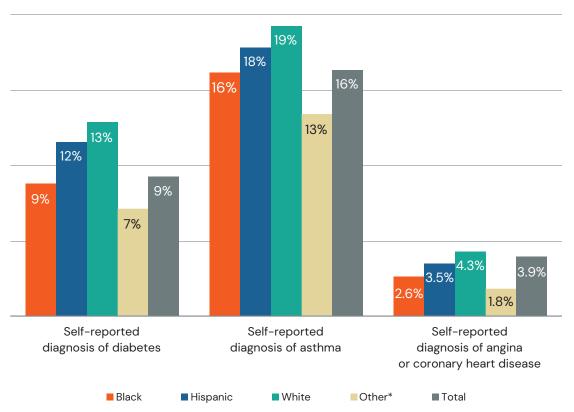
^{*&}quot;Other" defined as "other or multiple races, non-Hispanic."

Source: "Massachusetts Health Insurance Survey," Center for Health Information and Analysis. Available here.

CHRONIC DISEASE PREVALENCE BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts report higher rates of diabetes and asthma than White people do, while White people report higher rates of angina or coronary heart disease.

SELF-REPORTED CHRONIC DISEASE PREVALENCE, MASSACHUSETTS, 2014-2018



- Similar to diagnosis trends in Massachusetts, White people nationally have the highest death rate from diseases of the heart, at 252.7 per 100,000, compared with 183.4 for Black people and 66.8 for Hispanic people.¹⁴⁹
- Nationally, Black people are 1.5 times more likely to have asthma and 5 times more likely to have an emergency room visit due to asthma than White people.¹⁵⁰
- Black and Hispanic people are more likely to live in poorer neighborhoods with less access to healthy food, which research has demonstrated is linked to increased risk of diabetes.¹⁵¹
- Nationally, Black and Hispanic people are also exposed to disproportionately high levels of air pollution, on average, which may contribute to higher rates of asthma diagnosis (see Section 2.2 for more information on social drivers of health).¹⁵²

^{*&}quot;Other" includes non-Hispanic Asian, Pacific Islander, and American Indian or Alaska Native.

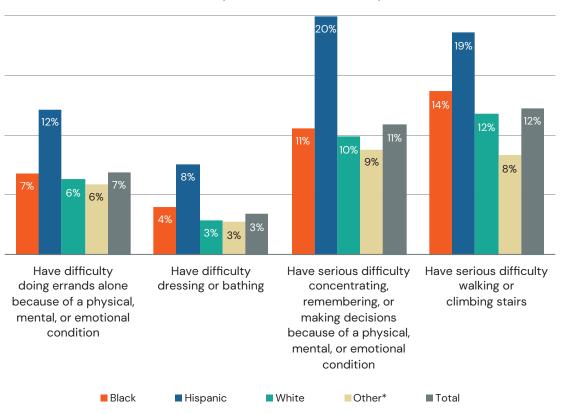
Source: "Behavioral Risk Factor Surveillance System," Centers for Disease Control and Prevention. Available here.

Population	Social Drivers	Access to Coverage	Service	Quality and Consumer	Health	Disparate Impact
Overview	of Health	and Care	Utilization	Experience	Outcomes	of COVID-19

FUNCTIONAL STATUS BY RACE AND ETHNICITY

Hispanic people in Massachusetts report higher rates of functional impairments (e.g., difficulty dressing, bathing, walking) than people in other populations.

SELF-REPORTED FUNCTIONAL STATUS, MASSACHUSETTS ADULTS, 2014-2018



- Hispanic people in Massachusetts report having difficulty performing several activities of daily living (ADL) at twice the rate of White and Black people.
 White and Black people have comparable rates of reported functional status.
- Research suggests that while Hispanic people live longer on average than White people, older Hispanic people may face more physical disabilities for longer periods of time than White people, which could potentially be attributable to lack of access to specialist care.¹⁵³

^{*&}quot;Other" includes non-Hispanic Asian, Pacific Islander, and American Indian or Alaska Native.

