Springfield Health Equity Report

Looking at Health through Race and Ethnicity: 2019 Update

PUBLIC HEALTH INSTITUTE
OF WESTERN MASSACHUSETTS
PARTNERS FOR HEALTH EQUITY

HEALTH EQUITY STATEMENT

A historic legacy of social, economic and environmental inequities, such as racism and gender-based discrimination, are embedded in societal institutions and result in poor health. These unjust inequities affect communities differently with some bearing a greater burden of poorer health.

These inequities can influence health more than individual choices or access to healthcare.

PHIWM recognizes its responsibility to dismantle these injustices by promoting health through research, program evaluation, and coalition building that inform policy, organizational practice and system change that benefit all.

We encourage others to join in these efforts.

About the Public Health Institute of Western Massachusetts

The Public Health Institute of Western Massachusetts (PHIWM), formerly Partners for a Healthier Community, is a 501(c)(3) non-profit organization based out of Springfield, MA whose mission is to build measurably healthy communities with equitable opportunities and resources for all through civic leadership, collaborative partnerships, and policy advocacy. PHIWM is committed to improving the public's health by fostering innovation, leveraging resources, and building partnerships across sectors, including government agencies, communities, the health care delivery system, media, and academia.

Letter from the Executive Director

Five years ago, we released the first Springfield Health Equity Report lifting up the need to understand health inequities from a racial and ethnic perspective. We also brought to the fore a new framework highlighting social determinants of health – basic human needs – such as food, transportation, housing, access to safe public spaces, quality education and employment – as key to someone living a long and healthy life.

Over the past five years we have released other reports with local data highlighting inequities between sexes and people who identify as LGBTQ versus heterosexual status. There are several things that we know and believe have come from these reports: 1) We know that more people are having conversations and beginning to understand that health is supported or curtailed by opportunities available to them where they live, work, play and go to school; 2) We know that disaggregating health data by different populations can lead to policy and programmatic changes so that resources can be distributed appropriately to the people who need them; 3) We believe that continuing to highlight health inequities that are unfair, unjust and avoidable is one of the critical steps in achieving the Public Health Institute of Western MA's vision that all people in our region have what they need to lead a healthy life.

Data is powerful, as are multi-sector **collaborations**, and **interventions** that address individual needs as well as broad systemic changes. Perhaps most powerful, is the amplification of **stories** and **voices** of people that are battling adversity daily to secure basic needs for themselves and their families.

We hope you will read this report and think about how you and perhaps your organization, can contribute your strengths, creativity and innovation to reduce inequities in our region.

We look forward to working with you.

Thank you,

Jessica Collins
Executive Director
Public Health Institute
of Western MA

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Advancing Health Equity in Springfield

Our 2014 **Springfield Health Equity Report: Looking at Health through Race and Ethnicity** examined social and economic factors that impact health (social determinants of health) among communities of color in Springfield and the resulting health inequities. A legacy of unjust discriminatory policies, systems and practices has created barriers among communities of color to accessing social and economic resources and opportunities that support health. This report provides an update to the health data presented in the 2014 report. It is our hope that this update will help our community continue to explore and understand health inequities in Springfield so that we can take collective action towards our shared goal of better health for **all** Springfield residents.

» What is Health Equity?

Health equity means that all people have the **opportunity** to reach their highest level of health possible. Where we live, work, go to school and play substantially impacts our ability to be healthy.

Our health is largely determined by the social, economic, cultural, and physical environments we live in. Among factors that contribute to health, it has been estimated that less than a third of our health can be accounted for by our biological make-up or genetics. Modifiable social and economic conditions - known as social determinants of health - can greatly impact length and quality of life.[1] For example, studies have generally shown that people with greater incomes live longer, with one study finding that people with high incomes lived at least six and a half years longer than those living in poverty.[2] Too often, access to social and economic health-promoting resources (e.g. access to quality education; living in quality, safe housing) is determined by the environments people live in and is beyond an individual's control. As shown in Figure 1, among modifiable health factors, social and economic factors are considered to have the greatest impact (40%) on individuals' health, followed by health behaviors (30%), clinical care (20%), and the physical environment (10%).[3]

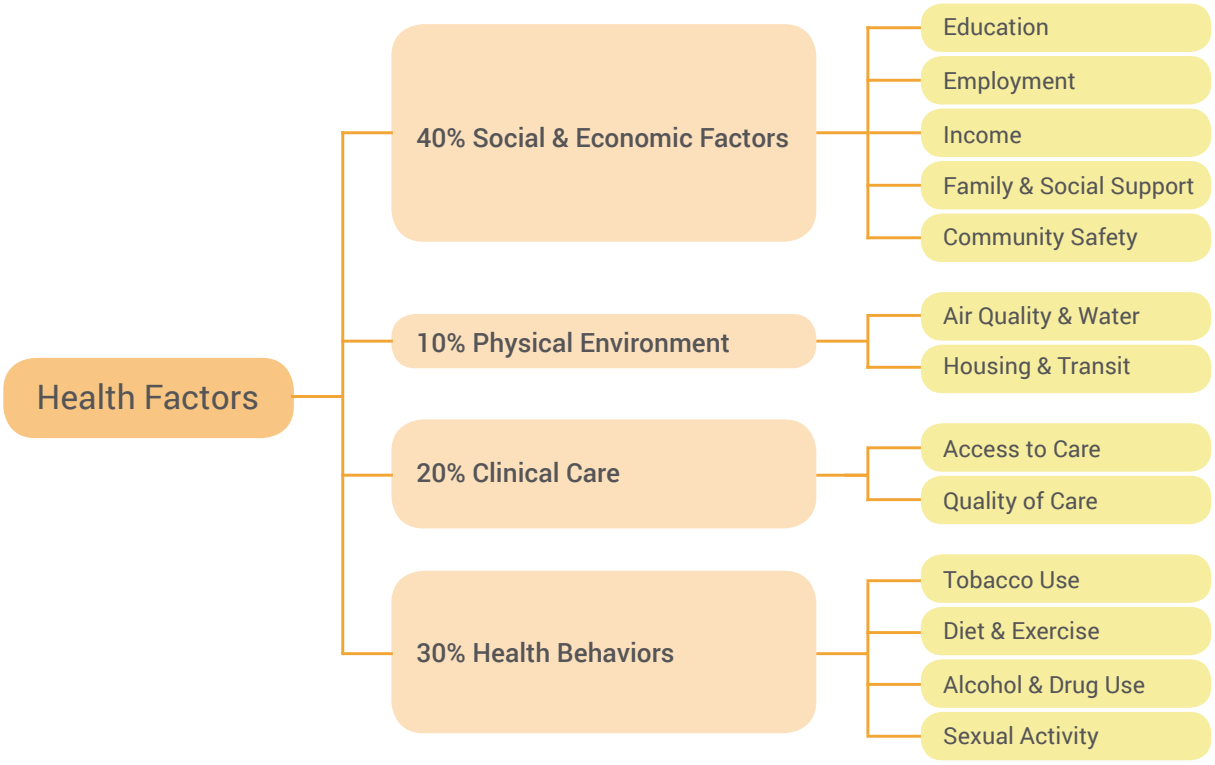


Figure 1.Population Health Model of Modifiable Health Factors
Source: Adapted from the Robert Wood Johnson Foundation, 2016

