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Penn Medicine Princeton Health
2021 Community Health Needs Assessment

Final Report

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Health Resources in Action
Advancing Public Health and Medical Research

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EXECUTIVE SUMMARY

Background
Improving the health of a community is essential to enhancing the quality of life for residents in the region and supporting future social and economic well-being. In 2021, Penn Medicine Princeton Health (Princeton Health) engaged Health Resources in Action (HRiA), a non-profit public health consultancy organization, to conduct a community health planning process to gather information about the health of residents in Princeton Health's three-county region (Mercer, Middlesex, and Somerset). This effort includes two phases: (1) a community needs health assessment (CHNA) to identify the health-related needs and strengths of the region and (2) a strategic implementation plan (SIP) to identify major health priorities, develop goals, and select strategies and identify partners to address these priority issues across the region. This report provides an overview of key findings from the community health needs assessment (CHNA).

Princeton Health has conducted similar community health needs assessments in 2012, 2015, and 2018. Priority areas identified in the 2018 CHNA included chronic disease, obesity, healthy eating and active living; behavioral health; health care access; maternal and child health; and elder health. Princeton Health and its partners developed and implemented a range of strategies to address these identified needs (see Appendix A).

Context for the Community Health Needs Assessment
The coronavirus (COVID-19) pandemic coincided with this assessment and impacted both the CHNA data collection process and topics, as well as concerns of participants during discussions in focus groups and interviews. A wave of national protests for racial equity also coincided with the CHNA. As part of a movement for racial justice, national attention was focused on how racism is embedded in every system and structure of our country, including housing, education, employment, and healthcare. This context impacted the CHNA, including the design of data collection instruments and the input that was shared during interviews and focus groups, as well as through survey responses.

Community Health Needs Assessment Methods
The community health needs assessment was guided by a participatory, collaborative approach, which examined health in its broadest sense. This process included integrating existing secondary data on social, economic, and health issues in the region with quantitative information from a community health survey and qualitative information from ten focus groups with community residents and service providers and nine interviews with community stakeholders. Focus groups were conducted with seniors, parents, EMTs, public health officers, young adults, members of the Korean population, LGBTQ residents, local food pantry recipients, school nurses, and members of the Hamilton YMCA Board of Directors. Interviewees included members of the Capital Region Minority Chamber of Commerce, church leaders, Latino residents, health care providers, community leaders, and Princeton Health staff. The community health survey was administered online and disseminated through multiple channels to individuals who live or work in Mercer, Middlesex, and Somerset Counties. A total of 2,355 people completed the survey.

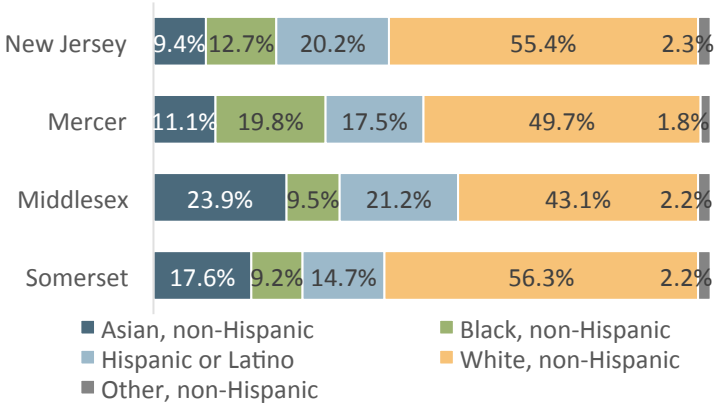
Key Findings

The following provides a brief overview of key findings that emerged from this assessment.

Community Social and Economic Context

- **Overall Population:** In 2019, the total population of the three counties served by Princeton Health was over 1.5 million, about 17% of New Jersey's total population. Between 2014 and 2019, the population of Middlesex and Somerset counties grew slightly while the population of Mercer County decreased slightly.
- **Age Distribution:** The age distribution in the three counties largely reflects that of the state overall. Slightly over 20% of residents in each of the counties are under 18 years old while about 15% are over age 65.
- **Racial and Ethnic Diversity:** The three counties PMPH serves are racially and ethnically diverse, which focus group participants and interviewees saw as a positive attribute, contributing to the cultural vibrancy of communities. Middlesex County is the most diverse of the three counties, with the largest proportion of Asian, non-Hispanic (23.9%) and Hispanic (21.2%) residents. Diversity in the region has increased since the 2018 CHNA.

Racial and Ethnic Distribution, by State and County, 2015-2019



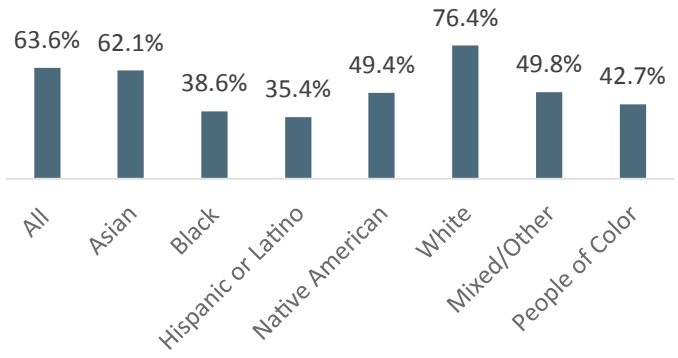
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

- **Income and Poverty:** While the central New Jersey area is seen as affluent, there are residents who are less well off. Robbinsville, Montgomery, and Hopewell were described as wealthier, while Hamilton, Plainsboro, and Cranbury were seen as towns with higher-need residents. The median income of Asian residents in Mercer County ($151,813) is over three times higher than Black residents ($46,675) and Hispanic residents ($50,742) in the same county. The poverty rate is highest in Mercer County (7.9%) and 1 in 5 Hispanic or Latino Mercer County families live in poverty.
- **Employment:** Prior to 2020 and the onset of the COVID-19 pandemic, the unemployment rates in New Jersey and three counties were decreasing. Unemployment rates were nearly double among Black (9.8%), American Indian and Alaska Native (8.5%), and Native Hawaiian and Other Pacific Islander (6.7%) residents as compared to Asian (4.2%) and White, non-Hispanic residents (4.6%).
- **Education:** Interviewees and focus group participants reported that the region has strong schools and a well-educated population. Proximity to higher education institutions was seen as a substantial community asset. A higher proportion of residents in all three counties than in the state overall have a college degree or higher.

> *"People are well educated, they seek out information, they're well-informed."*
>
> – Key Informant

- **Housing:** Similar to previous CHNAs, participants expressed concern about the high cost of housing, high property taxes, and lack of a focus on and development of affordable housing. In all three counties at least 20% of owners contribute 35% or more of their household income to housing costs and approximately 40% of renters do so. Housing ownership is the lowest among Hispanic or Latino (35.4%) and Black (38.6%) residents and highest among Asian (62.1%) and White (76.4%) residents in New Jersey.

Percent Owner-Occupied Households by Race/Ethnicity, New Jersey, 2017



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2013-2017 and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas

- **Transportation:** Perspectives on transportation in the region varied. While some focus group participants and interviewees described the region as having good public transportation, including NJ Transit, Amtrak, and buses, others shared that those without a car face challenges, including seniors and low-wage workers.
- **Crime and Safety:** Similar to the previous CHNA, Mercer County experiences higher rates of both violent and nonviolent crime than the other two counties. However, crime rates have declined between 2017 and 2019 in all three counties, and crime was not identified as a pressing concern in focus groups or interviews.
- **Discrimination and Racism:** Discrimination and racism were mentioned by a couple of participants but were not prominent themes in interviews or focus group conversations. Community health survey data reveal substantial differences in reported discrimination among racial or ethnic groups when trying to get medical care. Black respondents (56.5%) were over 17 times more likely to report discrimination based on race or ethnicity than White respondents (3.3%) and nearly 50 times (39.1% Black; 0.8% White) more likely to report discrimination based on language.

Community Resources and Assets

CHNA participants identified many strengths and assets in their communities including:

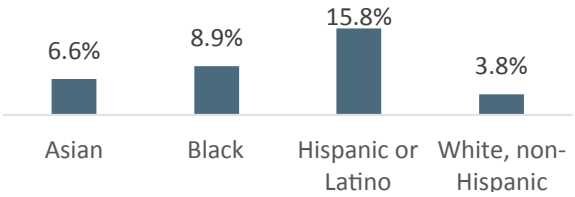
- **Amenities and Social Cohesion:** Many participants described their communities as tight-knit, family-oriented, and a nice place to raise children. They appreciated the many amenities available in the region including the shops, walking paths and bike trails, the beach, and active senior centers. Proximity to highways and New York and Philadelphia were also seen as assets. Strong social ties and generosity were seen as key community assets. Numerous respondents shared that community members care about their neighbors and the community. They pointed to the all-volunteer EMS services, substantial supports for seniors, and high volunteerism among residents.
- **Human and Economic Resources:** Residents in the PMPH service area were described as largely well-educated. Additionally, local schools and higher education institutions were seen as substantial assets. Interview and focus group participants also described diversity as a key community strength, and most community health survey respondents reported community diversity (i.e., people of many races and cultures) as a strength.

- **Health Care Resources:** Focus group participants and interviewees stated that residents have many health care options, with the ability to choose among several hospitals, specialty care of every type, proximity to care in the larger cities, and dentists, physicians, pharmacies, and urgent care nearby in most, but not all, towns. Those in senior living reported that they have some access to on-site and home-based medical services. Participants also mentioned that community-based programming is strong.

Health Care Access and Utilization

- **Access to Health Care Services:** Although the region is rich in medical resources, some interviewees and focus group participants reported challenges finding providers. The two health care services community survey respondents most frequently ranked as hard to access were mental health and alcohol/drug treatment/prevention services. For survey respondents experiencing challenges in healthcare access, the most frequent barriers were long wait for an appointment, lack of evening or weekend services, and offices not accepting new patients.
- **Obtaining Health Insurance:** The proportion of uninsured residents was lower in the three counties than in the state overall. In New Jersey, Hispanic or Latino residents were over four times as likely to be uninsured as compared to White, non-Hispanic residents. Low rates of insurance among young people were mentioned by several participants.

Percent Population Uninsured by Race/Ethnicity, New Jersey, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

- **Affordability of Health Care Services:** Focus group participants and interviewees stated that high co-pays and deductibles and lack of clarity about costs put health services out of reach for some residents. Additionally, over a quarter (28.3%) of community health survey respondents identified cost of prescription medications as a barrier to accessing health services, and 16.9% of respondents also identified cost of care as a barrier.
- **Use of Telehealth:** Since the COVID-19 pandemic, virtual visits have been increasingly utilized in the health care system, offering promise to address some long-standing access and provider challenges, including in behavioral health. While focus group participants and interviewees spoke about the opportunities of telehealth, they also shared challenges for some residents, including the cost and access to technology and knowledge about how to utilize it.
- **Transportation:** Participants in interviews and focus groups this year mentioned that residents without access to a car face challenges accessing health care, and 17.3% of community health survey respondents identified lack of transportation as a barrier to accessing health services. Transportation barriers have several consequences according to interviewees and focus group participants. Residents may forgo medical care because transportation is inaccessible or too expensive. Seniors shared that some older community members are choosing to utilize health care systems that offer good transportation services.
- **Language Barriers and Cultural Competence:** Language barriers continue to exist for some patients, especially those who are lower income. Reaching undocumented residents was seen as an important priority. Participants of a focus group saw opportunity to improve provider competency in caring for LGBTQ+ patients.
- **Health Care Hesitancy/Delay:** Several participants expressed concern that residents are delaying needed health care. Participants linked this to effects of the pandemic and concerns about safety, but they also see this as related to growing mistrust of science, health care and misinformation. This

has had consequences for the health care system, including people who present with more acute conditions and increased use of emergency departments and urgent care, according to participants.

- **Navigating Health Care for Seniors:** Navigating the health care system was also mentioned as a challenge by a few participants, mostly seniors who often interact with multiple health care providers and systems. While health care systems often have discharge planners, care coordinators, and social workers who help with this, some focus group participants and interviewees believed more could be done to support patients and families. Another related issue for seniors and those with multiple chronic conditions is medication management and participants mentioned a need for greater support for patients to manage their medication.

Community Health Outcomes and Behaviors

- **Overall Community Health Status and Health Concerns:** The majority of community health survey respondents in the three counties reported that overall their community's health was "very good" or "excellent", a proportion similar to that in 2018. The top three personal health issues identified by survey respondents for residents and their families were chronic disease, neuroscience issues, and mental health issues. The top community health concerns identified by survey respondents were access to access to affordable housing, COVID-19, and access to health care services.
- **Morbidity and Mortality:** The top five causes of death are the same across the three counties and the state and include heart disease, cancer, unintentional injury, stroke, and chronic lower respiratory disease. Black and White residents had higher death rates compared to Hispanic and Asian residents. Diabetes is one of the top five causes of death among Asian and Black residents.
- **Healthy Eating and Physical Activity:** Focus group participants and interviewees reported that food insecurity in the region has grown since the COVID-19 pandemic as residents faced unemployment and other economic challenges or were unable to get to grocery stores due to lack of transportation or safety concerns. Focus group participants and interviewees shared that in some communities, residents lack access to nutritious food, having to rely on local corner stores and bodegas. In addition to healthy eating, physical activity was seen by focus group participants and interviewees as a driver to prevent chronic disease. The proportion of adults who report having had no leisure time for physical activity rose between 2014 and 2017.
- **Overweight and Obesity:** As in prior years, obesity was mentioned by focus group participants and interviewees as a substantial health concern in the PMPH service area, with communities of color especially affected. Between 2014 and 2017, obesity rates rose in all three counties and the state, with nearly 1 in 3 adults in Mercer County and around 1 in 4 adults in Middlesex and Somerset Counties reported being obese in 2017.
- **Heart Disease:** Age-adjusted death rates due to heart disease were lower in Middlesex and Somerset counties in 2019 than in the state overall. Heart disease was not a prominent theme in interviews or focus groups; rates declined slightly between 2015 and 2019 in all three counties and the state.
- **Diabetes:** Diabetes emerged as a chronic disease of great concern to interviewees and focus group participants, with communities of color especially affected. Adult diabetes rates increased in the state, and in Mercer and Middlesex counties between 2014 and 2017 while they decreased for Somerset County.
- **Cancer:** Cancer is the second leading cause of death in all three counties and in the state of New Jersey. Age-adjusted cancer incidence declined between 2014 and 2017 in the three counties, with Middlesex County experiencing the greatest decline. Among the three counties, Somerset had the highest rates of breast cancer incidence, Middlesex had the highest rates of cervical cancer incidence, and Mercer had the highest rates of prostate, colorectal, and lung cancer incidence.

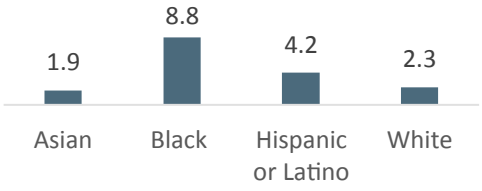
While mammogram rates remained roughly the same between 2014 and 2017, cervical cancer screening rates decreased during the same period.

- **Asthma:** Unlike the 2018 CHNA, asthma was not mentioned in focus groups or interviews. Self-reported rates of asthma among adults in 2017 was highest among adults in Middlesex County than in Mercer and Somerset counties, yet below the statewide rate.
- **Behavioral Health:**
    - *Mental Health:* Focus group participants and key informants identified mental health as a key health concern for residents, one that has been exacerbated by the pandemic. As in 2018, mental health was a concern seen as affecting all age groups in the community. Focus group participants and interviewees stated that anxiety and depression among children and adolescents was high, stemming from factors such as isolation during the pandemic, the impact of social media, and consequences of intergenerational mental health issues. Mental health concerns identified among adults included depression and anxiety, hoarding, as well as more severe mental illness. Among seniors, participants considered depression to be most common, and was connected to loss of independence, social isolation, and aging. Comments about existing mental health services mirror those shared in 2018: the region needs more mental health providers, including psychiatrists and social workers, in-patient beds, school counselors and social workers, and those skilled at addressing trauma.

> *"The need for behavioral health services in our community is skyrocketing."*
>
> – Key Informant

    - *Substance Use:* Substance use continues to be a challenge for the service area, as it was in previous CHNAs. According to focus group participants, substance use in the three counties has increased in recent years and many participants pointed to the effects of the pandemic on substance misuse. Drug poisoning mortality rates increased across the three counties and the state overall between 2015 and 2019. Data about substance use treatment admissions show that treatment for alcohol and heroin addiction comprised the largest proportion of admissions in 2019 in both the state and the three counties.
- **Infectious and Communicable Disease:** COVID-19 was the dominant topic in conversations about infectious and communicable diseases. Challenges with vaccination were most often mentioned, specifically misinformation and lack of trust.
- **Reproductive and Maternal Health:** Reproductive and maternal health concerns were not discussed extensively among focus group and interview participants. However, quantitative data indicate that Mercer County experiences higher adolescent birth rates and lower rates of prenatal care than the other two counties. Black mothers experienced births with no prenatal care and low birth weight births at higher rates than Asian, White, and Hispanic or Latino mothers across all three counties and the state. Additionally, Black infants die at more than three times the rate of White infants and more than four times the rate of Asian infants in New Jersey.

Infant Mortality Rate per 1,000 Births by Race/Ethnicity, New Jersey, 2018



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD). 2018

- **Oral Health:** Oral health was not frequently mentioned as an area of concern in the region among focus group participants or key informants. A higher proportion of adults in all three counties reported that they had a dental visit in the past year than the state overall, with White residents

more likely to have had a dental visit in the past year, as compared to Asian, Black, and Hispanic residents in New Jersey.

Community Suggestions and Vision for the Future

Community health survey respondents identified 1) quality educational opportunities, 2) safe, stable, quality, well-compensated work, and 3) increasing the number of services to help the elderly stay in their homes as top priority issues. Focus group members and interviewees identified the following additional suggestions for future programming:

- **Behavioral Health Services:** To address the growing need for behavioral health services, community members stated that the region would benefit from expanded services (including telehealth), stronger community-based providers and programs, more programs and services for children and youth, and addressing stigma and systemic barriers.
- **Prevention and Community Education Programs:** CHNA participants saw a need for more programs and supports that enhanced residents' ability to maintain and improve their health. Suggestions included expanding community-based health programs, partnering with schools and local corporations, enhancing and tailoring community outreach, ensuring programs are low-cost and consider incentives, and expanding education related to nutrition, behavioral health, and health care.

> *"They need to do more trainings in the community with less emphasis on people going to the hospital. They need to bring the hospital to the community."*
>
> - Focus Group Participant

- **Senior Health Services and Programs:** Senior focus group participants and those working with seniors identified several needs unique to this population. Participants suggested increasing in-home supports, providing caregiver support, enhancing support by patient advocates, providing education, and facilitating access to hearing aids and dental services.
- **Strengthened Health Care Services:** Several participants shared a vision of health excellence and continued high quality health care in the region. Specifics included continuing to expand hospital services, a continued focus on cultural competency, and enhancing connections to schools.
- **Attention to Social Determinants of Health:** Participants saw a need for a greater attention to social determinants of health as a pathway to improve community health including supporting affordable housing, expanding transportation, and enhancing the built environment.
- **Enhanced Engagement with Community Organizations:** Focus group participants and interviewees saw the importance of partnerships with local community institutions, including schools, faith institutions, and employers to communicate about hospital services and address fundamental issues affecting community health.

Key Themes and Conclusions

Many of the issues identified in the 2018 CHNA continue to be pressing needs in the region. Overarching themes that emerge from this synthesis include:

- **The PMPH service area has several community strengths and assets.** Generally, residents are well-educated and affluent compared to other communities in New Jersey. The service area's growing diversity is seen as a strength, as are its amenities and social cohesion. Human, economic, and health care resources were identified as assets of the service area.
- **Considerable disparities among racial and ethnic groups in PMPH's service area were detected through secondary data and the community health survey.** Disparities between residents of color and white residents were observed in the social determinants of health, such as employment, education, housing, and the built environment. For example, New Jersey unemployment rates were

nearly double among Black, American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander residents compared to White, non-Hispanic residents. Additionally, White residents (76.4%) in New Jersey were almost twice as likely to own their homes than people of color (42.7%)

- In addition to racial and ethnic groups, several themes emerged related to **specific populations**, **including the LGBTQ community and seniors**. LGBTQ health concerns rose as one of the top five health issues for community health respondents, both for the community and for respondents. For the LGBTQ population, a lack of adult (55+) housing was identified as well as the need to improve provider competency in caring for LGBTQ patients. Specific concerns for seniors were elevated, including accessing housing, transportation, and health care.
- Unlike the 2018 CHNA, the **COVID-19 pandemic was an emergent theme in focus groups and interviews**. Community health survey respondents also identified COVID-19 as a top health issue for their community. Additionally, COVID-19 necessitated a virtual approach to qualitative data collection. The pandemic has increased the unemployment rate and residents reported that mental health concerns have worsened and substance use has increased. Since the pandemic, virtual health care visits have been increasingly utilized, helping to address some long-standing access and provider challenges including in the area of behavioral health.
- Providers and focus group participants reported that the **range and severity of mental health concerns in the community is growing**. Similar to 2018, counseling/mental health care and alcohol/drug treatment/prevention were the two health care services rated as "hard" or "very hard" to access by the greatest number of survey respondents. However, the ratios of the population to mental health providers decreased across New Jersey and all three counties from 2017 to 2019, indicating a growth of mental health providers in the region. Drug poisoning mortality rates increased across the three counties and the state overall between 2015 and 2019.
- Although not as extensively discussed as in 2018, focus group participants and interviewees shared that **residents face challenges with chronic diseases such as cardiac issues, obesity and diabetes, and cancer**. Similar to 2015 and 2018, heart disease and cancer remain the leading causes of death in PMPH's service area, although death rates from these causes are declining. As in prior years, obesity and diabetes were mentioned by focus group participants and interviewees as a substantial health concern in the PMPH service area, with communities of color especially affected. Lack of physical activity, access to healthy foods, and understanding about the importance of good nutrition and how to prepare healthy foods were cited as top drivers of chronic disease by focus group participants and interviewees.
- While **cancer** did not emerge as a key concern in this assessment, it is the second leading cause of death across all geographic regions and racial/ethnic groups (with the exception of being the first leading cause of death of Asian residents).
- While there are numerous high-quality health care facilities in the region, residents identified several **barriers or concerns with health care access and utilization** including provider availability, insurance problems/lack of coverage, language barriers and cultural competence, transportation, health care hesitancy/delay, cost and quality of care, and navigating health care. Additionally, disparities were generally seen in experiences of discrimination and health care access (e.g., insurance, having a main source of medical care, proximity to medical services, dental care, mental health, alcohol/drug services/programs) between residents of color and white residents. For example, in New Jersey, Hispanic or Latino residents were over four times as likely to be uninsured as compared to White, non-Hispanic residents.
- **Given these identified needs, various recommendations were offered by residents** including an expansion of behavioral health services, tailored prevention and community education programs, an increase of senior health services and programs, strengthened health care services, a greater

attention to the social determinants of health, and enhanced engagement with community-based organizations.

Priority Health Needs of the Community

In August and September 2021, HRiA led a facilitated process with senior leaders from Penn Medicine Princeton Health. In August 2021, HRiA presented the priorities identified by the 2021 community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2022-2024 Strategic Implementation Plan (SIP) in the following clustered priority categories:

- Priority 1: Chronic Disease, Obesity, and Healthy Eating and Active Living (HEAL)
- Priority 2: Behavioral Health
- Priority 3: Health Care Access
- Priority 4: Maternal Child Health
- Priority 5: Elder Health

These priority needs continue from the previous CHNA-SIP process, as they are ongoing needs and several initiatives are still in progress to address them. In September 2021, HRiA led SIP planning sessions that included mapping current and emerging programs and initiatives against these needs, as well as decision-making regarding which existing programs and initiatives would be continued and what new programs or initiatives would be developed. All areas highlighted by the 2021 CHNA are being addressed by the 2022-2025 Strategic Implementation Plan.

BACKGROUND

Overview of Penn Medicine Princeton Health (PMPH)

Penn Medicine Princeton Health (Princeton Health) is one of the most comprehensive healthcare systems in New Jersey. Princeton Health provides acute care hospital services through Princeton Medical Center; behavioral healthcare through Princeton House Behavioral Health; in-home nursing, rehabilitation, and hospice care through Princeton HomeCare; primary and specialty care through Princeton Medicine Physicians; ambulatory surgery and wellness services. Since May 2012, Princeton Medical Center has been located in a state-of-the-art facility in Plainsboro Township which offers services in areas such as cancer, cardiac and pulmonary care, critical care, emergency, imaging and outpatient laboratory services, maternal and newborn care, neuroscience, surgery, sleep disorders, pediatric care, and eating disorders. Princeton Health also houses the Bristol-Myers Squibb Community Health Center which provides adult and pediatric care to uninsured and underinsured residents and maintains a partnership with The Children's Hospital of Philadelphia (CHOP). In January 2018, Princeton Health and its affiliates joined the University of Pennsylvania Health System (UPHS), one of the world's leading academic medical centers.

As part of its commitment to the community, Princeton Health established the Community Wellness Program to offer a dynamic curriculum of comprehensive health education, screenings, and support facilitated by its outstanding physicians, nurses, and health professionals. The PMPH Community Wellness Program offers an equitable, dynamic array of innovative health- and lifestyle-related programming at little or no cost to address the key social drivers that influence the community's ability to promote and support the healthiest and highest quality lives for all. The Program also works closely with leading national organizations—the American Cancer Society, the American Heart Association, and the Susan G. Komen Breast Cancer Foundation, among others—to raise funds, heighten awareness, and bring important health programming to the community it serves. Princeton Health is dedicated to promoting healthy living at every stage of life and to enhancing quality of life by addressing the unique needs of women, men, seniors, children, adolescents, and diverse populations.

Purpose and Scope of the PMPH Community Health Needs Assessment (CHNA)

Purpose and Scope of 2021 CHNA

To ensure that Princeton Health is achieving its mission and meeting the needs of the community, and in furtherance of its obligations under the Affordable Care Act, Princeton Health undertook a community health needs assessment (CHNA) process in the spring of 2021. Health Resources in Action (HRiA), a non-profit public health consultancy organization, was engaged to conduct the CHNA. HRiA conducted a similar assessment for Princeton Health in 2012, 2015, and 2018.

A CHNA process aims to provide a broad portrait of the health of a community to lay the foundation for future data-driven planning efforts. In addition to fulfilling the requirement by the IRS Section H/Form 990 mandate, the Princeton Health CHNA process was undertaken to achieve the following overarching goals:

- To examine the current health status of residents in the three-county region served by Princeton Health, including met and unmet health needs, within the larger social context of the community; and

- To identify community assets and current infrastructure, which may be leveraged to guide future programming and strategic opportunities for Princeton Health.

The CHNA process included three components: a review of existing social, economic, and health data about the three counties comprising Princeton Health's service area; a community health survey; and in-depth interview discussions with leaders in public health, health care, education, social services, and other sectors, and focus groups with residents to identify the perceived health needs of the community, challenges to accessing services, the current strengths and assets, and opportunities.

Summary of Previous CHNA

Princeton Health's previous CNHA utilized a methodology similar to that used to develop this report. This comprehensive 2018 community needs assessment used a collaborative approach and focused on Mercer, Middlesex, and Somerset Counties. Data from key informant interviews, focus groups, a community health survey, and secondary sources were analyzed to describe the community's social and economic issues, health behaviors and health outcomes, health care access, strengths and challenges, and resources to help achieve a vision for the future. Priority areas identified in the 2018 CHNA included chronic disease, obesity, healthy eating and active living; behavioral health; health care access; maternal and child health; and elder health. Princeton Health and its partners have developed and implemented a range of strategies to address these identified needs. The full 2018 CHNA may be accessed here: https://www.princetonhcs.org/community.

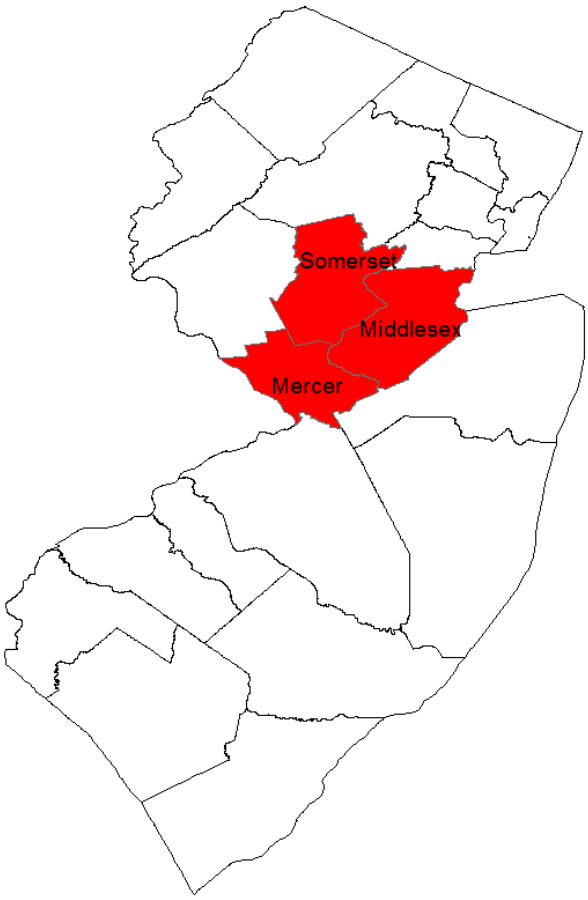
Summary of Review of Initiatives

As a result of the 2018 CHNA, Penn Medicine Princeton Health developed a plan to address identified key health needs and issues through clinical care, programs and services, and in collaboration with a variety of community agencies. Since the 2018 CHNA, Penn Medicine Princeton has provided a variety of services and programming to address the identified key needs and issues (see Appendix A). Strategic Initiatives have been implemented to address the following Priority Areas: Chronic Disease, Obesity, and Health Eating Active Living; Behavioral Health; Health Care Access; Maternal and Child Health; and Elder Care.

Definition of Community Served

Princeton Health's primary service area spans Mercer, Middlesex, and Somerset Counties. Figure 1 below shows the location of these three counties within the state of New Jersey. This assessment examined the social, economic, and health issues across the three counties. Additionally, 11.4% of community health survey respondents live or work outside these three counties, including (in descending order of number of responses): Hunterdon, Monmouth, Burlington, Ocean, Union, Bergen, Essex, Morris, Warren, Camden, Passaic, Gloucester, Hudson, Atlantic, Cape May, and Sussex. While the assessment looked at conditions across the counties, particular emphasis was given to examining issues among populations that were most at-risk, seniors, and from racial/ethnic minority groups. In many instances, quantitative data were not available for these specific sub-groups; therefore, qualitative data collection—through focus groups with residents and interviews—was conducted to identify the needs of those from these populations.

Figure 1. Mercer, Middlesex, and Somerset Counties, New Jersey



DATA SOURCE: Map created by Health Resources in Action using 2010 data from the U.S. Department of Commerce, Bureau of the Census

Context for the Community Health Needs Assessment

COVID-19 Pandemic

The novel coronavirus (COVID-19) pandemic coincided with the activities of this assessment and impacted both the CHNA data collection process and topics, as well as concerns that participants put forth during discussions in focus groups and interviews. On March 4, 2020, the first confirmed case of COVID-19 in New Jersey was announced, and on March 9, 2020, the Governor of New Jersey declared a State of Emergency and a Public Health Emergency to protect the health, safety and welfare of residents. By March 17, 2020, other emergency actions were announced to address COVID-19 including school closures, business closures, recommended curfews and limitations on gatherings, before a statewide stay-at-home order was enacted on March 21, 2020. By January 2021, there were over 500,000 cumulative cases of COVID-19 and over 16,000 COVID-19 deaths in New Jersey; current data about cases and deaths can be found in Table 13. Logistically, the pandemic impacted the feasibility of convening in-person groups for the CHNA (advisory bodies, focus groups, etc.) and the availability of key stakeholders and community members to participate in CHNA activities, given their focus on addressing immediate needs. Consequently, some data collection was shifted to a virtual setting (e.g., telephone or video focus groups), and engagement of residents and stakeholders was challenging. (A more detailed description of this engagement process may be found in the Methods section.)

Substantively, during the CHNA process, COVID-19 was and remains a primary health concern for communities and has exacerbated underlying inequities and social needs. The pandemic brought to light both the capabilities and gaps in the healthcare system, the public health infrastructure, and social service networks. In this context, an assessment of the community's strengths and needs, and in particular the social determinants of health, is both critically important and logistically challenging. Where possible, CHNA participants were asked to reflect on health and social issues beyond those directly related to COVID-19, yet the pandemic's short-term and long-term impacts remained at the forefront of many conversations. This CHNA should be considered a snapshot in time; consistent with public health best practices, the community can continue to be engaged to understand how identified issues may evolve and what new issues or concerns may emerge over time.

National Movement for Racial Justice

A wave of national protests for racial equity – sparked by the killing of George Floyd, Ahmaud Arbery, Breonna Taylor, Tony McDade, and many others – also coincided with the timeline of the CHNA. As part of a movement for racial justice, national attention was focused on how racism is embedded in every system and structure of our country, including housing, education, employment, and healthcare. This context impacted the content of the CHNA, including the design of data collection instruments and the input that was shared during interviews and focus groups, as well as through survey responses. While racism and oppression have persisted in this country for over 400 years, it is important to acknowledge the recent focus on these issues in 2020 and 2021 in the form of protests and dialogues, locally and nationally, as context for this assessment.

METHODS

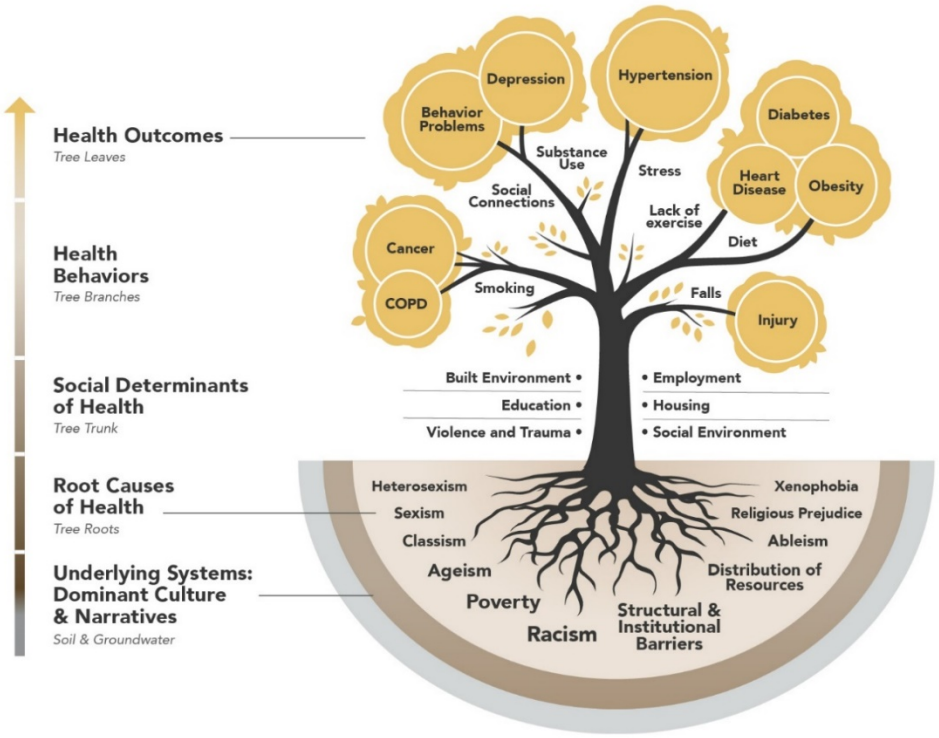
The following section details how the data for the Penn Medicine Princeton Health (Princeton Health) community health needs assessment was compiled and analyzed, as well as the broader lens used to guide this process. Specifically, the community health needs assessment defines health in the broadest sense and recognizes that numerous factors and multiple levels— from lifestyle behaviors (e.g., diet and exercise) to clinical care (e.g., access to medical services) to social and economic factors (e.g., employment opportunities) to the physical environment (e.g., air quality)—all have an impact on the community's health.