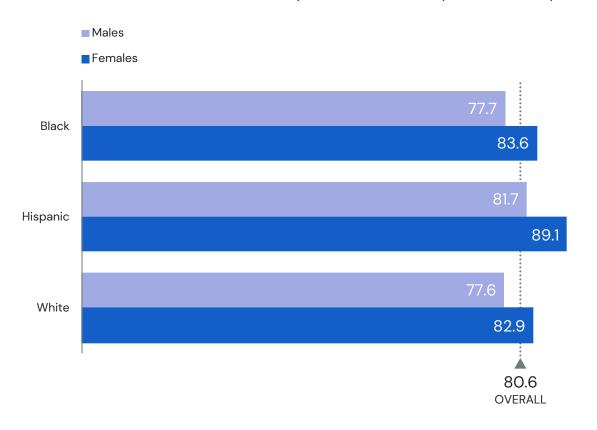
Source: "Behavioral Risk Factor Surveillance System," Centers for Disease Control and Prevention. Available here.

PopulationSocial DriversAccess to CoverageServiceQuality and ConsumerHealthDisparate ImpactOverviewof Healthand CareUtilizationExperienceOutcomesof COVID-19

LIFE EXPECTANCY BY RACE AND ETHNICITY

Consistent with national trends, Hispanic people in Massachusetts prior to the pandemic had higher life expectancies than their White and Black counterparts.¹⁵⁴

YEARS OF LIFE REMAINING FROM BIRTH BY RACE/ETHNICITY AND GENDER, MASSACHUSETTS, 2017



Note: Data only available for shown race/ethnic categories.

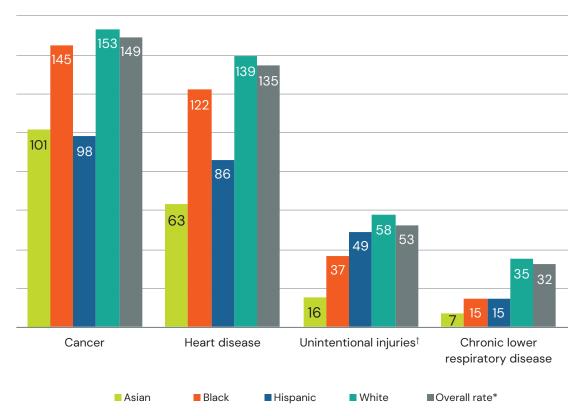
Source: "Massachusetts Deaths 2017 Report," Commonwealth of Massachusetts, Department of Public Health. Oct. 2019. Available here.

- People across all races and ethnicities in Massachusetts have life expectancies that are higher than national averages, and the difference is especially pronounced for Black and Hispanic people.
- Research has shown that Hispanic people fare better than others on a number of measures of mortality and life expectancy, despite lower socioeconomic status, on average, and other barriers to health; this circumstance is called the "Hispanic paradox." 155
- This mortality advantage tends to decline the longer a person has remained in the United States, likely driven by social factors and unmet social needs, and the advantage is primarily observed in immigrants from Mexico (i.e., not all people identifying as Hispanic).¹⁵⁶
- The overall life expectancy in Massachusetts was 2.5% higher than the national average. ¹⁵⁷
- Life expectancies for Black and Hispanic males in Massachusetts were 8% and 3% higher than the national average, respectively; while life expectancies for Black and Hispanic females were 7% and 6% higher.¹⁵⁸
- The differences between the Massachusetts and national averages for White people were less pronounced (2.1% and 1.6% higher than the national average for females and males, respectively).¹⁵⁹
- Preliminary national evidence from the COVID-19 pandemic suggests that Black and Hispanic people saw substantially larger declines in life expectancy in 2020 than White people did (3.25, 3.88, and 1.36 years, respectively).¹⁶⁰

CAUSE OF DEATH BY RACE AND ETHNICITY

Consistent with national trends, cancer and heart disease were the leading causes of death across all races and ethnicities in Massachusetts, with White and Black people of the same age dying from these diseases at higher rates than Hispanic and Asian people.