Achieving Health Equity

We can only achieve health equity when "everyone has the opportunity to attain their full health potential," regardless of their race, gender, education, sexual orientation, or economic background.[1]

As we work to build health equity in Springfield, it's important to recognize that health inequities are not simply a result of individual-level behaviors. Inequities are driven by an **underlying culture of systemic, institutional, and structural oppression** that historically and currently influences how people are treated and how opportunity is distributed. For example, redlining was a government sanctioned practice by the federal Home Owners' Loan Corporation that identified high risk neighborhoods, often communities of color, that were redlined and denied access to loans.[4] Though discriminatory redlining practices were later banned, the resulting racial and economic residential segregation persist today. Dr. David Williams of Harvard University describes racial residential segregation, a form of structural racism that has become embedded in our society, as one of the most damaging forms of racism impacting

health. Restricted opportunity among people of color in these neighborhoods results in lower income, education, and home ownership rates which impacts health.[5]

> We must eliminate health differences that are unnecessary, avoidable, unfair, and unjust.[6]

A "one size fits all" approach will not ensure that people have what they need to be healthy (Figure 2) and can even perpetuate inequity. To advance health equity, strategies and solutions must be tailored to meet needs and address structural barriers that keep people from having the opportunity to be healthy.

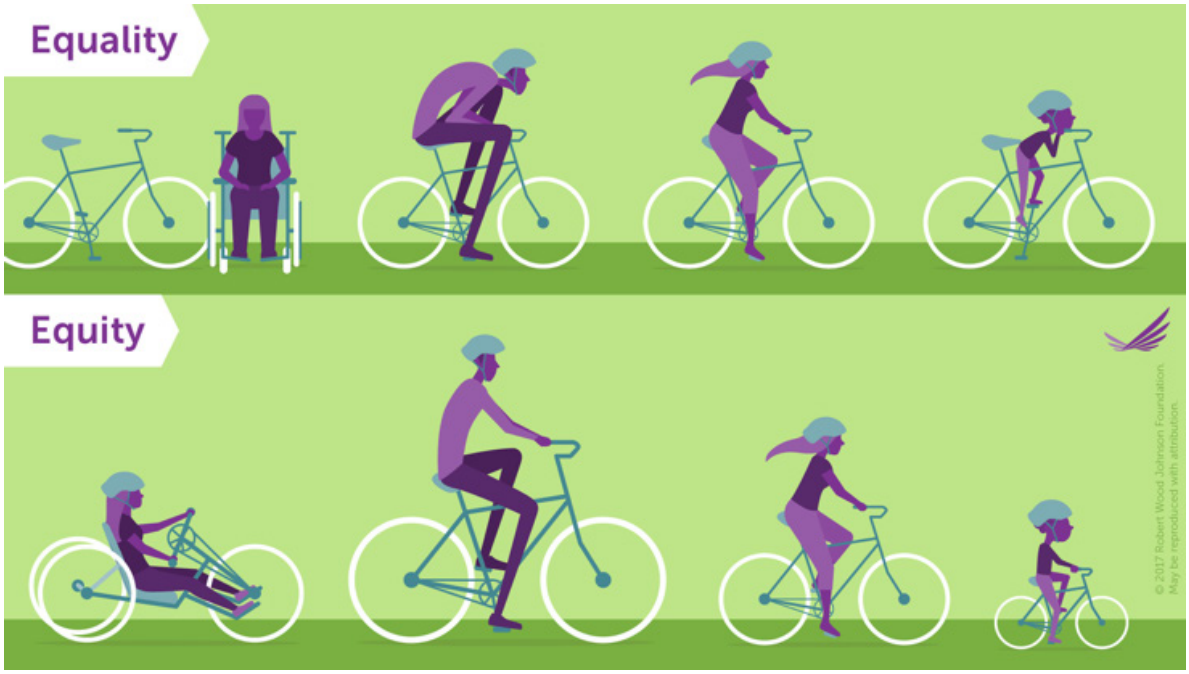


Figure 2. Visualizing Health Equity: One Size Does Not Fit All
Source: Robert Wood Johnson Foundation, 2017

Creating Health Equity in Springfield through Opportunity

Change takes time and as you will see in our report, health inequities persist. However, change is happening and through our continued collective efforts, we can create environments that support health.

Below are examples of ongoing collaborative work in Springfield that have led to changes in environments, policies and systems that impact health. Some of the examples focus on social and economic determinants of health such as education, and others focus more directly on health and access to medical care. Examples include:

- A cross-sector collaborative launched a community wide communications campaign, implemented evidence-based programs, and prioritized policy advocacy in Springfield leading to decreases in chronic absenteeism in preschool and grades K-4, as well as, increases in 3rd grade reading proficiency.
- Partnerships between the city and community organizations have worked to promote education, clinical services, and policies that have positively impacted graduation and dropout rates among teen parents and helped substantially decrease teen birth rates in Springfield.
- A regional coalition has worked successfully to implement multiple strategies for asthma prevention, including education and policy efforts to reduce environmental triggers and increase access to medical care. Recent school nurse data show a decline in the number of children being sent home from school or to the emergency department due to asthma.
- Community partnerships have achieved numerous environmental, systems and policy changes, including enhancing the built environment for walking and bicycling, urban agriculture, school nutrition, and increasing age for purchasing tobacco products.

About Springfield

Springfield is a diverse, multi-ethnic city with people of color accounting for the majority (67%) of the city's population. As shown in Figure 3, an estimated 44% of Springfield residents identify as Latino/a, 19% as Black, and 2% as Asian (Figure 3). Springfield also has a sizeable immigrant and migrant population. More than 10% of Springfield residents are foreign-born and nearly 16% of Springfield residents are migrants from Puerto Rico (U.S. Census, ACS, 5-Year Estimate, 2013-2017).

