LIVE LONG AND WELL

BOSTON'S POPULATION HEALTH EQUITY AGENDA

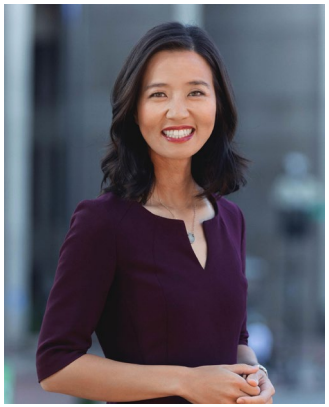
CITY of BOSTON

BOSTON PUBLIC HEALTH COMMISSION

MISSION STATEMENT

To work in partnership with communities to protect and promote the health and well-being of all Boston residents, especially those impacted by racism and systemic inequities.

LETTER FROM MAYOR WU



Dear Neighbors,

At the City, we're working to make Boston a home for everyone. That means investing in the health, safety, and wellness of all of our residents. Through our health equity agenda, we're working to continue shrinking the longevity gap and make sure that all our residents have the opportunity to live long and live well in Boston.

That's why we're investing in better access to the resources that we know can lead to longer, healthier lives for every family in every neighborhood. We're working with our residents to plant the seeds of health equity in every corner of our city.

Whether we're helping nearly 700 families find their first home; transitioning Boston Housing Authority communities to be fossil-fuel free by 2030; providing more than 10,000 paid summer jobs to young people in our Boston Public Schools; or reducing violence and addressing trauma to make Boston the safest major city in the country, everything we're doing is about making Boston a home for everyone.

In this report, we describe our *Live Long and Well* population health equity agenda. By working to close the life expectancy gap citywide, we can also make Boston a healthier, more equitable city for everyone.

This is work that we are proud to be doing in partnership with hospitals and health centers, community organizations and local businesses. I'm grateful to our leadership at the City, Commissioner Dr. Bisola Ojikutu and her team at the Boston Public Health Commission, for tackling these health disparities at their root. And, of course, I'm grateful to the community here in Boston and across every sector for working with us to identify the gaps and the strategies to move forward.

Sincerely,

Michelle Wu
Mayor of Boston

LETTER FROM THE COMMISSIONER

Dear Fellow Bostonians,

Though our city is rich with healthcare resources, we continue to experience significant health inequities by race and by neighborhood. These inequities are a result of a long history of structural racism and decades of disinvestment in communities of color.

The most glaring of these inequities is the disparity in life expectancy. For more than 10 years it was often repeated that a 33-year difference in life expectancy existed between neighborhoods 2.3 miles apart, in Roxbury and in the Back Bay. In 2023, we made it a priority to update these data. We found that the 33-year difference in life expectancy between Roxbury and Back Bay had decreased and is now 23 years.

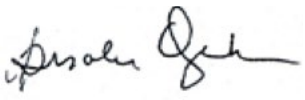
Progress has been made. This administration has made significant investments in factors that impact our health. However, we have much work ahead. In addition to Roxbury, our analysis revealed communities with low life expectancy and high premature mortality in other neighborhoods throughout our city – in Mattapan, Dorchester, East Boston, and Jamaica Plain.

Simply documenting this long-standing inequity is both insufficient and irresponsible. We must continue to act to ensure that all Bostonians can live long, healthy, high-quality lives.

Live Long and Well is Boston's first citywide population health equity agenda. Our agenda convenes partners across sectors to address the three primary causes of premature mortality in Boston: drug overdoses, preventable cancers and cardiometabolic disease. This agenda recognizes that health outcomes are highly dependent upon the conditions in the communities where we live, work and play. Social determinants of health, like economic mobility, housing, and transportation, significantly impact our overall life expectancy. To address these health drivers, our solutions must be community-driven; our data must be timely and actionable; and our partnerships across public and private sectors, communities, hospitals, health centers, investors, and advocates must be strengthened.

I hope *Live Long and Well* helps all Bostonians understand the City's commitment to making our city a better place to live for everyone. We cannot do this without you. I want to express my gratitude for our collective progress, and I am confident that we will continue to create positive change in the years ahead.

In partnership,



Bisola Ojikutu, MD MPH FIDSA
Commissioner of Public Health, City of Boston
Executive Director, Boston Public Health Commission

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INTRODUCTION

Boston is a vibrant, diverse, and thriving city. Our residents, on average, are healthier and live longer than residents of most other U.S. cities. But throughout our city, there are stark and persistent health inequities by race, by ethnicity and by neighborhood. The Boston Public Health Commission's *Live Long and Well* agenda, our city's first population health equity agenda, reflects our commitment to eliminating gaps in health outcomes and creating a city where all residents can live healthy, long lives.

OUR CITY, OUR PEOPLE

Boston is an extraordinary place to live, learn, and work. It is a diverse and flourishing city that attracts people from all over the world. When it comes to health care, Boston is a global medical hub with exceptional resources. A remarkable 96% of Bostonians are insured, and the average life expectancy of our residents is just over 80 years.[1]

But even in our resource-rich city, there are persistent and pervasive health inequities.

Life expectancy varies widely based on where you live in Boston. In 2007, there was a 33-year gap between census tracts in Roxbury and in the Back Bay.[2] By 2021, this gap had narrowed, but there was still an unacceptable 23-year difference in life expectancy between census tracts in these two neighborhoods.

BOSTON'S RICH DIVERSITY

Total population in 2023: 653,833[4]

- Asian: 10.0%
- Black: 21.5%
- Latinx: 18.9%
- White: 44.5%

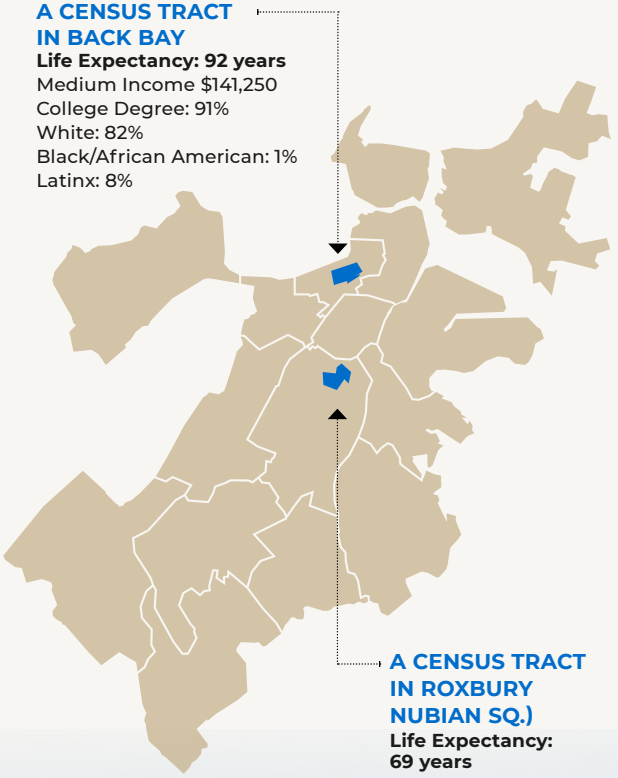
Despite this diversity, racial and ethnic groups are concentrated in 23 of Boston's 207 census tracts.

Roxbury is not the only neighborhood in Boston where life expectancy is significantly lower than average. Life expectancy is also lower than Boston's citywide average in census tracts in other neighborhoods such as in Dorchester, Mattapan, East Boston, and Jamaica Plain.[3]

These neighborhoods differ in many ways from that of Back Bay, including the presence of green spaces, housing quality, and access to transportation. The City of Boston and its partners have continued to address many of these social determinants of health. We have made progress, but we still have a long way to go. The root causes of these disparities, including structural racism, have resulted in residential segregation and chronic disinvestment in communities where residents are disproportionately Black and Latinx.