Approach and Framework

Upstream Approaches to Health

Having a healthy population is about more than delivering quality health care to residents. Where a person lives, learns, works, and plays all have an enormous impact on health. Health is not only affected by people's genes and lifestyle behaviors, but by upstream factors such as employment status, quality of housing stock, and economic policies. **Error! Reference source not found.**Figure 2 provides a visual representation of these relationships in a tree, demonstrating how individual health behaviors (tree branches), which are closest to health outcomes (tree leaves), are influenced by more upstream factors (tree trunk) such as employment status, educational opportunities, and housing quality.

Figure 2. The Health EquiTree: Connecting Health Outcomes to Root Causes



DATA SOURCE: HRiA

The data to which we have access is often a snapshot in time, but the people represented by that data have lived their lives in ways that are constrained and enabled by economic circumstances, social

context, and government policies. To this end, much of this report is dedicated to discussing the social, economic, and community context in which Central New Jersey residents live. As such, we hope to understand the current health status of residents and the multitude of factors that influence health to enable the identification of priorities for community health planning, existing strengths and assets upon which to build, and areas for further collaboration and coordination.

Health Equity Lens

When compared to many regions across the country, Central New Jersey is a healthy area, with numerous successes to celebrate. However, this is not uniformly the case for all neighborhoods or population groups, and specific groups consistently experience poor health outcomes. Barriers to the opportunities to live a healthy life may be disproportionately concentrated among certain populations, such as communities of color, low-income populations, homeless persons, persons with disabilities, and the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community.

Furthermore, the influences of race, ethnicity, income, and geography on health patterns are often intertwined, as depicted in Figure 2Figure 2, as the tree roots, soil, and groundwater. In the United States, social, economic, and political processes ascribe social status based on race and ethnicity, which may influence opportunities for educational and occupational advancement and housing options, two factors that profoundly affect health. Institutional racism, economic inequality, discriminatory policies, and historical oppression of specific groups are a few of the factors that drive health inequities in the U.S.

In this report, we describe health patterns overall and areas of need for particular population groups. Understanding factors that contribute to health patterns for these populations can facilitate the identification of data-informed and evidence-based strategies to provide all residents with the opportunity to live a healthy life.

Secondary Data

The Princeton Health community health needs assessment (CHNA) incorporates data on important social, economic, and health indicators pulled from various sources, including the U.S. Census, Centers for Disease Control and Prevention, U.S. Bureau of Labor, New Jersey Department of Health, New Jersey Department of Law and Public Safety, New Jersey Office of the Attorney General, National Equity Atlas, and national databases that compile county-level data, such as University of Wisconsin's County Health Rankings and Community Commons. Types of data include self-reporting of health behaviors from large, population- based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), as well as vital statistics based on birth and death records. All tables and graphs note the specific data source.

Most of the social, economic, and health data in this report are provided for each of the three counties as well as the state overall. However, county-level data were not available for all measures. In the cases where county-level data were not available, state data are provided. It should also be noted that for data that derive from the American Community Survey, five-year (2015-2019) estimates are used. Per Census recommendations, these five-year aggregates are used to yield a large enough sample size. Where possible, the most current data are compared to data shared in the 2018 CHNA to enable the examination of trends.

Primary Data: Input from Community Representatives

Community Health Survey

To gather quantitative data not provided by secondary sources and to understand public perceptions around health, a community survey was adapted from the previous CHNA to examine change over time. The 22-item community survey was developed and administered online and on paper to residents within the three counties during four weeks from early May 2021 to early June 2021. The survey explored key health concerns of community residents as well as their primary priorities for services and programming. Princeton Health reviewed and provided feedback on the survey and also disseminated the online survey link and hard-copy survey through a variety of dissemination channels, including an employee Listserv and community partner organizations, including, but not limited to, the Hamilton YMCA, the Princeton Fitness and Wellness Centers, the Mercer County Minority Chamber Board, the Princeton Chamber of Commerce, and New Hope Celebrates. Additionally, several hard-copy surveys were offered to residents at COVID-19 vaccination sites, with the option to complete during the 15-minute post-shot monitoring period. Although the survey was completed at one point in time, survey respondents were asked to reflect on current and pre-COVID 19 conditions.

A total of 2,355 respondents completed the survey. 2,002 residents live and/or work in Mercer, Middlesex, or Somerset County. 353 residents who live or work in other counties or did not specify counties completed the survey were included in survey analyses, which is different than the 2018 survey analysis. While these respondents don't live or work in PMPH's primary three-county service area, 55.2% of these 353 respondents live in the neighboring counties of Burlington, Hunterdon, Monmouth, Morris, and Union.

The survey was administered in both English and Spanish, online and through hard copy. Where possible throughout this report, comparisons are made to the 2018 Penn Medicine Princeton Health CHNA Survey, which was fielded in April-May 2018 and completed by 1,037 respondents who lived and/or worked in Mercer, Middlesex, or Somerset County.

Table 1 presents the demographics of the 2,355 survey respondents included in the analysis. Similar to 2018, the majority of respondents completed the survey in English (94.7%) and identify as female (58.5%). Most respondents selected English (82.3%) as their primary language spoken at home, which decreased since the 2018 CHNA (91.9%). A higher percentage of 2021 respondents completed a paper survey (56.9%) compared to 2018 respondents (2.6%). The majority (53.3%) of the respondents reported that they live or work in Mercer County. Generally, survey respondents were younger and more racially/ethnically diverse as compared to the 2018 survey respondents. Approximately half (49.3%) of survey respondents were above the age of 50, which is lower than the 2018 survey (81.6%). Nearly half of survey respondents (46.6%) of survey respondents were people of color, which is higher than the 2018 survey (22.4%). Similar to 2018, the majority of respondents (61.9%) had at least a college-level education.

Table 1. Characteristics of 2021 Community Health Needs Assessment Survey Respondents (N=2,355)

	%
Language of Survey Administration	**N=2,355**
English	94.7%
Spanish	5.3%
Survey Method	**N=2,355**
Paper	56.9%
Online	43.1%
County	**N=2,260**
Mercer	53.1%
Middlesex	26.8%
Somerset	8.7%
Other*	11.4%
Age	**N=1,836**
Under 18 years old	3.1%
18-29 years old	20.0%
30-39 years old	11.9%
40-49 years old	15.7%
50-64 years old	25.2%
65 years or older	24.1%
Gender	**N=1,830**
Female	58.5%
Male	40.7%
Additional Gender Category	0.8%
Race/Ethnicity	**N=1,958**
Caucasian/White	53.4%
Hispanic/Latino(a)	14.3%
African American/Black	11.6%
South Asian	8.7%
East Asian/Pacific Islander	5.9%
Multiracial	3.8%
Middle Eastern/North African	0.8%
Additional ethnic/racial category	0.8%
American Indian/Native American	0.6%
Highest Level of Educational Attainment	**N=1,822**
High school graduate or GED	16.9%
Some college	15.4%
Associate or technical degree/certification	5.8%
College graduate	28.5%
Graduate or professional degree	33.4%

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

NOTE: Asterisk (*) indicates other counties include (in descending order of # of responses): Hunterdon, Monmouth, Burlington, Ocean, Union, Bergen, Essex, Morris, Warren, Camden, Passaic, Gloucester, Hudson, Atlantic, Cape May, Sussex

Qualitative Data: Focus Groups and Interviews

From May to July 2021, focus groups and interviews were conducted with leaders from a wide range of organizations in different sectors. In total, ten focus groups and nine key informant discussions were conducted with individuals from Penn Medicine Princeton Health's service area and over 70 individuals were engaged in this qualitative data collection. Focus groups were conducted with seniors, parents, EMTs, public health officers, young adults, members of the Korean population, LGBTQ residents, local food pantry recipients, school nurses, and members of the Hamilton YMCA Board of Directors. Interviewees included members of the Capital Region Minority Chamber of Commerce, church leaders, Latino residents, health care providers, community leaders, and Princeton Health staff. A full list of the different sectors engaged during the focus group and interview process can be found in Appendix B.

Focus group and interview discussions explored participants' perceptions of their communities, priority health concerns, perceptions of public health, prevention, and health care services, and suggestions for future programming and services to address these issues. A semi-structured moderator's guide was used across all discussions to ensure consistency in the topics covered. Each focus group and interview was facilitated by a trained moderator, and detailed notes were taken during conversations. On average, focus groups lasted 60 minutes and included 3-12 participants, while interviews lasted approximately 30-60 minutes. Participants for the focus groups were recruited by Princeton Health, working with clinical and community partners.

The collected qualitative data were coded and analyzed thematically, where data analysis identified themes that emerged across all groups and interviews. Frequency and intensity of discussion on a specific topic were key indicators used for extracting main themes. Selected quotes—without personal identifying information—are presented in the report to further illustrate points within topic areas.

Limitations

As with all data collection efforts, there are several limitations related to the assessment's research methods that should be acknowledged. Years of the most current data available differ by data source. In some instances, 2021 may be the most current year available for data, while 2012 may be the most current year for other sources. Some of the secondary data were not available at the county level. Additionally, several sources did not provide current data stratified by race/ethnicity, gender, or age – thus these data could only be analyzed by total population.

Secondary survey data that is included in this CHNA report and is based on self-reports, such as the Behavioral Risk Factor Surveillance Survey (BRFSS), should be interpreted with particular caution. In some instances, respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias—that is, they may attempt to answer accurately, but they remember incorrectly. In some surveys, reporting and recall bias may differ according to a risk factor or health outcome of interest. Despite these limitations, most of the self- report surveys analyzed in this CHNA benefit from large sample sizes and repeated administrations, enabling comparison over time. Additionally, while some data is stratified by racial and ethnic groups (e.g., Asian), these are broad categories that may mask disparities within

groups.

The community health survey fielded specifically for this CHNA used a convenience sample for gathering information; while strong efforts were made to disseminate the survey to a broad cross-section of respondents from the region, results are not necessarily statistically representative of the larger population living in Mercer, Middlesex and Somerset Counties due to non-random sampling techniques. It should also be noted that survey respondents did not always answer every question on the survey; therefore, percentages shown below reflect only those participants who answered each question.

Similarly, while the focus groups and interviews conducted for this study provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Recruitment for focus groups was conducted by Princeton Health, working with clinical and community partners. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. It is also important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

FINDINGS

POPULATION CHARACTERISTICS

Why is This Important?

The population characteristics of a community, including changes in total population and age distribution, are important factors that inform our understanding of a community's health and health care needs. For example, a community in which a large proportion of aging baby boomers reside will have different health challenges and needs than one populated predominantly by college students or young families.

Population Overview

Focus group participants and interviewees described their communities as having a mix of families, seniors, and young professionals. Proximity to Philadelphia and New York, as well as large national and international companies locally, make the area appealing to professionals, according to respondents. Amenities such as parks and stores, strong schools, and close-knit communities attract families. For older residents, the PMPH service area offers high-quality senior housing and senior centers that provide a range of programs and services.

The most current figures from the 2015-2019 American Community Survey show that the three counties of Mercer, Middlesex, and Somerset have 1,534,639 residents, about 17% of New Jersey's total population. Middlesex County is the state's second most populous county with an estimated 825,920 residents. Mercer County and Somerset County are the 12th and 13th most populous, respectively, of New Jersey's 21 counties. Between 2014 and 2019, the population of all Middlesex and Somerset counties slightly grew, as well as that of New Jersey as a whole (Table 2). Mercer County's population decreased slightly during the same time period.

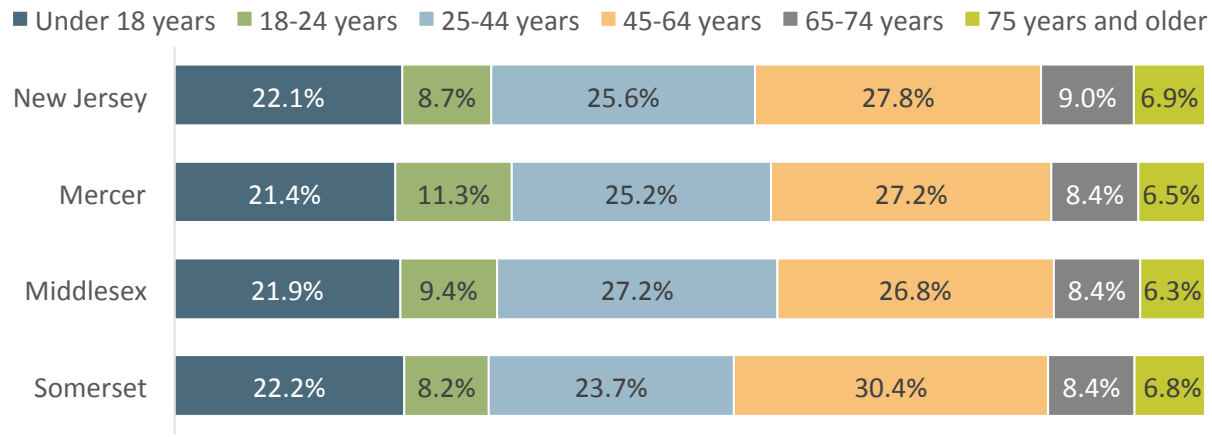
Table 2. Total Population, New Jersey and by County, 2010-2014 and 2015-2019

	2014	2019	% Change
New Jersey	8,874,374	8,878,503	0.05%
Mercer	369,526	367,922	-0.43%
Middlesex	824,046	825,920	0.23%
Somerset	328,704	329,838	0.34%

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

The population of the three counties largely reflects the population age distribution of the state (Figure 3). Slightly over 20% of residents in each of the counties are under 18 years old. Mercer County has the highest proportion of residents 18-24 years old (11.3%) while Somerset County has the highest proportion of residents 45-64 years old (30.4%). About 15% of residents in each of the three counties are 65 years or older, with about 6-7% older than 75 years.

Figure 3. Age Distribution, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Racial, Ethnic, and Language Diversity

> *"The diversity of our population is a strength. We have over 100 different nationalities in the communities we serve*." **–** Key Informant
>
> *"It's very diverse around here, which I love."* – Focus Group Participant

Why is This Important?

The racial and ethnic make-up of the population in United States is increasingly diversifying, with younger generations experiencing the most increases of non-White people. Between 2016 and 2020, New Jersey lost around 180,000 White residents and gained more than 190,000 residents of color.[i] *Simultaneously, inequities in social determinants of health, health outcomes, and health care access across different racial and ethnic groups are persistent challenges. People of color experience poorer health outcomes and greater barriers to accessing health care compared to their White counterparts and have lower utilization of health care resources. Understanding racial, ethnic, cultural and language profiles of communities gives context to data about health status and the structural, discriminatory, and social factors that contribute to health inequities.*

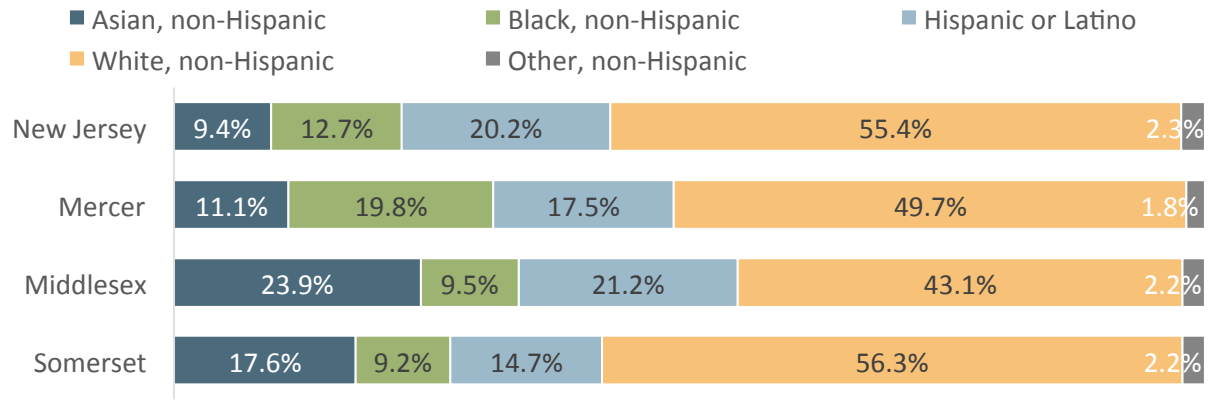
Several participants also noted that the demographics of the region are changing. Some pointed to a recent in-migration of wealthy people from the cities, while others noted growth in the number of new immigrants, particularly those who speak Spanish, to the region. The three counties PMPH serves are racially and ethnically diverse, which focus group participants and interviewees saw as a positive attribute, contributing to the cultural vibrancy of communities. The region has a large and growing Asian and Southeast Asian population. Latino residents make up a large portion of the populations of Plainsboro, Hamilton, and Lawrence. The region also has residents from other countries including Poland and Russia.

Data also show that there is substantial racial and ethnic diversity in New Jersey and the three counties. Middlesex County is the most diverse of the three, with about 57% of residents identifying as non-White

(Figure 4). Middlesex County has the largest Asian, non-Hispanic (23.9%) and Hispanic population (21.2%) of the three counties. Somerset County has the largest proportion of White, non-Hispanic residents (56.3%). Mercer County has the highest proportion of Black, non-Hispanic residents (19.8%).

A comparison of these data with those presented in the 2018 CHNA indicate that diversity in New Jersey and the three counties has increased. For example, the percentage of residents who identify as Hispanic and the percentage of residents who self-identify as Asian increased slightly in all geographies.

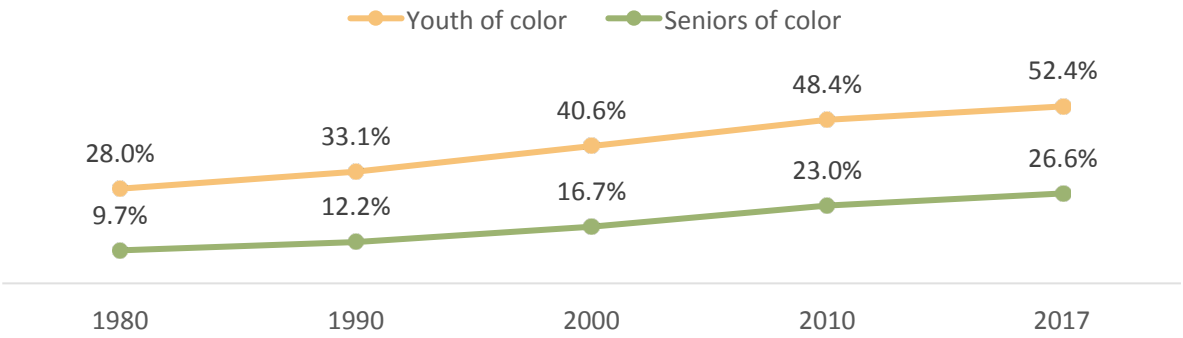
Figure 5. Racial and Ethnic Distribution, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

As the U.S.'s population of younger generations are increasingly comprised of people of color, and the White population is rapidly aging, there is a widening racial gap between the nation's youngest and oldest people.[ii] In New Jersey, the gap between the percentage of youth who are people of color and the percentage of seniors who are people of color has grown from 18.3% in 1980 to 25.8% in 2017 (Figure 6).

Figure 6. New Jersey Racial Generation Gap, 1980-2017



DATA SOURCE: U.S. Census Bureau, Decennial Census, 1980, 1990, 2000, and 2010 and U.S. Census Bureau, American Community Survey 5-Year Estimates, 2013-2017, as cited by National Equity Atlas
NOTE: The racial generation gap is defined as the difference in the percentage of people of color between the youth (under age 18) and senior (age 65 or older) populations; Data for 2017 represents a 2013-2017 average.

While diversity is a notable community asset, interviewees and focus group participants working in health and social service organizations reported challenges meeting the needs of many different people.

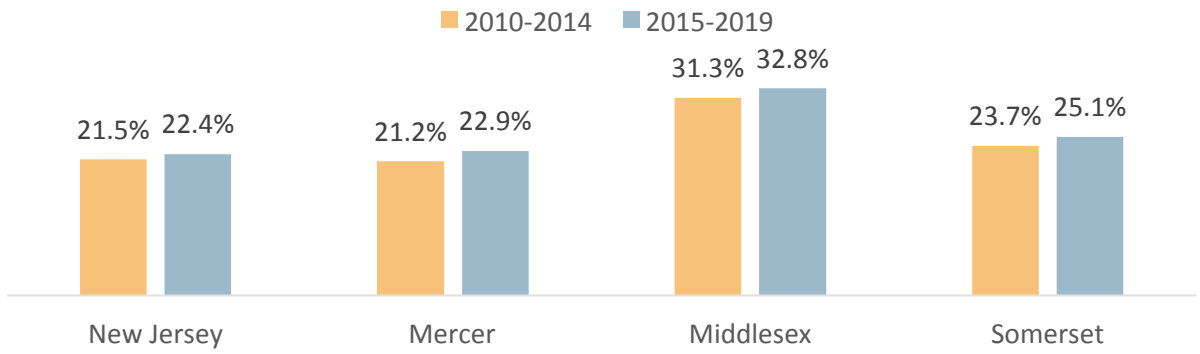
One community provider shared, "*[community residents] are so diverse, they bring a lot of experiences, but it can also be challenging because we don't always understand some of the ethnic underpinnings*." Service providers expressed particular concern for undocumented residents, many of whom are disconnected from services, yet face substantial challenges.

Country of Origin

Data from the 2015-2019 American Community Survey show that that Middlesex County has the highest proportion of residents who were born outside the United States (32.8%) (Figure 7). Across the region and the state overall, the proportion of foreign-born residents has risen slightly since 2014.

The country of origin of foreign-born residents is most commonly India in New Jersey (12.9%) and across the three counties. Of the foreign born, the Indian population makes up 34.0% in Middlesex County, 24.4% in Somerset County, and 17.7% in Mercer County. Other primary foreign-born populations by geography are the following: Dominican (8.8%) and Mexican (5.5%) populations in New Jersey; Guatemalan (13.7%) and Chinese (7.7%) in Mercer County; Dominican (8.9%) and Chinese (6.3%) in Middlesex County; and Chinese (12.1%) and Filipino (4.1%) in Somerset County.

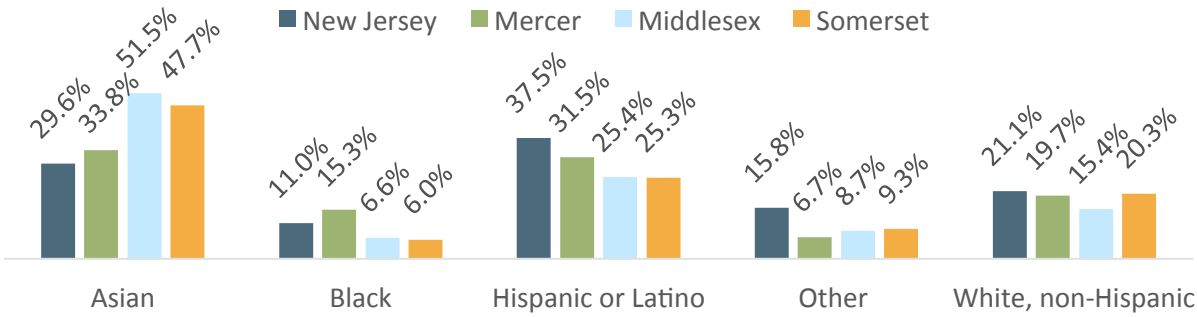
Figure 7. Percent Foreign-Born Population, New Jersey and by County, 2010-2014 and 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

Data from the 2015-2019 American Community Survey show the highest to lowest percentage of immigrants are from the following racial/ethnic categories in the three counties: Asian, non-Hispanic; Hispanic or Latino, White, non-Hispanic; Black or Other (Figure 8). This proportion ranges from a low of 6.0% of Black residents in Somerset County to a high of 51.5% of the Asian residents in Middlesex County.

Figure 8. Percent Foreign-Born Population by Race/Ethnicity, New Jersey and by County, 2015-2019



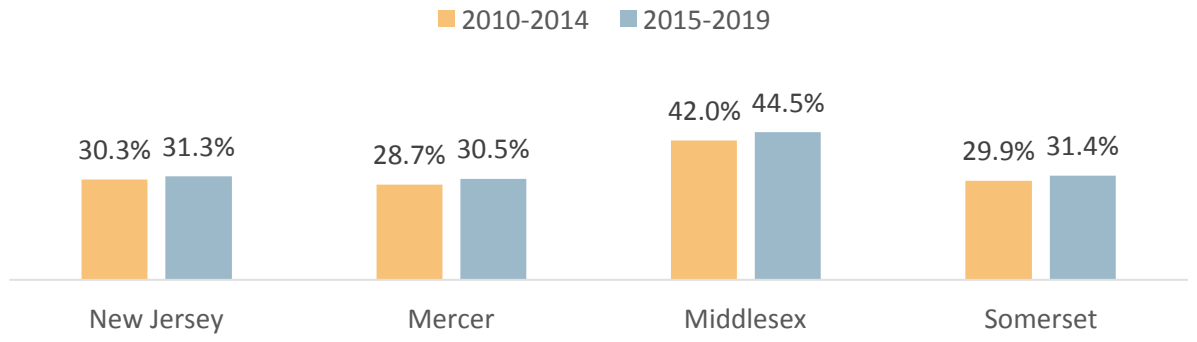
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019
NOTE: "White" is the only racial group specified as non-Hispanic. Respondents who identify as a race in addition to Hispanic or Latino may be represented in more than one category. Totals within each geographic region may total more than 100%

Language

The proportion of residents who speak a language other than English at home has grown between 2014 and 2019, in all three counties and the state overall (Figure 9). Middlesex County has the highest proportion of residents who speak a language other than English at home (44.5%) while Mercer County has the lowest proportion (30.5%). In focus groups and interviews, service providers saw a need to develop greater language and cultural competency within their organizations. At the same time, they also noted that some groups are isolated from services, either because of limited English skills and/or lack of trust, and acknowledged the need to be more proactive and creative in reaching out to these communities.

When examining most common languages spoken excluding English, residents of these counties and the state speak Spanish and Other Indo-European languages (see Appendix D). Notably, 14.1% of residents in Middlesex County speak Indo-European languages.

Figure 9. Percent Population 5 Years and Over Who Speak a Language Other Than English at Home, 2010-2014 and 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

COMMUNITY SOCIAL AND ECONOMIC CONTEXT

Income and Financial Security

"The cost of living has really gone up." – Focus Group Participant

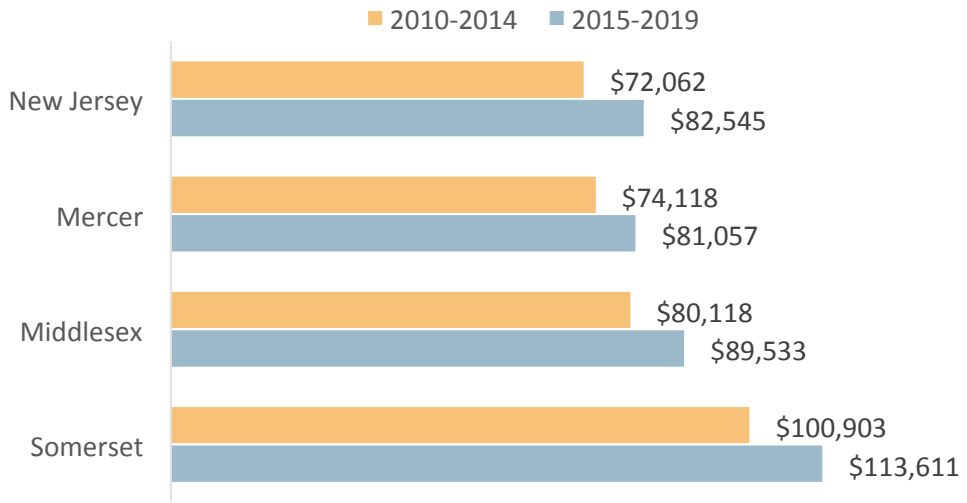
Why is This Important?

Income has a strong influence on one's health; it affects where individuals live, their access to higher education and skills training and to resources to health-promoting resources such as healthy food, health care, and technological advances (e.g., new medical treatments).[iii] *Individuals with lower incomes have higher rates of smoking, obesity, and physical inactivity; more limited access to healthy foods, opportunities for physical activity, and healthy environments; higher rates of physical limitations, heart disease, diabetes, stroke, and other chronic conditions; and more limited access to health care compared to those with higher incomes.*[iv] *Regardless of individual level of income, low community wealth often correlates with more limited educational and job opportunities, greater community violence, environmental pollution and disinvestment in essential infrastructure and resources.*[v] *Many oppressed population groups—communities of color, women, immigrants, and others—experience barriers and structural inequities across systems related to economic advancement and upward mobility.*

Focus group participants and interviewees described the communities PMPH serves as economically diverse. While the central New Jersey area is seen as fairly affluent, there are residents who are less well off. Within the PMPH service area, the towns of Robbinsville, Montgomery, and Hopewell were described as wealthier, while Hamilton, Plainsboro, and Cranbury were seen as towns with higher-need residents.

Median household income rose for the state and in all three counties between 2014 and 2019, and all three counties had median incomes above the state average in 2019 (Figure 10). Among the three counties, median incomes range from $81,057 in Mercer to $113,611 in Somerset.

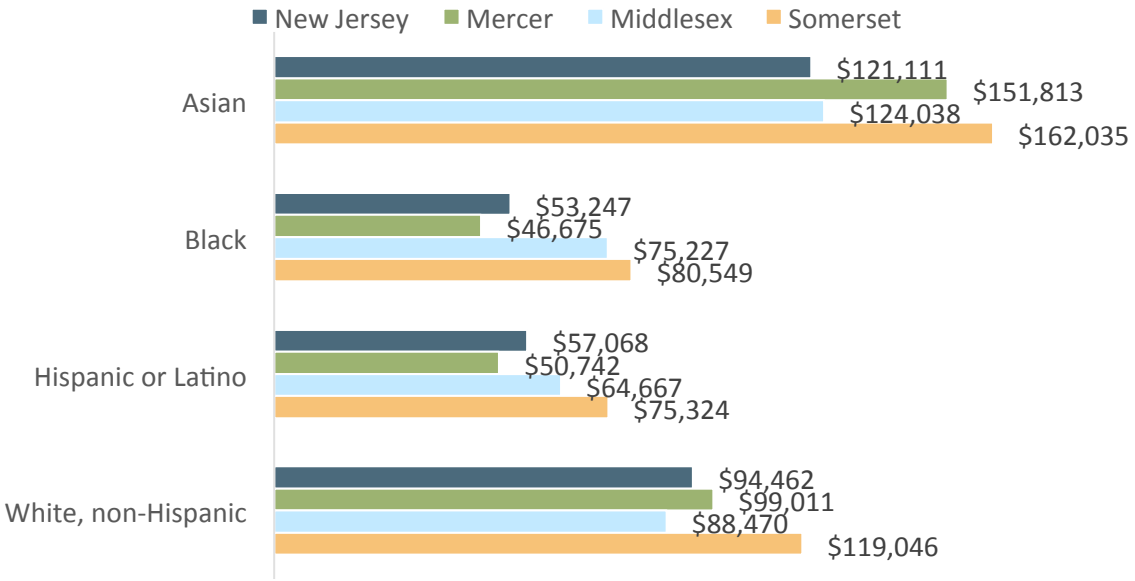
Figure 10. Median Household Income (in U.S. Dollars), New Jersey and by County, 2010-2014 and 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

While median income ranged from $82,545 to $113,611 in New Jersey and the three counties, examining these data by race/ethnicity reveal that disparities exist among these groups. Notably, the median income of Asian residents in Mercer County ($151,813) is more than three times higher than Black residents ($46,675) and Hispanic residents ($50,742) in the same county (Figure 11). Median incomes followed the same pattern among race/ethnicity groups within the state and each county with highest to lowest median incomes in the following order: Asian; White, non-Hispanic; Hispanic or Latino; and Black residents.

Figure 11. Median Household Income (in U.S. Dollars) by Race/Ethnicity, New Jersey and by County, 2015-2019



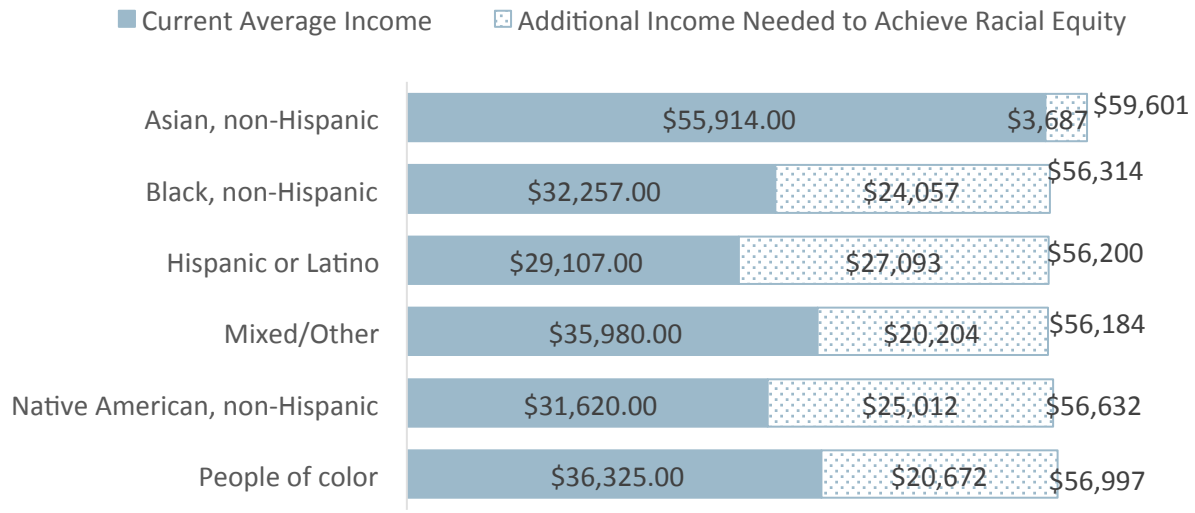
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Eliminating racial inequities in income would strengthen families, communities, and local economies. Wage and employment gaps by race (as well as gender) are not only bad for people of color—they back the entire economy. Rising wages and incomes, particularly for low-income households, leads to more consumer spending, which is a key driver of economic growth and job creation.[1] In order to racial equity in income, the largest additional income needed to achieve this in the state is among the Hispanic or Latino population ($27K additional to total to $56K), followed by Native American, non-Hispanic population ($25K additional to total to $56K) and Black, non-Hispanic ($24K additional to to $56K). The lowest additional income needed was for the Asian, non-Hispanic population (only $4K make $60K) (

[1] National Equity Atlas

Figure 12).