DEATH RATES FROM LEADING CAUSES OF DEATH (AGE-ADJUSTED, PER 100,000), MASSACHUSETTS, 2017



- *Age-adjusted per 100,000 residents using the 2000 U.S. standard population.

 †Unintentional injuries" includes accidental drug overdoses.
- Source: "Massachusetts Deaths 2017 Report," Commonwealth of Massachusetts, Department of Public Health. Oct. 2019. Available here.

- Hispanic and Asian people have lower death rates across the leading causes of death compared to White and Black people when adjusted for age.
- These figures are consistent with findings in Massachusetts and nationally that show that Hispanic people have a longer life expectancy than White and Black people (see page 48).
- In Massachusetts, age-adjusted homicide rates are more than nine times higher for Black people than for White people; age-adjusted homicide rates are five times higher for Hispanic people than for White people.¹⁶¹

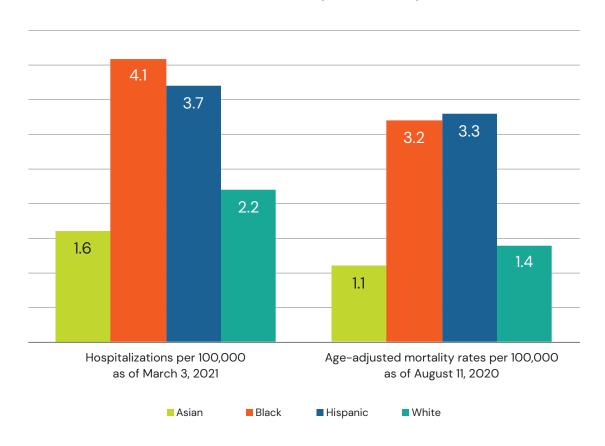
3.5. DISPARATE IMPACT OF COVID-19

Longstanding health inequities and disparities were laid bare during the COVID-19 pandemic, with Black and Hispanic populations shouldering the largest burden of disease and mortality in Massachusetts as well as nationally. Massachusetts data shows that Black and Hispanic people are more likely than Asian and White people to have been diagnosed with COVID-19, been hospitalized with COVID-19, and died from COVID-19. The causes of these disparities are numerous. Research suggests that Black people admitted to a hospital with COVID-19 early in the pandemic were more likely to die than White people, and that one of the reasons for that difference were differences in the hospitals to which individuals were admitted. The inequities, both nationally and in the Commonwealth, also result from significant socioeconomic differences between Black and Hispanic people and White and Asian people. Black and Hispanic people are more likely than White people to live in multigenerational households and rely on public transportation, and they are less likely to be able to work remotely, increasing the odds that they will be exposed to COVID-19 during the course of day-to-day activities and that they will infect members of their household. Black and Hispanic people have also been more hesitant than Asian and White people to get vaccinated, likely the result of barriers to access among Black and Hispanic populations as well as greater levels of vaccine hesitancy.

COVID-19 CASES, HOSPITALIZATIONS, AND DEATHS BY RACE AND ETHNICITY

Early pandemic experiences found Black and Hispanic people in Massachusetts were two to three times more likely to have contracted COVID-19, twice as likely to have been hospitalized from it, and three times more likely to have died from it, accounting for age, than White and Asian people.

COVID-19 HOSPITALIZATIONS AND DEATHS PER 100,000 RESIDENTS, MASSACHUSETTS



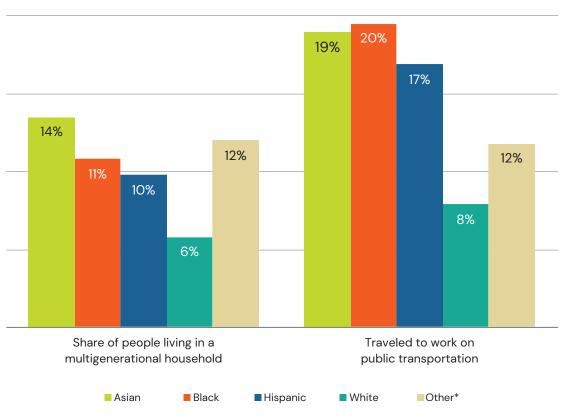
^{*&}quot;Other" includes Non-Hispanic American Indian/Alaska Native, Non-Hispanic Native Hawaiian/Pacific Islander, and Non-Hispanic Other Race. Sources: "COVID-19 Interactive Data Dashboard," Massachusetts Department of Public Health. Available here. "Across Two Waves: COVID-19 Disparities in Massachusetts," Boston Indicators. Dec. 18, 2020. Available here.