The adverse impacts this has had on economic opportunity and wealth building are deeply entrenched in our city. To continue to make progress, we must work together toward a shared vision for a healthier, more equitable Boston where all residents have the opportunity to live long and well.

Life Expectancy in Boston by Census Tract



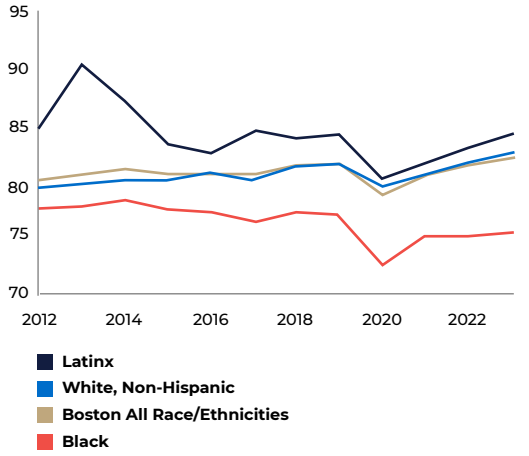
LIVE LONG AND WELL

Live Long and Well describes our vision for a healthier, more equitable Boston. It offers community members, partners, funders, and other stakeholders an overview for Boston Public Health Commission's (BPHC) ongoing efforts to eliminate the life expectancy gap and reduce premature mortality throughout Boston. *Live Long and Well* is a whole-of-society approach, applying lessons learned from the COVID-19 pandemic and grounded in an anti-racism framework.

This report describes our focus areas as we strive to mitigate persistent disparities across Boston:

- **The deep-rooted racism and social determinants of health** that underlie and drive the unacceptable racial and ethnic health disparities in our city.
- **The three leading causes of premature mortality in Boston today,** which are unintentional drug overdose, cancer, and cardiometabolic disease.
- **Strategies to address the social and structural factors** that impact life expectancy in Boston, ranging from affordable housing to access to health and social services.
- **Our approach to supporting the physical and mental health** of all Bostonians across their lives, from birth to death.
- **Spotlights on programs and initiatives** that are advancing our Live Long and Well agenda.

Life expectancy in Boston: Trends by Select Race and Ethnicity Group



DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

LIVE LONG AND WELL GOAL

We aim to close the life expectancy gap entirely citywide by 2035.

We plan to do this by addressing the social and structural drivers of health and ensuring access to health and social services for communities most at risk for poor health outcomes.

- **Lead** with data
- **Share** decision-making power with most impacted communities
- **Establish** partnerships and shared goals
- **Invest** collaboratively
- **Support** place-based strategies to address local needs
- **Promote** accountability and sustainability
- **Focus** on systems and policy change

Learn more at the Live Long and Well website

BPHC'S MISSION AND WORK

BPHC's mission is to work in partnership with communities to protect and promote the health and well-being of all Boston residents, especially those impacted by racism and systemic inequities.[5] This mission statement was updated in 2023 after an all-staff engagement process to ensure that it reflects our commitment to working with the community to advance health equity and promote racial justice.

Six BPHC bureaus and over 40 programs provide Boston residents with a wide array of services, including accessible community-based health and social services; community engagement and advocacy; health-promoting policies and regulations; disease and injury prevention; emergency services; health promotion; and health education services.

Through our policies, programs and services, we strive to eliminate health disparities based on race, ethnicity, income, age, gender, religion, sexual orientation, and neighborhood. As this report describes in greater detail throughout, we do this by:

Collaborating with City departments that address social determinants of health. Many of our partners across City government work every day to address factors — such as housing, food access, education, economic mobility, and the environment — that profoundly impact health and well-being. Through our Health Equity in All Policies initiative, we and our partners consider the impact of all our decisions on people of color and others experiencing barriers to care.[6]

Developing and advocating for policies and regulations at the local, state, and federal levels to improve health. From advocating for maternal health and gun violence prevention to serving on anti-poverty commissions, we fight for policies that improve the health of Boston residents.

Providing direct health and social services to Boston residents. We continue to improve the direct services that are critical to residents' health, including emergency medical services, substance use treatment programs, and infectious disease management.

Applying an equitable community engagement approach. We incorporate a racial equity lens in all our community engagement. Our Transformational Community Engagement Plan emphasizes the need to intentionally seek and include the voices of those historically excluded, to reduce barriers to participation, and to design engagement processes that work for and in these communities.

OUR VALUES

BPHC has five core values that guide our work:

- **Equity:** Redistribute resources equitably and challenge oppression
- **Transparency:** Communicate transparently and use data to inform decisions
- **Anti-Racism:** Commit to anti-racism as an action
- **Collaboration:** Work together with others
- **People-Centered:** Put people at the center of interactions

These values help shape our culture and guide decisions, including strategic planning, community investments, and partnerships.

HEALTH EQUITY ACROSS BOSTON

To eliminate the life expectancy gap in our city, we must address the social, institutional, systemic, and structural factors that affect physical and mental health. This includes the conditions and environments where people are born, live, work, worship, play, and love.

SOCIAL DETERMINANTS OF HEALTH

Social conditions such as housing, education, economic security, employment and the built environment are strong predictors of health and well-being. Often referred to as "social determinants of health" or "SDOH," these factors account for the majority of an individual's health outcomes.[7,8] SDOH also influence life expectancy and risk of developing a chronic disease, such as diabetes or heart disease. Numerous studies have documented the impact of social and structural conditions on health outcomes.[9,10,11,12,13,14]

RACISM AND HEALTH

Racism has had, and continues to have, a significant impact on the overall health and well-being of people of color. In the U.S., centuries of discrimination, racist policies, and barriers to accessing resources and opportunities have resulted in significant inequities in health outcomes by race and ethnicity. A growing body of evidence has found that

> "Growing up in Roxbury, I saw the product of racial division and inequity in society and the eventual health inequity that comes from that. If you don't have access to good food, good jobs, a good education, good environmental infrastructure, what happens is you end up sick."

MICHAEL CURRY, ESQ.
PRESIDENT AND CEO
Massachusetts League of Community Health Centers

all forms of racism, including structural, institutional and interpersonal racism, are associated with higher mortality and lower life expectancy among people of color compared to white individuals.[15,16] Specifically, structural racism, defined as the totality of ways in which societies foster racial inequity through systems that reinforce discriminatory beliefs and values, limits access to resources essential for promoting health, such as income, housing, education and employment.[17] Thus, structural racism is a root cause of health inequities.