Figure 12. Creating Racial Equity in Income, New Jersey, 2017



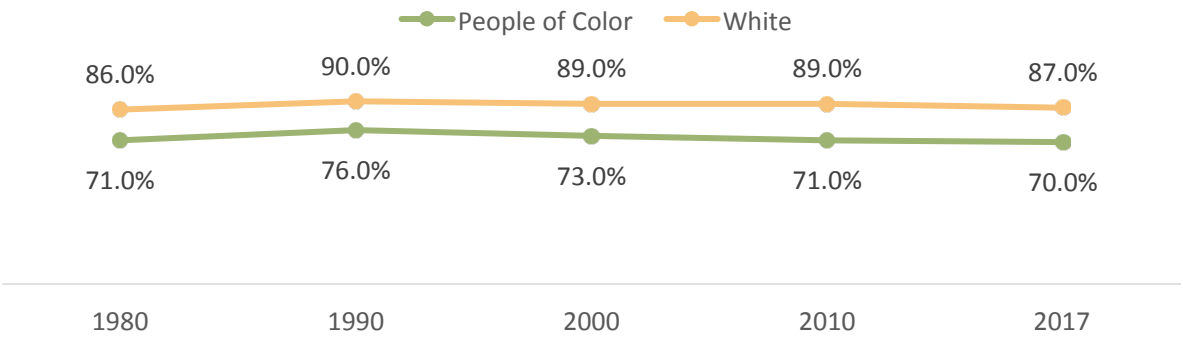
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2013-2017 and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas
NOTE: All dollar values are in 2017 dollars

A consistent theme in conversations was the high cost of living in the region, attributed to expensive housing and high taxes. This concern was identified in the 2018 CHNA as well. Additionally, this year participants pointed to the economic impacts of the pandemic. Food, transportation, and many basic commodities are now much more expensive, creating further financial pressures on local families. As one interviewee described, "*our main issue is affordability. A lot of wealth is leaving the area due to taxes. We're fighting for a $15 minimum wage, and we all know that wouldn't help.*"

An equitable economy is one in which workers earn a living wage that allows them to meet their and their family's basic needs. While the value of a living wage varies, depending on family size and cost-of-living, many are advocating for $15 per hour as a new bare-bones baseline (which equals $31,200 annually for full-time work).[2] In New Jersey, the percent of workers earning at least $15/ hour has been consistently higher among the White population than among people of color (Figure 13). In 2017, the percent of workers earning at least $15/hour was 87.0% for White population and 70.0% for People of Color.

[2] National Equity Atlas

Figure 13. Percent Workers Earning At Least $15/Hour by Race/Ethnicity, New Jersey, 1980-2017



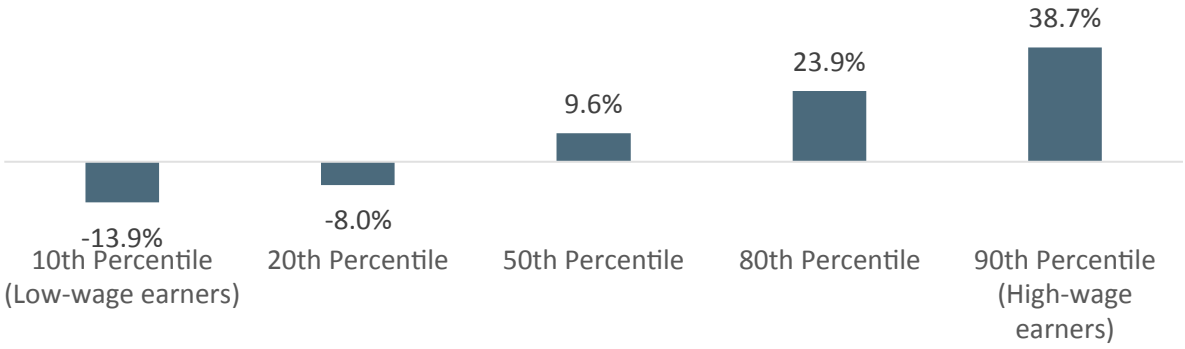
DATA SOURCE: 1980 5% State Sample, 1990 5% Sample, 2000 5% Sample, 2010 and 2017 American Community Survey 5-year and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas

NOTE: Figure shows the percentage of full-time wage and salary workers ages 25-64 earnings at least $15 per hour (in 2017 dollars). Data for 1980 through 2000 are based on surveys in those years but reflect income from the year prior, while data for 2010 and 2017 represent five-year averages (e.g., 2013-2017).

If income growth were inclusive, all workers would see their incomes rising, with the largest gains among lower-wage workers. The current trends of declining or stagnant incomes for low- and middle-wage workers and increasing incomes for high-wage workers contributes to growing inequality, which harms our social fabric and hinders economic resilience and prosperity.[3] In New Jersey, while incomes grew by almost 39% for the 90th percentile workers (high-wage earners) between 1980 and 2017, incomes declined by almost 14% for 10th percentile workers (low-wage earners).

Figure 14. Income Growth by Percentile Workers, New Jersey, 1980-2017

[3] National Equity Atlas

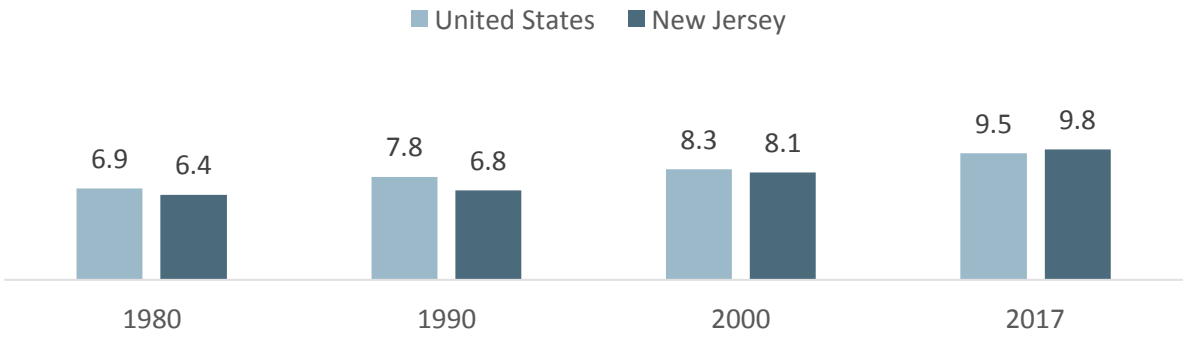


DATA SOURCE: 1980 5% State Sample, 1990 5% Sample, 2000 5% Sample, 2010 and 2017 American Community Survey 5-year and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas

NOTE: Average annual earned income for full-time wage and salary workers ages 25-64, and real (inflation-adjusted) earned income growth over time, by percentile. Data for 1980 through 2000 are based on surveys in those years but reflect income from the year prior, while data for 2010 and 2017 represent five-year averages (e.g. 2013-2017).

Income inequality is harmful for everyone, not just those who have lower incomes. There are studies that have found that income inequality contributes to factors that hinder economic growth including reduced education opportunities for low-income children, decreasing individual income, harming health and well-being, and increasing excessive debt. On the other hand, greater economic inclusion leads to more robust and sustained growth.[4] Income inequality, indicated by dividing 95th percentile income by 20th percentile income, has been increasing in both the United States overall and in New Jersey, from around 6-7 in 1980 to about 9-10 in 2017 (Figure 15).

Figure 15. Income Inequality (95th percentile income divided by 20th percentile income), by U.S. and NJ, 1980-2017



DATA SOURCE: 1980 5% State Sample, 1990 5% Sample, 2000 5% Sample, 2010 and 2017 American Community Survey 5-year and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas

NOTE: Annual household income at the 95th and 20th percentiles (in 2017 dollars), and the ratio of the 95th to the 20th percentile (the 95/20 ratio). A household income percentile is a level of income below which a given percentage of households fall. For example, 95 percent of households earn below the 95th percentile and 20

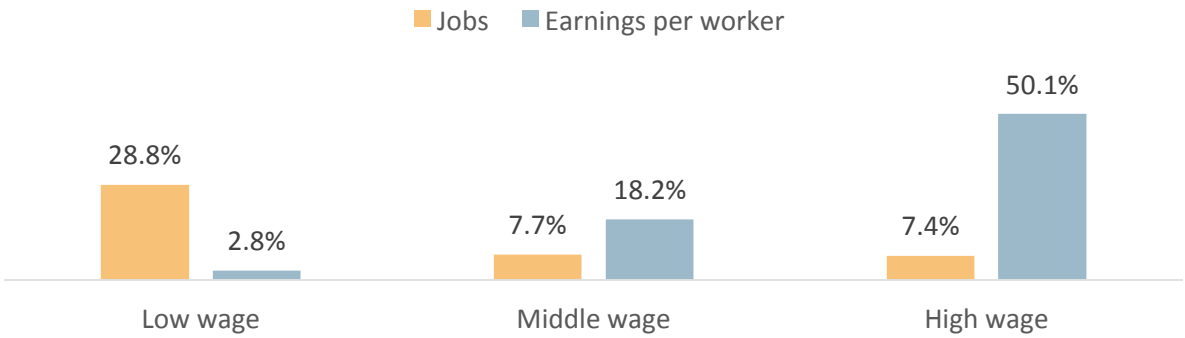
[4] National Equity Atlas

percent of households earn below the 20th percentile. The 95/20 ratio is a useful measure of income inequality, with a higher ratio indicating greater inequality. Data for 1980 through 2000 are based on surveys in those years but reflect income from the year prior, while data for 2010 and 2017 represent five-year averages (e.g. 2013-2017).

Job growth is critical for economic vitality, but it is important to grow good jobs that pay family-supporting wages and offer opportunities for upward mobility. The trend over recent decades has been job polarization, with much faster growth in low- and high-wage jobs than in the middle-wage jobs that have typically provided opportunities for workers without college degrees to be financially secure and enter the middle class. And although low-wage jobs have grown quickly, wages have largely been stagnant.[5]

Between 1980 and 2018, there has been a lot of job growth for low wage workers (29%), however, much less growth in earnings per worker (only 3%) in New Jersey. In contrast, high wage jobs have increased only by 7%, while earnings have grown by 50% per worker (Figure 16).

Figure 16. Job and Wage Growth by Wage Level, New Jersey, 1990-2018

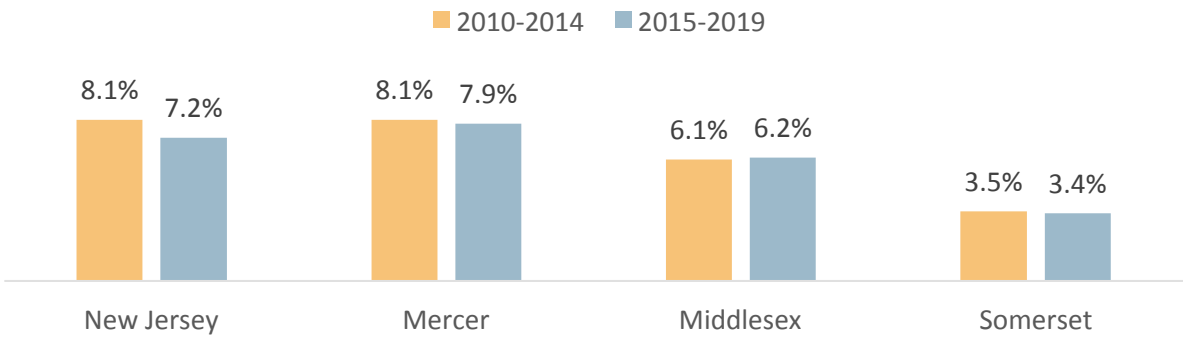


DATA SOURCE: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW) and Woods & Poole Economics, Complete Economic and Demographic Data Source, 2019 as cited by National Equity Atlas
NOTE: The net percentage change in jobs and earnings per worker by wage level category. Industries were grouped into three categories (low, middle, and high) by average annual earnings per worker in 1990, and measures of growth in jobs and earnings per worker were calculated for each category over time. Earnings growth is adjusted for inflation.

U.S. Census poverty data show that overall poverty rates differ substantially across the three counties (Figure 17). Mercer County had the highest poverty level in 2019, 7.9%, a rate similar to New Jersey overall (7.2%). By contrast, the poverty rate in Somerset County (3.4%) was less than half that rate. The proportion of families living below the poverty level decreased over 10% in New Jersey from 2015 to 2019, while remaining relatively stable in Mercer, Middlesex, and Somerset counties. The federal poverty level (FPL) changes by household size; in 2021, FPL is $12,880 for an individual and $26,500 for a family of four.

[5] National Equity Atlas

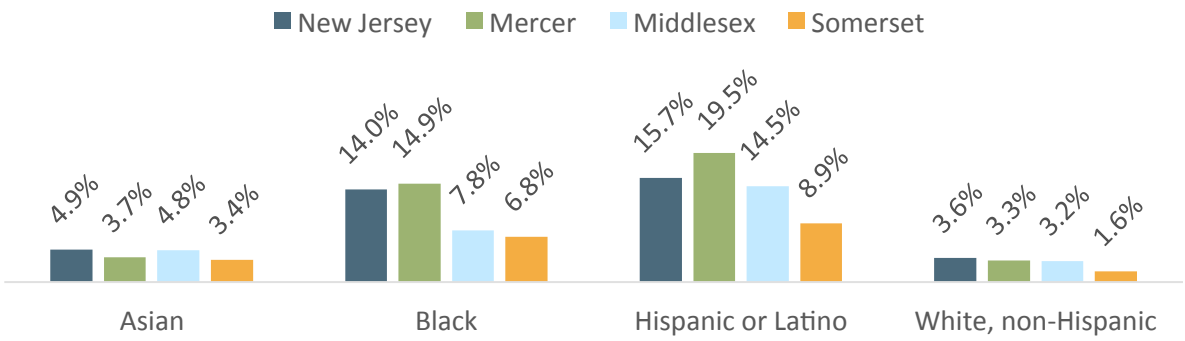
Figure 17. Percent Families Living in Poverty, New Jersey and by County, 2010-2014 and 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

Data show that poverty rates differ by race/ethnicity (Figure 18) in 2019. Among all geographies, the percent of families living in poverty followed the same pattern among race/ethnicity groups within the state and each county with highest to lowest poverty rates in the following order: Hispanic or Latino; Black; Asian; and White, non-Hispanic.

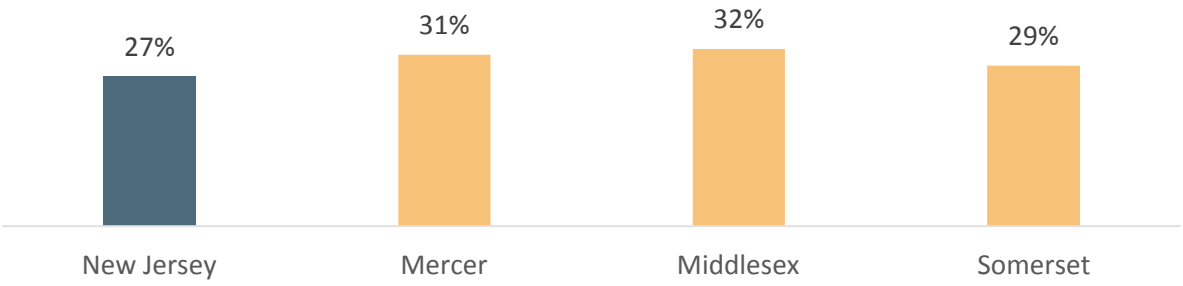
Figure 18. Percent Families Living in Poverty by Race/Ethnicity, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

Asset Limited, Income Constrained, Employed (ALICE) workers educate our children, keep us healthy, and make our quality of life possible, yet do not earn enough to support their own families. ALICE households are forced to make tough choices, such as deciding between quality childcare or paying rent, which have long-term consequences not only for ALICE, but for all.[vi] In New Jersey and all three counties, around one third of households fall into the ALICE population (Figure 19).

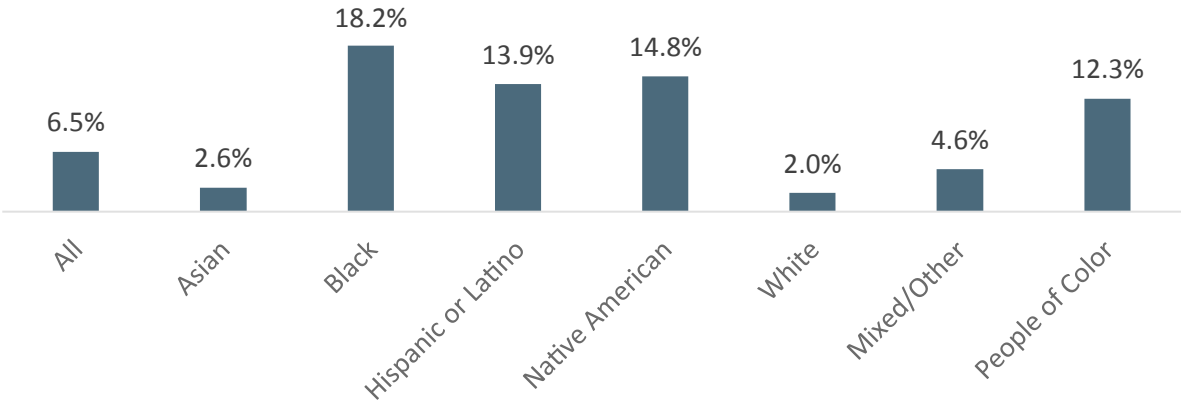
Figure 19. Percent Households Falling into ALICE Population, New Jersey and by County, 2018



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018 as reported by United Ways of New Jersey, Alice in New Jersey: A Financial Hardship Study, 2020

People who live in high-poverty neighborhoods have less access to jobs, services, high-quality education, parks, safe streets, and other essential ingredients of economic and social success.[6] In 2017 in the state, a higher proportion of people of color, particularly Black, Hispanic or Latino and Native American people, live in high-poverty neighborhoods, even if they themselves are not poor (Figure 20).

Figure 20. Percent Population Living in High Poverty Neighborhoods, New Jersey, 2017



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-year and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas
NOTE: The percentage of the population living in high-poverty neighborhoods, defined as census tracts with a poverty rate of 30 percent or higher. Data for 2017 represent five-year averages (e.g. 2013-2017).

[6] National Equity Atlas

Employment and Workforce

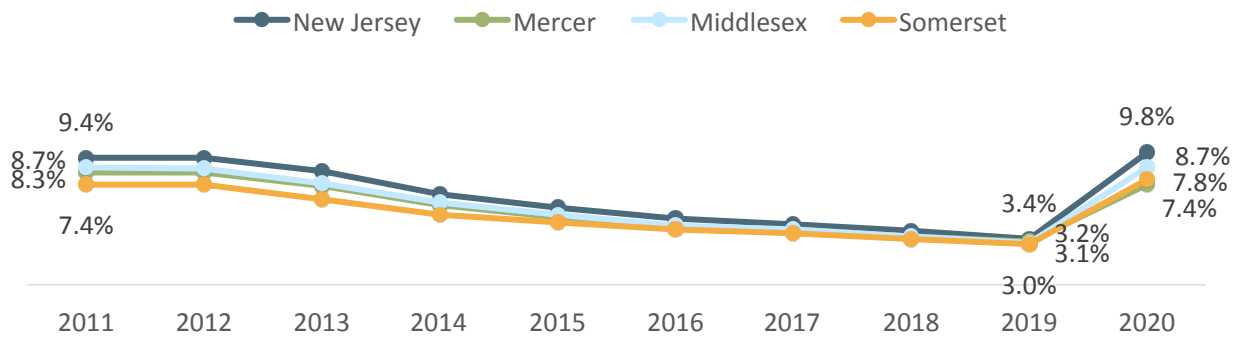
Why is This Important?

Americans spend more than half their waking lives at work.[vii] *Employment can confer income, benefits, and economic stability and make it easier to live in healthier neighborhoods, access better quality education and food, all of which promote health.* [viii] *By contrast, unemployment, underemployment, and job instability not only make it more difficult to purchase goods and services that enhance health, but also have been shown to contribute to stress-related health conditions and poorer mental health.*[ix]

Prior to 2020, the unemployment rates in New Jersey and three counties were decreasing. The impact of the COVID-19 pandemic and resulting economic shutdown in many sectors is reflected in 2020 unemployment rates, where the state rate rose to around 10% and the three counties' rates rose to 7-9% (Figure 21). A few focus group participants and interviewees shared that the pandemic led to loss of jobs for some families, particularly those who are low income.

Over the past decade, unemployment in the three counties was lower than that of the state, with Somerset County consistently experiencing the lowest unemployment rate of the three counties. As shown in Figure 21, the unemployment rate in the three counties was between 3.0-3.2% in 2019, similar to that of New Jersey (3.4%).

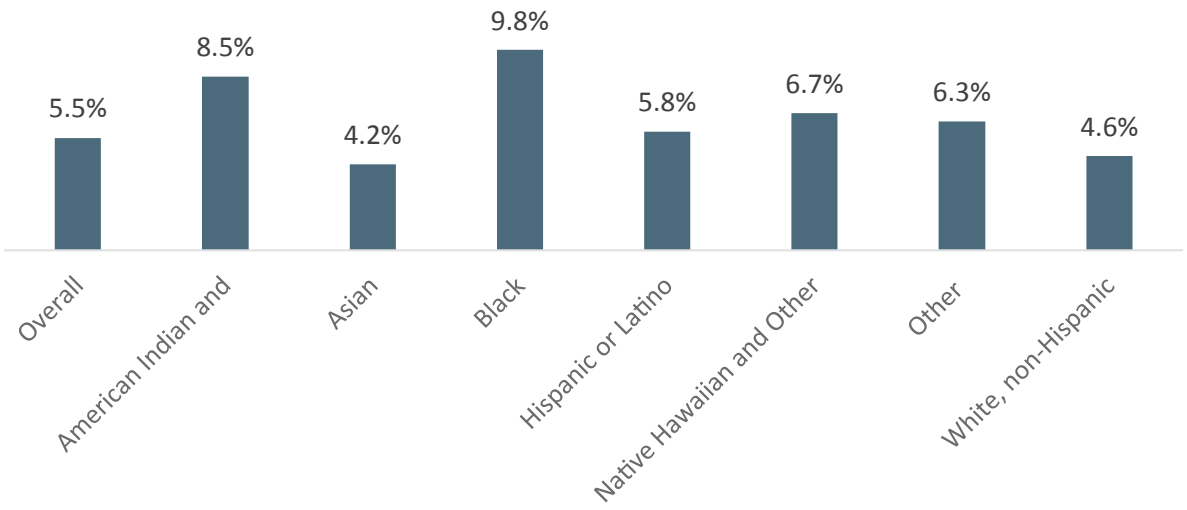
Figure 21. Unemployment Rate, New Jersey and by County, 2011-2019



DATA SOURCE: Bureau of Labor Statistics, Local Area Unemployment Statistics, 2011-2019
NOTE: There were revised population controls and model re-estimation when calculating the percentages for New Jersey for 2013 and onward.

When examining New Jersey rates of unemployment by race/ethnicity in 2015-2019, rates were nearly double among Black (9.8%), American Indian and Alaska Native (8.5%), and Native Hawaiian and Other Pacific Islander (6.7%) residents (Figure 22) as compared to Asian (4.2%) and White, non-Hispanic residents (4.6%).

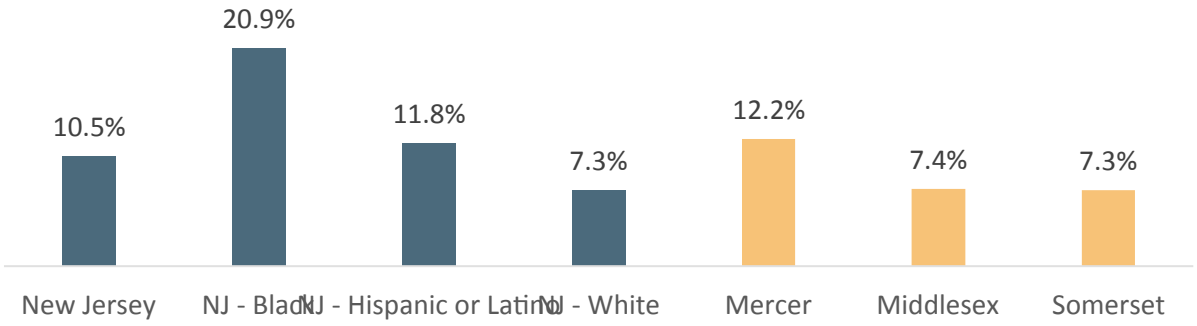
Figure 22. Unemployment Rate by Race/Ethnicity, New Jersey, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Data show that over one in ten youth in New Jersey are "disconnected youth", defined as those ages 16-24 who are neither in school nor employed. When looking at data by race/ethnicity in the state, this percentage is highest among the Black population (20.9%), which is double the statewide rate (10.5%) and nearly triple the rate of White residents (7.3%). Among the three counties, Mercer County has the highest proportion of such youth (12.2%), and Somerset County has the lowest rate (7.3%).

Figure 23. Percent Disconnected Youth by Race/Ethnicity, New Jersey and by County, 2018



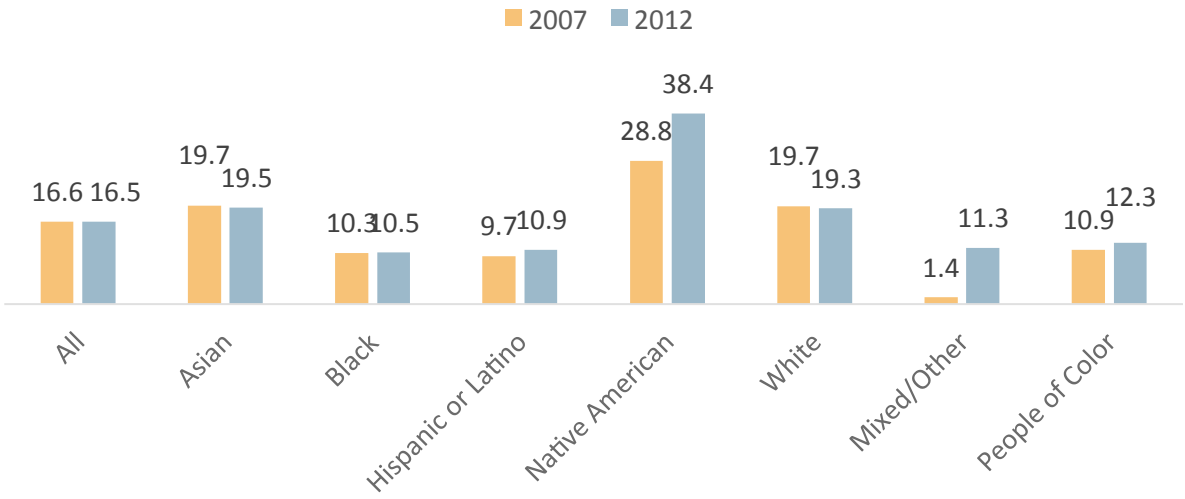
DATA SOURCE: U.S. Census Bureau, American Community Survey 1-Year Estimates, 2018, as cited by Measure of America of the Social Science Research Council
NOTE: Disconnected youth is defined as youth between the ages of 16 and 24 years old who are neither in school or employed, excluding those in the military or are in school or working part-time. Youth actively seeking jobs are also considered disconnected.

Being of a certain race or gender should not be a barrier to owning a business, and eliminating these barriers to ensure that people of color and women can start and grow successful businesses is critical for inclusive growth. Nationally, if the number of people of color firms had been proportional to their distribution in the labor force in 2012, people of color would own 1.1 million more businesses with

employees, representing an additional 9 million jobs and $300 billion in worker income to the economy.[7]

In New Jersey, the number of people of color owned businesses increased from 10.9 to 12.3 per 100 workers from 2007 to 2012 while White business ownership decreased slightly from 19.7 to 19.3 per 100 workers (Figure 24). Native American business ownership is the highest and continued to rise from 28.8 to 38.4 per 100 workers in that same time period. The rate of White business ownership was 1.5 to 2 times the rate of people of color business ownership in 2007 and 2012 in New Jersey.

Figure 24. Business Ownership per 100 Workers by Race/Ethnicity, New Jersey, 2007 and 2012

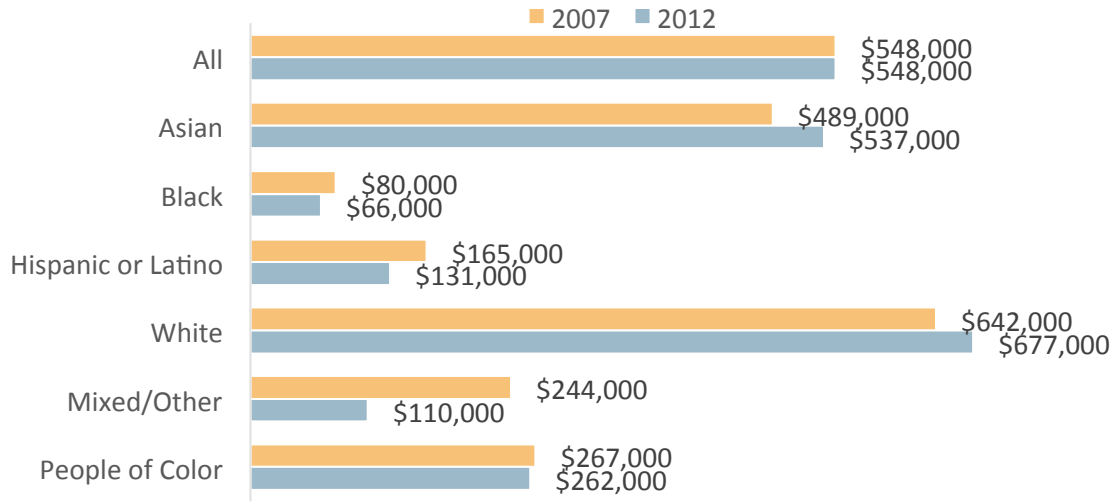


DATA SOURCE: U.S. Census Bureau, Survey of Business Owners, 2007 and 2012, as cited by National Equity Atlas
NOTE: The number of firms per 100 persons in the labor force ages 16 or older and growth in the number of firms. Firms are classified by race/ethnicity and gender based on the self-identification of the majority owner. With the exception of Whites, all racial groups include people of Hispanic origin who self-identify with that racial identity.

Leveling the playing field and ensuring underrepresented entrepreneurs can access the growth capital, information, contracts, and networks necessary to growing their businesses—and creating more jobs—is integral to building inclusive local economies. Entrepreneurs of color are more likely to hire employees of color than other firms, and they generate increased economic activity in low-income communities of color.[8] The disparity in average annual revenue between White-owned businesses and businesses owned by people of color has increased from $375,000 in 2007 to $415,000 in 2012 (Figure 25). White-owned businesses earned 8 to 10 times the amount earned by Black-owned businesses in 2007 and 2012.

[7] National Equity Atlas
[8] National Equity Atlas

Figure 25. Business Revenue per Firm by Race/Ethnicity, New Jersey, 2007 and 2012



DATA SOURCE: U.S. Census Bureau, Survey of Business Owners, 2007 and 2012

NOTE: The average annual receipts per firm (in 2012 dollars) and growth in receipts per firm. Firms are classified by race/ethnicity and gender based on the self-identification of the majority owner. With the exception of Whites, all racial groups include people of Hispanic origin who self-identify with that racial identity.

Education

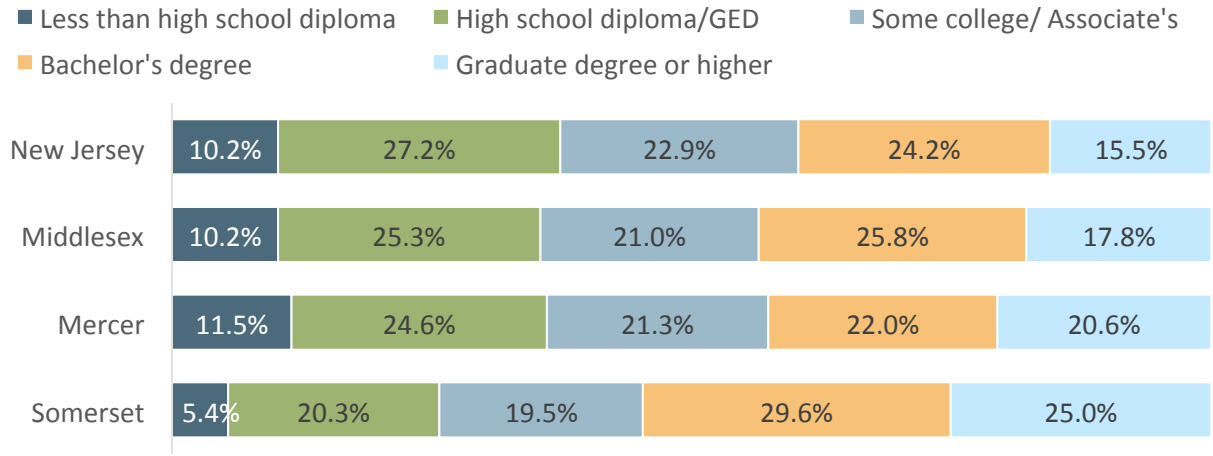
Why is This Important?

Education is a key social determinant of health. Individuals of higher educational attainment generally have more favorable health profiles compared to their counterparts with lower educational attainment.[x] *Education increases economic and social resources; individuals with higher levels of education are less likely to experience unemployment and economic hardship and have more social connections compared to those with lower levels.*[xi] *Those with lower levels of education are more likely to be engaged in jobs that are lower paying or unstable, lack employer-provided health insurance benefits, or that are more risky or unsafe. Research has also found that adults with higher educational levels have higher levels of health literacy, causing them to better comprehend medical instructions, understand medications, and advocate for themselves with health providers than their counterparts with lower educational attainment.*[xii] *Inequities in educational funding and unequal access to key educational resources, including skilled teachers and quality curriculum, are concentrated in low-income communities and communities of color and are interconnected with the unequitable and discriminatory housing and neighborhood polices these same communities experience.*[xiii]

Interviewees and focus group participants reported that the region has strong schools and a well-educated population. Proximity to higher education institutions was seen as a substantial community asset.

Data about educational achievement among adults ages 25 years and older show that a higher proportion of residents in all three counties than in the state overall have a college degree or higher (Figure 26). Almost 60% of adults in Somerset County have a bachelor's degree or higher; less than 6% have not completed high school. By contrast, a far higher proportion of adults in Mercer and Middlesex Counties did not complete high school.

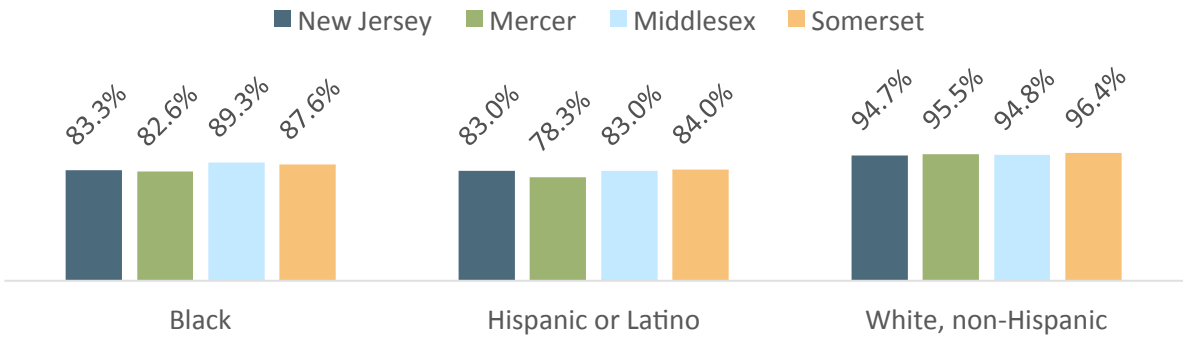
Figure 26. Educational Attainment for Population 25 Years and Over, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Overall, at least 90% of students in Mercer, Middlesex, and Somerset counties graduate high school within four years. Across the region, less than 85% of Hispanic or Latino students graduate high school in four years compared to at least 95% of White students (Figure 27).