- Nationally, the age-adjusted COVID-19 death rate for Black and Hispanic people in 2020 was more than twice as high as that for White and Asian people (i.e., Black and Hispanic people are more likely to die from COVID-19 than White and Asian people in the same age group).¹⁶⁵
- Nursing homes with higher proportions of Black and Hispanic residents nationally were also more likely to report COVID-19 cases and deaths and to experience more severe COVID-19 outbreaks than those with lower proportions of Black and Hispanic residents.¹⁶⁶

DRIVERS OF COVID-19 OUTCOMES: LIFE AND LIVELIHOOD FACTORS BY RACE AND ETHNICITY

Asian, Black, and Hispanic people in Massachusetts are approximately twice as likely to live in a multigenerational household than White people, and a higher proportion of them rely on public transportation to travel to work, putting them at greater risk for catching and spreading a wide spectrum of viruses, including COVID-19.

MULTIGENERATIONAL HOUSING SITUATIONS AND USE OF PUBLIC TRANSPORTATION FOR TRAVEL TO WORK, MASSACHUSETTS, 2019



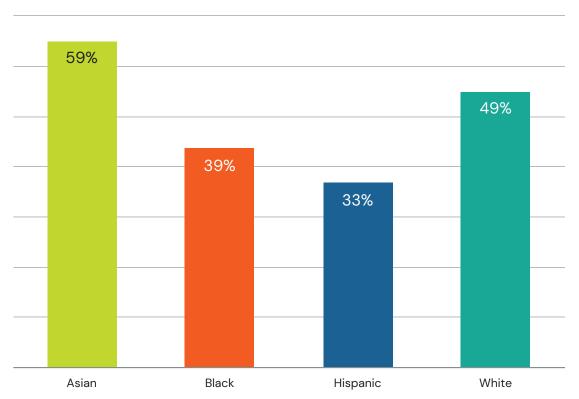
^{*&}quot;Other" includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or More Races, and Other. Source: Manatt analysis of 2019 American Community Survey data. Available here.

- Multigenerational living, although it often offers multigenerational support for older and younger family members, can also introduce new risks of intra-household spread of COVID-19.¹⁶⁷
- People relying on public transportation may face increased risk of exposure to COVID-19.¹⁶⁸

DRIVERS OF COVID-19 OUTCOMES: ABILITY TO ACCOMMODATE REMOTE WORK BY RACE AND ETHNICITY

Black and Hispanic people in Massachusetts are less likely than White and Asian people to have teleworked during the COVID-19 pandemic, potentially increasing their odds of exposure to COVID-19.

ABILITY TO TELEWORK, MASSACHUSETTS, FEBRUARY 2021



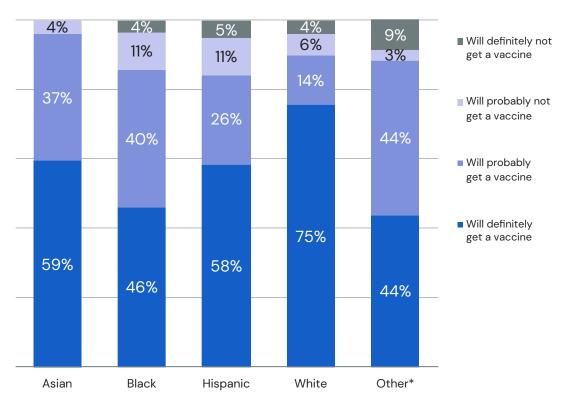
- A CDC analysis found that employed adults who tested positive for COVID-19 were more likely to be working in person than teleworking.¹⁶⁹
- Inequities in the ability to work remotely are likely driven by the types of occupations, including service-sector jobs, that a disproportionate number of Black and Hispanic people work in and their more limited ability to accommodate remote work.¹⁷⁰
- National data also suggests that Black and Hispanic people are significantly less likely than White people to have a broadband connection at home and are significantly more likely to rely on a smartphone for internet access; this may inhibit the ability to work remotely and conduct other business, including accessing health care services remotely during the pandemic.¹⁷¹