Racism may also directly impact health outcomes through exposure to chronic, daily stress. The weathering hypothesis has been proposed as a driver of racial inequity in health outcomes, specifically premature mortality, maternal morbidity and mortality and cardiovascular disease. This hypothesis states that the health status of Black adults deteriorates prematurely compared to other racial and ethnic groups as a consequence of long-term exposure to social and environmental stressors, such as chronic exposure to interpersonal, institutional and structural racism, political marginalization and economic adversity.[18]

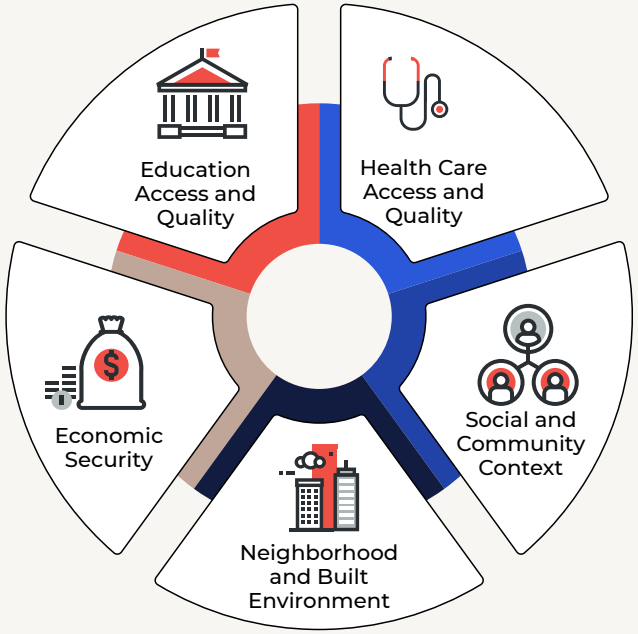
Studies have also demonstrated how implicit and explicit bias, in addition to other forms of institutional racism specifically within the healthcare system, influence access to care, quality of care, and health outcomes among people of color.[19,20] In addition, recent reviews have provided evidence of negative health impacts resulting from exposure to interpersonal racism and discrimination.[21]

A CITYWIDE AGENDA

Health disparities across race, ethnicity, and neighborhood are systemic, unfair, and unjust.[22] In recent years, the City of Boston has been intently focused on working to address these disparities. On July 12, 2020, Boston officially declared racism a public health crisis, recognizing its serious impact on health and instructing all of City government to work to dismantle systemic racism.[23] In 2021, the Health Inequities Task Force laid out a series of recommendations through the Health Equity Now Plan to guide the City's path toward health equity for all.[24] In the years since, Boston has dedicated resources to diverse hiring practices, affordable housing initiatives, and economic opportunities for local and minority-owned businesses, among

Social Determinants of Health

The City of Boston is making investments in Social Determinants of Health to improve health and wellbeing.



many other efforts focused on equity and inclusion. In 2022, Boston established a Task Force on Reparations, charged with helping the Mayor and City of Boston address racial inequities for descendants of slavery. In the subsequent years, the City has begun investing in communities based on the Task Force's initial recommendations.[25]

Across every cabinet and department, the City is committed to addressing the social and systemic drivers of health and reaching the *Live Long and Well* goal of eliminating the life expectancy gap in Boston. Under Mayor Michelle Wu's administration, the City has made significant new investments and commitments toward this goal, and will continue to do so. On many of these initiatives, public health staff work closely with other City colleagues to share public health insight, provide data to inform strategies, and add capacity.

Together we are working to improve conditions for all Bostonians by advancing economic opportunity, making streets safer, and supporting the development and preservation of affordable housing and a healthy physical environment. Examples of this work include:

- **Creating and preserving** affordable housing and promoting equitable access to homeownership opportunities.[26]
- **Combating** climate change and advancing resilience through an all-of-government approach.[27]
- **Establishing** a shared vision for a green, growing, and family-friendly Boston that coordinates investment in the built environment to actualize that vision.[28]

> "The most glaring differential in our city's geographic life expectancy data is socioeconomic status. The self-perpetuating nature of its roots is reflected across multiple intersections of health and wealth. If we intentionally leverage our rich resources to close the gap and enable thriving, the rest will fall in place."

DR. THEA JAMES
VICE PRESIDENT OF MISSION & ASSOCIATE CMO
Boston Medical Center Health System

COMMUNITY COLLABORATION

Reducing deep-rooted disparities in health requires ongoing and inclusive community engagement and collaboration. BPHC is committed to creating, enhancing, and sustaining formal and informal partnerships with the people and communities we serve. It is only with our community and network of partners that we can reduce persistent inequities in life expectancy and premature mortality for a healthier, thriving Boston.

COMMUNITY ENGAGEMENT AND EMPOWERMENT

BPHC is committed to the practice of Transformational Community Engagement, which is essential to closing life expectancy gaps in our city. The BPHC community engagement standard of practice prioritizes communities' strengths, pride, and resources by collaborating and sharing decision-making power with those impacted by health inequities and those who are historically excluded from opportunities to create and sustain policy and practice decisions that affect their lives and communities. Transformational Community Engagement results in policies not just for the people but by the people most affected.[29] BPHC uses our "We Asked, You Said, We Did, What Changed" accountability structure to report back to communities and participants of all engagement initiatives on how their

COMMUNITY HEALTH IMPROVEMENT PLAN

Based on our latest Community Health Needs Assessment and Improvement Planning process, the 2022-25 Community Health Improvement Plan identifies four priority areas to focus our collective efforts toward a healthier, thriving city:

- Access to Services
- Economic Mobility and Inclusion
- Housing
- Mental and Behavioral Health

involvement contributed to the final decision and outcome of engagement. This structure promotes trust building with communities.

BPHC's work is guided by a model for public health that recognizes the community as a full partner with deep expertise in its own unique needs. This model focuses on transforming the work we do to empower community-based organizations and residents.[30]

This report is informed by several specific community engagement activities, including but not limited to:.

- **The Boston Community Health Collaborative (BCHC)** - a multi-sector coalition, coordinated by BPHC, that is working to improve the health of Boston residents through a coordinated, citywide *Community Health Needs Assessment*. The Collaborative focuses efforts on key health priorities through a *Community Health Improvement Plan.*[31] The Collaborative includes Boston hospitals, community health centers, community-based organizations, and other community members. The assessment and improvement plan inform public health planning and guide the work of making Boston a healthier city for all residents. The current improvement plan focuses on SDOH and root causes of health inequities.
- **The Community Action Network** - a group of community residents and organization representatives who work together and in collaboration with BPHC to reduce racial inequities in infant mortality and poor birth outcomes, through policy and community-level changes.
- **Nubian Square Task Force** - a coalition of community-based, public health, and faith-based organizations, and businesses that share and coordinate resources in Roxbury's Nubian Square neighborhood. They work together to support people who use drugs and experience homelessness by meeting residents where they are and ensuring that resources are tailored to their needs. There is a similar coalition in East Boston. BPHC collaborates with the City's Community Engagement Cabinet on this.
- **The Cancer Advisory Group** - a group of community members and cancer experts who provide advice to inform BPHC's cancer early detection strategies to reduce racial inequities in cancer mortality.

BOSTON RESIDENTS IN THE 2024 COMMUNITY HEALTH NEEDS ASSESSMENT SAID:

> **"Everything has become so expensive, it feels unlivable at times. I make good money and I still struggle with the cost of groceries or put off health care because of the cost. Being able to access affordable food would make such a difference."**

> **"My community needs healing from trauma and substance use and the racism that we experience on a day-to-day basis."**

> **"It is time to start thinking and spending differently in order to maximize our results. There are a lot of young children that are suffering from mental health issues. We need more community support services that can lend to targeted resources and possibly collaborations."**

OUR COLLABORATORS

BPHC works with Boston residents, community champions, health care entities, community-based organizations (CBOs), and other partners to improve health and well-being in Boston. Within the City, we work closely with the community health centers and hospitals that serve our residents every day, and we invest in and collaborate closely with CBOs across every neighborhood.

We have strong statewide partnerships that are critical to advancing this work. Among them are our partners in state government, including the Massachusetts Executive Office of Health and Human Services, the Department of Public Health, and the Bureau of Substance Addiction Services.

The State's Advancing Health Equity in Massachusetts initiative, a place-based initiative aimed at eliminating racial, economic, and regional disparities in health, is a partner agenda of *Live Long and Well*. The Health Equity Compact, a group of leaders of color in Massachusetts, is another key statewide partner in this work, advancing health equity across the state by transforming policy and institutional change.