Figure 27. Percent Students Receiving High School Diploma in Four Years by Race/Ethnicity, New Jersey and by County, 2017-2018

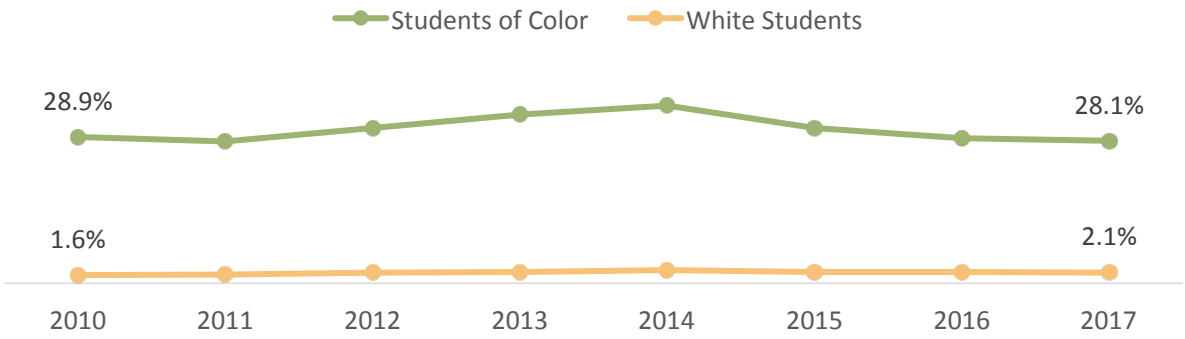


DATA SOURCE: U.S. Department of Education, EDFacts, accessed via Data.gov, analyzed by CARES, and reported by Community Commons 2017-2018

Research shows that the most powerful predictor of racial inequities in educational achievement is the extent to which students attend schools where most of their classmates are low-income. Because neighborhoods remain highly segregated by race, Black and Hispanic or Latino students are far more likely than their White counterparts to attend high poverty schools. These schools are charged with educating children who need more supports and services, yet generally have fewer resources, less skilled teachers, and less challenging curricula than schools with wealthier students.[9]

In the state of New Jersey, 28.1% of students of color attended high poverty schools, compared to a far lower proportion of 2.1% of White students in 2017 (Figure 28).

Figure 28. Percent Students in High Poverty Schools, New Jersey, 2010-2017

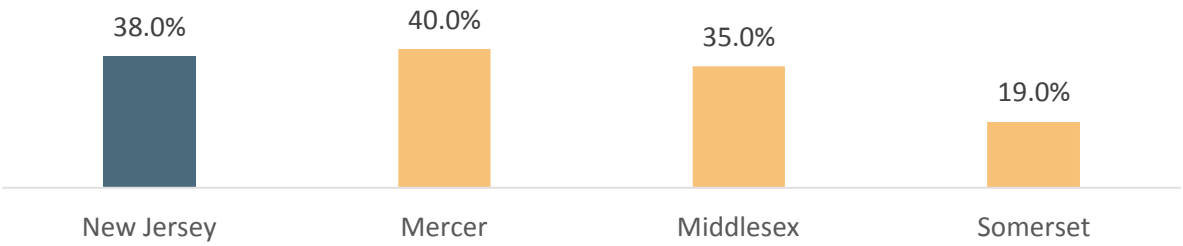


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2013-2017 as cited by National Equity Atlas

38.0% of students enrolled in public school in New Jersey were eligible for free/reduced lunch; this percentage was highest in Mercer County, with 40.0% students eligible, and lowest in Somerset County, with 19.0% eligible (Figure 29).

[9] National Equity Atlas

Figure 29. Percent Public School Students Eligible for Free or Reduced Price Lunch, by New Jersey and County, 2018-2019



DATA SOURCE: U.S. Department of Education, National Center for Education Statistics, as cited by County Health Rankings, 2018-2019

Housing

"Housing is expensive and landlords take advantage of people because of that." - Focus Group Participant

"How is somebody gonna buy their first house when housing is going through the roof?" Key Informant

Why is This Important?

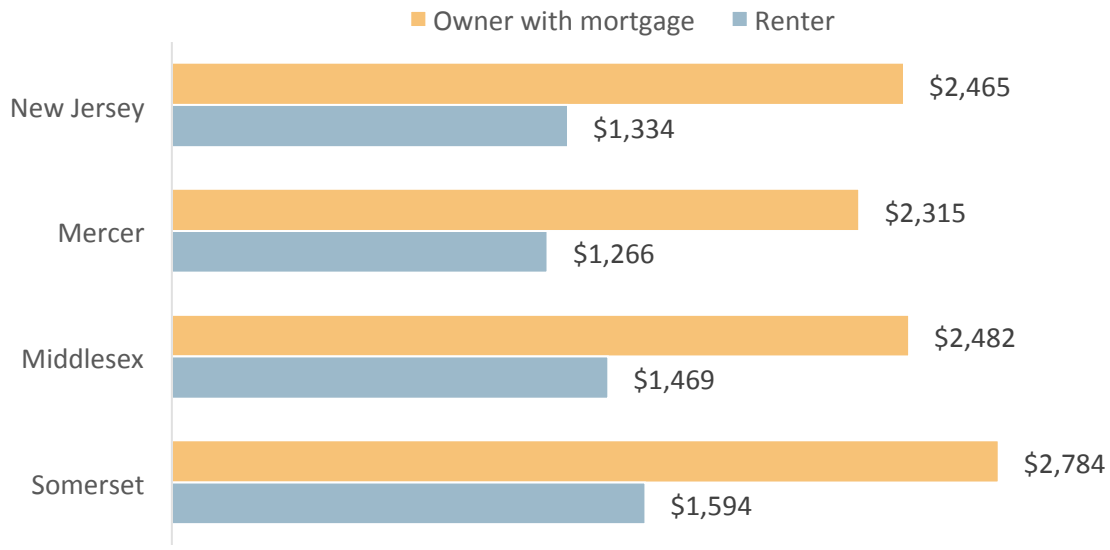
Analyses suggest that your zip code is the greatest predictor of life expectancy.[xiv] *Where people live impacts their daily lives, health, and well-being. Conditions in the home and neighborhood environment may promote health or be a source of exposures that may increase the risk of adverse health outcomes.*[xv] *Poor-quality housing can have direct negative health impacts such as respiratory conditions (e.g., asthma) due primarily to poor indoor air quality—and can be one of the strongest drivers for asthma-related emergency department visits among children. Poor housing conditions can also result in cognitive delays in children from exposure to neurotoxins such as lead.*[xvi] *Housing instability has been associated with poorer outcomes for children related to risk for developmental delays, being underweight, and lower school attendance. Additionally, housing is often the largest household expense; for homeowners, it can be an important source of wealth.*[xvii] *On the other hand, housing instability and stress of housing affordability have been associated with poorer mental health outcomes and disruptions in work, school, and day care arrangements.*[xviii]

Similar to 2018, the high cost of housing in the three counties was a theme in many conversations in 2021 as well. As in prior conversations, participants in 2021 expressed concern about the high cost of housing, high property taxes, and lack of a focus on and development of affordable housing. According to interviewees and focus group participants, the PMPH service area is experiencing the same surge in housing prices as elsewhere in the country—many houses, participants report, are being sold substantially above asking price. While towns such as Plainsboro and Hamilton were described as more affordable than those in other parts of the region, participants consistently mentioned that housing expense and high taxes put housing out of reach for some and created financial stress for those who remain.

According to interview and focus group participants, some residents have left the area for places with lower cost and often less desirable housing and younger people are being priced out. One young adult described the challenges as follows: *"I'm living with my parents and I just graduated – I'm looking for something around here, but with rent and student loan payments and everything, there's no way I'd be able to afford it."* Similarly, seniors noted that several new 55+ communities and assisted living facilities have been built in recent years but, one focus group participant stated, *"the price tag is really high on some of them."* Lack of adult housing for LGBTQ+ residents was also mentioned. The high cost of housing has led to other concerns as well. Some participants reported that overcrowding in housing is a growing challenge as are landlords who do not maintain their properties.

Quantitative data supports these qualitative findings around housing. The median housing costs for renters and owners in Mercer County is lower than the state overall (
Figure 30), while owners and renters in Middlesex and Somerset Counties have higher median housing costs compared to New Jersey.

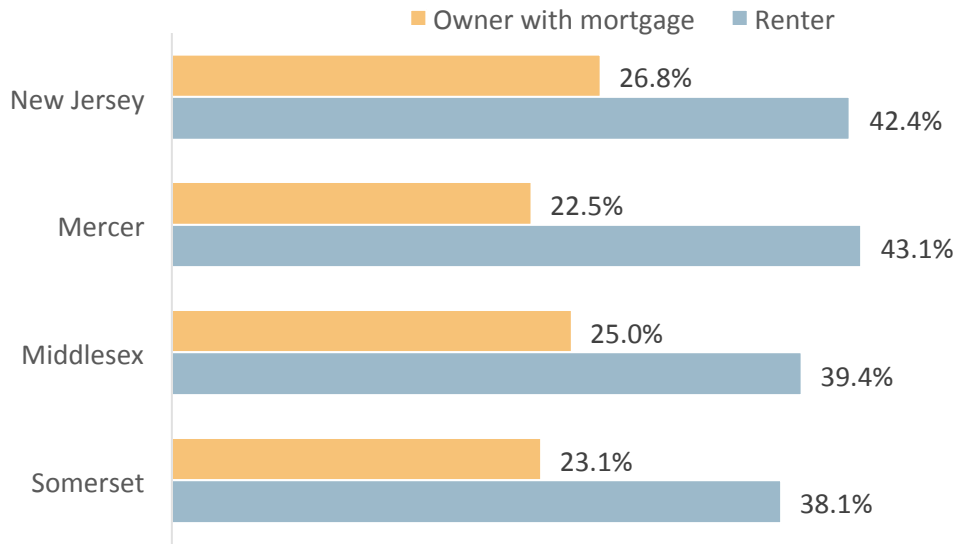
Figure 30. Monthly Median Housing Costs by Tenure, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

The proportion of residents whose housing costs are greater than 35% of household income is lower or about the same in the three counties as for the state, for both renters and owners (Figure 31). However, in all three counties at least 20% of owners and over 38% of renters contribute 35% or more of their household income to housing costs.

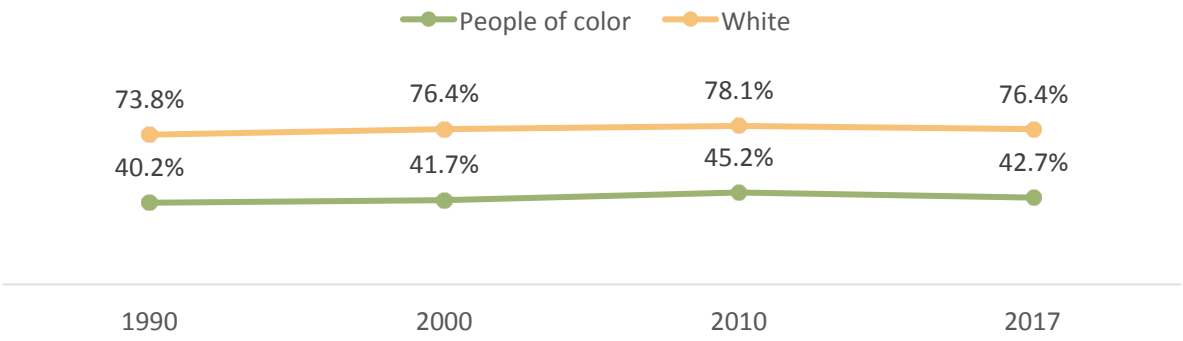
Figure 31. Percent Households where Housing Costs are 35% or More of Household Income by Tenure, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

When examining home ownership by race/ethnicity in 2017, a higher proportion of White residents in New Jersey (76.4%) own their homes than people of color (42.7%) (Figure 32). This rate has remained relatively consistent for both populations since 1990.

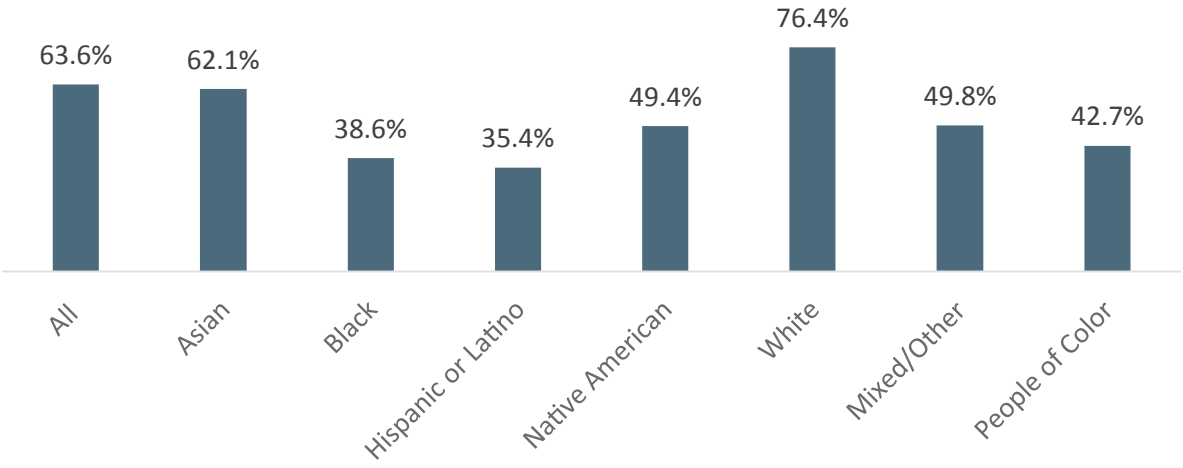
Figure 32. Percent Owner-Occupied Households by Race/Ethnicity, New Jersey, 1990–2017



DATA SOURCE: U.S. Census Bureau, 1980 5% State Sample, 1990 5% Sample, 2000 5% Sample, American Community Survey 5-Year Estimates, 2006-2010 and 2013-2017 and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas
NOTE: The percentage of households that are owner-occupied. Data for 2010 and 2017 represent five-year averages (e.g., 2013-2017).

When examining housing tenure by further disaggregated race/ethnicity characteristics in 2017, housing ownership is the lowest among Hispanic or Latino (35.4%) and Black (38.6%) residents and highest among Asian (62.1%) and White (76.4%) residents in New Jersey (Figure 33).

Figure 33. Percent Owner-Occupied Households by Race/Ethnicity, New Jersey, 2017



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2013-2017 and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas
NOTE: The percentage of households that are owner-occupied. Data for 2010 and 2017 represent five-year averages (e.g. 2013-2017).

All residents should have access to quality, affordable homes. Housing is the single largest expense for households, and far too many pay too much for housing, particularly low-income renters. High housing

costs squeeze family budgets, leaving few resources to pay for other expenses, save for emergencies, or make long-term investments.[10]

Severe housing cost burden is defined as the percentage of households that spend 50% or more of their household income on housing. Severe housing burden among New Jersey residents in 2017 was highest among renters and owners of color (29.1% and 18.0%, respectively), compared to White renters and owners (29.1% and 13.6% respectively (Figure 34). The share of renters and owners that are severely cost burdened has increased from 1990 to 2017.

Figure 34. Severe Housing Burden by Tenure, New Jersey, 1990-2017

Year	Renter-White	Renter-POC	Owner-White	Owner-POC
1990	16.3%	20.7%	7.6%	9.2%
2000	17.8%	19.8%	NA	NA
2010	24.6%	27.6%	15.0%	22.4%
2017	24.9%	29.1%	13.6%	18.0%

DATA SOURCE: U.S. Census Bureau, 1980 5% State Sample, 1990 5% Sample, 2000 5% Sample, American Community Survey 5-Year Estimates, 2006-2010 and 2013-2017 and Integrated Public Use Microdata Series, University of Minnesota, as cited by National Equity Atlas

NOTE: The share of owner- and renter-occupied households that are cost-burdened "severely" (more than 50 percent). Data for 2010 and 2017 represent five-year averages (e.g. 2013-2017).

[10] National Equity Atlas

Transportation

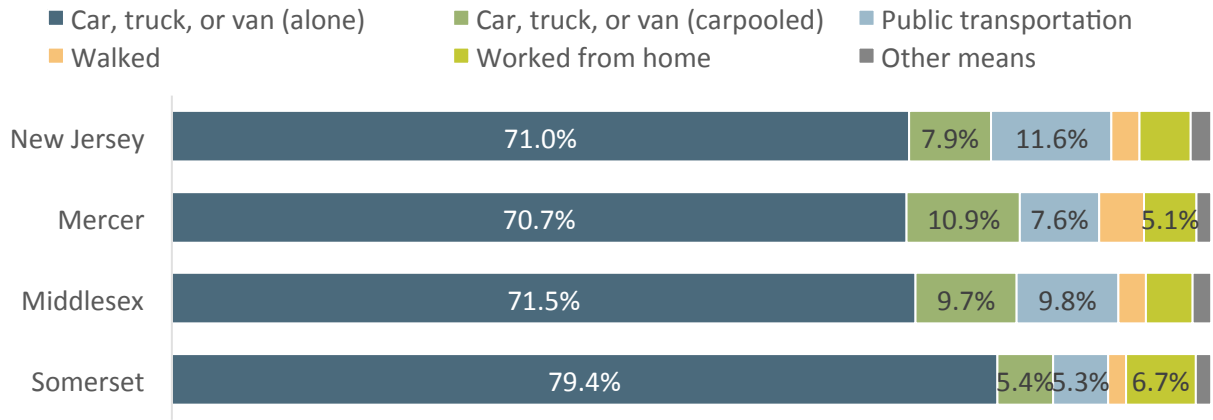
"[We have] poor transportation for those who don't have a car to get around. That's a huge issue, especially for entry level positions." – Key Informant

Why is This Important?

Transportation determines how people can connect between where they live, learn, play, and work. Access to good transportation promotes health by helping individuals, families, and communities connect with resources and opportunities, including employment, health care, education, and other goods and services such as parks or grocery stores.[xix] *Walkable or bikeable transportation options can also be health promoting, reducing the risk of obesity, diabetes, and cardiovascular disease and improving mental health and community cohesion.*[xx] *On the other hand, certain forms of transportation can also have health consequences, including traffic-related accidents, air pollution exposure, and sedentary lifestyles linked with less active forms of transportation.*[xxi]

American Community Survey data show that the region's residents are very reliant on private cars. In 2019, about 11.2% of Mercer County households did not have a vehicle available, a proportion similar to the state overall (11.5%). A smaller proportion of Middlesex County residents (8.0%) and Somerset County residents (4.9%) reported not having a vehicle available. Most workers across the three counties and the state of New Jersey drive alone to work (Figure 35). The highest proportion of Somerset workers (79.4%) drive alone to work. Use of public transportation by adult workers in the three counties is smaller than for the state overall, notably smallest in Somerset County. In New Jersey, of workers who drive to work alone, most are White, non-Hispanic (62.4%).

Figure 35. Means of Transportation to Work for Population 16 Years and Over, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019
NOTE: Data labels ≤ 5% not shown

In 2021, perspectives on transportation in the region varied. While some focus group participants and interviewees described the region as having good public transportation, including NJ Transit, Amtrak, and buses, others shared that those without a car face challenges. Transportation was identified as a substantial concern in the community in past CHNAs. According to participants, seniors and lower-income residents have some ride options, including those offered through the Counties and through local hospitals and non-profit organizations. Participants reported that there are some limitations on

how these services can be used and for some, the paperwork required to receive these services can be challenging. Additionally, many of these services were curtailed due to the pandemic and some residents are reluctant to use public transportation at this time.

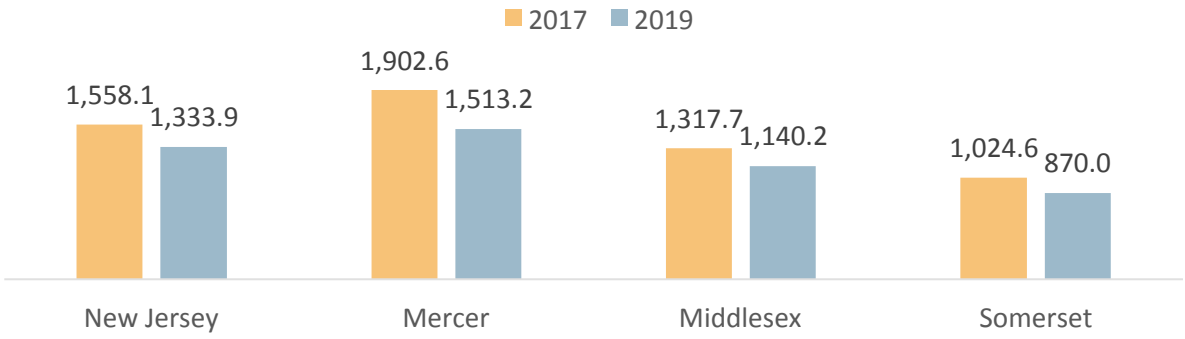
Crime and Safety

Why is This Important?

Violence and trauma can have lasting impacts on physical and mental health. There are a myriad of ways people may be exposed to violence: they may be victims and suffer from premature death or injuries themselves or may witness or hear about crime and violence in their community, which can lead to trauma and other mental distress and decreased quality of life.[xxii] *Youth exposed to violence may experience behavioral or mental health problems, including depression, anxiety, and post-traumatic stress disorder or may show increased signs of aggression; studies have shown violence and trauma are linked to health conditions such as high blood pressure, worse cardiovascular health, immune deficiency, and sleep problems.*[xxiii]

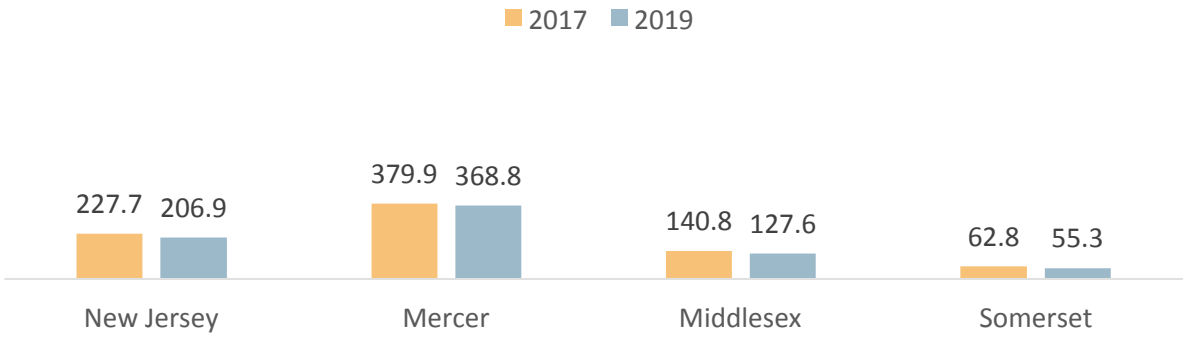
Crime statistics from the state of New Jersey indicate that Mercer County experienced higher rates of both nonviolent and violent crime than the other two counties or the state overall in 2019 (Figure 36 and Figure 37). Non-violent and violent crime rates have declined between 2017 and 2019 in all three counties and the state overall.

Figure 36. Nonviolent Crime Rate per 100,000 Population, New Jersey and by County, 2017 and 2019



DATA SOURCE: State of New Jersey, Department of Law and Public Safety, Uniform Crime Reporting Unit, 2017-2019; Rates calculated per U.S. Census Bureau, American Community Survey 1-Year Estimates, 2016
NOTE: Nonviolent crime includes burglary, larceny – theft, and motor vehicle theft

Figure 37. Violent Crime Rate per 100,000 Population, New Jersey and by County, 2017 and 2019



DATA SOURCE: State of New Jersey, Department of Law and Public Safety, Uniform Crime Reporting Unit, 2017-2019; Rates calculated per U.S. Census Bureau, American Community Survey 1-Year Estimates, 2016
NOTE: Violent crime includes homicide, rape, robbery, assault and simple assault

Along with these crime rate decreases, crime and safety were not identified as a pressing concern in focus groups or interviews. Respondents generally reported that their communities are safe. As one young person shared, "*not a lot happens … For the most part you can walk down the street and not be scared."* Domestic violence was not a prominent theme in conversations. However, one interviewee noted that the region has seen a sharp increase in domestic violence since the start of the pandemic.

Environment

Why is This Important?

A healthy environment is associated with a high quality of life and good health. Environmental factors range including the following: exposure for hazardous substances in the air, water, soil, or food; natural disasters and climate change; occupational hazards; and the built environment.[xxiv,xxv] *An unhealthy environment exacerbates issues of health, illness, injury, and behavior. Poor environmental quality has its greatest impact on people whose health status is already at risk.*[xxvi]

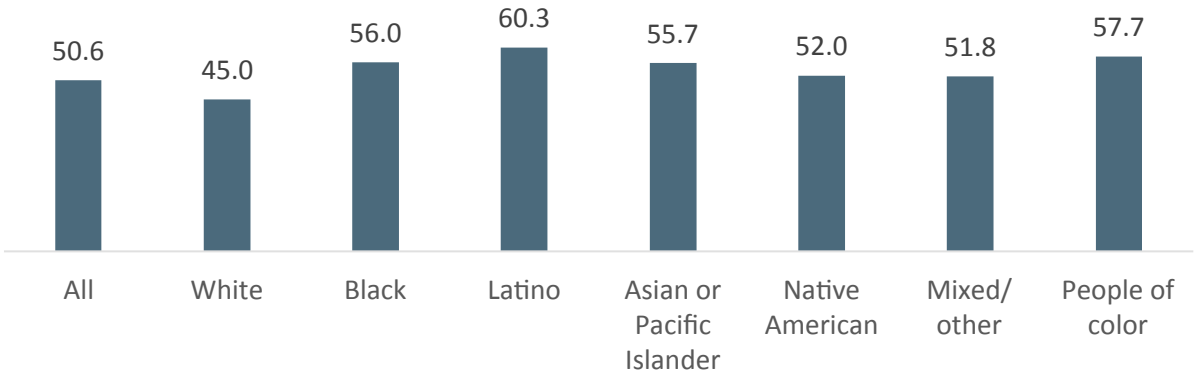
Environmental Health

Environmental issues were not extensively discussed in focus groups and interviews. However, in the community health survey, environmental health issues (e.g., lead poisoning, air pollution, climate change) were designated as a perceived top health issue for their communities by one-third of respondents identifying as multiracial or other race/ethnicity (33.8%) and almost a quarter of Hispanic/Latino (24.2%) respondents. Although not a common theme, the quality of drinking water was discussed in one focus group. Participants of this group shared that in some communities, including Hamilton, lead in the water from old pipes was a concern. Participants of this focus group, who were parents, stated that they need to filter their drinking water.

Air Pollution and Asthma

The air pollution exposure index in New Jersey overall is 50.6 (Figure 38). White New Jersey residents are exposed to less air pollution (45.0) than People of Color in New Jersey (57.7).

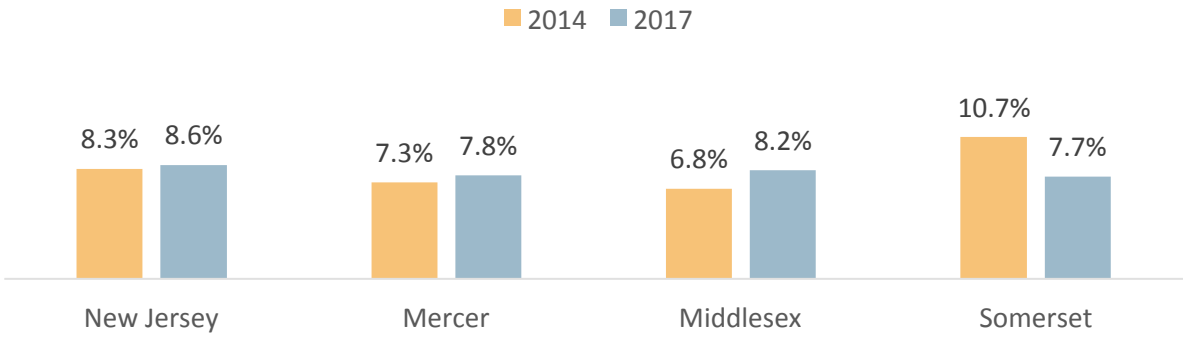
Figure 38. Air Pollution Exposure Index by Race/Ethnicity, New Jersey, 2017



DATA SOURCE: U.S. Environmental Protection Agency, 1999, 2011 and 2014 National-Scale Air Toxics Assessment (NATA); U.S. Census Bureau, 2000 Decennial Census Summary File 3, 2010 and 2017 American Community Survey (ACS) 5-Year Summary File, as cited by National Equity Atlas

Unlike the 2018 CHNA, asthma was not mentioned in focus groups or interviews. Self-reported rates of asthma among adults in 2017 was highest among adults in Middlesex County than in Mercer and Somerset counties, yet below the statewide rate (Figure 39). Somerset County experienced a decrease in the proportion of adults with asthma between 2014 and 2017.

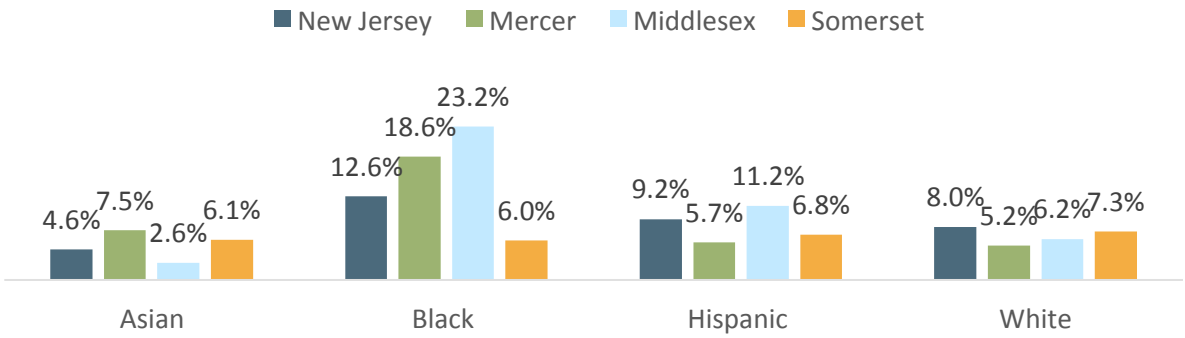
Figure 39. Percent Adults Reported Current Asthma, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

By race/ethnicity, self-reported rates of asthma among adults in 2017 was highest among Black residents in Middlesex County and lowest among Asian residents in Middlesex County (Figure 40). Notably, Black residents had the highest rates of asthma in all geographies with the exception of Somerset County, where White residents had the highest rates of asthma.

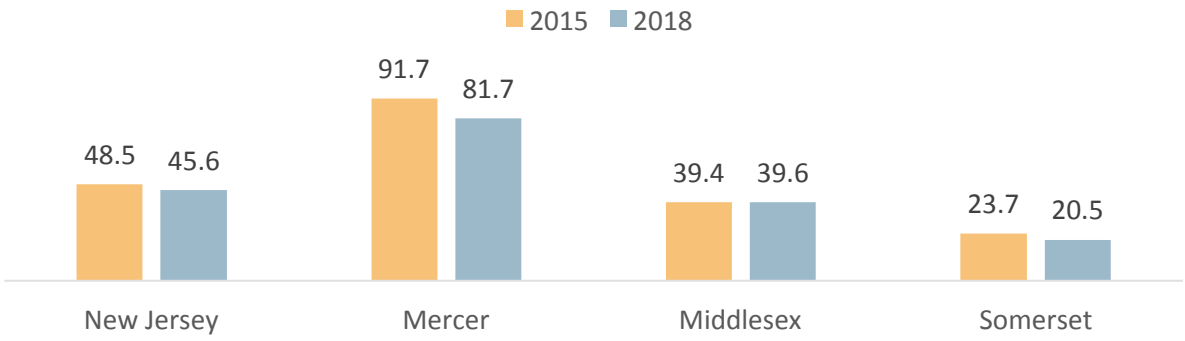
Figure 40. Percent Adults Reported Current Asthma by Race/Ethnicity, New Jersey and by County, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

The rate of age-adjusted emergency department (ED) visits for asthma in 2018 was higher in Mercer County, 82 visits per 10,000 population, than it was in Middlesex or Somerset counties or the state (Figure 41). Residents in Mercer County visit the ED for asthma more than twice as often as residents in Middlesex County (40 visits per 10,000 population) and about four times as often as residents in Somerset County (21 visits per 10,000 population). ED visits for asthma declined between 2015 and 2018 for Mercer and Somerset Counties and the state overall and remained stable in Middlesex County.

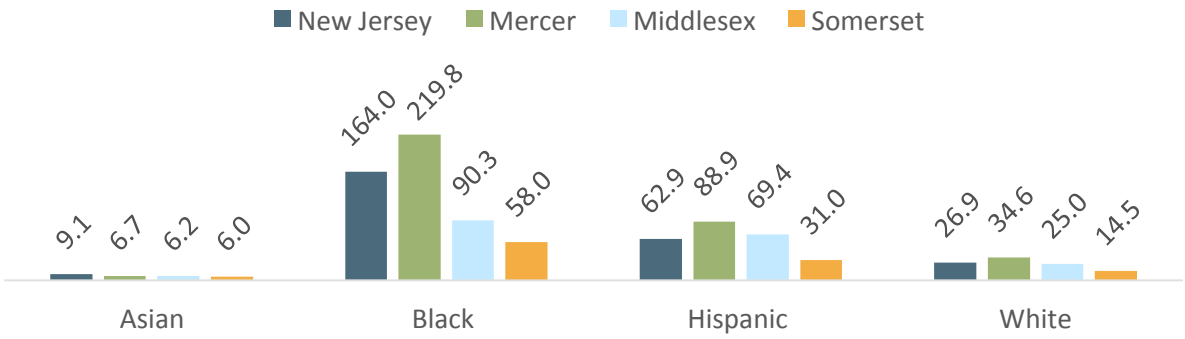
Figure 41. Age-Adjusted Asthma Emergency Department Visit Rate per 10,000 Population, New Jersey and by County, 2015 and 2018



DATA SOURCE: New Jersey Discharge Data Collection System, Office of Health Care Quality Assessment, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2015 and 2018
NOTE: Data includes ED visits where asthma was primary diagnosis

For all geographies, Black residents had the highest rates of asthma emergency department visits, followed by Hispanic, White, and Asian residents. The greatest disparity is in Mercer County, where Black residents (219.8) experience a rate 32 times that of Asian residents (6.7).