Population Overview	Social Drivers of Health	Access to Coverage and Care	Service Utilization	Quality and Consumer Experience	Health Outcomes	Disparate Impact of COVID-19
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COVID-19 VACCINATIONS BY RACE AND ETHNICITY

As vaccines started to become widely available in early 2021, White and Asian people in Massachusetts were more likely than Black and Hispanic people to have received the COVID-19 vaccine and, for those not already vaccinated, to report that they were likely to get vaccinated.

SELF-REPORTED LIKELIHOOD TO GET VACCINATED AGAINST COVID-19 BY RACE AND ETHNICITY, MASSACHUSETTS, FEB. 3-15, 2021^{\dagger}



¹Nationally and in Massachusetts vaccination disparities have narrowed through the spring of 2021: "Weekly COVID-19 Vaccination Report," Massachusetts Department of Public Health. Aug. 19, 2021. Available here

Sources: "Weekly COVID-19 Vaccination Report," Massachusetts Department of Public Health. Aug. 19, 2021. Available here. Manatt analysis of 2019 American Community Survey data. Available here. "COVID-19 Vaccine Equity Initiative," Massachusetts Department of Health. Available here.

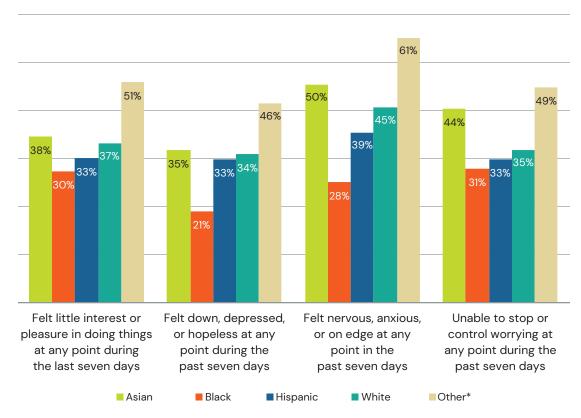
- Massachusetts findings are consistent with national data, which shows gaps in vaccination rates between Black and Hispanic people and White and Asian people.¹⁷²
- Early in the pandemic, among those not already vaccinated, Black and Hispanic people in Massachusetts were much less likely than White people to report that they would "definitely" get a COVID-19 vaccine.
- Massachusetts has attempted to address this issue by implementing a COVID-19 Vaccine Equity Initiative to ensure that communities hardest hit by COVID-19 have access to vaccinations.⁷⁷³

^{*&}quot;Other" includes Non-Hispanic, Two or More Races, and Other Races.

COVID-19: MENTAL HEALTH STATUS BY RACE AND ETHNICITY

White and Asian people in Massachusetts reported higher levels of anxiety and depression during the COVID-19 pandemic than Black and Hispanic people.

SYMPTOMS OF DEPRESSION AND ANXIETY, MASSACHUSETTS, 2021



 Massachusetts findings from data collected during the pandemic diverge from broader mental health status surveys, wherein Hispanic and Black residents of Massachusetts consistently report poorer mental health status than White residents (page 45).^{174,175}

^{*&}quot;Other" includes Non-Hispanic, Two or More Races, and Other Races.
Source: "Week 27 Household Pulse Survey: March 17—March 29," US Census Bureau. Apr. 7, 2021. Available here.