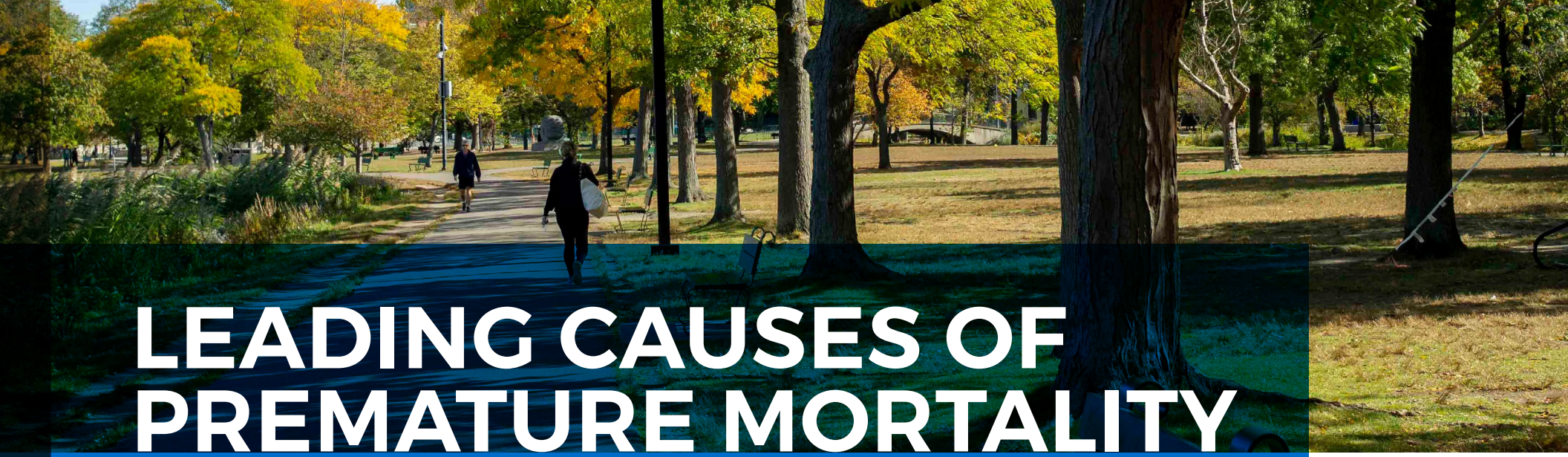
SPOTLIGHT

Together in action

The City of Boston, BPHC, Atrius Health Equity Foundation (AHEF) & Boston Community Health Collaborative (BCHC) Partnership is a new multi-sector partnership, supported by a $10 million investment from AHEF, to fund community-based coalitions to create place-based opportunities for economic mobility and to increase generational wealth-building in communities and neighborhoods most impacted by and at risk for chronic disease. This investment is a catalytic initial multi-sector partnership in support of the Live Long and Well agenda.

> **"We are thrilled to partner with the Mayor, the City of Boston, the Boston Public Health Commission, and the Boston Community Health Collaborative, all of whom have shown tremendous leadership in advancing community priorities for better health."**
>
> **DR. ANN HWANG**
> PRESIDENT
> Atrius Health Equity Foundation

> **"Through my work in the Mattapan community, we have heard again and again that we need to address the many inequities that impact our health, like racial discrimination, low wages, limited access to housing, the need for quality education, and much more. We must address all of these issues by working in partnership with community. Collectively, we can do this!"**
>
> **VIVIEN MORRIS**
> Mattapan resident and part of the Boston Community Health Collaborative



LEADING CAUSES OF PREMATURE MORTALITY

Boston's average life expectancy is high for the U.S. and many of our residents live long, healthy lives. But health, a basic human right, is not equitably distributed in our city. Far too many people die far too young from conditions that can and should be prevented.

The three leading causes of premature mortality (death before the age of 65) and reduced life expectancy (expected years of life at birth) in Boston today are:[32]

- Unintentional drug overdose
- Cancer, including these preventable cancers: breast, cervical, colorectal, lung, and prostate cancers
- Cardiometabolic disease, including heart disease, stroke, and diabetes

These conditions have a disproportionate effect on the lives of Bostonians of color and residents of our poorer neighborhoods. Between 2020 and 2023, the gap in average life expectancy between Black and White residents of Boston was 6.5 years. 40% of the difference in average life expectancy was due to younger Black residents dying before the age of 40. The leading causes of death that contributed the most to the gap in life expectancy between Black and White residents were the same as those contributing to premature mortality and reduced life expectancy overall in the city: unintentional overdose, cancer, and heart disease.[33]

BPHC is working to reduce the gaps we see in premature mortality and life expectancy from these conditions through a range of strategies and specific partnerships and initiatives, examples of which we spotlight in the rest of this report. In

addition to strategies targeting specific health outcomes, we are also committed to strategies that impact all causes of premature mortality, such as enhancing the capacity of community health workers to provide outreach and health education in the diverse communities of Boston, and investing in community initiatives based out of CBOs or health centers to holistically address health and social service needs. In December 2023, we established the Community Health Equity Empowerment (CHEE) Fund and partnered with Mass General Brigham to provide awards of up to $200,000 to ten organizations working to increase access to healthcare in underserved neighborhoods.[34]

Leading Causes of Premature Mortality

Count under age 65

RANK	2019	2020	2021	2022	2023
1	Cancer 222	Unintended overdose 252	Unintended overdose 265	Unintended overdose 254	Unintended overdose 281
2	Unintended overdose 191	Cancer 233	Cancer 233	Cancer 224	Cancer 223
3	Diseases of the heart 179	Diseases of the heart 190	Diseases of the heart 189	Diseases of the heart 161	Diseases of the heart 159
4	Accidents 39	COVID-19 122	COVID-19 70	COVID-19 44	Accidents 47
5	Chronic liver disease & cirrhosis 38	Diabetes mellitis, Homicide 52, 52	Diabetes mellitis 56	Diabetes mellitis 42	Diabetes mellitis 38

NOTE: Rank is based on number of deaths.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

DRUG OVERDOSE

Unintentional drug overdose is the leading cause of premature death in Boston. Substance use disorder (SUD), combined with an unpredictable drug supply (frequent contamination with more potent drugs), has led to fatal overdoses involving substances such as fentanyl, prescription opioids, cocaine, alcohol, benzodiazepines, amphetamines, heroin, and xylazine. Between 2019 and 2023, fatal drug overdoses increased by over 40% in Boston, with the heaviest toll among Black and Latinx residents.[35]

In 2023, the opioid overdose mortality rate for Black residents was 131% higher than the rate for white residents. The rate for Latinx residents was 48% higher than the rate for white residents.

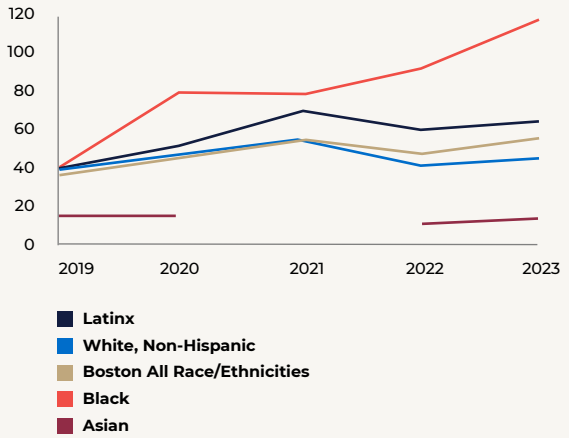
Many factors contribute to a person's risk for substance use and overdose. Structural racism, adverse childhood experiences, poverty, trauma, incarceration, mental illness, and homelessness are key risk factors. In addition, Bostonians of color, particularly in poorer Black, Latinx, and indigenous communities, do not have the same access to preventive care and treatment as white residents.[36]

Opioid overdoses are concentrated in neighborhoods with higher rates of unemployment, lower education, and lower household income.[37] And there are stark racial and ethnic differences in the treatment and support provided to individuals following an overdose hospitalization. One study found that in Boston, when Black and Latinx people were hospitalized for opioid overdose, they were 49% and 31% less likely to receive follow-up substance use treatment than white residents.[38] Without post-overdose treatment and care, individuals are more likely to die from a future overdose.