Figure 42. Age-Adjusted Asthma Emergency Department Visit Rate per 10,000 Population by Race/Ethnicity, New Jersey and by County, 2018



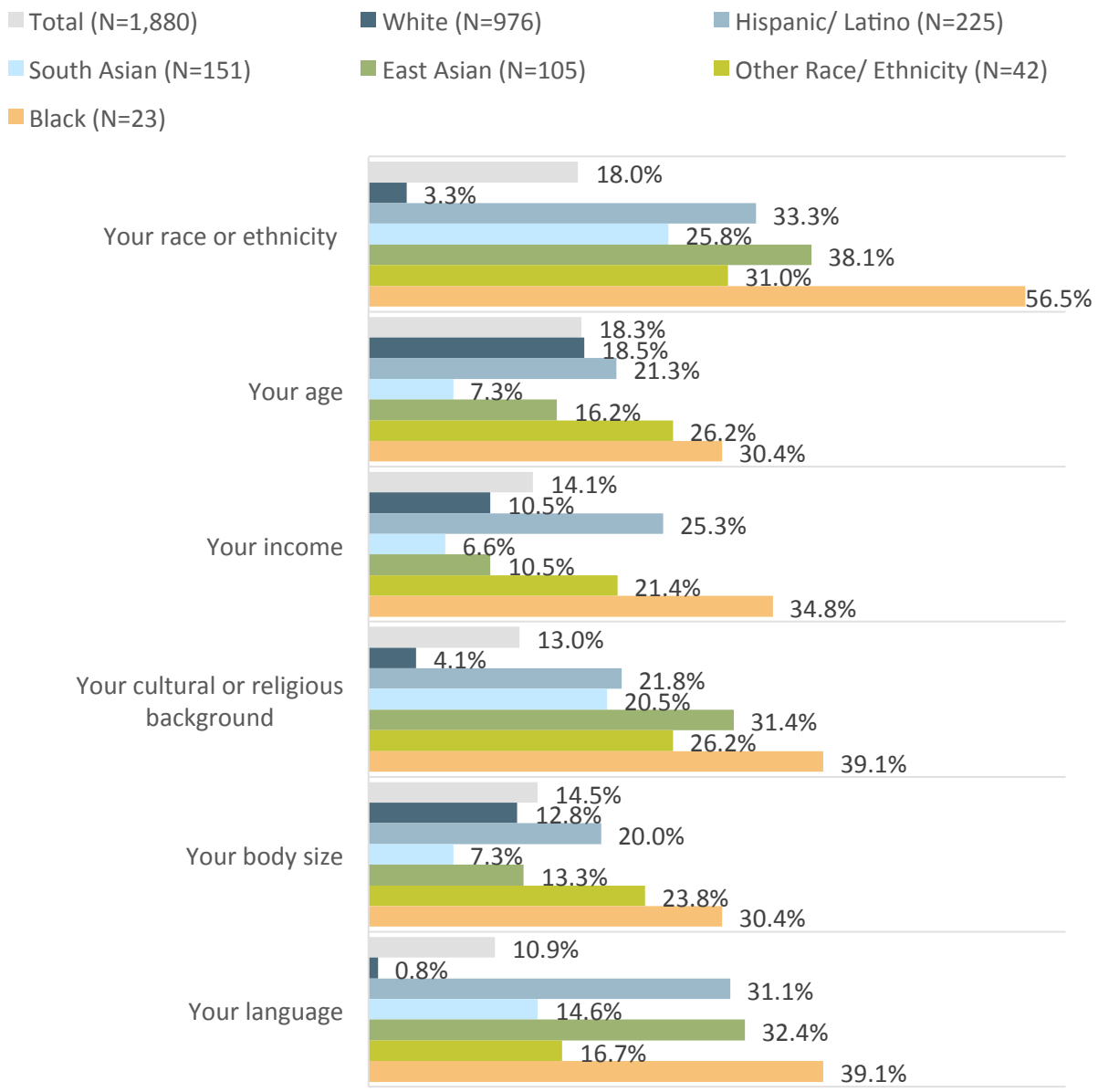
DATA SOURCE: New Jersey Discharge Data Collection System, Office of Health Care Quality Assessment, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2018
NOTE: Data includes ED visits where asthma was primary diagnosis

Discrimination and Racism

Discrimination and racism were mentioned by a couple of participants but were not prominent themes in interviews or focus group conversations. In speaking about population trends in their communities, participants of a focus group comprised of Asian residents shared that some friends have relocated to the community from larger cities, in part over fears of being targeted for their race. Providers shared that they are seeing a rise in mental health issues associated with trauma and marginalization associated with race as well as with gender identification and sexual orientation.

Survey respondents were asked to indicate how frequently they personally felt discriminated against when trying to get medical care. Between 10-18% of survey respondents reported experiencing discrimination based on race or ethnicity, age, income, cultural or religious background, body size, or language. As in the 2018 survey, experiences of discrimination were similarly ranked across geographic regions. Similar to 2018, as shown in Figure 43, "age" was one of the two characteristics most frequently selected (18.3%) by survey respondents as a basis for discrimination. Unlike 2018, another most frequently characteristic selected (18.0%) by survey respondents as a basis for discrimination was "race or ethnicity", compared to 11% in 2018. There are substantial differences in reported discrimination among racial or ethnic groups. Black respondents (56.5%) were over 17 times more likely to report discrimination based on "race or ethnicity" than White respondents (3.3%) and nearly 50 times (39.1% Black; 0.8% White) more likely to report discrimination based on "language".

Figure 43. Characteristics on Which Respondents Were Frequently or Sometimes Discriminated Against When Seeking Medical Care, by Race/Ethnicity



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

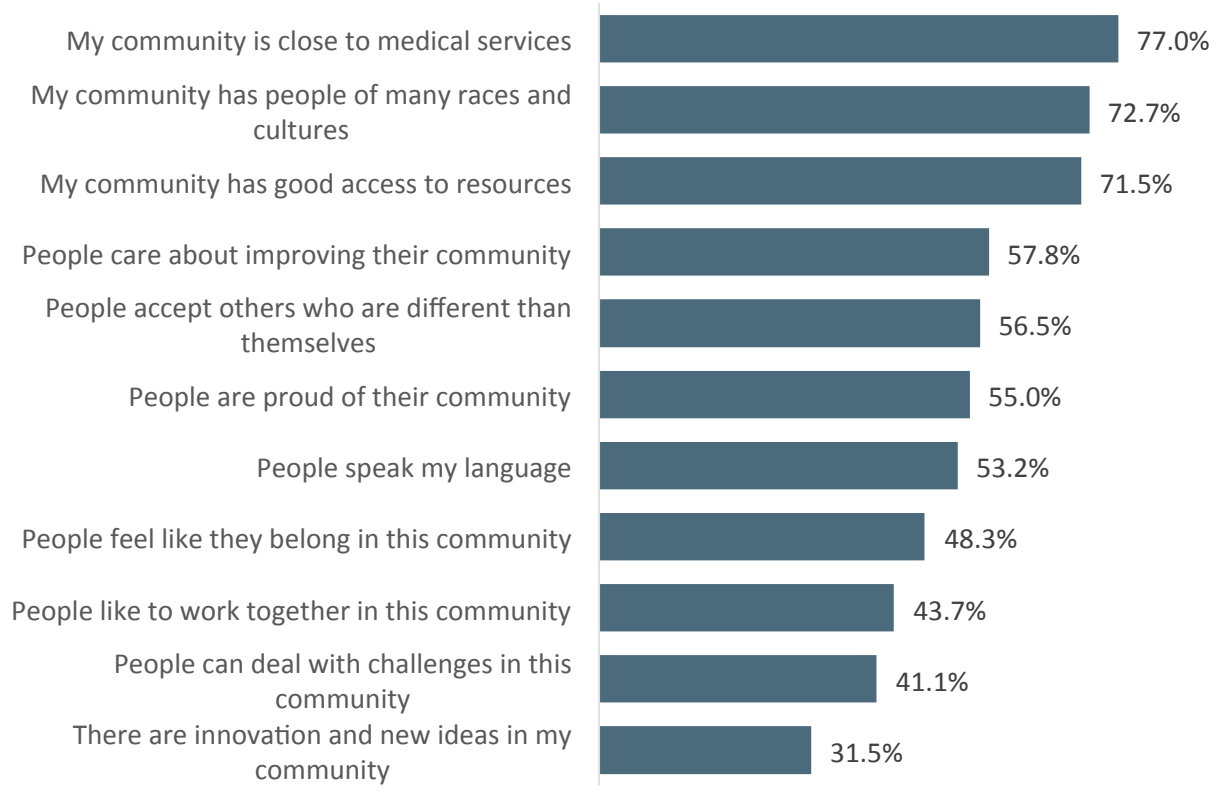
COMMUNITY RESOURCES AND ASSETS

Community health survey respondents were asked to identify strengths of their community. As shown in Figure 44, the top three community strengths included proximity to medical services (77.0%), racial/ cultural diversity (72.7%), and access to resources (71.5%). Compared to overall results of community strengths, responses were somewhat similar across counties. However, a greater proportion of Somerset County respondents endorsed they had good access to resources (82.0%) as compared to Mercer (72.5%) and Middlesex (67.9%) counties. Additionally, beyond the primary counties served by PMPH, respondents were less likely to report that their community had racial/cultural diversity (50.6%).

Overall community strengths were somewhat similar when examining responses by race/ethnicity. However, Black respondents were less likely to identify proximity to medical services (37.5%), good access to resources (54.2%), and racial/cultural diversity (66.7%) compared to other racial/ethnic groups. Additionally, just over a third (34.3%) of East Asian respondents stated that people speak their language and only about half (52.1%) of Hispanic/Latino respondents identified access to resources as a strength (see Appendix D).

Generally perceived community strengths were similar across age groups. However, a higher percentage of residents aged 65 or older (88.5%) compared to residents under 30 years old (67.1%) stated that their community is close to medical services (see Appendix D).

Figure 44. Perceived Community Strengths Identified by Respondents (N=1,931), 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Focus group participants and interviewees were also asked to identify the strengths and assets in their communities. The themes that were identified are similar to those identified in the 2018 and 2015 CHNAs.

Amenities and Social Cohesion

> *"The community is really nice and different from the big city vibe like New York and Philly. You can really relax here and the community is enriching for everyone here – no matter your gender or race*." – Focus Group Participant

As illustrated in Figure 44, the majority of community health survey respondents reported that people care about improving their community (57.8%) and are proud of their community (55.0%). Almost half (48.3%) of community health survey respondents reported that they feel like they belong in their community.

Focus group participants and interviewees reported that they enjoyed living in their communities. Many participants described their communities as tight-knit, family-oriented, and a nice place to raise children. They appreciated the many amenities available in the region including the shops, walking paths and bike trails, the beach, and active senior centers. Proximity to highways and New York and Philadelphia were also seen as assets.

Strong social ties and generosity were seen as key community assets. Numerous respondents shared that community members care about their neighbors and the community. They pointed to the all-volunteer EMS services, substantial supports for seniors, and high volunteerism among residents. This was illustrated by one focus group participant who stated, "*in Princeton, everyone helps out. From feeding the homeless to other needs, these are fulfilled by the community members*." Not all participants shared this view however: a few older residents perceived a shift away from community-mindedness. As one person living in senior housing observed, "*people are sticking to themselves, more conflict between residents, less cohesion among residents*."

Human and Economic Resources

> *"People are well educated, they seek out information, they're well-informed."* – Key Informant

Residents in the PMPH service area were described as largely well-educated. Additionally, local schools and higher education institutions were seen as substantial assets. Interview and focus group participants also described diversity as a key community strength, and the majority (72.7%) of community health survey respondents reported community diversity (i.e., people of many races and cultures) as a strength.

Health Care Resources

> *"We have a lot of specialists in our area for people that seek them out. So you can get your acute care needs met, not too far from home*." – Key Informant

> *"We have a lot of hospitals, so our residents have choices; there's no shortage of providers*." – Key Informant

The PMPH service area is one with many health care resources, which participants described as a substantial asset. Focus group participants and interviewees stated that residents have many health care options, with the ability to choose among several hospitals, specialty care of every type, proximity to care in the larger cities, and dentists, physicians, pharmacies, and urgent care nearby in most, but not all, towns. Those in senior living reported that they have some access to on-site and home-based medical services. Participants also mentioned that community-based programming is strong, with one person saying, *"the hospitals really have stepped up their game in terms of community outreach—lots of support groups and classes for health education."*

Those more intimately involved in the health care system noted that the health care landscape is shifting, bringing with it both challenges and opportunities. These changes include greater competition among health systems, greater specialization, physician aggregation, and the expansion and growth of pharmacy chains, minute clinics, and mobile in-home urgent care.

HEALTH CARE ACCESS AND UTILIZATION

While the PMPH service area has many health care resources, focus group participants and interviewees shared that there are barriers to access.

Access to Health Care Services

> *"Getting a doctor's appointment is challenging. I had to cancel my last appointment and now they can't see me [for five months]*" – Focus Group Participant

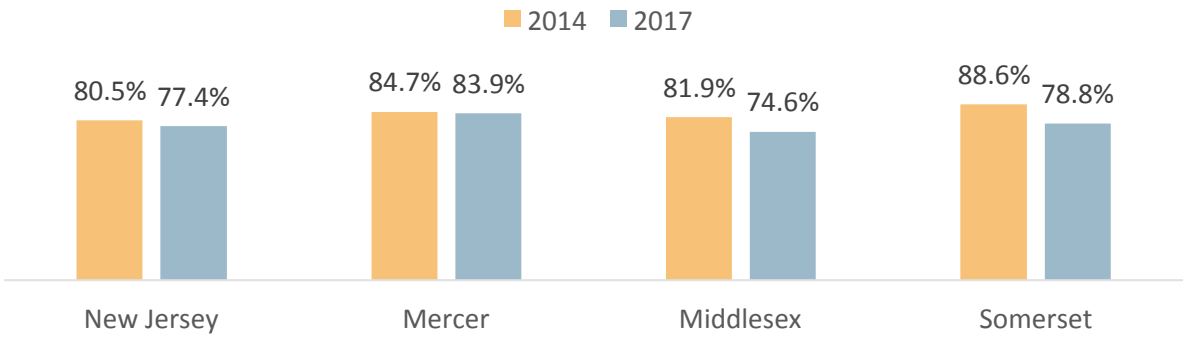
Overall, focus group participants and interviewees shared residents in the PMPH service area have excellent access to health care services. As described earlier, residents in the PMPH service area have many health care options including hospitals, specialty care of every type, proximity to care in the larger cities, and dentists, physicians, pharmacies, and urgent care.

Although the region is rich in medical resources, some interviewees and focus group participants reported challenges finding providers. As nationally, retirement of primary care providers (PCPs) is of concern in the PMPH service area. A few focus group participants shared that it has become more difficult to find a PCP or get a timely primary care appointment. Workforce constraints in the geriatrics and behavioral health fields were also mentioned. Seniors saw a need for more physicians who understand and can identify cognitive issues. As one senior stated, "*changes in cognitive status are a huge issue in older adults, some physicians know how to address it, other physicians sort of duck out*." Participants of another focus group remarked on the rise of concierge health care which is a substantial out-of-pocket cost but promoted as providing more responsive, higher-level care. This level of service *"should be a part of the doctor's basic care with our own insurances"* one focus group participant stated.

Similar to 2018, a majority of community health survey respondents (84.2% in Mercer County, 83.2% in Middlesex County, 92.2% in Somerset County, and 79.3% in other counties) indicated that their main medical care is provided by a private doctor's office or group practice. BRFSS data for 2017 show that over 75% of adults in the state and the three counties reported that they have a primary care provider.

The proportion of adults reporting to have a primary care provider decreased between 2014 and 2017 in the state and all three counties.

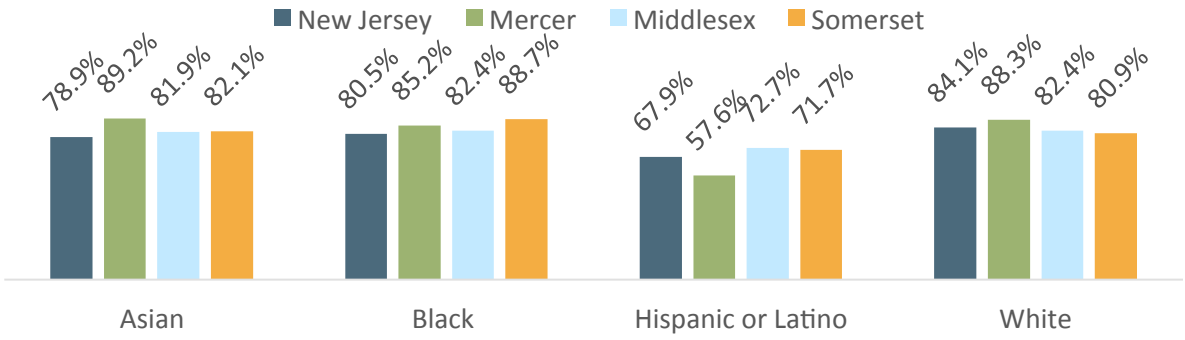
Figure 45. Percent Adults Reported to Have a Primary Care Provider, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

A lower percentage of Hispanic/Latino (59.6%) and Black (65.2%) respondents report that their main medical care is provided by a private doctor's office or group practice than White respondents (90.6%). More than one in 10 (17.4%) Hispanic/Latino respondents reported not having a main source of medical care, which is three times higher than all respondents (5.5%). When examining the proportion of residents who reported having primary care provider by race/ethnicity, BRFSS data for 2015-2017 combined show that the lowest proportion is among Hispanic residents across all geographies, with Mercer County's Hispanic residents least often reporting having a primary care provider (57.6%) compared to Asian, Black, and White residents (Figure 46). In discussion with service providers, they noted that some groups are isolated from health care services, either because of limited English skills and/or lack of trust, and acknowledged the need to be more proactive and creative in reaching out to these communities.

Figure 46. Percent Adults Reported to Have a Primary Care Provider by Race/Ethnicity, New Jersey and by County, 2015-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2015- 2017

Quantitative data show that residents' access to primary and dental care providers vary across the three counties (Figure 47). Somerset County has the highest number of primary care providers for its population size (860 residents per PCP) while Middlesex County has the fewest (1,080 residents per PCP) in 2017. There were 1,020 residents per dentist in Somerset County in 2018, compared to 1,220 residents per dentist in Mercer County, which is higher than the state ratio of 1,160 residents per dentist.

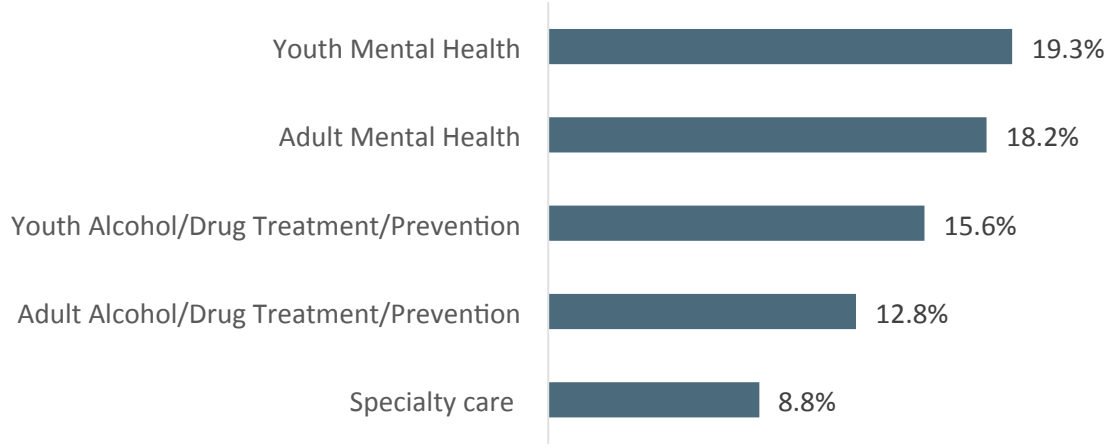
Figure 47. Ratio of Population to Primary Care Physicians (2017) and Dentists (2018), New Jersey and by County

	Primary Care Physicians (PCP)	Dentist
New Jersey	1,190:1	1,160:1
Mercer	990:1	1,220:1
Middlesex	1,080:1	1,130:1
Somerset	860:1	1,020:1

DATA SOURCE: National Provider Identification file, Centers for Medicare and Medicaid Services, Area Health Resource File, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017-2018

Community health survey respondents were also asked to rate difficulty in accessing specific health care services in the community. Similar to 2018, the top four services that respondents rated as "hard" or "very hard" to access (Figure 48) were youth counseling/mental health care (19.3%), adult counseling/mental health care (18.2%), youth alcohol/drug treatment/prevention (15.6%), and adult alcohol/drug treatment/prevention (12.8%). While responses were similar across geographic regions, there were substantial differences across racial and ethnic groups (see Appendix D**Error! Reference source not found.**). For example, respondents in the Multiracial or Other Race/Ethnicity group (20.0%) more often rated accessing dental or oral health services as difficult than White respondents (3.2%). Similarly, Multiracial or Other Race/Ethnicity group rated youth or adult mental health services or alcohol/drug treatment/prevention as hard to access twice as often as White respondents.

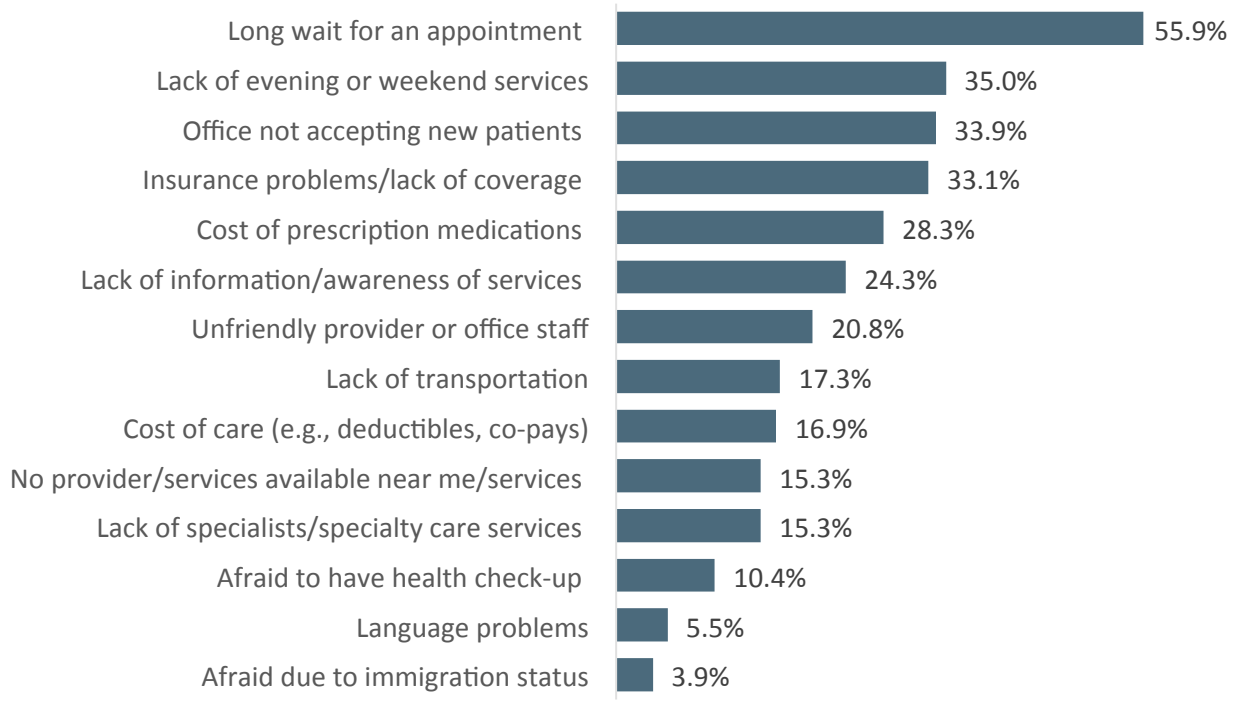
Figure 48. Healthcare Services Rated as Most Difficult to Access, 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Community health survey respondents were then asked to report what issues made it difficult for them to get care over the past two years. As shown in Figure 49, respondents most often cited experiencing long waits for appointments (55.9%), followed by lack of evening/weekend services (35.0%), and offices not accepting new patients (33.9%). While responses were similar across geographic regions, there were some differences across racial/ethnic groups. Over half (58.8%) of Black respondents and almost half (44.0%) of Hispanic/Latino respondents reported insurance problems/lack of coverage as a barrier.

Figure 49. Reported Barriers to Accessing Health Services, Among Respondents who Experienced Challenges in Healthcare Access (N=1,611), 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Obtaining Health Insurance

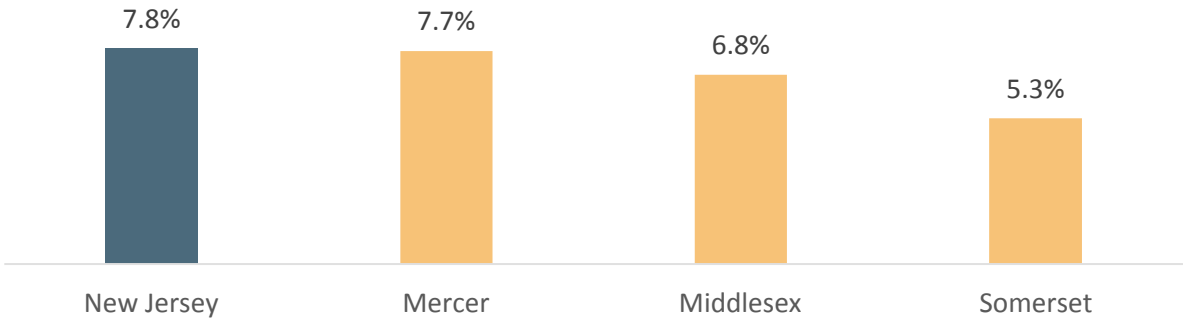
> *"As a new resident to the area, it is not easy to access health care unless you are insured. I am not insured and can't get an appointment*." - Focus Group Participant
>
> *"Someone who has a medical issue doesn't even know if they will receive a bill or not so they don't go to the hospital because they are confused or worried about getting a bill*." - Focus Group Participant

While the PMPH service area was described as one with high rates of insured residents, participants reported that there are some who lack insurance or who are underinsured. Additionally, a third (33.1%)

of community health survey respondents identified insurance problems or lack of coverage as a barrier to accessing health services. Low rates of insurance among young people were mentioned by several participants. As one young adult explained, "*the obvious [challenge to accessing health care] is that most people our age don't have health insurance and the path to it is very difficult. In some cases, you get it through your job or your parents, but that's not an option for everyone."* EMS providers reported that residents have declined care because they do not have health insurance and fear they cannot afford medical care. Undocumented residents have no access to health insurance.

According to American Community Survey 2015-2019 estimates, the proportion of uninsured residents was lower in the three counties than in the state overall (Figure 50). Somerset County had the lowest uninsured population (5.3%) while Mercer County (7.7%) had the highest.

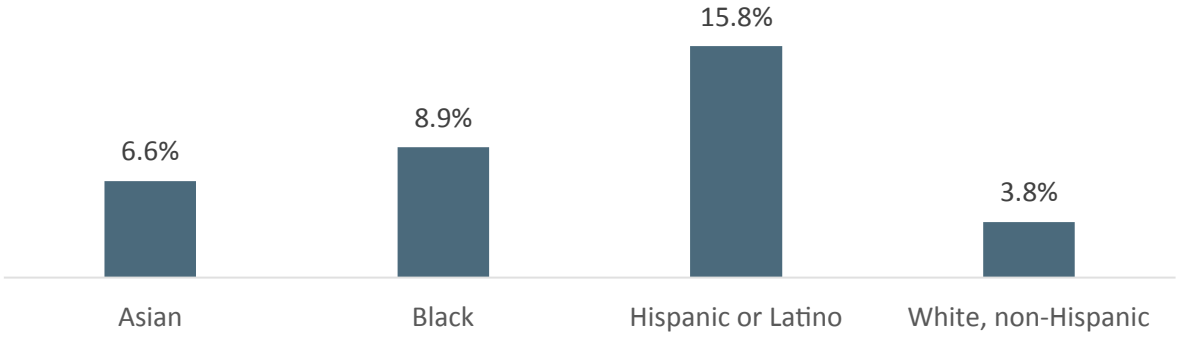
Figure 50. Percent Population Uninsured, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Data about insurance levels by race and ethnicity reveal that about 16% of Hispanic residents in the state did not have health insurance in 2019 (Figure 51). White, non-Hispanic residents in the region had the lowest rate of uninsured among the racial/ethnic groups. In New Jersey, Hispanic or Latino residents were over four times as likely to be uninsured as compared to White, non-Hispanic residents.

Figure 51. Percent Population Uninsured by Race/Ethnicity, New Jersey, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Lack of providers who accept Medicare and Medicaid was also a theme in conversations; this was identified as a challenge in 2018 as well. Differences in insurance acceptance across providers creates additional challenges, as one interviewee noted: "*most of our providers don't take Medicaid even though the hospital takes it. That's problematic. There's an access issue in accessing our hospital*

because of those insurance issues." Additionally, a couple of participants spoke about gaps in health care utilization that come when workers move between employers or between full-time and part-time employment and have their insurance interrupted or suspended.

The recent transfer of PMPH's community health center to FQHC status was described as a positive step to expand health care services for those who lack insurance or who are underinsured.

Affordability of Health Care Services

Focus group participants and interviewees stated that high co-pays and deductibles and lack of clarity about costs put health services out of reach for some residents. One focus group participant shared the challenges of navigating health care costs saying, "*even if you have health insurance it's still costly. You have all these bills, you have to pay rent, and student loans and then after insurance it's still $150 to see a therapist and people aren't able to do that."* For seniors, the lack of reimbursement for hearing aids is a substantial challenge, leading some to forego these vital services. As one senior focus group participant stated, *"hearing aids would solve so many issues, but they are thousands of dollars*." Additionally, over a quarter (28.3%) of community health survey respondents identified cost of prescription medications as a barrier to accessing health services, and 16.9% of respondents also identified cost of care as a barrier.

Use of Telehealth

Conversations about technology during the 2018 CHNA process revolved around the use of on-line patient portals and communication with providers through email; only a few focus group participants at that time reported they had interacted with providers through video technology. Since the pandemic, virtual visits have been increasingly utilized in the health care system, offering promise to address some long-standing access and provider challenges, including in the area of behavioral health. As one provider interviewee stated, "*we have done a good job of transitioning to telehealth – the delivery of care is evolving in front of us."* While focus group participants and interviewees spoke about the opportunities of telehealth, they also shared challenges for some residents, including the cost and access to technology and knowledge about how to utilize it. For telehealth to be maximized, participants believe these barriers will need to be addressed.

A majority (54.8%) of community health survey respondents reported using an online patient portal to access medical information. Nearly four times as many respondents (46.6%) in the 2021 survey reported using a mobile device to access health care compared to 2018 survey respondents (11.8%). Among the 53.4% of respondents who did not currently access health care through a mobile device, approximately one-third (36.6%) expressed an interest in accessing health care through a mobile device. These responses were similar across the three-county service area.

Transportation

> *"People put off procedures because they don't have a ride, they can't afford to pay $100 for non-emergency medical transportation*." – Key Informant

As in 2018, participants in interviews and focus groups this year mentioned that residents without access to a car face challenges accessing health care, and 17.3% of community health survey

respondents identified lack of transportation as a barrier to accessing health services. In communities such as Hamilton, for example, health resources are more spread out, some participants said, making them difficult to access through public transportation. A couple of interviewees stated that PMPH's move to the Plainsboro campus has made transportation access to its medical services more challenging for some residents. According to participants, taxis and car services can be costly for lower income residents. Participants also indicated that while some low-cost transportation services are available, especially for seniors and the disabled, there are limitations on how these services can be used and substantial advance notice is often required for these services.

Transportation barriers have several consequences according to interviewees and focus group participants. Residents may forgo medical care because transportation is inaccessible or too expensive. Seniors shared that some older community members are choosing to utilize health care systems that offer good transportation services. As one participant shared, "*Capital Health, a competing health system, they're ahead of Penn Medicine in transportation; we find people are switching because they're better at offering transportation."* EMS focus group participants expressed concern that transportation barriers cause residents to call EMS for non-emergent medical issues, which is both an inefficient use of these volunteer services and diverts resources. An EMS provider noted that, **"***improving the non-emergency transportation to hospitals is crucial to freeing up EMS teams to respond to true emergencies."*

Language Barriers and Cultural Competence

> *"Our older adults need more time. They do not hear as well, they move more slowly, they have impaired cognition, they often feel rushed through their doctors' visits*." – Key Informant

The PMPH service area is comprised of residents from many different cultural backgrounds. While focus group participants and interviewees shared that the region has many bilingual and culturally sensitive health care providers, some mentioned that these areas could be strengthened. Language barriers continue to exist for some patients, especially those who are lower income. Reaching undocumented residents was seen as an important priority. Participants of a focus group saw opportunity to improve provider competency in caring for LGBTQ+ patients.

Although not a prominent theme in conversations held for this CHNA, a few focus group participants and interviewees shared concerns about quality of care. They mentioned challenges to finding a provider who will take sufficient time and listen to their concerns; a few participants perceived they were dismissed by their health care providers and unsure about the right questions to ask about their health. One focus group participant wished that health care was financed differently saying, "*part of it goes back to doctor's offices are run like businesses and not so focused on the people. [I am] not sure what the answer is, but there is something with how can we help doctors have a profitable business, but run it like something focused on people, our community, and our health*?"

Health Care Hesitancy/Delay

> *"We've seen a much higher rate of health care hesitancy than in other areas. People are avoiding seeing their doctors and because of that we're seeing a huge spike of acuity in the ED and the hospital*." – Key Informant

Several participants expressed concern that residents are delaying needed health care. Participants linked this to effects of the pandemic and concerns about safety, but they also see this as related to growing mistrust of science, health care and misinformation. This has had consequences for the health care system, including people who present with more acute conditions and increased use of emergency departments and urgent care, according to participants. Young adult focus group participants spoke about another health care gap—that which comes when students transition out of pediatric care. As one explained, "*I feel like there's a drop off in people getting routine physicals after high school because they have to get them when they go to school or play sports and then when they don't have that anymore, they kind of forget to do it*."

Navigating Health Care for Seniors

> *"When that inevitable day comes – when we get to ER and into the hospital, what is the process? I know we have to go through triage… after that point, if we can know a little bit more – that would at least put me to ease so at least you would know what to expect."* – Focus Group Participant

Navigating the health care system was also mentioned as a challenge by a few participants, mostly seniors who often interact with multiple health care providers and systems. This was identified as a concern in 2018 as well. Health care systems often have discharge planners, care coordinators, and social workers who help with this, but some focus group participants and interviewees believed more could be done to support patients and families. Some senior focus group participants wanted to know more about processes at hospitals should they be taken in through the emergency room. Others saw a need for advocates within the health care system, especially for those who do not have family close by and for those struggling with the early stages of dementia.

Another related issue for seniors and those with multiple chronic conditions is medication management and participants mentioned a need for greater support for patients to manage their medication. One focus group participant described the situation as follows: "*many patients see five to six doctors, perhaps across different systems, but they're not aware of what the other is prescribing. There needs to be better communication around that issue, it's a lot for the patient to manage alone."*

COMMUNITY HEALTH OUTCOMES AND BEHAVIORS

This section focuses on health issues and concerns that emerged during the 2021 Penn Medicine Princeton Health needs assessment process. It examines health outcomes as well as lifestyle behaviors among residents that support or hinder health including physical activity, nutrition, and alcohol and substance use. Where appropriate and available, county-level statistics are compared to the state as well as data reported in the 2018 community health needs assessment.

Overall Community Health Status and Health Concerns

Overall, quantitative data suggest that residents in the PMPH service region are healthier compared to the rest of the state. The County Health Rankings system provides an overview of county-level health based on several key indicators. According to the 2021 County Health Rankings, Somerset County ranked 3rd, Middlesex County ranked 5th and Mercer County ranked 12th among New Jersey's 21 counties for health outcomes including length and quality of life (Table 3). This is a slight improvement in rankings from 2018 for Middlesex and Mercer Counties, while Somerset remained the same. Within the Health Factors ratings, which assess health behaviors, clinical care, social and economic factors, and the physical environment, Somerset County ranked 3rd, Middlesex ranked 7th, and Mercer ranked 10th. Compared to 2018, all three counties declined by one place.