4. DATA LIMITATIONS, GAPS, AND NEXT STEPS

While federal and national data resources can cast light on the disparities Massachusetts residents face and enable limited insights into their root causes, the data is often siloed or overly broad, incomplete or not comprehensive enough to tell the full story of how race, racism and their influence on the health care and social service systems shape our health care experiences and health outcomes. Identifying the shortcomings of present data reporting by race and ethnicity will provide context to understanding what these data findings do and do not indicate, and where enhancements in data capacity could result in new and important insights into both the root causes of health inequities and disparities and potential strategies to address them.

4.1. LIMITATIONS OF RACE AND ETHNICITY DATA IN MASSACHUSETTS AND NATIONALLY

Health and socioeconomic data reported by race and ethnicity is limited, with its interpretation and use further bound by a limited number of reporting categories, incomplete data collection, and uneven data standards to support collection. Key race and ethnicity data limitations include:

- Limited race and ethnicity data collection for critical measures. Race and ethnicity segmentations are not universally collected for socioeconomic and health data, limiting understanding of variations among populations, and they are further limited when other important segmentations—such as age, gender, distability status, and geography—are desired. Beyond impeding understanding, inadequate data limits data-actionability. For example, health insurance coverage outreach efforts are most effective when organizations understand the age of those they are targeting and where those people live. Further, foundational health data sources—such as health care claims and encounters—continue to have significant gaps in the completeness of their race and ethnicity data, which continue to limit localized health plan and health system actions to identify and address disparities.¹⁷⁶
- When data is available, racial and ethnic categories can be overly broad, hiding important differences among subpopulations. Many data sources only report a limited number of race and ethnicity categories, sometimes excluding categories beyond the broad classifications of "Black," "Hispanic," "White," and "Other." This level of aggregation limits the ability of researchers and other stakeholders to discern a range of narrower health inequities and disparities among heterogeneous and culturally distinct subpopulations and to effectively develop interventions that could address these issues, as might be possible with more disaggregated data. (See additional discussion in Section 1.)

- Varied reporting of race and ethnicity categories. Data sources that report race and ethnicity data can use different race and ethnicity categorizations, complicating comparisons. For example, the Office of Management and Budget (OMB) requires the Census Bureau to collect data on the following racial categories: White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander; and separately, whether or not a person is Hispanic. However, other sources use different categorizations. For example, the Massachusetts Health Interview Survey (MHIS), administered every year by the Massachusetts Center for Health Information and Analysis (CHIA), reports race only by White, Black, and "Other" categories, in addition to Hispanic ethnicity. Furthermore, while most data sources separately report Hispanic people of any race, some report only race data inclusive of people of Hispanic ethnicity.
- Race and ethnicity categorization is occasionally limited by sample size. Some data sources that depend on survey data do not have sample sizes that are sufficient to report comparisons of all data points by race and ethnicity, particularly when reported at the state and sub-state level.
- Race and ethnicity data—like much of the data reported from state and federal sources—is not always timely. Lagged race and ethnicity data—which frequently is reported after "top line" measures—can limit its applicability for more pressing public health or public engagement use cases. For example, despite broader recognition of the maternal morbidity and mortality crisis among people of color, particularly Black women, currently the latest data on maternal mortality and morbidity by race and ethnicity in Massachusetts is from the 2000–2007 period.¹⁷⁷

4.2. GAPS IN RACE AND ETHNICITY DATA IN MASSACHUSETTS

Through this project, several major gaps in data collection reporting were identified:

- **Homelessness.** The experience of homelessness is one of the strongest predictors of a wide range of serious physical and behavioral health conditions. ¹⁷⁸ However, data on the scale and scope of people experiencing homelessness by race and ethnicity in Massachusetts is limited. This is likely the result of the unique challenges associated with collecting data on the homeless population, particularly the mobility of the population and the cyclical nature of homelessness. ^{179,180} Despite these challenges, understanding the impact of homelessness by race and ethnicity—and the impact of racism on homelessness as measured by race and ethnicity—will be critical for targeting interventions for this uniquely marginalized population moving forward.
- **Provider workforce.** Racial and ethnic concordance between patients and providers is strongly associated with higher quality health care communication, information giving, patient participation, and participatory decision-making.¹⁸¹ However, publicly available reports on the Massachusetts health care provider workforce are dated (2014) and only provide data by race and ethnicity across a small subset of provider types (including dentists, dental hygienists, pharmacists, physician assistants, registered nurses, and licensed practical nurses).¹⁸² National data (including from the Bureau of Labor Statistics) is significantly more robust but could mask key differences in the Massachusetts provider workforce. Few surveys or other instruments exist—either nationally or in Massachusetts—to directly measure racial and ethnic concordance of health care service delivery.

- Detailed behavioral health utilization data. Data sources such as CHIA's MHIS provide some insights into access to mental health and substance use treatment by race and ethnicity. Furthermore, Massachusetts Behavioral Health Access (MABHA) provides real-time data on provider availability for mental health and substance use disorder services. However, there are no cohesive data sources in Massachusetts systematically assessing access to care across all components of the Massachusetts behavioral health delivery system and how access may vary by race and ethnicity. Understanding how access to specific behavioral health services (e.g., behavioral health crisis services) varies by race and ethnicity will be critical for policymakers and other stakeholders working toward building a more equitable behavioral health delivery system in Massachusetts.
- Quality and consumer experience data. The federal government—through the Agency for Healthcare Research and Quality—aggregates robust data from numerous sources across multiple domains of quality measurement by race and ethnicity. However, Massachusetts Quality and Consumer Experience data by race and ethnicity is sparse. CHIA collects and reports quality data from a variety of Massachusetts sources; however, these reports generally do not provide detail by race and ethnicity. Massachusetts Health Quality Partners also conducts quality-of-care surveys, including a survey focused on patient experience. This data is made available to the public on a provider-by-provider basis through the MHQP Health Compass directory. However, aggregate reports (including data by race and ethnicity) are not readily available for public use. 186

Data on additional state-level measures by race and ethnicity could include immunizations, preventable emergency room use, prevalence of chronic conditions (beyond the select measures discussed herein), provider payment disparities, and many more not addressed in this primer.

Further, existing data may be enhanced by ensuring actionable sub-categorizations—such as age, gender, disability status, and geography—are collected and reported, and where possible, broad categories of race and ethnicity are disaggregated to better reflect more sharply defined communities, which have common characteristics (e.g., language) and have more similar cultural needs.

5. CONCLUSION

Despite important limitations around the availability and robustness of data on racial and health disparities in Massachusetts, existing data does paint a clear picture that Black and Hispanic people in Massachusetts face persistent disparities in access to health care coverage, access to routine medical care, quality of care, and health outcomes, including experiences with the COVID-19 pandemic. Black and Hispanic people are significantly more likely to be uninsured and face cost-related barriers to care relative to White people, and they are unlikely to have access to racially and ethnically diverse providers. Black and Hispanic people receive worse care across a broad range of quality measures and experience higher rates of many adverse health outcomes, including infant/neonatal mortality, diabetes, asthma, HIV mortality, and heart disease. Black and Hispanic people are also significantly more likely to be hospitalized or die as a result of COVID-19. These disparities are driven by a host of intersecting factors—including socioeconomic drivers of health such as food insecurity, housing instability, language barriers, exposure to toxic stress—many of which are rooted in longstanding racist structures, policies, and practices in Massachusetts and the United States more broadly.

Improving understanding of health disparities and their wide-ranging causes is an essential step for stakeholders in the Commonwealth to address these persistent inequities. There is a unique opportunity now for Massachusetts policymakers and other stakeholders to conduct a more thorough assessment of data gaps and potential options for filling these gaps with new approaches to data collection (e.g., surveys) and standardization, and new methods of data analysis (as national and other state stakeholders have begun to explore). Organizations like the Massachusetts Department of Public Health, Health Policy Commission, and CHIA are well positioned to advance such efforts, given their central roles in health care data collection, reporting, and analysis in the Commonwealth. The Commonwealth could also consider mechanisms to leverage public-private partnerships with health care providers, payers, community-based organizations, and other stakeholders in order to strengthen the robustness of race and ethnicity data available for public analysis.