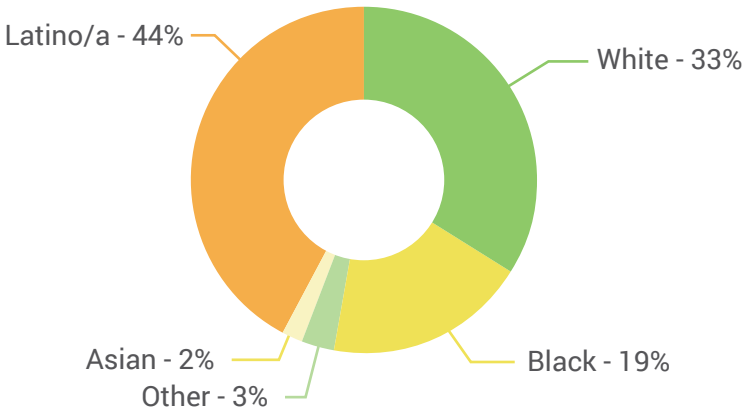


Figure 3. Racial and Ethnic Makeup of Springfield Residents
Source: U.S. Census Bureau, American Community Survey, 2013 - 2017

As discussed in the 2014 Health Equity report and continuing today, many Springfield residents, particularly those of color, experience numerous socioeconomic challenges which impact their health (e.g. limited economic resources, housing instability, food insecurity, poor housing conditions). Systemic oppression and structural racism, such as racial residential segregation, limit opportunities for many people of color in Springfield to access the resources they need to achieve their full health potential. For example, Springfield residents have a median family income of $41,485, less than half the statewide median family income of ($94,110), and almost 30% of all Springfield residents live below the Federal Poverty Line (US Census, ACS, 2013-2017). Springfield residents of color continue to disproportionately experience inequities in these social determinants.

Health Inequities in Springfield

Recognizing that health inequities exist for many communities of color in Springfield, we will focus on inequities among those who are Latino/a and Black as we did in our previous report because 1) they are the largest communities of color in Springfield, and 2) available data was limited for other racial and ethnic groups.

Premature Mortality

Premature mortality, which is defined as death before the age of 75, is a measure of overall community health because these deaths are considered preventable. As in our previous report, Springfield continues to have one of the highest premature mortality rates in Massachusetts when compared

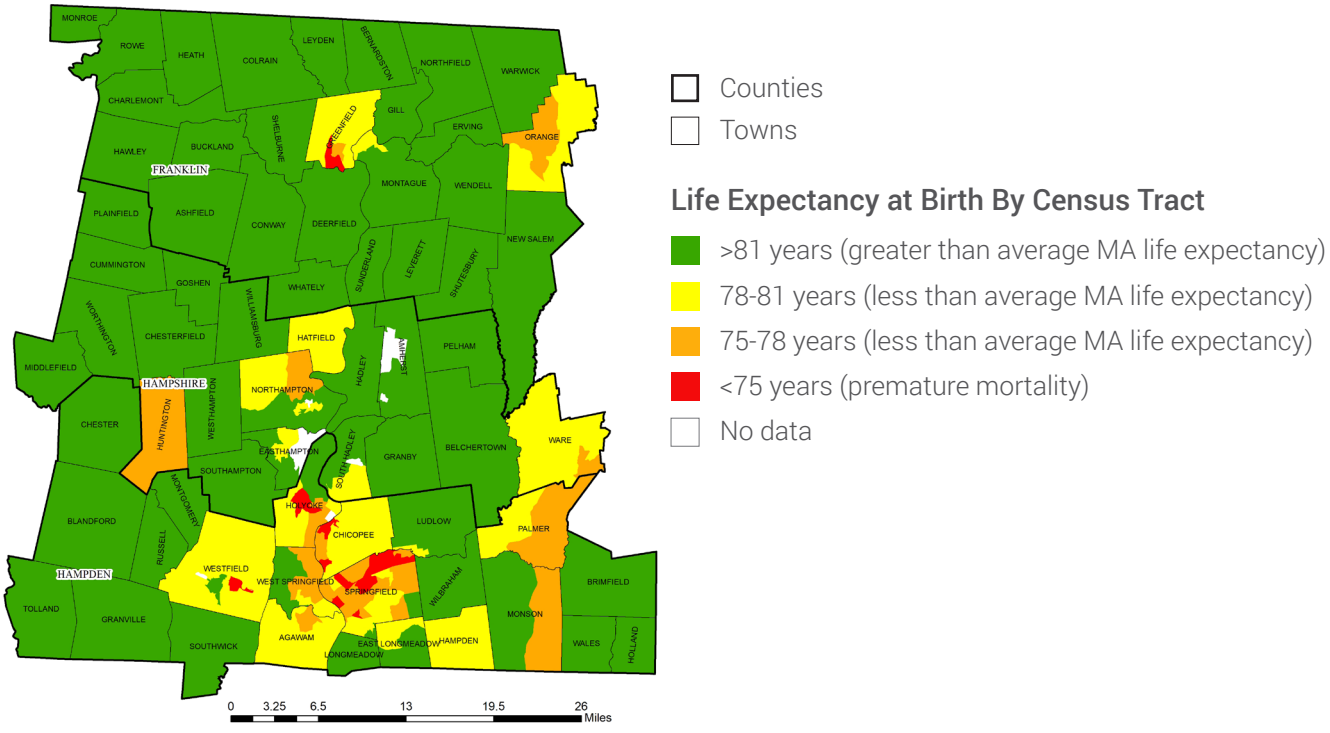


Figure 4. Life Expectancy at Birth by Census Tract
Source: National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for Massachusetts, 2010-2015]. National Center for Health Statistics. 2018. Available from: https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html

to other large communities with a rate in 2016 that was 56% greater than that of Massachusetts as a whole (441.0 vs. 282.2 per 100,000).[7] Although Massachusetts has one of the highest life expectancy rates in the nation (80.7 years), average life expectancy in most of Springfield's census tracts falls below state rates. Estimates vary substantially across Springfield, with the lowest life expectancy of 70.3 years found in an area the Metro Center neighborhood and the highest life expectancy of 81.2 years found in an area of the Forest Park neighborhood (Figure 4).