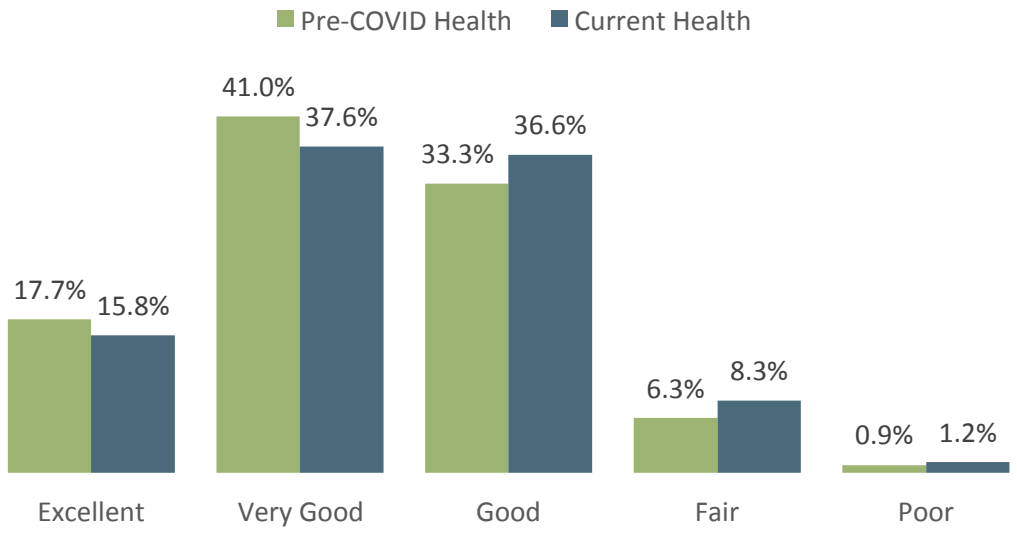
Table 3. Health Outcomes and Health Factors County Health Rankings, 2018 and 2021

	Health Outcomes		Health Factors	
	2018	2021	2018	2021
Mercer	14th	12th	14th	12th
Middlesex	6th	5th	6th	5th
Somerset	3rd	3rd	3rd	3rd

DATA SOURCE: County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2018 and 2021

Similar to 2018, the majority of community health survey respondents indicated that their overall community's health was "very good" or "excellent", for both pre-COVID and current conditions (Figure 52). Responses to this question were similar across geographic regions and racial/ethnic groups.

Figure 52. Overall Perceived Health of the Community in Which Respondents Live, Pre-COVID and Currently, 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

In addition to overall perceived community health, survey respondents were asked to select the top five health issues impacting their community. Survey respondents identified the following top five concerns: access to affordable housing, Coronavirus/COVID-19, access to health care services, caregiving (e.g., elder care, childcare), and LGBTQ health concerns (Table 4). While healthcare access and caregiving were also top health issues for communities identified in the 2018 survey, LGBTQ health concerns was not among the top community issues selected by respondents in 2018 (access to affordable housing and Coronavirus/COVID-19 were new response options added in 2021). Mental health issues, aging health concerns, and drug/alcohol abuse were identified in the 2018 survey as top health concerns but not in 2021 (Table 4).

Table 4. Top Five Health Issues Impacting the Community in Which Respondents Live and Impacting Respondent/Respondent's Family, 2018 and 2021

	Community		Respondent/Respondent's Family	
	2018	2021	2018	2021
1	Access to health care service	*Access to affordable housing	Musculoskeletal issues (e.g., joint pain, arthritis)	Chronic disease
2	Mental health issues	*Coronavirus/COVID-19	Aging health concerns (e.g., Alzheimer's, dementia)	Neuroscience issues (e.g., epilepsy, seizures)
3	Aging health concerns (e.g., Alzheimer's, dementia)	Access to health care services	Overweight or obesity	Mental health issues
4	Caregiving (e.g., elder care, childcare)	Caregiving (e.g., elder care, childcare)	Dental and oral health	Dental and oral health
5	Drug/alcohol abuse	LGBTQ health concerns	Access to health care services	LGBTQ health concerns

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Surveys, 2018 and 2021
Note: * indicates this response was not an option in 2018 community health survey.

There were geographic differences of top five health issues impacting the community in which respondents live. Table 5 shows that access to healthy foods was a perceived health issue for some residents of Middlesex (16.6%) and Other (20.3%) counties. Additionally, neuroscience issues (e.g., epilepsy, seizures) was a top perceived health issue by almost one-fifth (17.9%) of Somerset County residents.

Table 5. Top Five Perceived Health Issues within the Community, by Mercer, Middlesex, Somerset, and Other Counties, 2021

	Mercer (N=885)	Middlesex (N=477)	Somerset (N=134)	Other (N=222)
1	Access to affordable housing (24.9%)	Access to affordable housing (25.4%)	Coronavirus/COVID-19 (22.4%)	Access to affordable housing (23.4%)
2	Caregiving (20.5%)	Access to health care services (17.2%)	Neuroscience issues (17.9%)	Access to health care services (21.6%)
3	Coronavirus/COVID-19 (20.5%)	Access to healthy foods (16.6%)	LGBTQ health concerns (16.4%)	Access to healthy foods (20.3%)
4	Access to health care services (19.7%)	Aging health concerns (13.4%)	Access to affordable housing (15.7%)	Coronavirus/ COVID-19 (18.9%)
5	Sexually transmitted infections (18.2%)	Alcohol use disorder (10.9%)	Caregiving (15.7%)	Sexually transmitted infections (18.0%)

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Surveys, 2021

Additionally, there were racial/ethnic differences of the top five health issues impacting the community in which respondents live. While 15.1% of all respondents identified environmental health issues (e.g., lead poisoning, air pollution, climate change) as a perceived top health issue for their communities, over one-third of respondents identifying as multiracial or other race/ethnicity (33.8%) and almost a quarter of Hispanic/Latino (24.2%) respondents identified environment health issues as a top health issue for their communities. Aging health concerns (e.g., Alzheimer's, dementia) was a top issue identified by 2018 survey respondents. While not a top issue for all 2021 respondents, almost one-third of East Asian (32.6%) respondents over a quarter of Hispanic/Latino (28.0%) respondents identified aging health concerns as a top health issue for their community (see Appendix D).

Survey respondents also identified top health concerns that have the biggest impact on them and their families personally. The health concerns that survey respondents indicated had the biggest impact on themselves or their families were chronic disease (e.g., diabetes, heart disease, hypertension), neuroscience issues (e.g., epilepsy, seizures), mental health issues, dental and oral health, and LGBTQ health concerns (Table 4). Dental and oral health was the only top issue identified in both 2018 and 2021 surveys; musculoskeletal issues, aging health concerns, overweight or obesity, and access to health care services were identified in 2018 but not in 2021 (Table 4).

The top health issue for respondents or respondent's families varied by county as illustrated in Table 6. In addition to the top five health issues identified by all respondents, environmental health was a top issue for Somerset respondents (14.9%), and asthma was a top health issue identified by respondents of other counties (14.4%).

Table 6. Top Five Perceived Health Issues Impacting Respondent/Respondent's Family, by Mercer, Middlesex, Somerset, and Other Counties, 2021

	Mercer (N=884)	Middlesex (N=477)	Somerset (N=134)	Other (N=222)
1	Chronic disease (20.4%)	Neuroscience issues (24.7%)	Mental health issues (29.1%)	Access to health care services (21.6%)
2	Neuroscience issues (19.7%)	Chronic disease (24.1%)	Neuroscience issues (22.4%)	Neuroscience issues (18.9%)
3	Access to health care services (19.7%)	Mental health issues (19.9%)	Chronic disease (20.1%)	Chronic disease (16.2%)
4	Dental and oral health (19.2%)	Dental and oral health (19.7%)	Dental and oral health (14.9%)*	Dental and oral health (14.9%)
5	Mental health issues (19.0%)	LGBTQ health concerns (17.4%)	Environmental health concerns (14.9%)*	Asthma (14.4%)

NOTE: * indicates issues were tied.

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

The top five perceived health issues impacting community health survey respondents varied by racial/ethnic group. For example, access to affordable housing was the top issue selected by Hispanic/Latino respondents (Table 7), and asthma was the second top issue selected by Black respondents. Additionally, access to health care services was one of the top five health issues for both Hispanic/Latino and East Asian respondents.

Table 7. Top Five Perceived Health Issues Impacting Respondent/Respondent's Family, by Race/Ethnicity, 2021

	White (N=833)	Hispanic/ Latino (N=208)	Black (N=176)	East Asian (N=97)	South Asian (N=97)	Other Race/ Ethnicity (N=38)
1	Chronic disease (25.3%)*	Access to affordable housing (18.8%)	Neuroscience issues (21.6%)	Dental and oral health (33.0%)	Dental and oral health (15.5%)	Mental health issues (26.3%)
2	Mental health issues (25.3%)*	Neuroscience issues (17.3%)	Asthma (20.5%)	Neuroscience issues (16.5%)	Chronic disease (12.4%)	Neuroscience issues (23.7%)*
3	Neuroscience issues (23.3%)	Access to health care services (16.3%)	Chronic disease (19.9%)	Access to health care services (14.4%)*	Neuroscience issues (10.3%)	Dental and oral health (23.7%)*
4	LGBTQ health concerns (18.8%)	Dental and oral health (15.9%)	Dental and oral health (16.5%)	Chronic disease (14.4%)*	Children's health concerns (10.3%)	LGBTQ health concerns (21.1%)
5	Dental and oral health (17.9%)	Coronavirus/ COVID-19 (13.9%)	LGBTQ health concerns (14.8%)	LGBTQ health concerns (14.4%)*	Coronavirus/ COVID-19 (9.3%)	Coronavirus/ COVID-19 (15.8%)

NOTE: * indicates issues were tied.
DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Morbidity and Mortality

Racism and structural inequities in many aspects of life including education, income, wealth, health care, and neighborhood opportunity cumulatively affect preventable disparities in life expectancy among racial groups.[11] In 2016, life expectancy overall in New Jersey was around 80 years of age, with the highest life expectancy among Asian residents (85.4 years) and the lowest life expectancy among Black residents (75.5 years) (Figure 53. Life Expectancy by Race/Ethnicity, New Jersey, 2016.

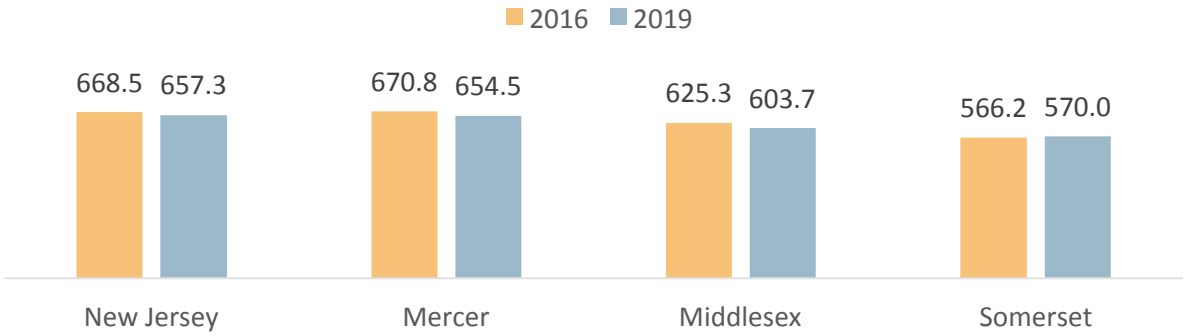
[11] National Equity Atlas

Figure 53. Life Expectancy by Race/Ethnicity, New Jersey, 2016

DATA SOURCE: Centers for Disease Control and Prevention, CDC Wonder, as cited by National Equity Atlas, 2016

The overall age-adjusted death rate was lower in the three counties compared to the state overall (Figure 54). Somerset had the lowest death rate of the three counties (570.0 deaths per 100,000 population).

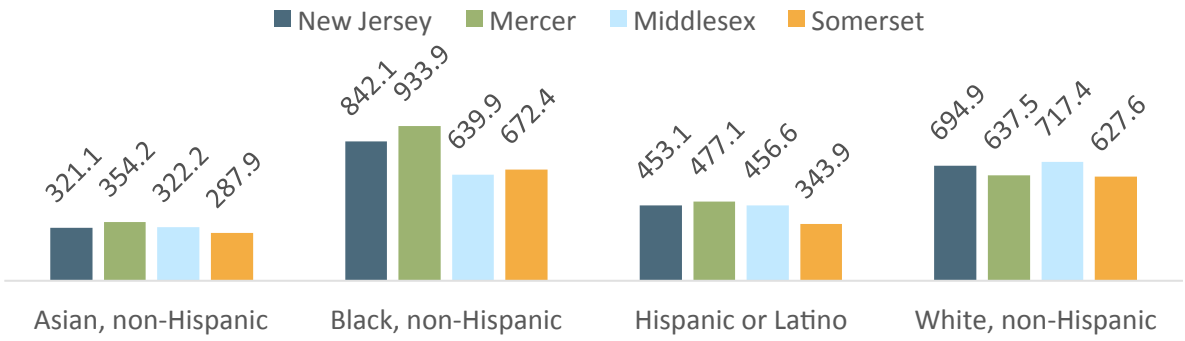
Figure 54. Age-Adjusted Overall Mortality Rate per 100,000 Population, New Jersey and by County, 2016 and 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2012 and 2016

When examining the age-adjusted death rate by race/ethnicity, disparities reveal that the highest to lowest death rates follow a similar pattern in all geographies: Black, non-Hispanic; White, non-Hispanic; Hispanic or Latino; Asian, non-Hispanic (Figure 55). The Black, non-Hispanic population in Mercer County experienced the highest death rate (934 deaths per 100,000 population), and the Asian, non-Hispanic population in Somerset County experienced the lowest death rate (288 deaths per 100,000 population).

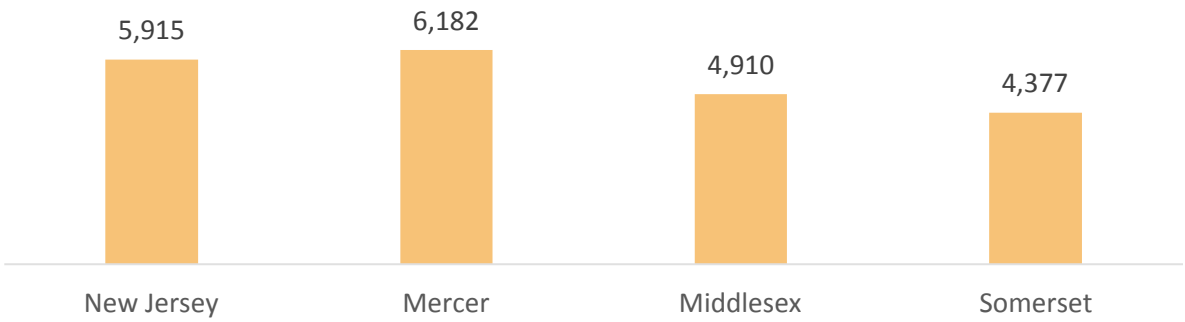
Figure 55. Age-Adjusted Overall Mortality Rate per 100,000 Population by Race/Ethnicity, New Jersey and by County, 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2016

Another measure of mortality is Years of Potential Life Lost (YPLL), which assesses premature mortality or the average years a person would have lived if they had not died prematurely (Figure 56 and Figure 57). Among the three counties, Mercer County had the highest YPLL (6,182 years).

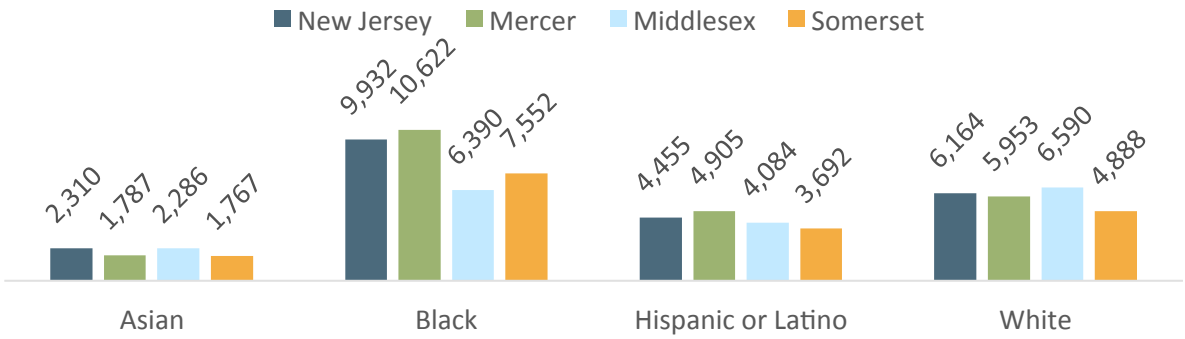
Figure 56. Age-Adjusted Years of Potential Life Lost Before Age 75 per 100,000 Population, New Jersey and by County, 2017-2019



DATA SOURCE: National Vital Statistics System, National Center for Health Statistics - Mortality Files, as cited by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017-2019

From 2017-2019, Black residents in Mercer County had the highest age-adjusted rate of YPLL among the three counties (10,622 years), while Asian residents in Somerset County had the lowest rate (1,767 years).

Figure 57. Age-Adjusted Years of Potential Life Lost Before Age 75 per 100,000 Population by Race/Ethnicity, New Jersey and by County, 2017-2019



DATA SOURCE: National Vital Statistics System, National Center for Health Statistics - Mortality Files, as cited by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017-2019

The top five causes of death are the same across the three counties and the state and include heart disease, cancer, accidents, stroke, and chronic lower respiratory disease (CRLD) (Table 8). Residents in Somerset County die from heart disease, cancer, unintentional injury, and chronic lower respiratory disease at lower rates than residents in Mercer County, Middlesex County, and New Jersey as a whole. Except for heart disease mortality rates in Mercer County, death rates were lower in the three countries in 2019 when compared with the state overall.

Table 8. Top Five Leading Causes of Death, Age-Adjusted Rates per 100,000 Population, New Jersey and by County, 2019

Rank	New Jersey	Mercer	Middlesex	Somerset
1	Heart disease 155.6	Heart disease 157.0	Heart disease 146.6	Heart disease 131.0
2	Cancer 134.5	Cancer 131.7	Cancer 125.9	Cancer 119.7
3	Unintentional Injury 47.4	Unintentional Injury 45.5	Unintentional Injury 37.8	Unintentional Injury 33.0
4	Stroke 29.6	Stroke 26.2	Stroke 27.5	Stroke 28.9
5	Chronic lower respiratory disease 26.0	Chronic lower respiratory disease 21.6	Chronic lower respiratory disease 21.8	Chronic lower respiratory disease 19.8

DATA SOURCE: New Jersey Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2019

When examining the top five causes of death by race/ethnicity in the state, Black and White residents had higher death rates in general compared to Hispanic and Asian residents (Table 9). Diabetes is one of the top five causes of death among Asian and Black residents.

Table 9. Top Five Leading Causes of Death by Race/Ethnicity, Age-Adjusted Rates per 100,000 Population, New Jersey, 2019

Rank	Asian	Black	Hispanic	White
1	Cancer 65.9	Heart disease 179.8	Heart disease 88.7	Heart disease 166.9
2	Heart disease 63.7	Cancer 150.9	Cancer 86.3	Cancer 144.7
3	Stroke 19.2	Unintentional Injury 59.8	Unintentional Injury 36.9	Unintentional Injury 55.5
4	Diabetes 13.5	Stroke 39.5	Stroke 23.7	Chronic lower respiratory disease 29.4
5	Septicemia 9.7	Diabetes 28.8	Alzheimer's disease 16.9	Stroke 28.7

DATA SOURCE: New Jersey Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2019

Chronic Diseases and Related Risk Factors

> *"They say diabetes hits all communities and it's hitting the minority community very hard and we don't really understand diabetes*." – Key Informant

> *"Not that far from here there's a Wendy's, Burger King, and McDonald's within walking distance of each other but there's not healthy options around here*." – Focus Group Participant

Focus group participants and interviewees shared that residents served by PMPH face challenges with chronic diseases such as cardiac issues, obesity, diabetes, and cancer. Lack of access to care and high cost of medications, including insulin, were also identified as barriers to effectively managing chronic disease. Focus group participants and interviewees noted that lack of education about health and prevention of chronic disease was a barrier to good health. This was identified in the 2018 CHNA as well, and many of the same themes were identified. Some participants mentioned lack of access to information and programs about prevention as the fundamental issue. As one focus group participant stated, *"there are no programs that are proactively keeping people healthy. Everything is charity care which is reactive. Education about living a healthy life is not in public spaces."* Other participants pointed to lack of a tradition of routine check-ups among some immigrant groups. One key informant shared the consequences of this saying, "*I think we have various demographics that don't necessarily see the benefits of preventative care and then the hospital has become a provider of last result*." Both providers and those working in the community saw a need for more education about good health and disease prevention. Finally, residents also face other pressing issues in their lives, including managing life in a pandemic. As a result, one person observed, *"health things are on the back burner. If you are dealing with family things, then you aren't going to prioritize your own well-being*."

> *"There's not a lot of healthy food options. There's four pizzerias near me which is nice sometimes but harder when you want to find healthier options."* – Focus Group Participant

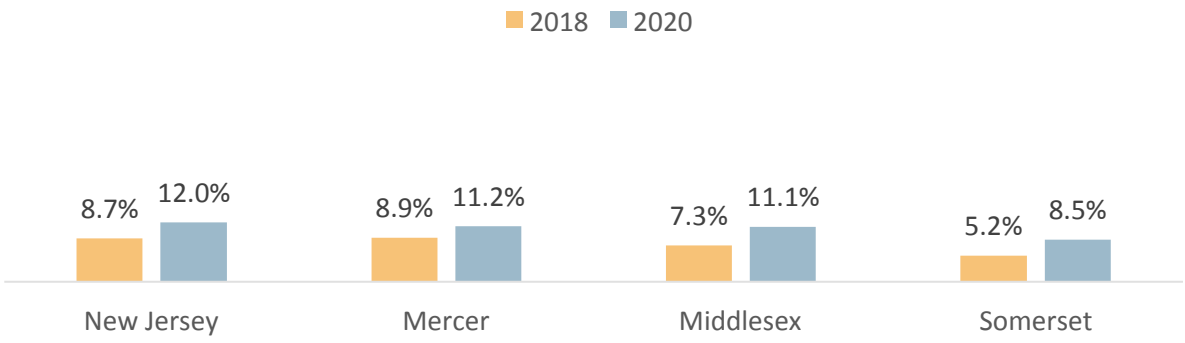
Why is This Important?

Food insecurity—not having reliable access to a sufficient quantity of affordable, nutritious food—is directly related to financial insecurity. Few Americans meet nutritional guidelines, as indicated by daily consumption of fruit and vegetables.[xxvii] *Inadequate financial resources and limited access to healthy, affordable food contribute to these patterns.*[xxviii,xxix] *Food insecurity has substantial negative effects on health: research has shown that people experiencing food insecurity have lower nutritional intakes, increased rates of mental health problems and depression, higher rates of diabetes and hypertension, and worse oral health.*[xxx]

Access to healthy foods and understanding the importance of good nutrition and how to prepare healthy foods were cited as top drivers of chronic disease by focus group participants and interviewees. Focus group participants and interviewees reported that food insecurity in the region has grown since the start of the pandemic as residents faced unemployment and other economic challenges or were unable to get to grocery stores due to lack of transportation or safety concerns. Low-income residents and seniors were seen as those most food insecure. Participants did note that food resources have expanded during and since the pandemic, including food banks, food delivery, school-based food programs, and senior lunch programs. However, food insecurity remains a concern for some residents.

Mercer and Middlesex counties had the highest proportion of residents that were food insecure in 2020, slightly over 11% (Figure 58). Overall food insecurity has increased between 2018 and 2020 in all three counties and the state.

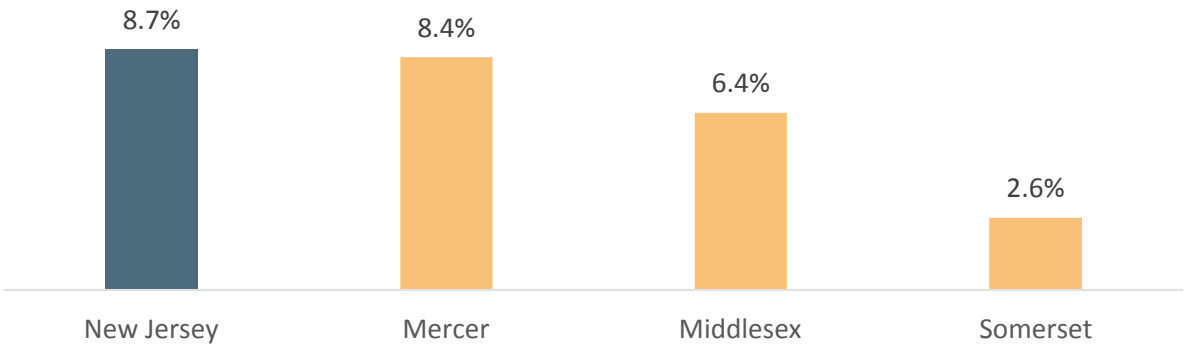
Figure 58. Percent Population Food Insecure, New Jersey and by County, 2018 and 2020



DATA SOURCE: Feeding America, Map the Meal Gap, 2018 and 2020
NOTE: 2020 data are estimated projections based on available employment and poverty data, and were revised in March 2021; therefore data are subject to change.

The proportion of households participating in the Supplemental Nutrition Assistance Program (SNAP) was lower in all three counties than the state overall for the reporting period 2015-2019 (Figure 59). In Mercer County, about 8% of households participated in SNAP.

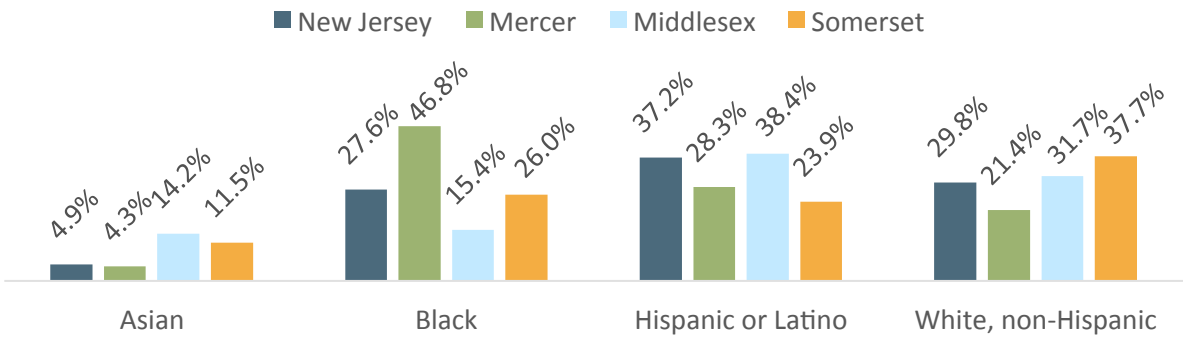
Figure 59. Percent Households Receiving Food Stamps/SNAP, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

When examining the proportion of households participating in SNAP by race/ethnicity, data show highest rates of participation among Black households in Mercer County (46.8%), followed by Hispanic households in Middlesex County (38.4%) and White, non-Hispanic households in Somerset County (37.7%) (Figure 60). Overall, participation rates are lower among the Asian population in all geographies.

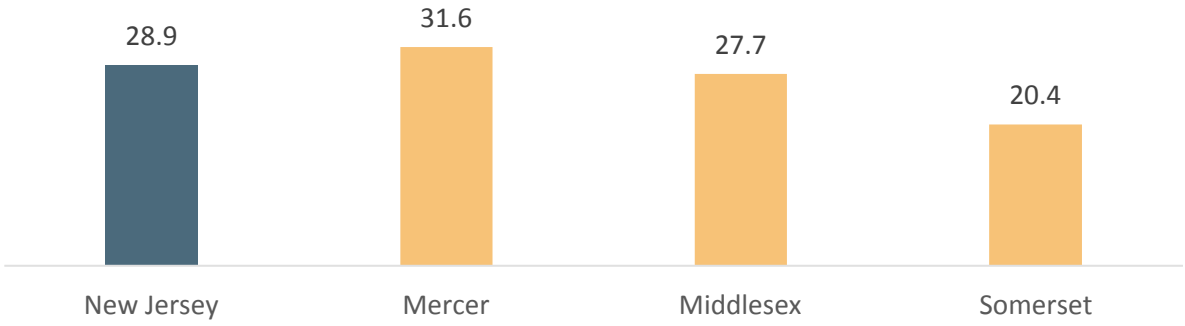
Figure 60. Percent Households Receiving Food Stamps/SNAP by Race/Ethnicity, New Jersey and by County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Focus group participants and interviews shared that in some communities, residents lack access to nutritious food, having to rely on local corner stores and bodegas. The rate of grocery stores and supermarkets per 100,000 population in 2017 was lowest in Somerset County and below that of the state. Mercer County residents have greater access to grocery stores and supermarkets compared to residents statewide. (Figure 61).

Figure 61. Rate of Grocery Stores and Supermarkets per 100,000 Population, New Jersey and by County, 2017

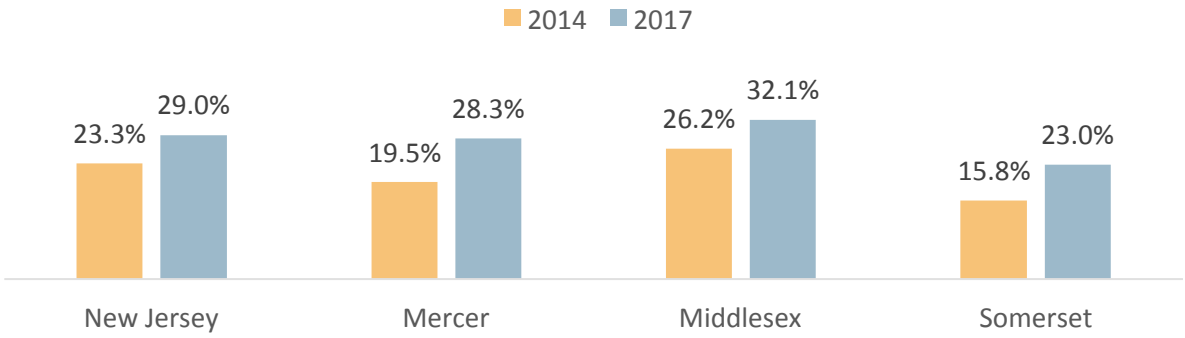


DATA SOURCE: U.S. Census Bureau, County Business Patterns, analyzed by CARES, as reported by Community Commons, 2017

In addition to healthy eating, physical activity was seen by focus group participants and interviewees as a driver to prevent chronic disease. The proportion of adults who report having had no leisure time physical activity rose between 2014 and 2017 (

Figure 62); in Mercer and Somerset counties, these proportions increased by over 5%. Overall, a higher proportion of adults in Middlesex County (32.1%) reported having no leisure time physical activity compared to Mercer (28.3%) and Somerset (23.0%) counties and the state (29.0%).

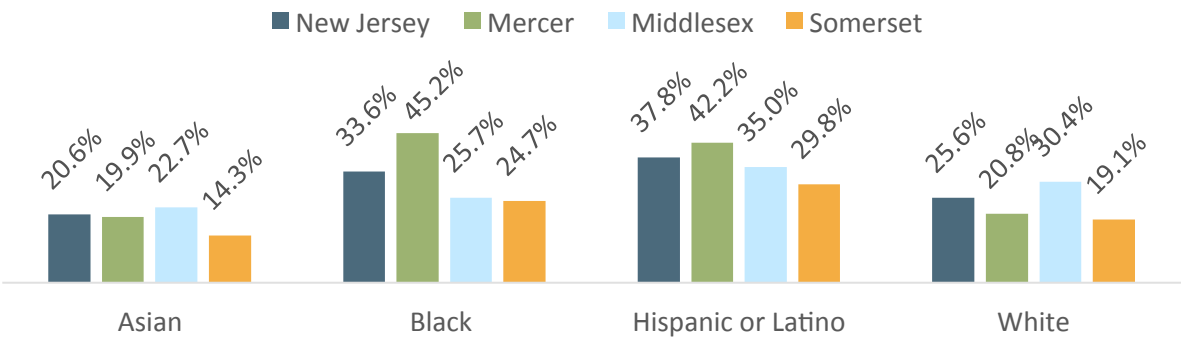
Figure 62. Percent Adults Reported to Have Had No Leisure Time Physical Activity, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

When examining this proportion by race/ethnicity, more than double the percentage of Black and Hispanic or Latino residents in Mercer County had no leisure time physical activity compared to about 20% of Asian and White residents.

Figure 63. Percent Adults Reported to Have Had No Leisure Time Physical Activity by Race/Ethnicity, New Jersey and by County, 2015-2017

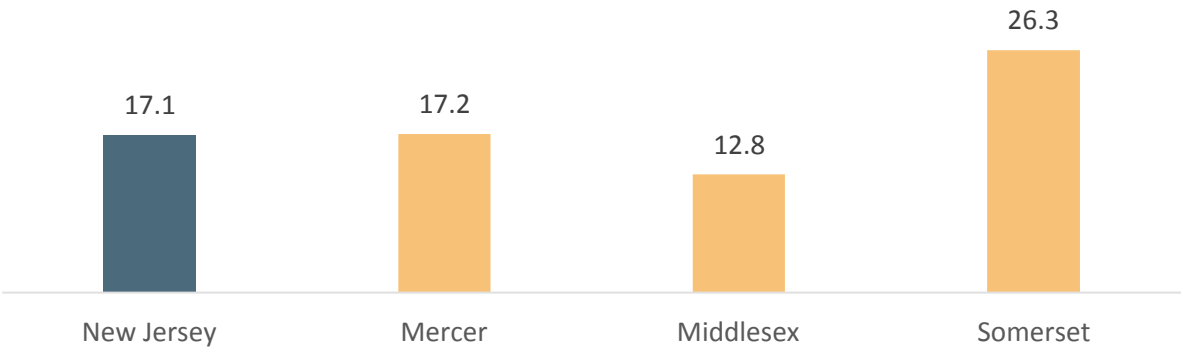


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2015-2017

Business data from 2017 indicate that access to recreation and fitness facilities is lower among residents of Mercer and Middlesex Counties than Somerset County residents or residents statewide (

Figure 64). Somerset County, with 24 facilities per 100,000 population in 2015, had facilities for physical activity at twice the rate of Mercer and Middlesex Counties (13 and 12 facilities per 100,000 population, respectively).

Figure 64. Rate of Recreation and Fitness Facilities per 100,000 Population, New Jersey and by County, 2017

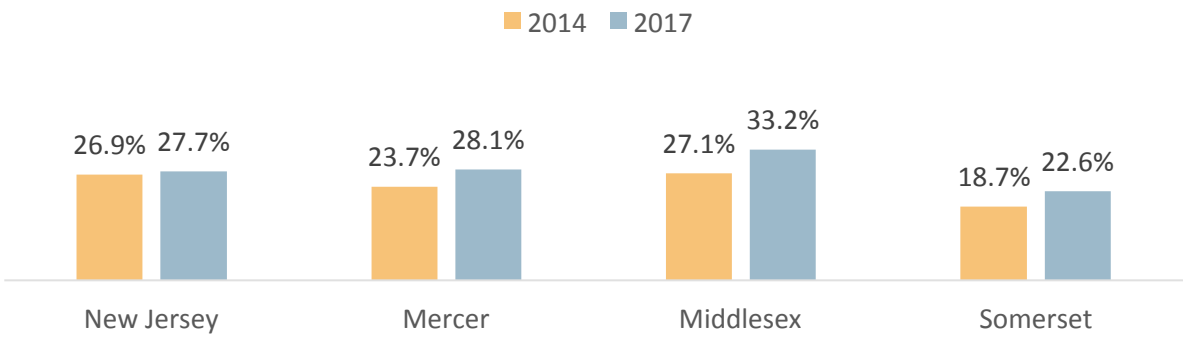


DATA SOURCE: U.S. Census Bureau, County Business Patterns, analyzed by CARES, as reported by Community Commons, 2017

Overweight and Obesity

As in prior years, obesity was mentioned by focus group participants and interviewees as a substantial health concern in the PMPH service area, with communities of color especially affected. Nearly a third of adults in Mercer County and around one quarter of adults in Middlesex and Somerset Counties reported being obese in 2017 (Figure 65). Between 2014 and 2017, obesity rates rose in all three counties and the state.