Given the scope of the opioid epidemic and the tragic toll it takes in certain communities, the City of Boston and BPHC have committed extensive resources to addressing it. This includes dedicated outreach, resources, harm reduction methods, residential treatment programs, and more.[39] In addition to significant allocation of City funds, federal grants and support from the State's Bureau of Substance Addiction Services are instrumental in this work. Recent Massachusetts opioid settlement funds supplement the response. Early data from 2024 suggests that the trend in fatal overdoses may be reversing.[40] At this pivotal moment, we must strengthen our commitment to evidence-based public health.

Drug Mortality Rate by Race/Ethnicity and Year, 2019-2023

Deaths per 100,000 residents



DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

DRUG OVERDOSE

OUR STRATEGIES

To reduce premature mortality from drug overdoses across the City, BPHC is committed to furthering its efforts to:

- **Connect individuals to treatment.** When people know how and where to get help for SUD or overdose, they are more likely to seek treatment and care. By delivering information and direct care services, BPHC is working to ensure that anyone seeking treatment for SUD or overdose can get the care they need. We work closely with the State as well as community health centers and hospitals to coordinate care and refer people to drug treatment programs.
- **Expand harm reduction.** Harm reduction strategies like increasing access to naloxone (which reverses opioid overdoses), drug checking and fentanyl test strips, clean syringes and other drug use supplies save lives. BPHC will continue to expand and explore innovative access to evidence-based harm reduction services, showing up with compassion and building trust with people who use drugs.[41]
- **Ensure opportunities for housing.** Low-threshold shelter has a stabilizing effect, providing people with a safe place to sleep, storage for their belongings, ability to come and go, access to clinical and social services, regular meals, and housing navigation services.[42] Being unhoused can put people at greater risk of fatal overdose. One study on people experiencing homelessness in Boston found that drug overdose accounted for one in four deaths among this population from 2003-2018.[43] In close collaboration with the Mayor's Office of Housing, BPHC is providing housing options and resources for individuals experiencing SUD.
- **Increase youth awareness and engagement.** Looking ahead to the future generation, we must prevent substance use disorder before it happens. We are working in partnership with young people to empower them and provide educational material and messages to youth and their families about substance use and social-emotional learning. We support youth in becoming health leaders within their own communities, and we coordinate prevention efforts between public, private, and nonprofit sectors.

SPOTLIGHT

Together in action

To reduce drug overdoses in Boston, we are leading several strategic programs.

Naloxone Access and Education programs distribute naloxone and train people who use drugs, service providers, and family members on how to recognize an overdose and administer naloxone. Through a new CDC-funded initiative (Boston Overdose Data 2 Action) and opioid settlement-funded community grants, naloxone distribution and overdose reversal training are being expanded throughout Boston.

In 2024, BPHC distributed 23,101 naloxone doses and trained 3,010 individuals across 203 trainings.

BPHC is also expanding our data collection efforts to better track drug-related deaths among our residents and to evaluate this and other interventions.

CARDIOMETABOLIC DISEASE

Cardiometabolic risk factors are a group of conditions that often occur together, including diabetes, pre-diabetes, hypertension and obesity, and are a major cause of heart disease. Heart disease includes conditions such as coronary artery disease, heart failure, and arrhythmias. Type 2 Diabetes is the most common type of diabetes, accounts for approximately 90% of all cases, and is a leading cause of cardiovascular morbidity and mortality. The prevalence of type 2 diabetes has increased significantly, largely due to escalating rates of obesity among adults and children. These conditions affect all Bostonians, but people of color and residents of lower-income neighborhoods in Boston are disproportionately impacted.

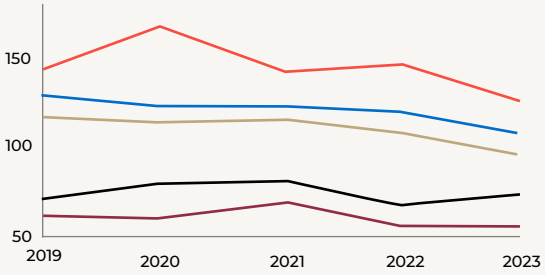
Compared to white Bostonians, Black Bostonians are three times more likely to die from diabetes. Latinx Bostonians are nearly twice as likely compared to white Bostonians.

There are many reasons for the glaring disparities in early death from cardiometabolic conditions. Structural and institutional racism, and related social determinants of health, play a significant role. Boston's past history of discriminatory housing policies has led to neighborhoods with limited open spaces, inadequate grocery stores, and unacceptable levels of environmental pollutants. These factors create barriers to physical activity and healthy eating, which affect risk of heart disease, stroke, and diabetes.[44] Barriers to accessing healthcare services which is critical to prevention and treatment are an ongoing challenge for our city's historically marginalized communities.

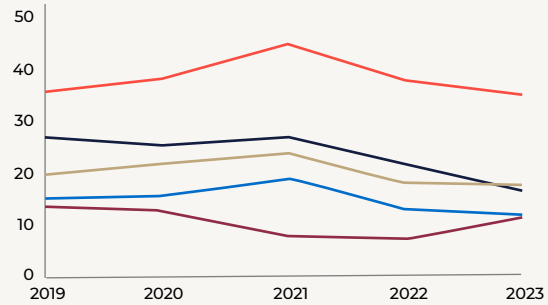
Hypertension is a major risk factor for heart disease and stroke. In addition to heart disease and stroke, untreated or sub-optimally controlled hypertension can lead to a range of disabling and deadly chronic illnesses including kidney disease, vision loss, and sexual dysfunction. Black adults are disproportionately affected and have the highest rate of hypertension in Boston. Chronic exposure to racism, weathering and allostatic load, which refers to the accumulations of physiologic changes due to chronic stressors in daily life, has been associated with development of hypertension.[45] In our analysis, higher rates of hypertension were observed among adult Bostonians with less education or lower household income, or who were unemployed, older, or living in publicly supported housing.[46] Of note, hypertension among children is a growing concern, particularly among children of color. Recent studies have noted an increase in pediatric hypertension largely due to the obesity epidemic.[47]

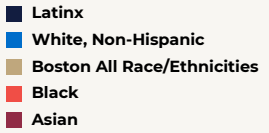
In partnership with several City departments, the State, external funders, and community-based partners, we are investing further into this long-standing driver of early death.