Maternal and Child Health

A child's health at birth can have long-term effects on future health and cognitive development. Measures like preterm birth, low birth weight, and access to prenatal care provide insight as to whether or not a child has a "healthy start" to life, while also serving as an indicator of mothers' health risks. Infant mortality rates and teen birth rates also can provide important insight about a community's overall health and well-being.[8]

Preterm Birth, Low Birth Weight, and Infant Mortality

Springfield infants were born preterm (11.0%) and with low birth weights (9.6%) at rates higher than that of the state as a whole in 2016 (MA: Preterm – 8.7%, Low Birth Weight – 7.5%)(MDPH, Birth Dataset, 2016). In Springfield, noticeable differences in these rates continued to exist by race and ethnicity, with Black women experiencing the highest rates of preterm birth (12.6%) and Black and Latina women both experiencing higher rates of low birth weight (Black – 12.9%; Latina – 9.5%) than White women in 2016 (Preterm Birth-9.5%; Low Birth Weight – 7.6%) (Figures 5 and 6).

Springfield also continued to experience high infant mortality rates when compared to the statewide rate in 2014 (6.5 per 1,000 live births in Springfield vs. 4.5 per 1,000 live births statewide)(MDPH, 2014), with large disparities existing among communities of color. Blacks continued to have the highest rates of infant mortality (12.1 per 1,000), with rates over double that of Whites (4.6 per 1,000) from 2012-2014 (MDPH, 2012-2014). The infant mortality rate among those who are Latina was comparable to that of Whites (4.4 per 1,000).

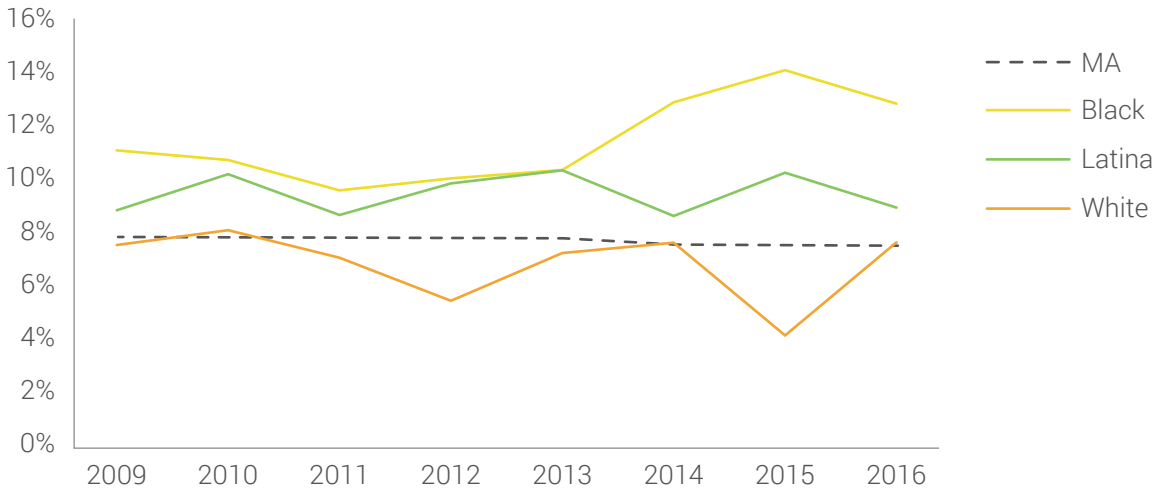


Figure 5. Percent of Low Birth Weight Births in Springfield by Race/Ethnicity, 2009 – 2016
Source: Massachusetts Department of Public Health, Birth Dataset, 2009-2016

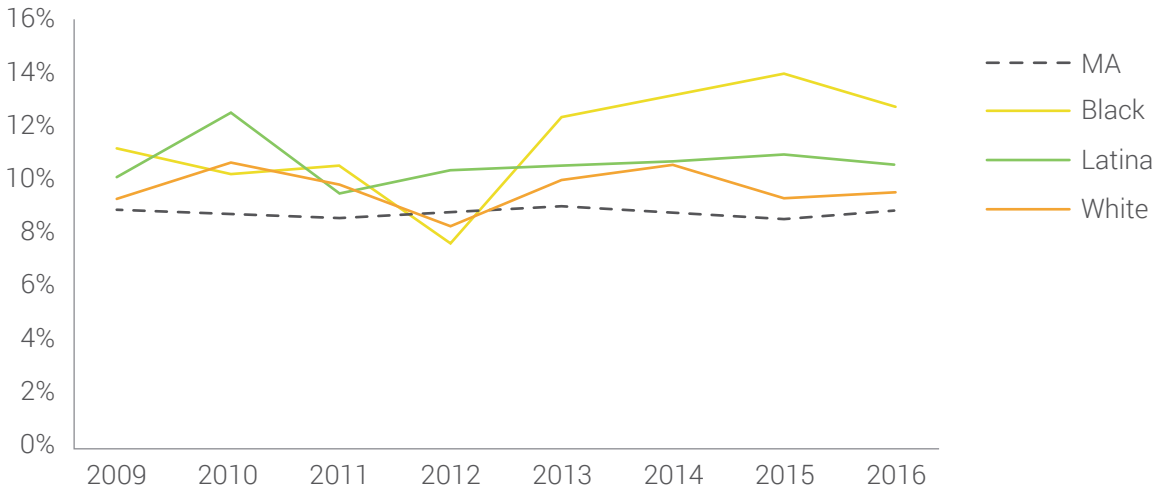
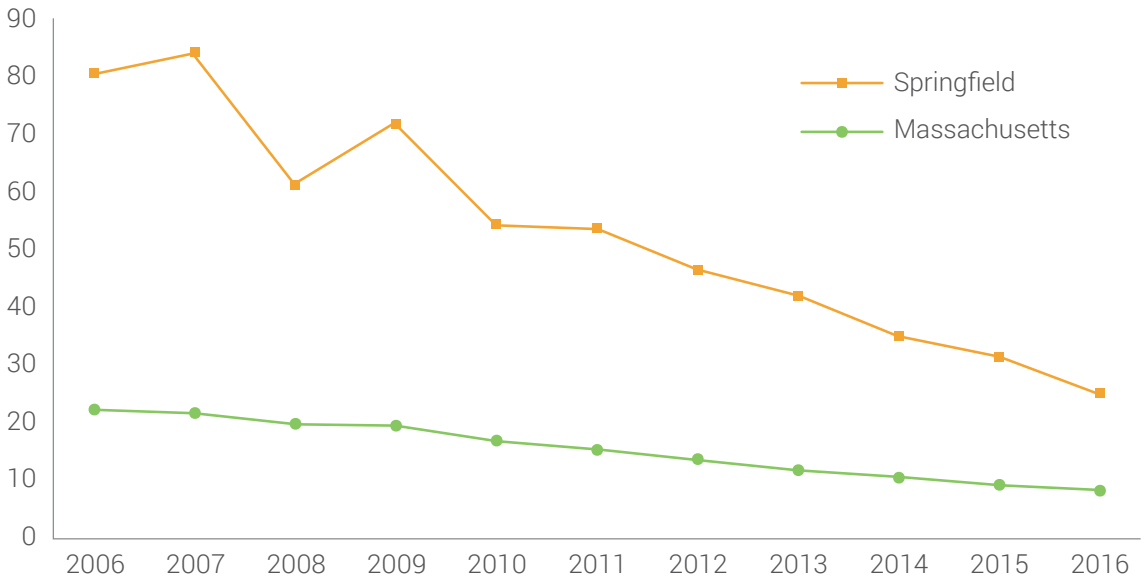