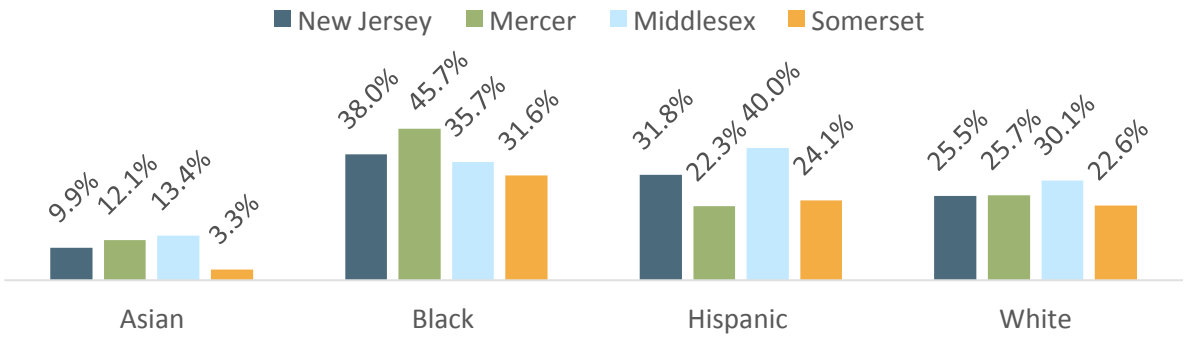
Figure 65. Percent Adults Aged 20 and Older Reported to be Obese, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

When examining self-reported obesity rates by race/ethnicity, data show patterns of obesity; notably, Black people in New Jersey, Mercer and Somerset counties and Hispanic residents in Middlesex had the highest percentages of self-reported obesity (Figure 66). Asian people had lowest percentages of self-reported obesity in all geographies.

Figure 66. Percent Adults Aged 20 and Older Reported to be Obese by Race/Ethnicity, 2015-2017

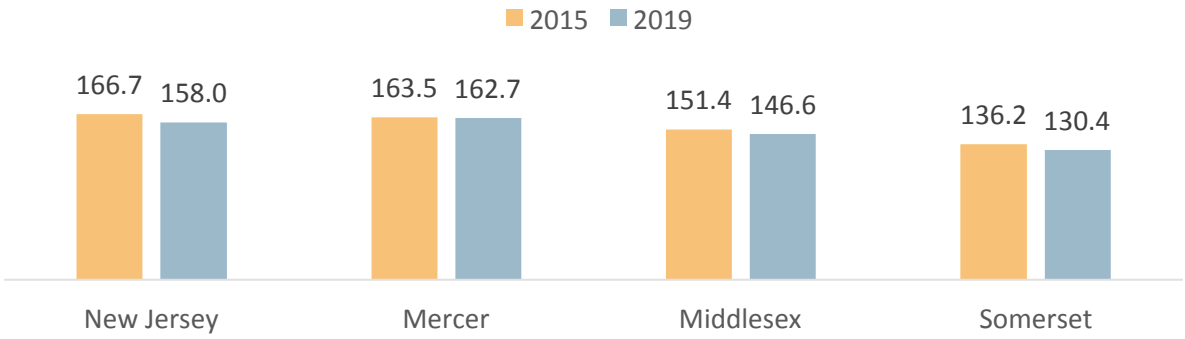


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2015-2017

Heart Disease

Similar to the 2018 CHNA, heart disease was not a prominent theme in focus groups or interviews. Vital statistics data show that age-adjusted death rates due to heart disease were lower in Middlesex and Somerset counties in 2019 than statewide (Figure 67). Heart disease rates declined slightly between 2015 and 2019 in all three counties and the state.

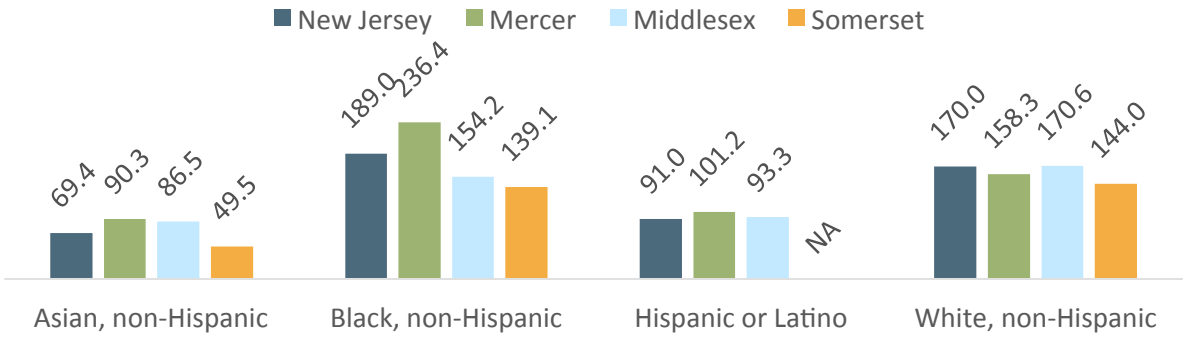
Figure 67. Age-Adjusted Heart Disease Mortality Rate per 100,000 population, New Jersey and by County, 2015 and 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2015 and 2019
NOTE: Includes ICD-10 codes I00-I09, I11, I13, I20-I51

Heart disease mortality rates differed by race/ethnicity among the geographies; in the state, rates were highest among the Black population (189.0 per 100,000 population) and lower than that of the state overall among the Asian, non-Hispanic (69.4 heart disease deaths per 100,000 population) and Hispanic or Latino (91.0 heart disease deaths per 100,000 population) populations.

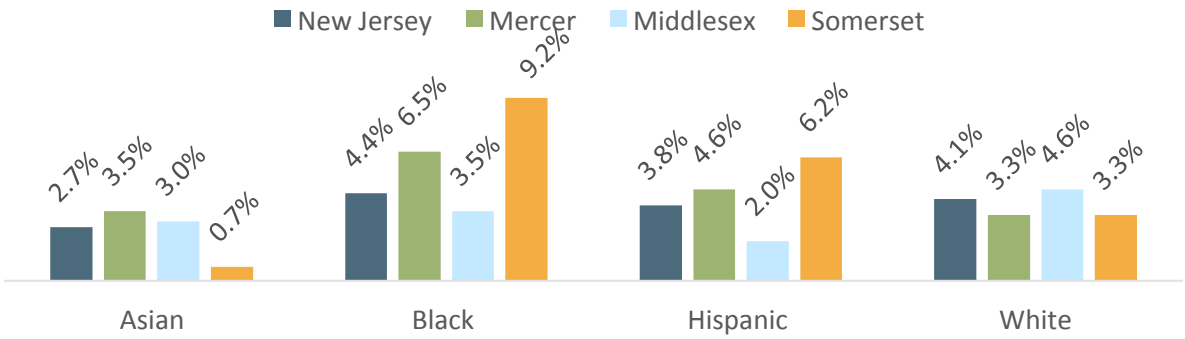
Figure 68. Age-Adjusted Heart Disease Mortality Rate per 100,000 population, New Jersey and by County, 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2019
NOTE: Includes ICD-10 codes I00-I09, I11, I13, I20-I51

According to 2017 BRFSS results, self-reported rates of heart attack were 3.8% in the state, similar in Middlesex County (3.3%) and slightly higher in Mercer and Somerset Counties (4.3%) (see Appendix D). When examining these self-reported rates of heart attack by race/ethnicity, Black adults in Somerset County reported 13 times the percentage of heart attacks compared to their Asian counterparts (Figure 69).

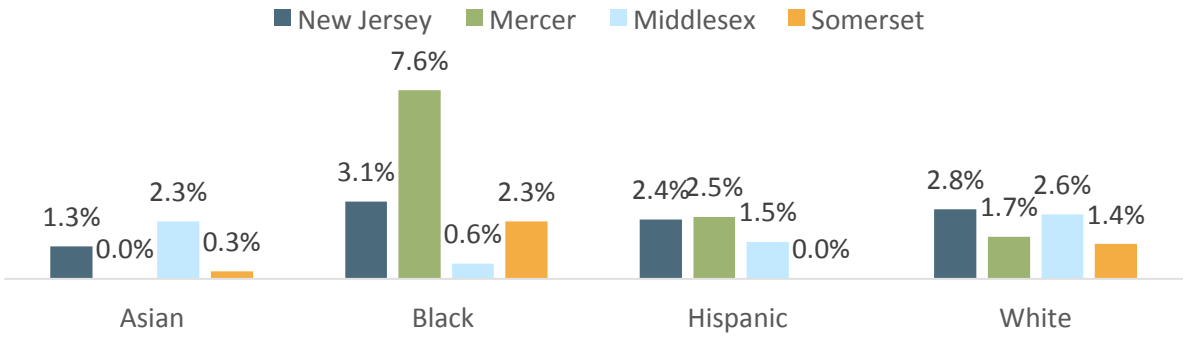
Figure 69. Percent Adults Reported to Have Had a Heart Attack by Race/Ethnicity, New Jersey and by County, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

2.5% of adults in New Jersey reported having had a stroke in 2017 (see Appendix D). When examining self-reported rates of stroke by race/ethnicity, rates ranged from 0% of Asian adults in Mercer and Hispanic adults in Somerset to a high of 7.6% Black adults in Mercer County; Black adults residing in Mercer County suffer from strokes at more than twice the rate of their counterparts (Figure 70).

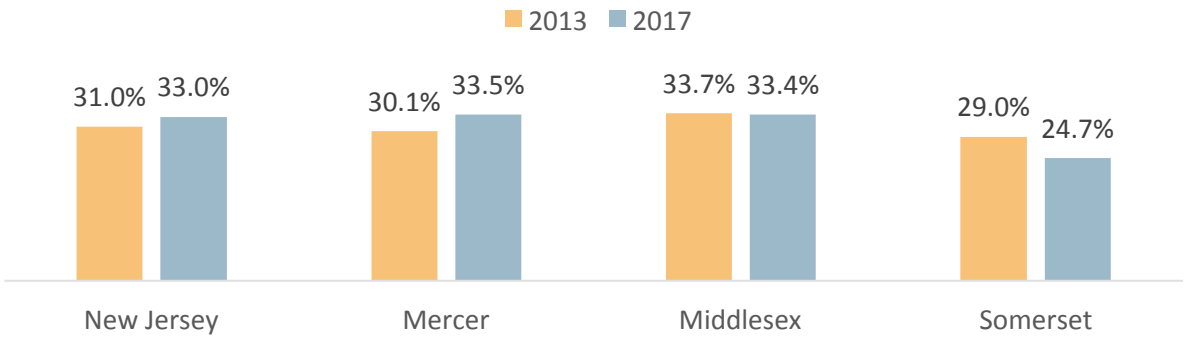
Figure 70. Percent Adults Reported to Have Had a Stroke by Race/Ethnicity, New Jersey and by County, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

About a third of adults statewide and in Mercer and Middlesex counties self-reported high blood pressure in 2017, compared to about a quarter of residents in Somerset County (Figure 71). The rates have slightly increased in the state and Mercer County, decreased in Somerset County and remained similar in Middlesex County.

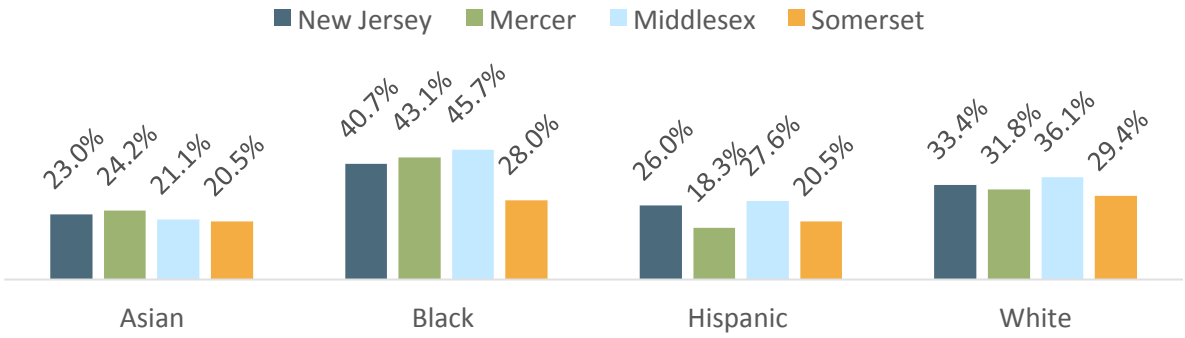
Figure 71. Percent Adults Reported to Have Had High Blood Pressure, New Jersey and by County, 2013 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2017

Data of prevalence of high blood pressure among different race/ethnicities show that a greater percentage of Black adults have high blood pressure (40.7-45.7%) compared to White, Asian and Hispanic adults in the state, Mercer and Middlesex counties (Figure 72). In Somerset County, a slightly higher percentage of White residents (29.4%) have high blood pressure as compared to Black residents (28.0%)

Figure 72. Percent Adults Reported to Have Had High Blood Pressure, by Race/Ethnicity, New Jersey and by County, 2015 and 2017 Combined

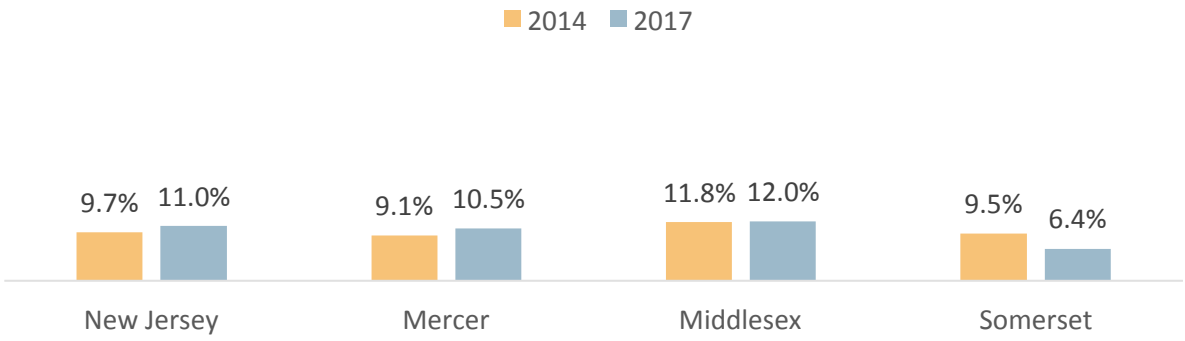


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2015 and 2017

Diabetes

Similar to 2018, diabetes was also mentioned by focus group participants and interviewees as a substantial health concern, with communities of color especially affected. At least one in ten adults in Mercer and Middlesex counties, as well as statewide, have diabetes. Adult diabetes rates increased in the state, and in Mercer and Middlesex counties between 2014 and 2017 while they decreased for Somerset County (Figure 73). In 2017, adults residing in Middlesex County (12.0%) were nearly twice as likely to have been diagnosed with diabetes compared to adults residing in Somerset County (6.4%).

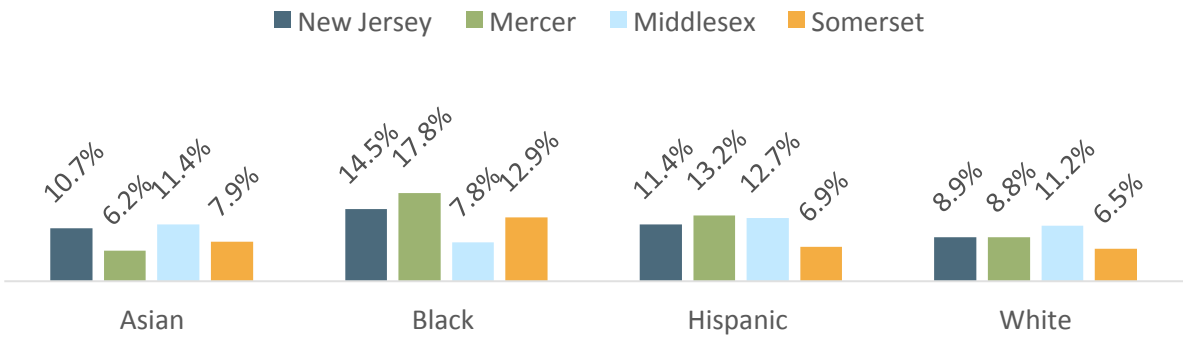
Figure 73. Percent Adults Reported to Have Been Diagnosed with Diabetes, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

Data by race/ethnicity reveal that Black adults have the highest rate of diabetes in New Jersey (14.5%) and Mercer (17.8%) and Somerset (12.9%) counties, while having the lowest rate in Middlesex County (7.8%) (Figure 74).

Figure 74. Percent Adults Reported to Have Been Diagnosed with Diabetes by Race/Ethnicity, New Jersey and by County, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

Cancer

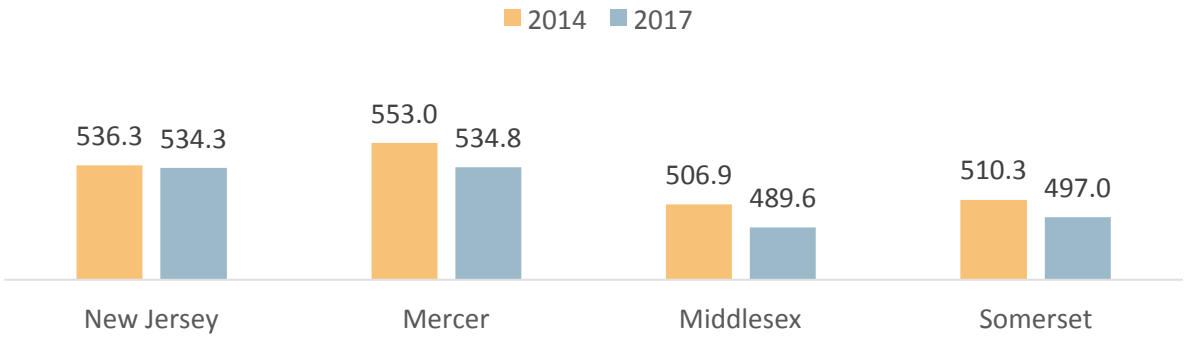
Cancer Mortality

Quantitative data indicate that cancer is the second leading cause of death in all three counties and in the state of New Jersey (Table 8 above). Age-adjusted cancer incidence declined in PMPH's service area between 2014 and 2017, with Middlesex County experiencing the greatest decline (from 506.9 to 489.6 cancer cases per 100,000 population).

Cancer Incidence

Overall cancer incidence rates were highest in Mercer County and lowest in Middlesex County in 2017 (Figure 75).

Figure 75. Age-Adjusted Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017

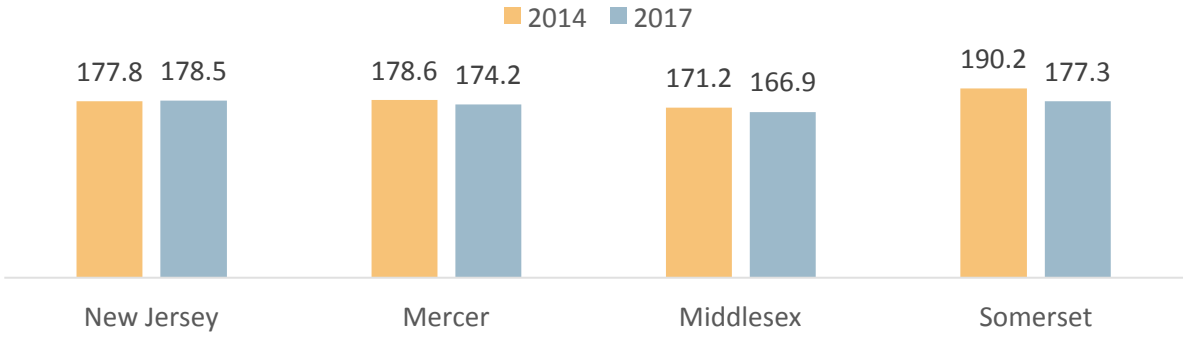


DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

When examining cancer incidence rates by the reported race/ethnicity categories, generally White residents (531.8 to 556.4 per 100,000 population) had the highest cancer incidence rates, followed by Black residents (450.5 to 550.2 per 100,000 population).

Of the three counties, Somerset County had the highest breast cancer incidence rate in 2017, (177.3 cases per 100,000 population) (Figure 76). The incidence of breast cancer rose between 2014 and 2017 overall in New Jersey, while it declined in all three counties.

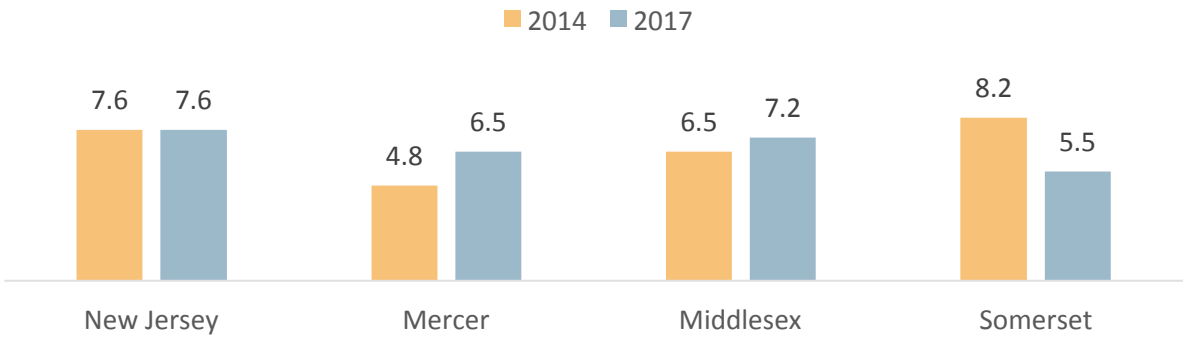
Figure 76. Age-Adjusted Female Breast Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Between 2014 and 2017, cervical cancer rates rose in Mercer and Middlesex counties while they decreased in Somerset County and remained the same in New Jersey over this period (Figure 77).

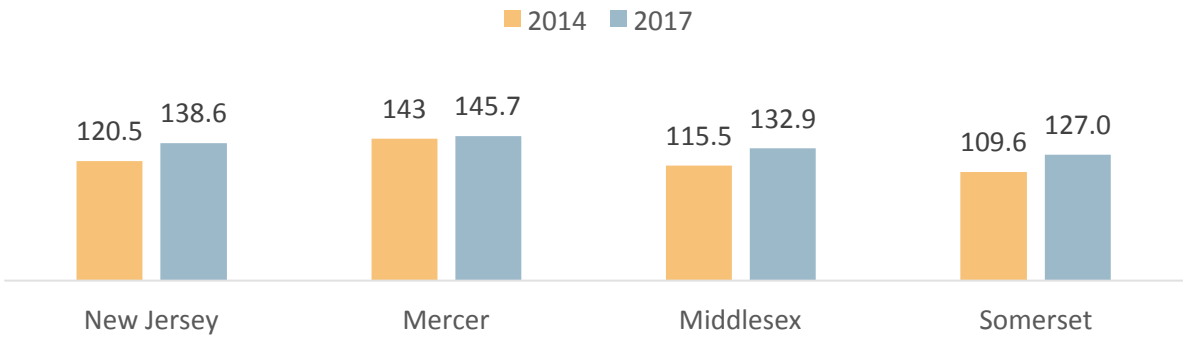
Figure 77. Age-Adjusted Cervical Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases. Rates for Mercer and Somerset counties are unstable and should be interpreted with caution.

Prostate cancer incidence rates were slightly higher in Mercer County in 2017 than in the other two counties or the state (Figure 78). Prostate cancer incidence rates have slightly increased in all three counties and the state overall.

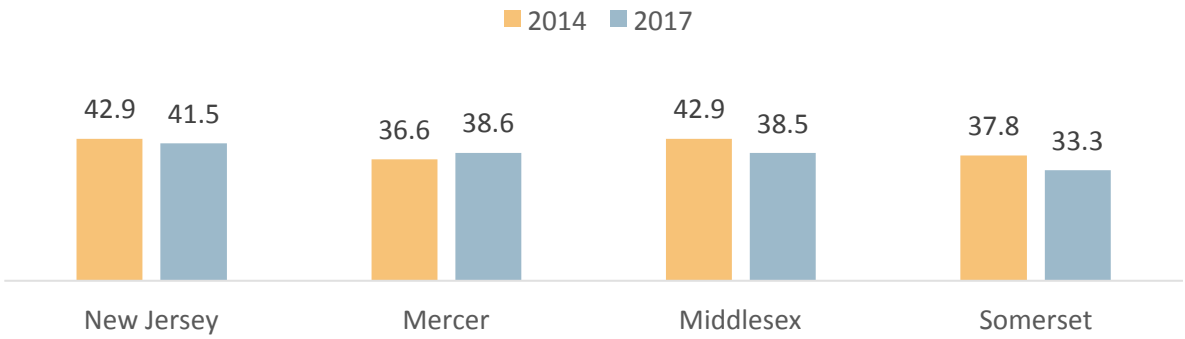
Figure 78. Age-Adjusted Prostate Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Colorectal cancer incidence rates were lower in all three counties than the state overall in 2017, with the lowest rates in Somerset County (Figure 79). While colorectal cancer incidence rates decreased in Middlesex and Somerset counties and in the state overall between 2012 and 2015, Mercer County experienced a slight increase in the rate of colorectal cancer.

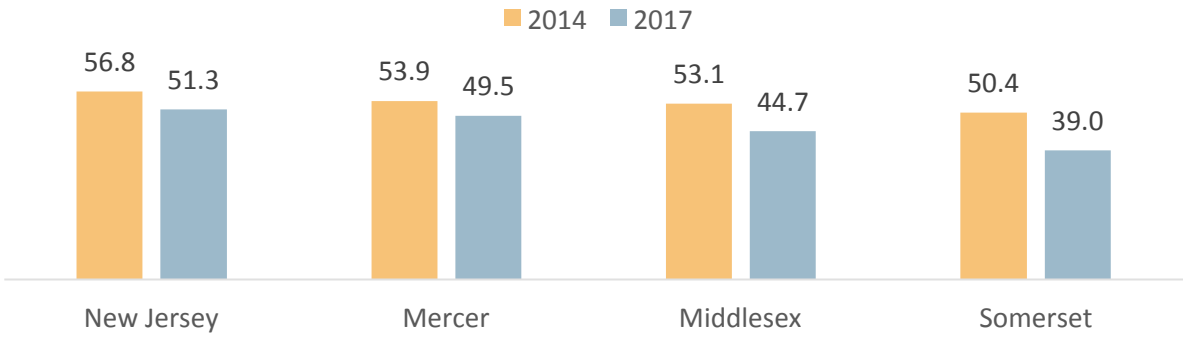
Figure 79. Age-Adjusted Colorectal Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Among the three counties, lung cancer incidence rates were highest in Mercer County in 2017 and lowest in Somerset County (Figure 80). Lung cancer incidence rates in all three counties were below that of the state and have declined between 2014 and 2017.

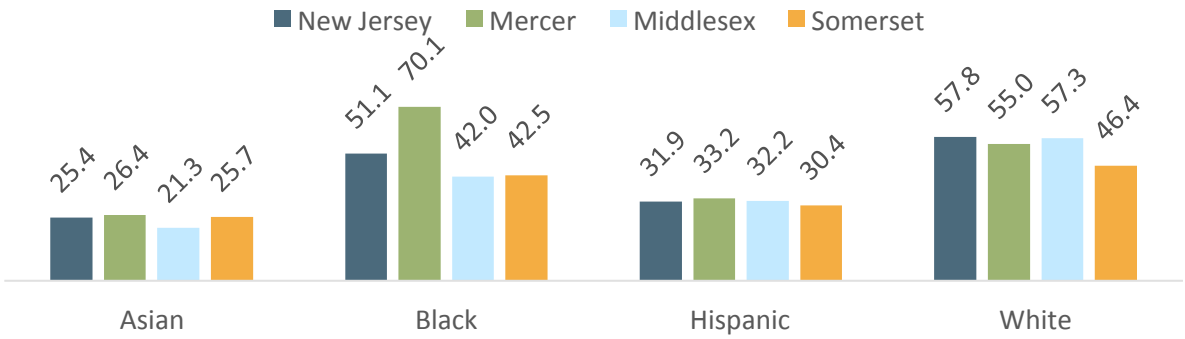
Figure 80. Age-Adjusted Lung Cancer Incidence Rate per 100,000 Population, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014 and 2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

When examining lung cancer incidence rates by race/ethnicity in the three counties, the rate was highest among Black people in Mercer County (70 cases of lung cancer per 100,000 population) and lowest among Asian/PI people in Middlesex County (21 cases of lung cancer per 100,000 population) (Figure 81).

Figure 81. Age-Adjusted Lung Cancer Incidence Rate per 100,000 Population by Race/Ethnicity, New Jersey and by County, 2014-2017

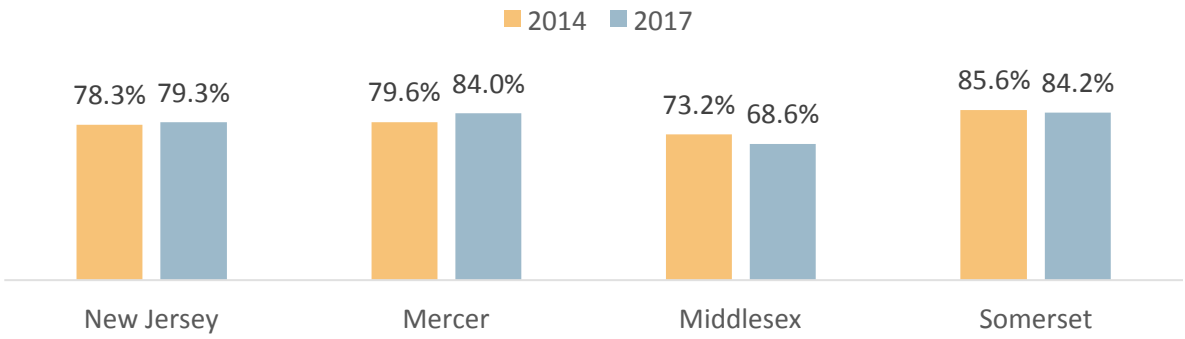


DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2014-2017
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in April 2021. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Cancer Screening

Data about mammogram rates reveals that rates remained roughly the same between 2014 and 2017 in all the counties and the state overall (Figure 82). The proportion of women receiving mammograms in 2017 was highest in Mercer and Somerset counties (84%) and lowest in Middlesex County (69%).

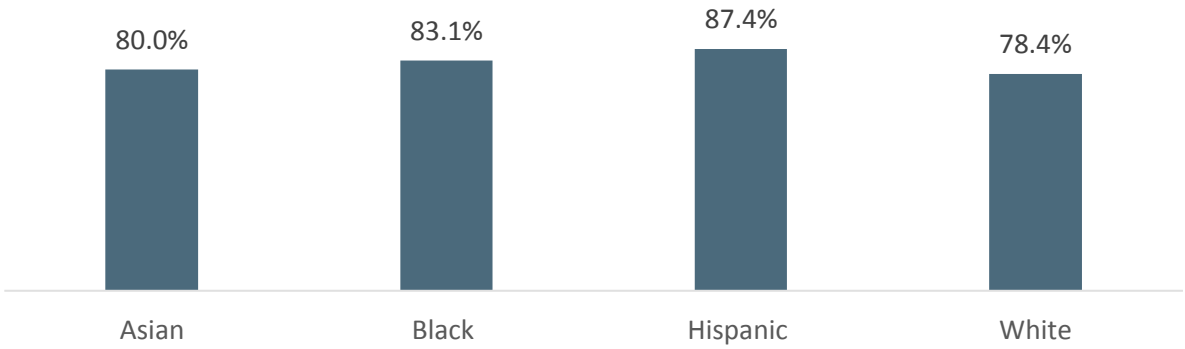
Figure 82. Percent Females Aged 50-74 Reported to Have Had a Mammogram in Past Two Years, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

Data about mammogram rates by race/ethnicity show that the proportion of women receiving mammograms in 2017 was highest among Hispanic residents (87.4%) and lowest among White residents (78.4%) (Figure 83).

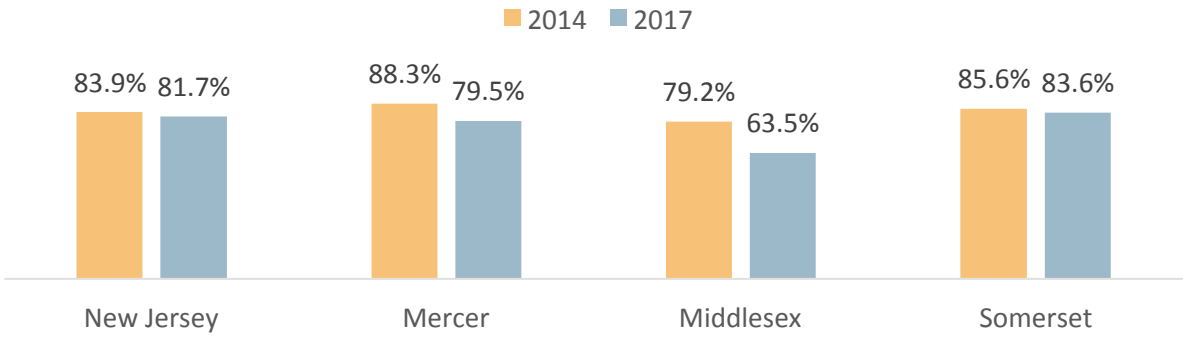
Figure 83. Percent Females Aged 50-74 Reported to Have Had a Mammogram in Past Two Years by Race/Ethnicity, New Jersey, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

Cervical cancer screening (pap test) rates also showed substantial variation across the region. The proportion of women receiving a pap test in 2017 was highest in Somerset County (83.6%) and lowest in Middlesex County (63.5%) (Figure 84). Both Mercer and Middlesex counties had pap test rates lower than that of the state; between 2014 and 2017, the proportion of women receiving a pap test declined.

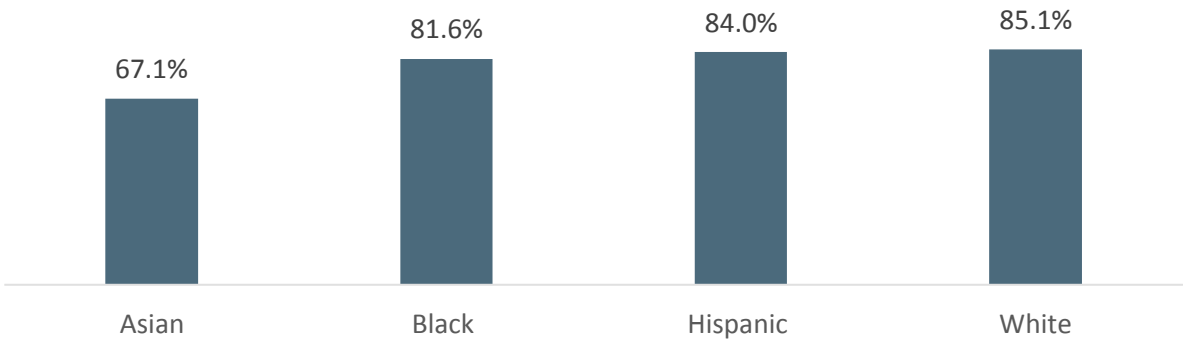
Figure 84. Percent Females Aged 21-65 Reported to Have Had a Pap Test in Past Three Years, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

When examining cervical cancer screening (pap test) rates by race/ethnicity in 2017 in the state, this rate was highest in the White population (85.1%) and lowest in the Asian population (67.1%) (Figure 85).