Heart Disease Mortality Rate by Race/Ethnicity, 2019-2023
Deaths per 100,000 residents



Diabetes Mortality Rate by Race/Ethnicity, 2019-2023
Deaths per 100,000 residents





DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

CARDIOMETABOLIC DISEASE

OUR STRATEGIES

To reduce disparities in cardiometabolic health outcomes, BPHC is working to:

- **Create economic mobility opportunities for individuals at risk.** Wealth and health are closely linked. To reduce the burden of cardiometabolic diseases in Boston, BPHC works to enhance economic opportunities and mobility for all residents, including through our new partnership with Atrius Health Equity Foundation and Boston Community Health Collaborative mentioned on page 10 of this report. We focus on supporting those who have historically been denied opportunities to build wealth and maintain health.
- **Improve access to nutritious, affordable, culturally relevant food.** Access to healthy, affordable, unprocessed or minimally processed food is essential for cardiometabolic health as it is important for preventing obesity and hypertension and reducing cholesterol. We are working to make nutritious and culturally relevant food accessible for all residents through improved policies, expanded resources, and greater public awareness of the link between nutrition and cardiometabolic health. BPHC collaborates with several community-based and neighborhood organizations, the Mayor's Offices of Food Justice and Early Childhood, and Boston Public Schools.
- **Improve access to safe spaces for active living.** Safe, public spaces enable adults and children to be physically active as part of their everyday lives. BPHC collaborates with the Boston Parks Department to ensure that our parks are welcoming to everyone as places to engage in healthy activity. We also work with the Boston's Streets Cabinet and other partners to make streets safer and more accessible for active living.
- **Expand disease screening and management.** For many people with heart disease and diabetes, early detection and ongoing management with a health care team is the difference between life and death. But many residents have limited access to medical screenings and services. BPHC collaborates with community health centers, hospitals, insurers, and CBOs to improve access as well as public awareness of these life-saving resources.

SPOTLIGHT

Together in action

To implement our strategies around cardiometabolic health, BPHC leads these and other collaborations and programs:

Boston REACH is a partnership with the City's Office of Food Justice, Streets Cabinet, Office of Early Childhood, and community partners in East Boston and Mattapan. With funding from the Centers for Disease Control and Prevention's Racial and Ethnic Approaches to Community Health Grant, Boston REACH increases access to fresh, healthy food in Boston's food pantries; affordable fruits and vegetables at Boston farmers markets; safer streets for walking, biking, and taking transit; and quality healthy childcare programs that prioritize nutrition and physical activity for children ages 0 to 5.

PREVENTABLE CANCER

Cancer is one of the leading causes of death in Boston, despite the fact that many cancers can be prevented or treated when detected early.

Preventable cancers — including breast, cervical, colorectal, lung, and prostate — affect many Bostonians. But there are significant differences in rates and premature mortality from cancer based on race and ethnicity.[48] For instance, the rate of colon cancer is highest among Black Bostonians.

Black men in Boston are 50% more likely to die from colon cancer than white men.

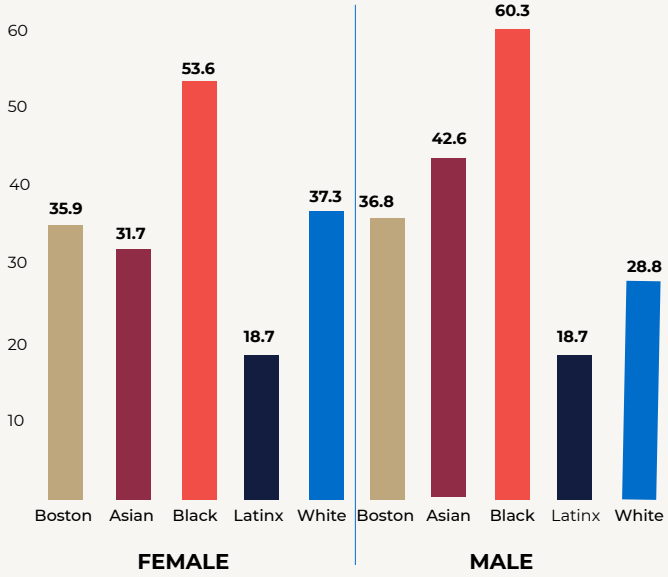
Social determinants of health, including employment, income, and housing, play an important role in cancer mortality. The physical environment in which people live or work can raise cancer risk substantially. Exposure to indoor and outdoor air pollution, for example, increases risk of various lung conditions, including lung cancer.[49]

There are stark differences in the opportunities to live or work in healthy physical environments based on race, ethnicity, and income. These differences exist because of the long legacy of discrimination, disinvestment, and exploitation. They are linked to systems, policies, and practices such as redlining and predatory lending.

Cancer screening, such as mammograms and colonoscopies, can lead to early detection and life-saving treatment. But cancer screening rates are also informed by a range of determinants of health, including health insurance, employment status, and access to childcare.[50]

Obtaining cancer screening can be challenging for any number of reasons, but the barriers are greater for Bostonians who, for instance, cannot take time off from work or lack the childcare or transportation they need to get to an appointment. Without routine screenings, early detection and treatment, which should be accessible to all Bostonians, these cancers will continue to contribute to premature mortality and lower life expectancy.[51]

All Invasive Cancer Premature Mortality by Sex and Race/Ethnicity, 2019-2023 Combined
Age-adjusted rates per 100,000 residents under age 65



DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

PREVENTABLE CANCER

OUR STRATEGIES

To improve cancer outcomes for all Bostonians, the BPHC is working to:

- **Reduce environmental exposures.** The air we breathe, the water we drink, the food we eat, and the materials we use to do our jobs can all impact cancer risk. BPHC seeks to reduce exposures to cancer-causing agents in the city through regulatory enforcement and collaboration with the Boston Inspectional Services and Environment Departments.
- **Reduce tobacco and nicotine use and exposure.** We will continue to protect Bostonians through enforcement of nation-leading regulations that prevent environmental tobacco and nicotine exposure in workplaces and prevent youth initiation by prohibiting the sale of tobacco and vaping products to residents under 21 and restricting the sale of products that target youth of color, including menthol products, blunt wraps, and inexpensive cigars. We also work to empower residents to quit smoking. Our work continues as we explore every policy, system, environmental, and programmatic tool at our disposal to decrease tobacco use and reduce the disproportionate burden of tobacco-related disease.
- **Increase community education and awareness.** The information and messaging people receive can make a difference in their health behaviors. BPHC aims to normalize and promote early detection behaviors, like cancer screening tests, especially in high-risk populations where screening earlier would save lives. BPHC works with community-based organizations to develop messaging and interventions to shift behaviors.
- **Ensure access to screening.** When people have easier access to cancer screenings, they are more likely to get screened. BPHC works to make screening more accessible, convenient, and affordable through community health centers and other community-based locations as well as through insurance coverage. BPHC also encourages healthcare providers to use guideline recommended screening tests for early detection.
- **Provide more connections to care.** People are more likely to get treatment for cancer when they are supported and encouraged by healthcare providers, especially in their own communities. BPHC seeks to improve access to cancer treatment for residents who are diagnosed with cancer through increased collaboration with the community health centers and local hospitals, including Dana Farber Cancer Institute.

SPOTLIGHT

Together in action

To promote our cancer-reduction strategies, BPHC leads this and other initiatives:

Colorectal Cancer Campaign is a partnership between BPHC and the Colon Cancer Coalition to help save lives from colon cancer. Because colon cancer screening can help catch cancer early when it is most treatable, BPHC and the Coalition launched a multilingual campaign in 2024 to encourage early screening, especially in Black and Latinx communities.

LIVING WELL AT EVERY AGE

In addition to addressing the leading causes of premature mortality, BPHC is promoting the physical and mental health of all Boston residents at every stage of life. We are focused on eliminating persistent health disparities that span all ages, often starting early — sometimes even before birth — and lasting through old age. From preterm birth to age-related dementia, there are significant disparities based on race, ethnicity, income, education, and neighborhood. BPHC is working to eliminate these gaps and help all Bostonians thrive at every stage of life.

SPOTLIGHT

Together in action

To promote mental health across Boston's diverse residents, BPHC is engaged in targeted initiatives, including:

Workforce Pathway Investments are collaborations with UMass Boston and Franciscan Children's Hospital as well as Boston Public Schools. The goal is to prepare diverse, youth-facing mental health practitioners to serve Boston communities through training and fieldwork in Boston schools, Boston Centers for Youth and Families, and other settings. Over five years, this work will support more than 600 people pursuing behavioral health careers in Boston.