Figure 6. Percent of Preterm Births in Springfield by Race/Ethnicity, 2009 – 2016
Source: Massachusetts Department of Public Health, Birth Dataset, 2009-2016

Teen Births

Springfield continues to have a teen birth rate that is substantially higher than Massachusetts as a whole. In 2016, the teen birth rate in Springfield (25.2 births per 1,000 female teens aged 15-19) was nearly three times the Massachusetts teen birth rate of (8.5 births per 1,000 female teens aged 15-19) (MDPH, Birth Dataset, 2016). When compared to all babies born in Springfield in 2016, babies born to teen mothers were more likely to be at risk of being born preterm (12.2%) and at a low birthweight (14.6%). In 2016, Latina teens continued to have the highest teen birth rate in Springfield (43 births per 1,000) at rates almost 6 times that of White teens (7.3 per 1,000) followed by Black teens (10.6 births per 1,000).

Despite these inequities, significant gains have been made to lower the teen birth rate among all Springfield teens and to close the gap between the rate in Springfield and Massachusetts as a whole (Figure 7). As shown in Figure 11, the overall teen birth rate in Springfield has declined by 69% between 2006 and 2016.



Springfield Teen Birth Rates, 2006 – 2016
Source: Massachusetts Department of Public Health, Birth Dataset, 2009-2016, per 1,000 females age 15-19

Prenatal Care

Regular check-ups and screening tests during pregnancy are important factors in keeping a baby and mother healthy during pregnancy and identifying problems early. National guidelines suggest that women receive routine checkups once a month for weeks four through 28 of pregnancy, twice a month during weeks 28 through 36, and weekly from weeks 36 to birth. The Adequacy of Prenatal Care Utilization Index (APNCU) measures utilization of prenatal care based on the time when care is initiated and the frequency in which care is received, as measured by the ratio of actual visits to the expected number of visits.[9] Women who begin prenatal care within the first four months of pregnancy and receive at least 80% of the expected number of visits to their physicians are considered to have received adequate prenatal care.[10]

In Springfield, just under 80% of women received adequate prenatal care in 2016, which was slightly lower than that of the state as a whole (82.1%). Rates vary across racial and ethnic groups. Studies suggest that racial and ethnic disparities in receiving adequate prenatal care is linked to systemic injustices facing many individuals of color, including practitioners stereotyping women of color when providing care, and unequal education opportunities.[11]

Black women in Springfield were less likely than their White and Latina counterparts to receive adequate prenatal care (Figure 8) despite increases in Springfield overall and among Latina women over time. Similarly, Black Springfield mothers (66%) were less likely to begin prenatal care during the first trimester of pregnancy compared to White (71%) or Latina women (76%).

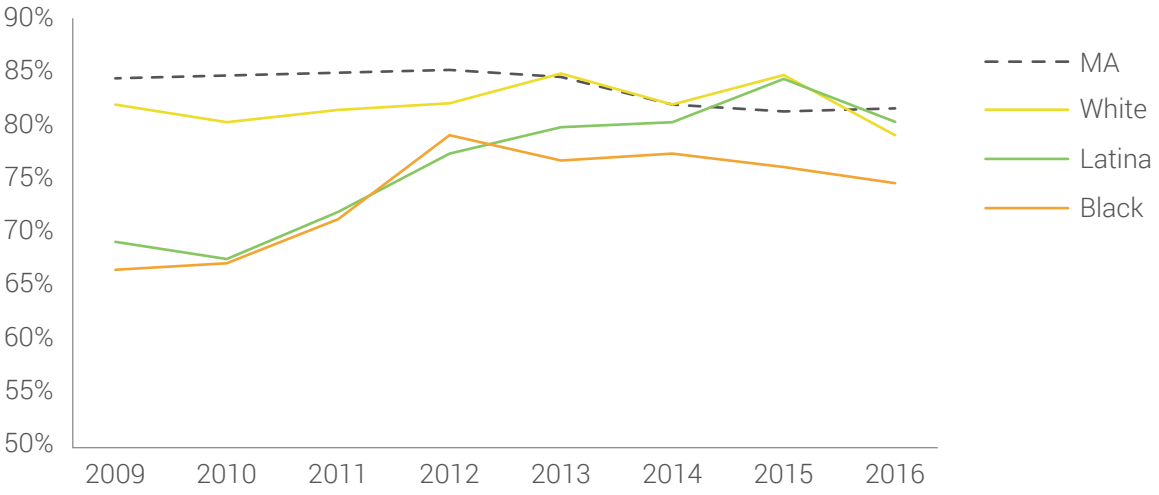


Figure 8. Percent of Women Receiving Adequate Prenatal Care by Race/Ethnicity in Springfield, 2006 – 2016
Source: Massachusetts Department of Public Health, Birth Dataset, 2009-2016

Smoking during pregnancy is another important factor impacting fetal growth. Rates in Springfield have substantially decreased over time with 7% of women reporting smoking during pregnancy in Springfield in 2016 compared to 13% in 2010 (MDPH, Birth Dataset). Smoking during pregnancy continued to be highest among White women (13.4%) with rates over double that of Black and Latina women (MDPH, Birth Dataset, 2016).

Respiratory Health

Asthma and chronic obstructive pulmonary disease (COPD) are significant public health problems that result in substantial financial burdens, strain on the health care system, and lost workplace productivity. Springfield residents continue to be impacted by asthma with a high prevalence among school children in 2016-2017 (Figure 9). These respiratory conditions also disproportionately affect people of color and low-income individuals.[12] While Springfield residents were admitted to the emergency room for asthma (1,502 vs 559 per 100,000) and COPD-related issues (1,761 vs 841 per 100,000) at rates more than double that of the state (MDPH, Case Mix Data, 2012-2015), disparities were especially prevalent among Springfield's Latino/a and Black residents.