Despite its limitations, Massachusetts data still shows the deep and pervasive health inequities and disparities experienced by racial and ethnic groups in Massachusetts today, resulting from a long history of structural racism and inequitably-designed health and social systems. We must not wait to take action. Stakeholders and policymakers across state and local governments; health care organizations; and public health, social services, and community-based organizations must act collectively and in partnership with the communities and people harmed by structural racism and inequities in health care, elevating their voices and ensuring they are equal participants in the effort to craft and implement solutions that advance and achieve health equity for all Massachusetts residents. Achieving health equity is a moral imperative, and it is only through all of us working together that we can begin to fully understand and address the societal systems, structures, and policies that must be changed. Inaction will only perpetuate the long-standing inequities that characterize many of our social and health care systems and result in such unacceptable health disparities.

APPENDIX

HEALTH EQUITY REPORTING AND ACTIVITIES IN MASSACHUSETTS

The Commonwealth and its diverse health care and public health stakeholder community have elevated racism and health equity as paramount concerns over the past year. Important and informative work has been done and is underway. A sampling of activities and initiatives is as follows:

- Chapter 93 of the Acts of 2020 established the Health Equity Task Force to study and make recommendations to the General Court that aimed at addressing health disparities for underserved or underrepresented populations during the COVID-19 pandemic. The task force convened over two dozen meetings in late 2020 and early 2021 to align on recommendations and released its final report, A Blueprint for Health Equity, on July 1, 2021.
- In August 2021, the Massachusetts Department of Public Health released preliminary results from its COVID Community Impact Survey (CCIS). The purpose of the CCIS was to better understand the most critical emerging health, economic, and social needs of residents of the Commonwealth as a result of the pandemic. Data from the survey is available on a range of topics related to COVID-19, including access to health care, pandemic-related changes in employment, impacts on mental health, substance use, discrimination, and intimate partner violence. Findings are made available across a range of subpopulations, including by disability status, race and ethnicity, sexual orientation, gender identity, geography, and others.
- As part of the State's Population Health Information Tool, the Massachusetts Department of Public Health released a Health Equity Dashboard in 2020, which shares health outcome data from across the agency's data sources in a centralized location. The Department also developed a Racial Equity Data Roadmap, which outlines best practices and potential data use cases for addressing racial and ethnic disparities in health.
- The Massachusetts Office of the Attorney General released Building Toward Racial Justice and Equity in Health: A Call to Action in November 2020. The report discusses a variety of ways that stakeholders should come together to address the systemic health inequities facing people of color, including improving the availability of stakeholders to use data to improve health equity.
- The Massachusetts Health Policy Commission (HPC) proposed an action plan to ensure that health equity is a core component of the HPC's work today and going forward. The action plan includes embedding health equity concepts in all of the HPC's core functions, including research and analysis, serving as a health care "watchdog," engaging with partners, and convening stakeholders.

- In early 2020, Boston University's Center for Antiracist Research launched the Racial Data Lab. The goal of the Racial Data Lab is to conduct a comprehensive effort to advocate for, collect, publish, and analyze nationwide data on the COVID-19 pandemic by race and ethnicity. Results of this analysis are maintained and made available to the public through the Center's COVID Racial Data Tracker.
- The Western Massachusetts Health Equity Network—operated by the UMass Amherst School of Public Health and Health Sciences—aims to develop regional strategies and opportunities to create conditions in which communities are able to attain the highest level of health for all residents. The network focuses its work on creating a regional policy voice for Western Massachusetts cities, supporting the collection and sharing of data, and facilitating cross-sector collaboration.

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- Different sources may also define "Black" and "Hispanic" people differently, some referred to them as mutually exclusive categories, others, as categories that allow overlap (i.e., Non-Hispanic Black people). Where critical for interpretation, these distinctions are noted.
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