MENTAL HEALTH

From our youngest residents to our oldest, living long and well includes both physical and mental well-being. Much as there are persistent health disparities in Boston when it comes to common physical health conditions, there are similar gaps in mental health outcomes.

Most physical health conditions, including the leading causes of premature mortality, are intimately linked to mental health. For instance, anxiety, depression, and adverse childhood events (ACEs) can increase the risk of diabetes, heart attack, stroke, and cancer.[52,53,54] Depression following a stroke is a common phenomenon.[55] There is also a close connection between mental health, ACEs, and substance use disorder.[56]

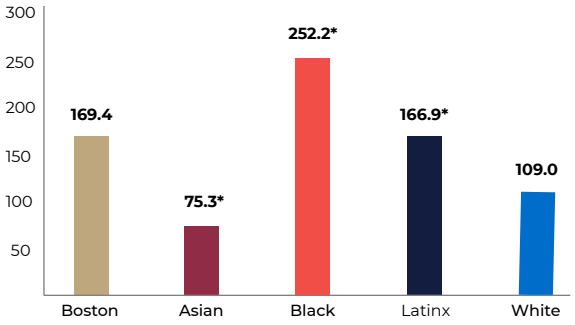
Additional social and economic factors — such as prolonged exposure to racism, discrimination, oppression, stigma, or exclusion — can lead to sustained stress, further affecting mental and physical health outcomes.[57]

Young people of color have higher rates of attempted suicide than white youth. LGBTQ+ youth, another population facing historic discrimination and exclusion, also experience higher rates of suicide, suicidal ideation, and self-harm than non-LGBTQ+ youth.[58,59]

Fewer Black and Latinx youth in Boston report feeling connected to someone at school and report having emotional support than white youth.

To support Bostonians of all ages — across race, ethnicity, sexual orientation, gender identity, and more — BPHC relies on many invaluable partners. Through BPHC's Center for Behavioral Health and Wellbeing, the Child, Adolescent, and Family Health Bureau, and the Office of Violence Prevention, we collaborate extensively with Boston Public Schools, the Mayor's Office of Youth Engagement & Advancement, local hospitals and community health centers, and community-based organizations (CBOs). Boston EMS is also changing the way it responds to behavioral health crises to provide non-ambulance response to low-acuity calls, and we are developing other community-based response efforts to mental health crises.

Any Mental Health Visits* Among Ages 0-18, 2021
Age-specific rates per 10,000 residents



NOTE: * Denotes significant differences between racial or ethnic group and White residents.

DATA SOURCE: Acute Hospital Case Mix Database, Massachusetts Center for Health Information and Analysis.

SPOTLIGHT

Together in action

(continued)

Early Childhood Mental Health Programming is a collaboration with the Children's Services of Roxbury and the Department of Children and Families to support children under four years old who are connected to the state child welfare system or BPHC family support services and in need of early social and emotional development. Over four years, the initiative will train at least 37 family partners, nurses, social workers, and case workers; provide services for 275 children; screen 1,800 families for social and emotional wellness; provide more behavioral health services; and increase awareness of early childhood mental health.

Mental and behavioral health have become an urgent issue for Boston residents, especially for youth of color and LGBTQ+ youth. In response, Mayor Wu asked BPHC to take bold actionable steps to address the worsening youth mental health crisis in Boston, dedicating approximately $12 million from the federal American Rescue Plan toward the effort. In 2022, BPHC established the Center for Behavioral Health and Wellness to provide an evidence-based, effective, and meaningful response.

MENTAL HEALTH

OUR STRATEGIES

To address health disparities in mental and behavioral health throughout Boston, BPHC is working to:

- **Prioritize support for our youth.** Support early in life — from early childhood through adolescence — has a critical impact on long-term mental health. BPHC continues to expand programming that promotes youth mental health. We work closely with essential partners, including the Boston Public Schools, the Mayor's Office of Youth Engagement and Advancement, and the Mayor's Office of Early Childhood.
- **Promote diversity in the mental health workforce.** People of color are more likely to have a positive health care experience with a provider of the same race or ethnicity.[60] BPHC aims to recruit, expand, and train a more diverse, culturally competent, trauma-informed behavioral health workforce that fully represents and reflects the diversity of Boston communities.
- **Strengthen local organizational capacity and resources.** To complement Boston's world-class mental health care facilities, it is critical that people have access to resources within their own communities. We aim to build the capacity of local CBOs serving marginalized youth, particularly youth of color and/or LGBTQ+ individuals, who face significant behavioral health disparities.
- **Expand education and awareness.** Mental health is still highly stigmatized in many Boston communities. We are engaging in evidence-based communication strategies to reduce stigma by increasing awareness, education, and dialog around mental health and wellness with a focus on Boston's Black, Latinx, LGBTQ+, and otherwise historically marginalized youth, as these are the youth bearing the greatest impact of today's youth mental health crisis.

INFANT AND MATERNAL HEALTH

Stark racial and ethnic health inequities exist in infant mortality and maternal morbidity and mortality in Boston.[61] Infant mortality rates, birth weight, and gestational age serve as key markers for measuring the well-being of pregnant birthing people and their infants.

Black infants in Boston experience approximately twice the rate of preterm birth and low birthweight, and approximately three times the rate of death compared with white infants.

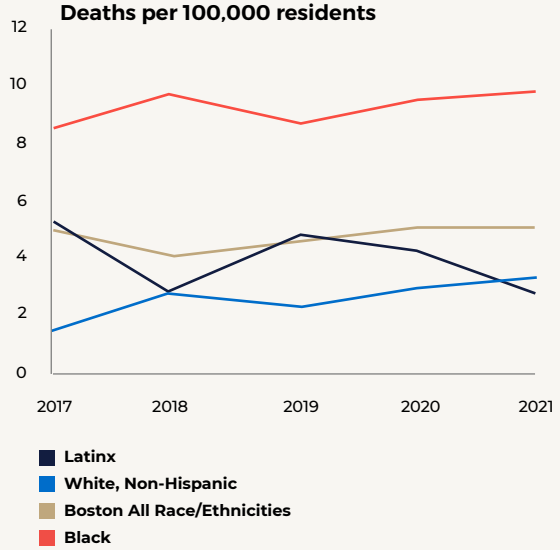
In Massachusetts, Black women are nearly twice as likely to die during pregnancy or within one year postpartum than white women.[62]

Research shows that individual behaviors — such as what a pregnant person smokes or drinks alcohol — do not explain these racial disparities. The root causes of these inequities include community-level social determinants of health such as substandard housing and limited access to high quality nutrition in their neighborhood grocery stores and markets. Furthermore, racism, discrimination, and implicit bias experienced throughout life and within the health care system contribute significantly to poor health outcomes among birthing people and children.[63]

Several studies highlight the role of non-socioeconomic factors on maternal and infant outcomes. One study noted that Black infants and mothers in all income brackets have higher morbidity and mortality than their white counterparts. In this study the mortality rate, low birthweight and preterm birth rates for infants of Black women in the highest income bracket were significantly higher compared to white women in the lowest income bracket.[64]

These findings suggest that higher socioeconomic status is not protective against the impact of racism among Black pregnant birthing individuals. Indeed, racism leads to chronic stress and weathering, undermines the health of mothers and their infants, irrespective of their economic status.[65] Institutional racism (i.e. racism experienced within the healthcare system) also creates barriers to accessing care and leads to the provision of lower quality care.