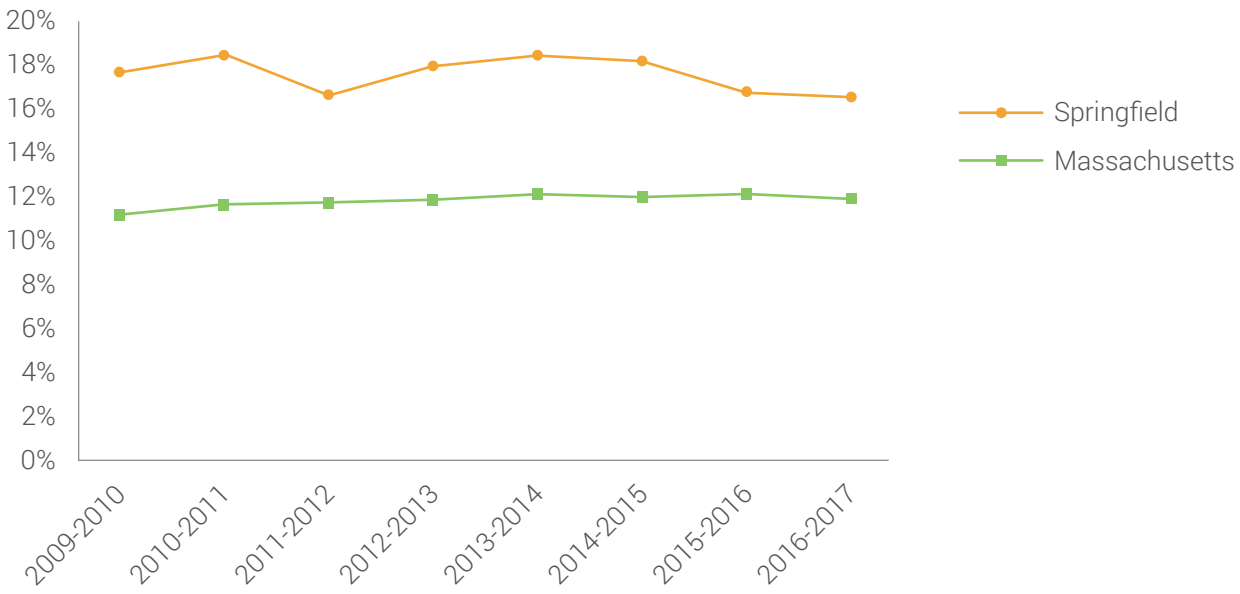


Figure 9. Pediatric Asthma Prevalence, 2016 – 2017
Source: MDPH, Environmental Public Health Tracking System

Asthma

Latino/a and Black Springfield residents continued to be at substantially greater risk of experiencing complications from asthma than White Springfield residents (Figure 10). Latino/a residents visited the emergency room for asthma-related complications at a rate nearly five times that of White Springfield residents, while Black residents had rates double that of Whites. Children age 0-14 also experienced these inequities with the highest rates among Latino/a children with rates double those of Whites (2,837 vs 1,107 per 100,000).

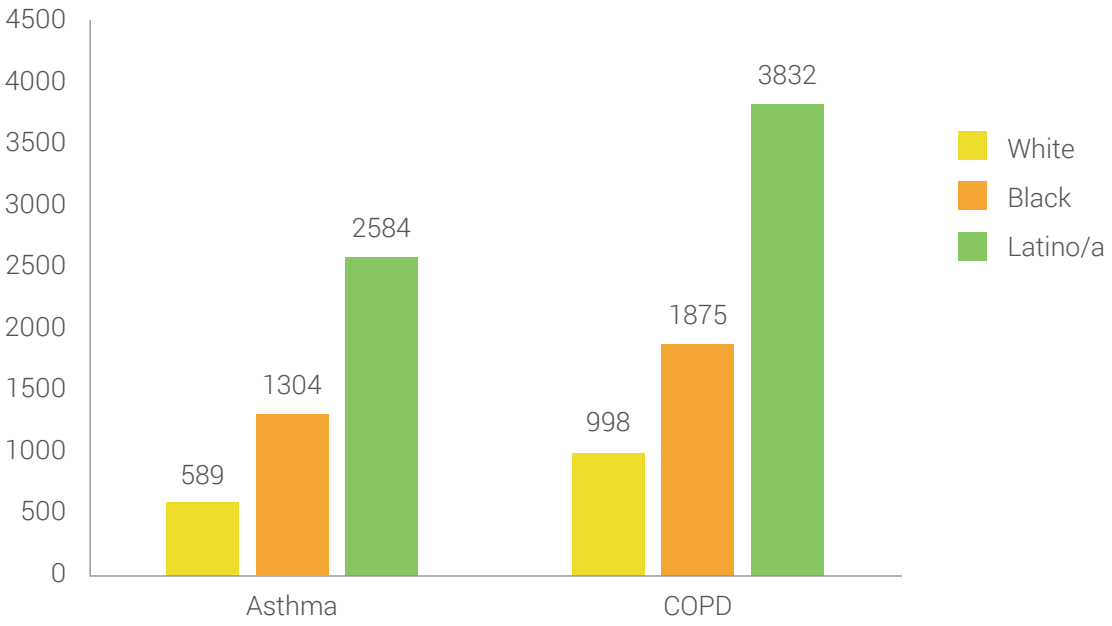


Figure 10. Springfield Asthma and COPD Emergency Room Visit Rates, 2012 – 2015
Source: MDPH, Acute Care Dataset; age-adjusted rates per 100,000

Chronic Obstructive Pulmonary Disease (COPD)

People of color in Springfield also continue to be at higher risk of COPD-related hospital visits. Latino/a residents were admitted to the ER at a rate almost 4 times greater than White residents and Blacks at a rate of almost two times that of Whites (Figure 10).

Chronic Disease

Chronic diseases are responsible for 70% of deaths in the United States and serve as a major driver in rising health care costs and disability. However, much of this burden can be reduced through prevention strategies that help individuals decrease tobacco use, decrease physical inactivity, improve nutrition, and take steps to lower their blood pressure. Increasing opportunities for individuals to engage in healthy behaviors is a vital step towards reducing the risk of chronic disease and improving well-being within the community.[13]

Obesity

Obesity is a complex health issue that is both a chronic health condition as well as a serious risk factor for other health conditions. Obesity puts individuals at an increased risk for many poor health outcomes, including diabetes, heart disease, stroke, osteoarthritis, and some cancers.[14] An estimated 37% of Springfield adults are obese, compared with 24% of Massachusetts residents statewide.[15,16]

Community-level dynamics, such as food access, education, and physical environment, are all contributing factors influencing obesity.[14] For many individuals, the ability to eat fresh foods and engage in exercise are limited by factors outside of their control, such as long work hours and commutes by public transit, lack of nearby grocery stores, or the absence of safe walking paths in their neighborhoods. Obesity prevalence is often highest among communities of color.[17]

Obesity during childhood can also lead to lasting health challenges that are detrimental to individuals later in life. During the 2016-2017 school year, school-based body mass index (BMI) screening data from the Springfield Public Schools indicates that 43% were overweight or obese (17% overweight, 26% obese). Rates were slightly higher among Latino/a and Black students (Black- 43% overweight or obese; Latino/a – 44% overweight or obese) when compared to White children (40.6% overweight or obese).

Cardiovascular Disease

Springfield residents experienced higher rates of cardiovascular disease hospitalization compared to the state as a whole from 2012-2015 (1,672 vs. 1,248 per 100,000)(MDPH Acute Care Dataset, 2012-2015). As illustrated in Figure 11, people of color in Springfield were at disproportionate risk of being admitted to the hospital for cardiovascular disease. Latino/a Springfield residents were admitted at a rate 70% greater than that of White residents, while Black Springfield residents were admitted at a rate 40% greater than that of Whites.

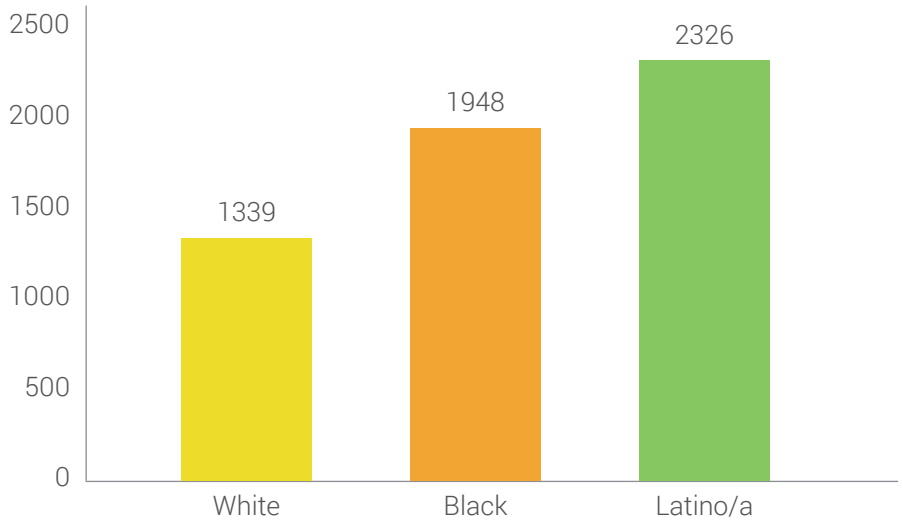


Figure 11. Springfield Cardiovascular Disease-Related Hospitalization Rates by Race/Ethnicity, 2012 – 2015
Source: MDPH, Acute Care Dataset; age-adjusted rates per 100,000

Diabetes

Springfield residents experienced high rates of morbidity from diabetes compared to the state as a whole with rates double that of the state (270 vs 138 per 100,000) (MDPH, Acute Care Dataset, 2012-2015). Latino/a and Black Springfield residents were hospitalized for diabetes at a rate more than twice that of White Springfield residents (Figure 12).

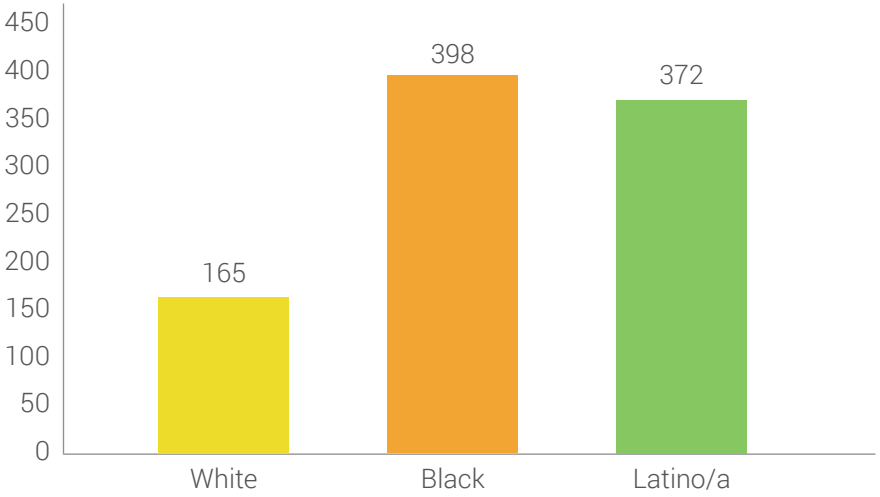


Figure 12. Springfield Diabetes-Related Hospitalizations Rates by Race/Ethnicity, 2012 – 2015
Source: MDPH, Acute Care Dataset; age-adjusted rates per 100,000

Mental Health

Mental health is essential to an individual's overall well-being, and is closely connected to physical health. Mental disorders are among the leading causes of disability in the United States and suicide remains the 10th leading cause of death.[18,19] Despite the availability of effective treatment, the majority of individuals diagnosed with mental disorders fail to receive treatment.[20] These disorders and barriers to treatment disproportionately affect people of color, which studies suggest may be the result of a number of factors including provider stigma and challenges detecting mental distress among people of color. Despite overall increases in rates of individuals seeking and receiving mental health treatment in recent years, racial inequities in mental health care remain higher than nearly any other health services area.[21]

Springfield residents continued to be hospitalized for mental health-related conditions more than twice as often as all Massachusetts residents (1,995 vs 853 per 100,000)(MDPH Acute Care Dataset, 2012-2015)(Figure 13). When examining by race/ethnicity, White and Latino/a residents continued to experience the highest rates of hospitalizations due to mental health conditions in Springfield. Statewide, the highest rate was among Black residents.