Infant Mortality by Maternal Race/Ethnicity, 2017-2021
Deaths per 100,000 residents



DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

INFANT AND MATERNAL HEALTH

OUR STRATEGIES

At BPHC we work to protect the lives and health of mothers and infants by promoting the support systems they need to not only survive but thrive. We aim to:

- **Enhance perinatal systems of care.** The perinatal period is a particularly critical time for families. To support them during this stage, BPHC developed a new community-based doula program that connects families to doula support, trains community members as doulas, and educates providers and residents on doula services.
- **Empower parenting families.** Parenting families deserve access to culturally and linguistically appropriate services but often experience barriers to accessing them. BPHC is expanding our home visiting programs and partnering with families to connect them to critical health resources, education, and services.
- **Engage fathers and other caregivers.** Children benefit from actively engaged parents, yet fathers continue to experience structural barriers to connection and involvement with their children, such as lack of paid paternal leave, custody challenges, and carceral involvement. BPHC partners with the National Association of City and County Health Officials (NACCHO) and the National Fatherhood Initiative to develop strategies to support fathers and other caregivers.
- **Mobilize communities to promote maternal and child health.** Boston families suffer from systems and structures that create inequities in birth outcomes. BPHC partners with community advocates to advance systems-level policies to advance maternal and child health, and is currently developing a Fetal and Infant Mortality Review (FIMR) program.

SPOTLIGHT

Together in action

To reduce disparities in infant and maternal health, BPHC engages in several targeted initiatives to support families, including:

Fetal and Infant Mortality Review (FIMR) is a community-based, action-oriented process to review fetal and infant deaths annually and use the findings to guide policies and programs to advance maternal and child health equity. BPHC's FIMR arose through the advocacy and energy of the Community Action Network (CAN) through the Boston Healthy Start Initiative. The CAN is a coalition of parents, providers, and advocates working together to reduce racial inequities in infant mortality and poor birth outcomes.

Boston Community Perinatal Health Project is a new community-based doula program. Doulas provide guidance and support to a pregnant woman during labor. The project connects families to doula support, trains community members as doulas, and educates providers and residents on doula services.

HEALTHY AGING

BPHC is committed to ensuring that our older adult population has the resources they need to sustain quality of life as they age.

BPHC launched its first-ever Healthy Aging Program in 2024, building on work begun in 2021 to support residents with Alzheimer's disease and related dementias (ADRD). The Massachusetts Health Aging Collaborative estimates that about 16% of Bostonians age 65 and up, or about 13,000 residents, currently have a dementia diagnosis, and the total number of Boston residents living with ADRD is expected to increase.[66]

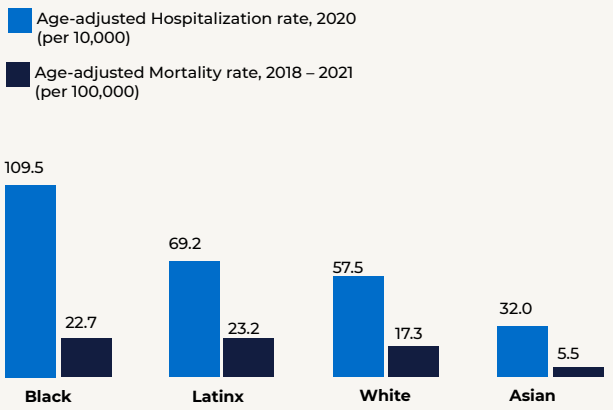
Studies show strong links between dementia and cardiometabolic diseases like hypertension, diabetes, and obesity, which not only drive premature mortality but also put Black and Latinx Bostonians over age 65 at disproportionate risk of developing dementia compared to white residents. Other known modifiable risk factors include excessive alcohol consumption, smoking, physical inactivity, and depression, some of which are also higher among Boston's Black and Latinx residents.[67]

Research shows that social determinants of health also play a role in cognition. Lower socioeconomic status, lower education levels, employment in manual labor, early- and late-life food insecurity, early-life adversity, higher levels of stress, social isolation, and racial discrimination all increase dementia risk.

By working closely with Boston's Age Strong Commission, the City's department supporting Bostonians 55 and older, we aim to address dementia's modifiable risk factors and the social determinants of brain health holistically through strong partnerships, effective public education, data-driven programming, and prioritizing input from older adults.

Over the next 40 years, dementia is projected to disproportionately impact Black and Latinx residents, rising 70% among whites, 100% among Blacks, and 400% among Latinx Bostonians.

Hospitalization and Mortality Rates for Alzheimer's/Dementia



DATA SOURCE: Acute Hospital Case Mix Database, Massachusetts Center for Health Information and Analysis and Boston resident deaths, Massachusetts Department of Public Health

HEALTHY AGING

OUR STRATEGIES

Promoting brain health and reducing dementia risk are key parts of healthy aging. We are building an environment where Boston's older adults can live long and well. Working alongside Boston's Age Strong Commission, we aim to:

- **Promote infrastructure for aging.** As people age, their needs shift, and they sometimes go unnoticed and unmet, especially in under-resourced communities. At BPHC we are committed to supporting City infrastructure to promote healthy aging, working in partnership with the Age Strong Commission and other City agencies to make sure older adults have continued access to critical services, programs, and social connections.
- **Expand support for Alzheimer Disease and Related Dementias (ADRD).** We aim to reduce the impact of ADRD among our older residents through implementation of a new strategic plan to meet the needs of residents living with — or at high risk of — ADRD. [68]
- **Create new opportunities for community engagement.** With age, people often feel less involved and less empowered in their lives and communities, which can undermine cognitive, mental, and physical health. BPHC strives to engage communities around healthy aging, and find opportunities to meet older residents where they are — in homes and in the community.
- **Capture relevant data regarding older adults.** Data helps ensure that we're addressing real needs with effective solutions. We are expanding our data infrastructure to measure healthy aging and to inform the development of strategic programming at BPHC in partnership with the Age Strong Commission and other City departments.

SPOTLIGHT

Together in action

To promote healthy aging for all Bostonians, BPHC engages in these and other strategic initiatives:

BPHC launched the Boston Building Our Largest Dementia (BOLD) Infrastructure Project with funding from the CDC's Healthy Brain Initiative. BOLD aims to build systems and support policy changes for people living with Alzheimer's disease and related dementias. Using insights from our stakeholder coalitions and community needs assessments, BPHC created a strategic plan to promote dementia risk reduction, access to screening and diagnosis, and supports for dementia caregivers.

JOIN US!

To reach our goal of eliminating the life expectancy gap in Boston by 2035, BPHC is proud to work alongside many invaluable partners, including other government agencies, community-based organizations, the health care sector, and private funders.

Closing the life expectancy gap and reducing premature mortality requires continued and deepened collaboration, investment, and commitment across sectors.

We invite organizations and individuals who share our vision for Boston to join us in this work. Together — and only together — we can make Boston a place where all residents *Live Long and Well.*

Interested in how you can support this work?

Whether you are an external funder interested in supporting the City on this work or a local organization seeking to partner on our *Live Long and Well* goals, please reach out to us at **info@bphc.org** with your name and your interest, and we'll be in touch.

ENDNOTES

Methodology: Data for this report are primarily sourced from the Health of Boston (2023, 2024) reports. For details on the data sources and methodology employed in the analysis please refer to these reports available at boston.gov/bphc-data. We have updated some of our analysis to include data from 2022 and 2023. Please be advised that 2022-2023 data are preliminary and subject to change. Raw preliminary data may be incomplete or inaccurate, have not been fully verified, and revisions are likely to occur following the production of these data. The Massachusetts Department of Public Health strongly cautions users regarding the accuracy of statistical analyses based on preliminary data and particularly with regard to small numbers of events.

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