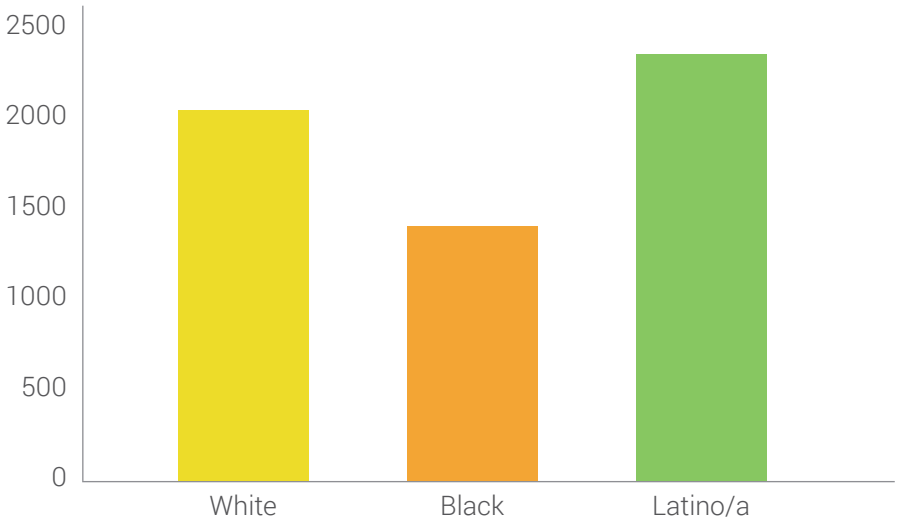


Figure 13. Springfield Mental Health Hospitalization by Race/Ethnicity, 2012 – 2015
Source: MDPH, Acute Care Dataset; age-adjusted rates per 100,000

In a 2018 Teen Health Survey of Springfield almost one third of eighth graders, experienced depressive symptoms, which was higher than the state rate of 19%. There were alarming rates of inequities by race/ethnicity with the highest rates among students who identified as Latino/a, Multiple Races and Asian (Figure 14).

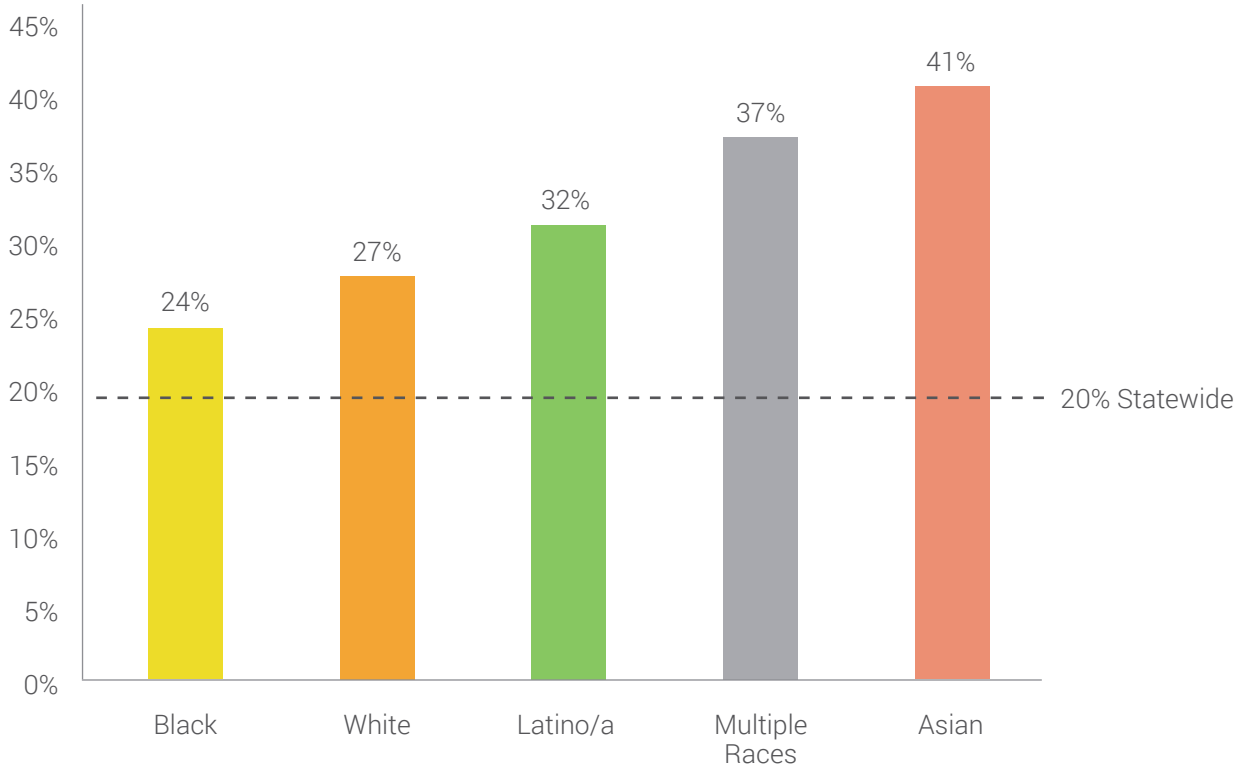


Figure 14. Percent of Springfield Public School 8th Graders Feeling Sad and Hopeless for Over Two Weeks by Race/Ethnicity

Source: Public Health Institute of Western MA; Mental Health Inequities among Springfield Teens, 2018

Limitations

It is important to note that these data are snapshots that cannot always capture all of the changes occurring in our community. The data we present in this report is influenced by variable cycles in data collection and the timing of data releases at the local, state, and national level. Small sample sizes may limit our ability to disaggregate data, and for some health outcomes, population-level data is not currently collected outside of hospital data. Also, note that data on race and ethnicity is often self-reported and used to categorize people into a specific racial/ethnic group, which does not reflect the continuum of racial and ethnic identity represented in reality.

Moving Forward

As illustrated in this report, Springfield residents continue to experience health inequities compared to the state as a whole. Black and Latino/a residents are disproportionately impacted with poorer health outcomes.

Strategies for Advancing Health Equity in Springfield

Through continued collaboration, we can build on our prior successes and work together to advance a culture of health and create a healthier Springfield. Here are prioritized recommendations for how to strengthen our collective work to eliminate health inequities:

- Involve residents in interpreting data, identifying community based challenges and opportunities, and creating and testing solutions to address challenges.
- Ensure health is a shared community value by prioritizing well-being and health in policy-making and community engagement – called Health in All Policies.
- Increase private/ business sector involvement in existing multi-sector collaborations to advance economic solutions that foster well-being and create a healthier community for all Springfield residents.
- Encourage policies that decrease racial and socioeconomic segregation and increase opportunities for equitable access to high quality schools, grocery stores, and community resources.
- Prioritize action that will build economic prosperity for residents of Springfield.

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