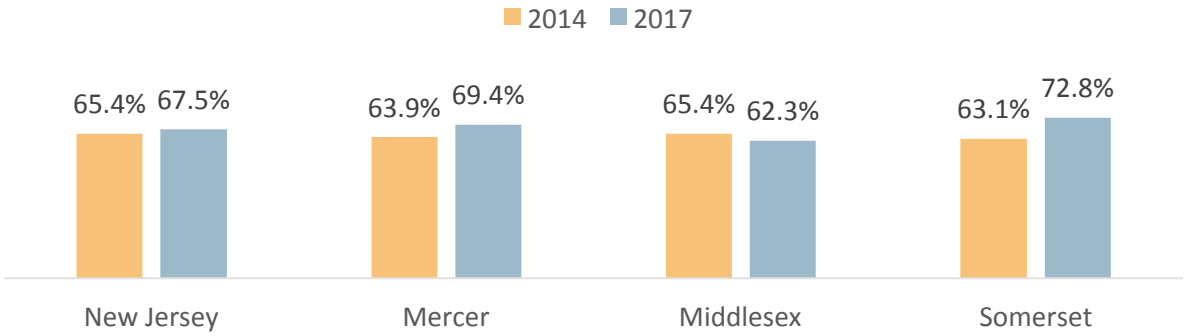
Figure 85. Percent Females Aged 21-65 Reported to Have Had a Pap Test in Past Three Years by Race/Ethnicity, New Jersey, 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2017

Colorectal screening rates among adults in 2017 was highest in Somerset County (73%) and lowest in Middlesex County (62%) (Figure 84Figure 86). The rates have increased slightly between 2014 and 2017 in Mercer, Somerset, and New Jersey overall, and declined in Middlesex.

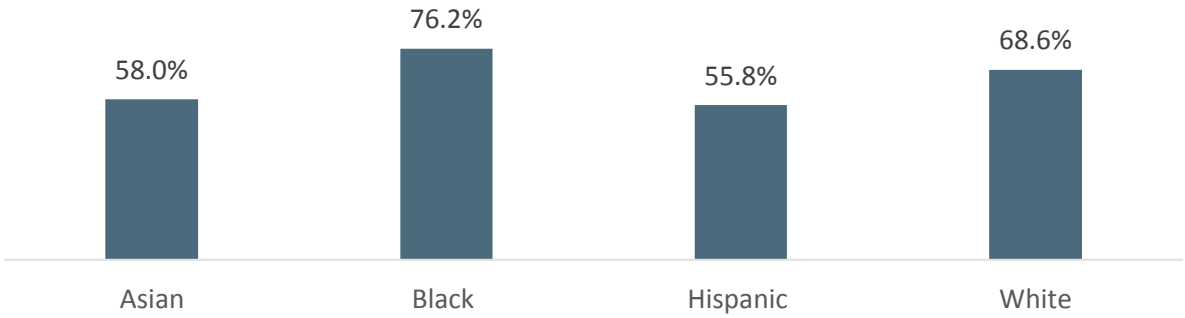
Figure 86. Percent Adults Aged 50-75 Reported to Have Met Colorectal Cancer Screening Guidelines, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

When examining 2017 colorectal screening rates among adults by race/ethnicity in the state, rates were lower among Hispanic (55.8%) and Asian populations (58.0%) and highest among the Black population (76.2%) (Figure 87).

Figure 87. Percent Adults Aged 50-75 Reported to Have Met Colorectal Cancer Screening Guidelines by Race/Ethnicity, New Jersey, 2016-2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016-2017

Behavioral Health

> *"The need for behavioral health services in our community is skyrocketing*." – Key Informant
>
> *"I look at what is happening with pandemic and stress. I recognize that the health side, they have had things on the front. On the behavioral health side, the tsunami is building*." – Key Informant

As in 2012, 2015, and 2018, behavioral health emerged as a topic identified as a concern in PMPH's service area by focus group participants and key informants.

Mental Health

Focus group participants and key informants identified mental health as a key health concern for residents in the PMPH service area, one that has been exacerbated by the pandemic. Mental health was also a substantial community health concern identified in prior CHNAs.

As in 2018, mental health was a concern seen as affecting all age groups in the community. Participants frequently mentioned that while mental health concerns have been long-standing in the community, they have worsened as a result of the COVID-19 pandemic. As one interviewee shared, *"during the pandemic, many people are leaning on therapy, psychologists, etc., but this was true even before pandemic; the pandemic has definitely made a bad situation worse."*

Focus group participants and interviewees stated that anxiety and depression among children and adolescents was high, stemming from factors such as isolation during the pandemic, the impact of social media, and consequences of intergenerational mental health issues. Stress for students also comes from the high achievement mentality within some families and communities. As one young adult observed, *"I think being a young person in our kind of society I think it encourages the decline of mental health because it's kind of set up against us. I have an absurd amount of student loans and I can't move out of my parent's house and all these factors that are out of my control."* Interviewees shared that suicide ideation and eating disorders have been increasing among young people in the region. Based on data from the Youth Risk Behavior Survey (YRBS) reported by the CDC, 35.8% of New Jersey high school

students reported feeling sad or hopeless almost every day for 2 or more weeks in a row in the past year and 14.5% of high school youth contemplated suicide in the past year.

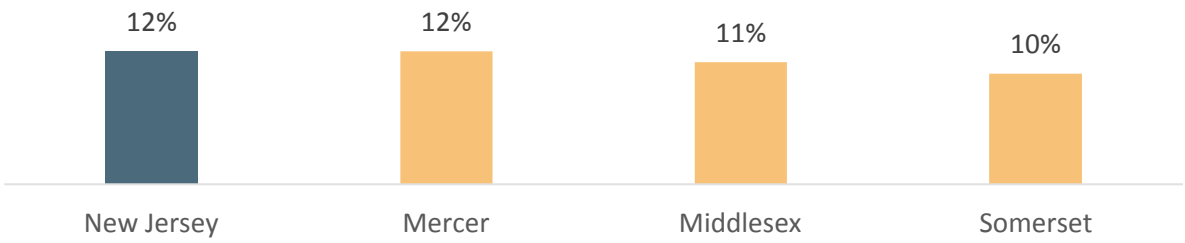
Mental health concerns identified among adults included depression and anxiety, hoarding, as well as more severe mental illness. Providers reported that the range and severity of mental health concerns in the community is growing. According to participants, trauma-associated mental health issues, identified as a concern in the 2018 CHNA, continue to increase and affect groups ranging from first responders and the military to victims of domestic abuse, and young children.

Participants this year also mentioned trauma associated with racism and marginalization. Providers noted the effects of the killing of George Floyd and other national incidents on residents' sense of well-being and justice. Participants also talked about the marginalization experienced due to gender identification and sexual orientation. Interviewees and focus group participants saw a need for more programming as well as training to enhance providers' capacity to address trauma.

Providers observed that involuntary mental health admissions are rising and reported higher acuity among those seeking inpatient mental health services including suicide attempts, extremes of mood disorders, substantial substance use, and severe depression. This situation, providers noted, reflects both the growing severity of residents' mental health issues and the insufficiency of community-based supports to address issues before they become acute.

According to the Behavioral Risk Factor Survey, the proportion of adults reporting 14 or more days of poor mental health in the past month was 12% in both Mercer County and the state overall and slightly lower in Middlesex (11%) and Somerset (10%) counties (Figure 88).

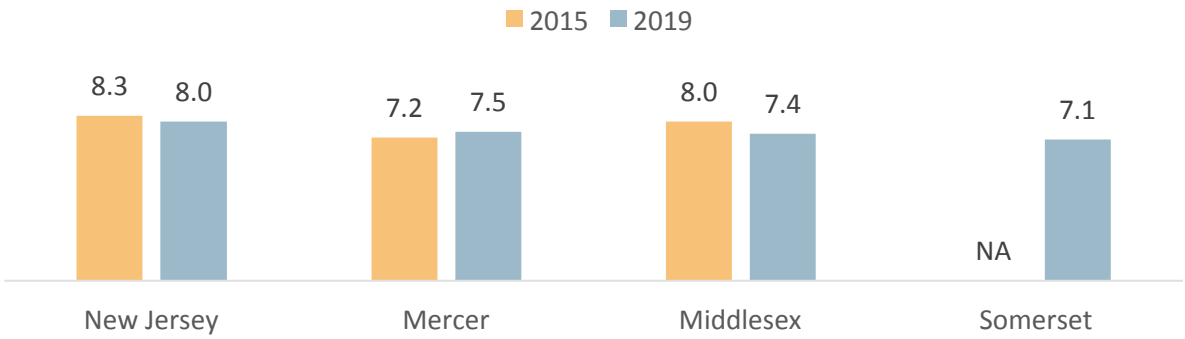
Figure 88. Percent Adults Reported 14 or More Days of Poor Mental Health in Past Month, New Jersey and by County, 2017



DATA SOURCE: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017

The age-adjusted suicide rate for 2019 was lowest for Somerset County at 7.1 per 100,000 population (Figure 89).

Figure 89. Age-Adjusted Suicide Mortality Rate per 100,000 Population, New Jersey and by County, 2015 and 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2015 and 2019
NOTE: Includes ICD-10 codes U03, X60-X84, Y87.0

Among seniors, participants considered depression to be most common, and was connected to loss of independence, social isolation, and aging. This has worsened during the pandemic, participants reported, when senior centers were closed and lunch programs were not available. One senior focus group participant shared that mental health concerns among seniors is likely higher than documented saying, *"I think a lot of seniors are depressed. But how many of those people really go to the doctors for that?"*

Comments about existing mental health services mirror those shared in 2018: the region needs more mental health providers of all kinds, including psychiatrists and social workers, in-patient beds, school counselors and social workers, and those skilled at addressing trauma. Participants shared that Princeton House is the leading provider of mental health services in the service area, particularly for tertiary behavioral health services, yet its services are insufficient to meet demand. Focus group participants and interviewees emphasized the need for community-based behavioral health services including out-patient services and wrap-around support for students. While focus group participants and interviewees noted that telehealth offers opportunity to expand behavioral health services, systemic constraints exist including low reimbursement for services and low compensation for behavioral health workers.

Similar to 2018, two of the top services that community health survey respondents rated as "hard" or "very hard" to access were youth counseling/mental health care (19.3%) and adult counseling/mental health care (18.2%). Multiracial or Other Race/Ethnicity group rated youth or adult mental health services or alcohol/drug treatment/prevention as hard to access twice as often as White respondents.

The ratio of the population to mental health providers represents the number of individuals served by one mental health provider in a county, if the population were equally distributed across providers. Data show that there is the highest availability of providers in Mercer County, with one provider per 310 people and less availability in Middlesex County, with one provider to every 550 residents (Table 10). Ratios of the population to mental health providers decreased across New Jersey and all three counties from 2017 to 2019.

Table 10. Ratios of Population to Mental Health Provider, New Jersey and by County, 2017 and 2019

	2017 Ratio	2019 Ratio
New Jersey	530:1	450:1
Mercer	340:1	310:1
Middlesex	630:1	550:1
Somerset	400:1	370:1

DATA SOURCE: National Provider Identification Registry, Centers for Medicare and Medicaid Services, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2019

Substance Use

> *"This past year, we have seen more substance abuse."* – Key Informant

> *"It's disheartening and painful to see the young people in our community needing Narcan and how the families suffer*." – Focus Group Participant

According to the National Survey on Drug Use and Health (NSDUH), in 2019 about 20.1 million American adults (aged 12 and older) battled a substance use disorder.[xxxi] Alcohol abuse disorder is the most common, affecting 14.5 million people (71.1%). 40.7% of adults in 2019 battled an illicit drug use disorder; an estimated 1.6 million people (0.6%) had an opioid use disorder.[xxxii] Substance abuse has a tremendous impact on individuals, families, and communities potentially resulting in poor health, fraying social structures, abuse and neglect of children, and crime and violence. Substance abuse also has a substantial economic cost: abuse of tobacco, alcohol, and illicit drugs is estimated to cost American society more than $740 billion annually in lost workplace productivity, health care expenses, and crime.[xxxiii]

Closely related to mental health concerns are those related to substance use. According to focus group participants, substance use in the three counties has increased in recent years. Substance misuse was identified as a substantial community health concern in prior CHNAs as well. This year, many participants pointed to the effects of the pandemic on substance misuse.

Alcohol

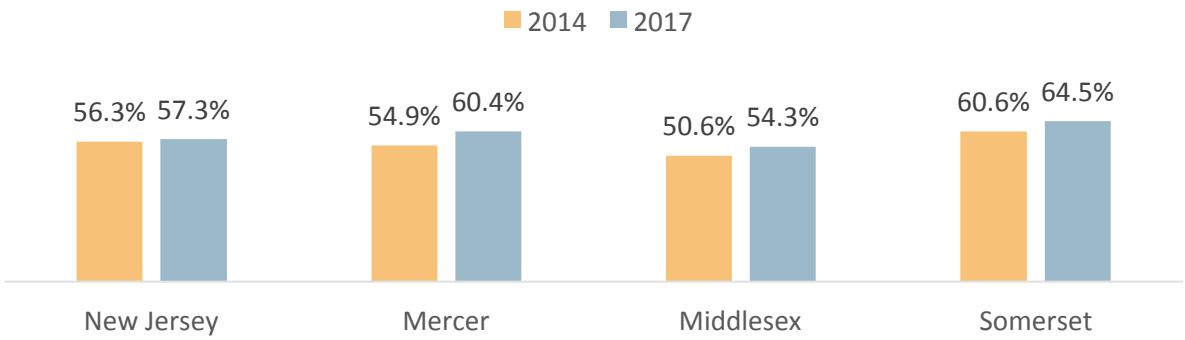
Participants shared that alcohol misuse has risen in the region. Participants in one focus group expressed concern about rising use of ETOH (ethyl alcohol) among youth. According to data from the 2019 Youth Risk Behavior Survey (YRBS) reported by the CDC, 30.3% of New Jersey high school students drank alcohol and 15.3% reported binge drinking in the past month.

Participants mentioned that among young people, misuse of prescription medications and alcohol is prevalent. Substance use among young people, participants stated, is attributable to several factors including the pandemic, easy accessibility including variable enforcement of ID laws, social pressures, and boredom. As one young focus group participant stated, "*around here it's kind of boring, so*

especially teens find other ways to fill their time and I think that's where drugs and alcohol comes in for teens."

Self-reported data about alcohol use indicates that a higher proportion of adults in Somerset County (64.5%) than in the Mercer or Middlesex counties or the state reported consuming any alcohol in 2017 (Figure 90). The reported use of alcohol slightly increased in all geographies between 2014 and 2017.

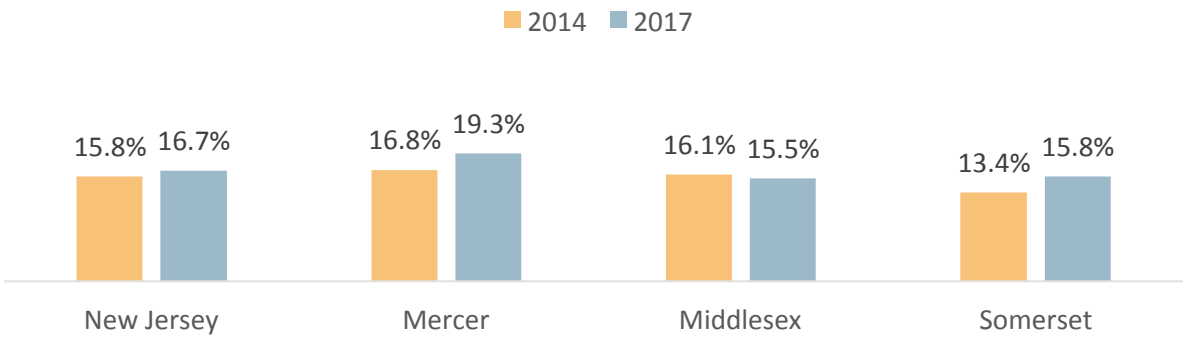
Figure 90. Percent Adults Reported to Have Consumed Any Alcohol, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

A higher proportion of adults in Mercer County (19.3%) reported binge drinking, a rate higher than adults in the state overall as well as Middlesex and Somerset counties (Figure 91). Furthermore, binge drinking increased slightly in all geographies, except for Middlesex County, which decreased slightly.

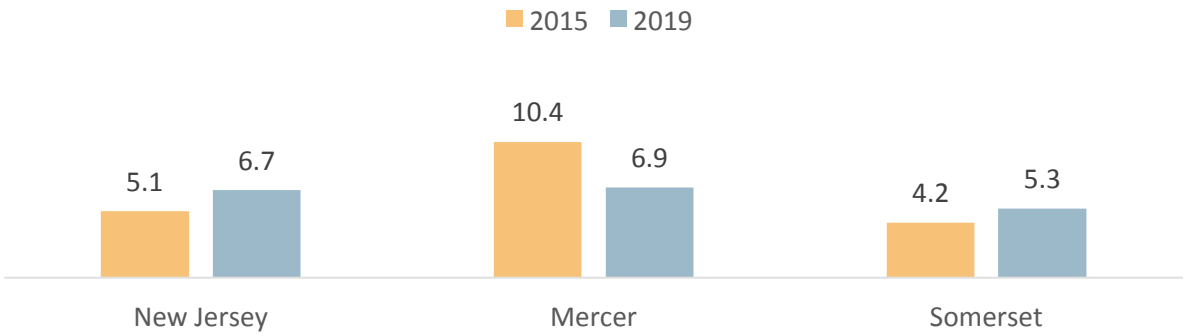
Figure 91. Percent Adults Reported Binge Drinking, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

According to the Centers for Disease Control and Prevention, alcohol induced mortality rates increased overall in New Jersey and in Somerset County, while the rate decreased in Mercer County (rates not available for Middlesex County) between 2015 and 2019 (Figure 92).

Figure 92. Age-Adjusted Alcohol Induced Mortality Rate per 100,000 Population, New Jersey and by County, 2015 and 2019



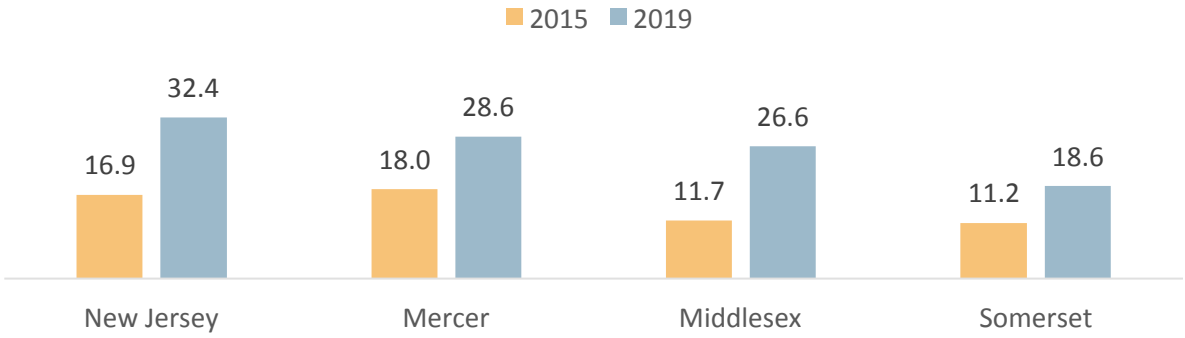
DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2015 and 2019
NOTE: Includes ICD-10 codes X40-X44; rates not available for Middlesex County

Drug Use

According to focus group participants, opioids are also a problem; EMS focus group participants reported a rise in overdoses. According to participants, the changing landscape around marijuana legalization has contributed to increased misuse of marijuana. According to data from the 2019 Youth Risk Behavior Survey (YRBS) reported by the CDC, 32.8% of high school students have tried marijuana and 20.1% reported using marijuana in the past month.

According to the Centers for Disease Control and Prevention, drug poisoning mortality rates increased across the three counties and the state overall between 2015 and 2019 (Figure 93). Among the three counties, the mortality rate was highest in Mercer County (28.6 deaths per 100,000 population) and lowest in Mercer County (18.6 deaths per 100,000 population).

Figure 93. Age-Adjusted Drug Poisoning Mortality Rate per 100,000 Population, New Jersey and by County, 2015 and 2019

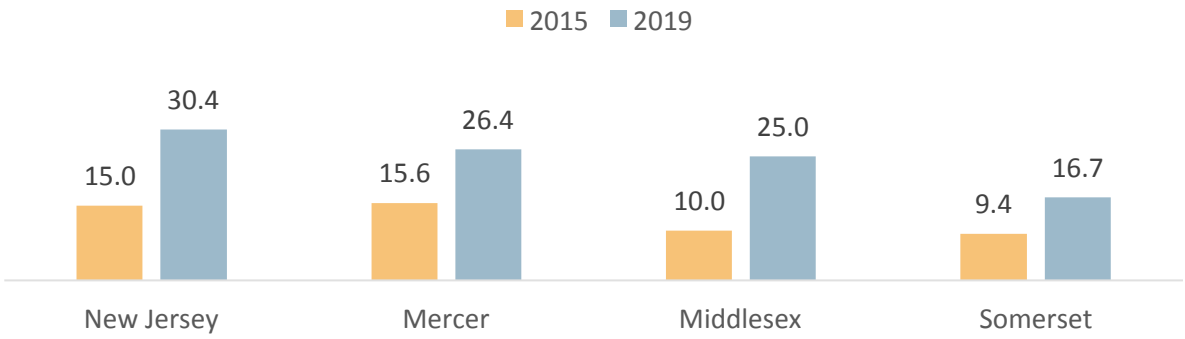


DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2015 and 2019
NOTE: Includes ICD-10 codes X40-X44, X60-X64, X85, and Y10-Y14

Similarly, unintentional drug induced poisoning mortality rates increased across the three counties and the state overall between 2015 and 2019 (Figure 94). Among the three counties, the mortality rate was

highest in Mercer County (26.4 deaths per 100,000 population) and lowest in Somerset County (16.7 deaths per 100,000 population).

Figure 94. Age-Adjusted Unintentional Drug Induced Poisoning Mortality Rate per 100,000 Population, New Jersey and by County, 2015 and 2019



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, 2015 and 2019
NOTE: Includes ICD-10 codes X40-X44

In 2018, 636 opioid-related deaths occurred in the three counties, accounting for 13% of all opioid related deaths in New Jersey for that year (Table 11). Of all deaths due to opioids in the three counties, 62.7% were due to fentanyl and fentanyl analogs, and 29.7% were due to heroin. Of the three counties, Middlesex County had the highest number of deaths across all drug types.

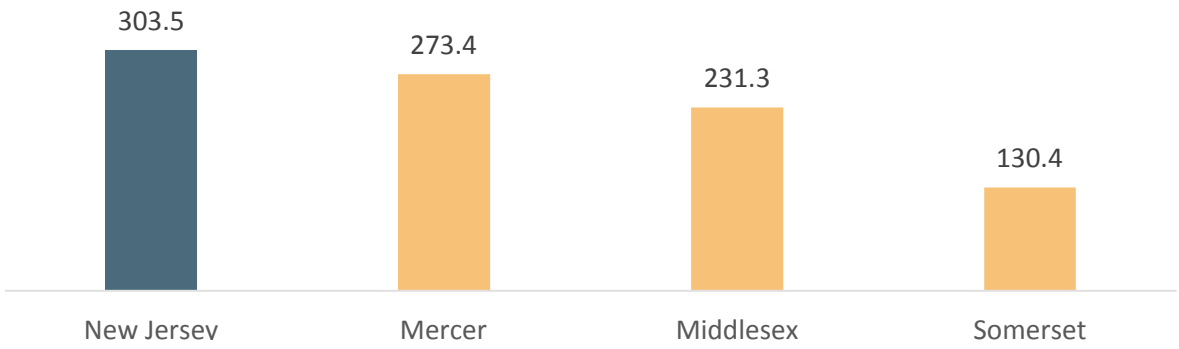
Table 11. Count of Opioid Related Deaths by Drug, New Jersey and by County, 2018

	Methadone	Morphine	Oxycodone	Heroin	Fentanyl and Fentanyl Analog
New Jersey	131	17	215	1,532	2,904
Mercer	4	0	5	77	144
Middlesex	13	0	20	88	220
Somerset	0	0	6	24	35

DATA SOURCE: Drug Deaths for 2018, New Jersey Office of the State Medical Examiner, as reported by NJ CARES, New Jersey Office of the Attorney General, 2018

According to the NJ Office of the Attorney General, in 2017, the naloxone administration rate for the three counties was lower than for New Jersey as a whole (Figure 95). Among the three counties, Somerset County had the lowest rate of naloxone administration at 130 administrations per 100,000 population while Mercer and Middlesex counties had higher rates, yet below that of the state.

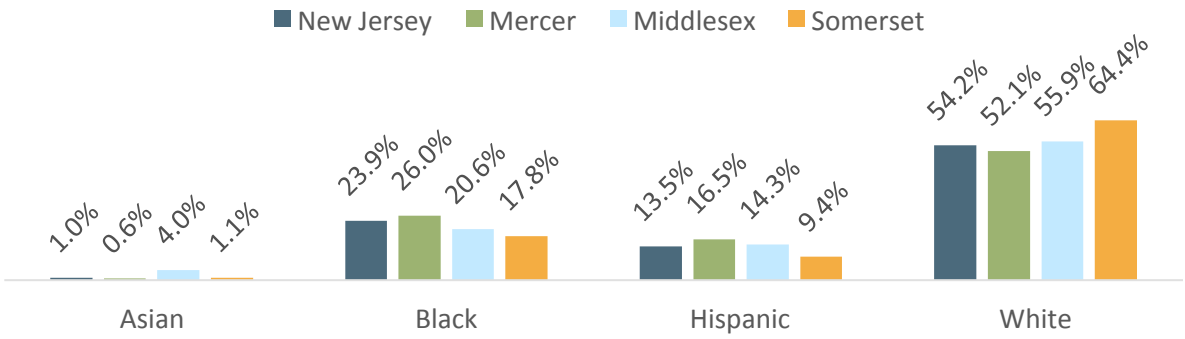
Figure 95. Naloxone Administration Rate per 100,000 Population, New Jersey and by County 2019



DATA SOURCE: NJ CARES, New Jersey Office of the Attorney General, 2019

The percentage of total Naloxone administrations differed by racial/ethnic groups (Figure 96). The highest proportion of naloxone administration occurred among White residents (52-64%), followed by Black residents (17-26%), and Hispanic residents (9-17%).

Figure 96. Percent Naloxone Administrations by Race/Ethnicity, New Jersey and by County, 2019



DATA SOURCE: NJ CARES, New Jersey Office of the Attorney General, 2019
NOTE: Data includes naloxone administrations by NJ law enforcement and emergency medical services

In 2020, the three counties in the Princeton Health service area accounted for about 14% of the total opioid dispensations in the state (Table 12). Mercer County had the highest rate of dispensations (361.8 per 1,000 population) and exceeded the statewide rate (345.5 per 1,000 population).

Table 12. Count of Opioid Prescriptions, New Jersey and by County, 2020

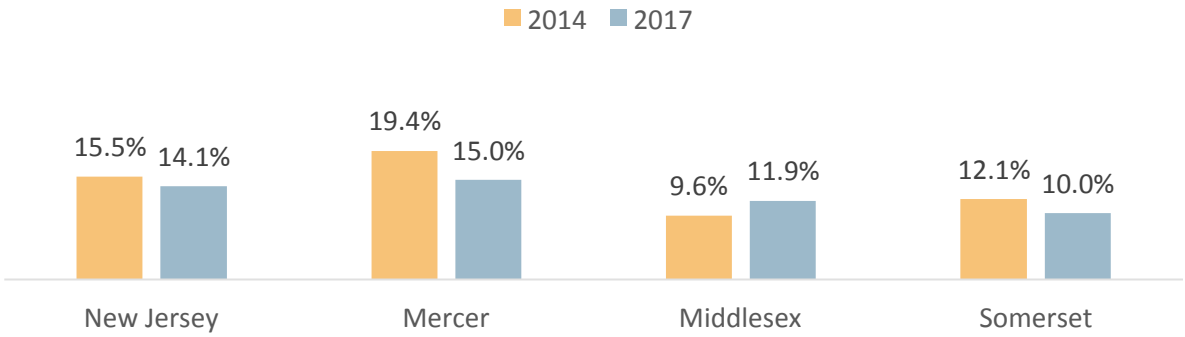
	Count	Rate (per 1,000 population)
New Jersey	3,067,870	345.5
Mercer	133,128	361.8
Middlesex	228,062	276.1
Somerset	78,126	236.9

DATA SOURCE: New Jersey Prescription Monitoring Program, NJ Division of Consumer Affairs, 2020
Note: Rate based on population from U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

Tobacco

Similar to the 2018 CHNA, tobacco use was not extensively discussed in focus groups and interviews. Data about self-reported smoking in 2017 indicate that a smaller proportion of adults in Middlesex and Somerset counties smoke compared to adults statewide (Figure 97). While rates declined in the state, Mercer and Somerset counties, rates slightly increased in Middlesex County.

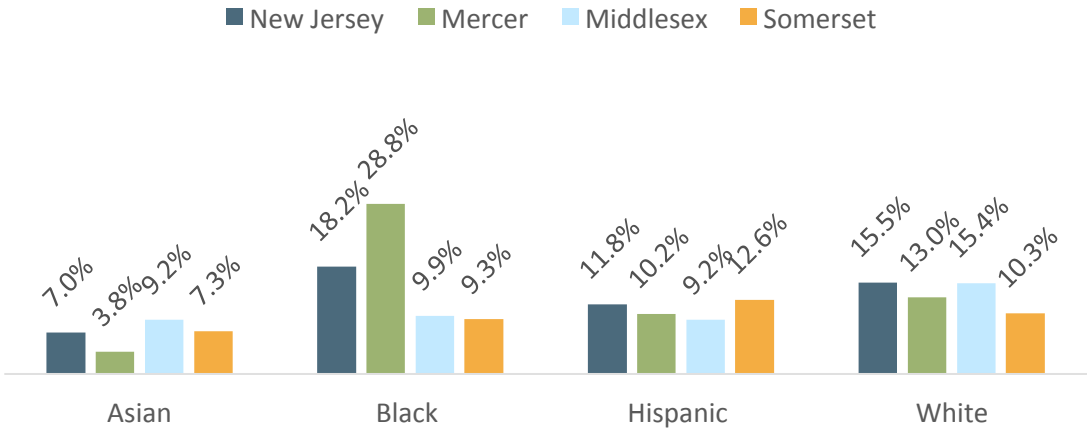
Figure 97. Percent Adults Reported Current Smokers, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

Data about self-reported smoking in 2017 by race/ethnicity reveal that rates are fairly similar across racial/ethnic groups; however, over a quarter (28.8%) of Black residents in Mercer County smoke (Figure 98).

Figure 98. Percent Adults Reported Current Smokers by Race/Ethnicity, New Jersey and by County, 2015-2017



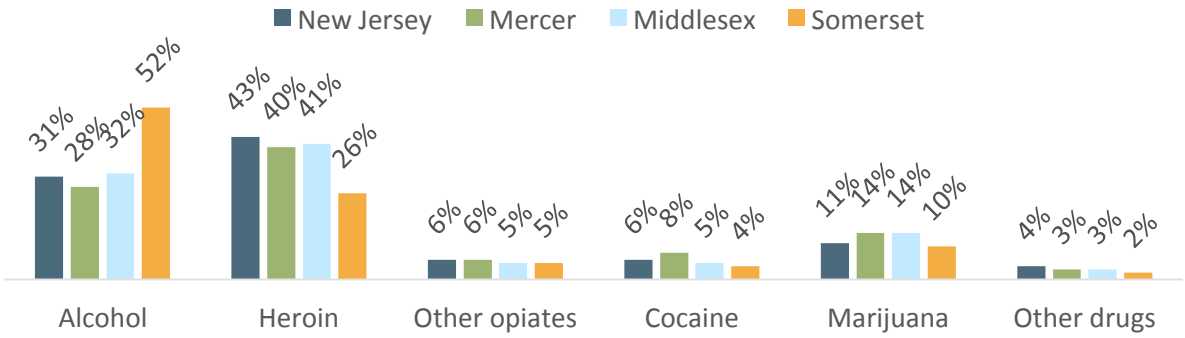
DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

Substance Use Treatment

Participants reported that community-based services for substance use disorders (SUD) have grown in recent years as the state has invested more in recovery centers and coaches. However, focus group participants and interviewees indicated that challenges remain. For example, residents may not be aware of these services. Additionally, there continues to be a need for more SUD beds for those with severe needs, services for co-occurring (mental health and substance misuse) disorders, and more prevention programming, especially in schools.

Data about substance use treatment admissions show that treatment for alcohol and heroin addiction comprised the largest proportion of admissions in 2019 in both the state and the three counties (Figure 99). Admission for alcohol treatment occurred more often than for heroin in Somerset County while in the other two counties and the state, admission for heroin treatment occurred more often.

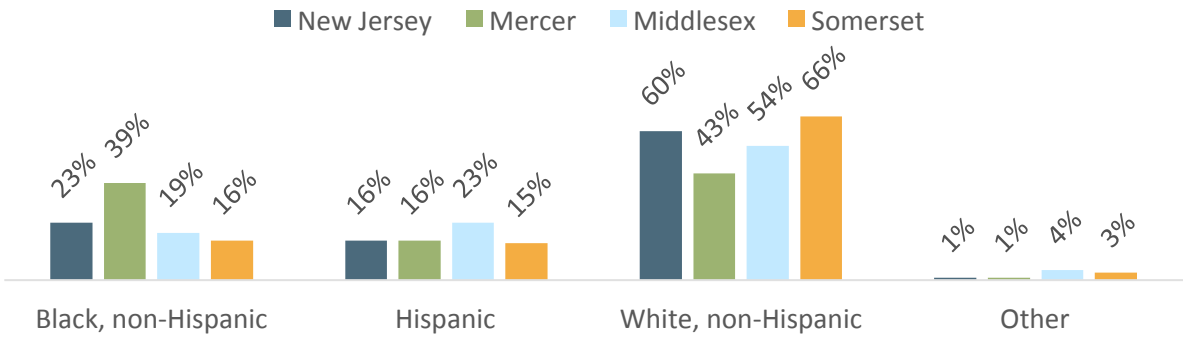
Figure 99. Percent of Substance Use Treatment Admissions by Primary Drug, New Jersey and by County, 2019



DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2019
NOTE: Percentages by county are by county of treatment site

Data about substance use treatment admissions by race/ethnicity show that the White, non-Hispanic population in all geographies had the highest proportions of admissions, followed by: Black, non-Hispanic; Hispanic; and Other race/ethnicities (Figure 100).

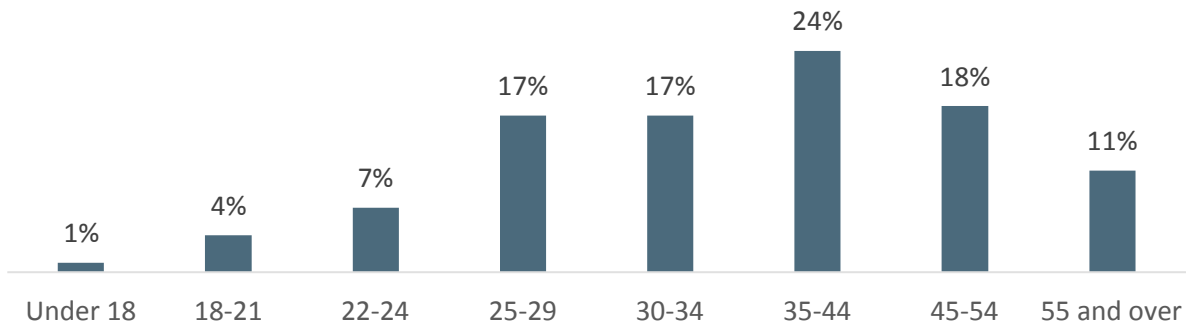
Figure 100. Substance Use Treatment Admissions by Race/Ethnicity, New Jersey and by County, 2019



DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2019

Across the three counties and in the state, the highest proportion of treatment admissions, about one fourth, are among 35 and 44 year olds (Figure 101). Those under age 18 comprise the smallest proportion. These proportions were similar in all three counties (data not shown).

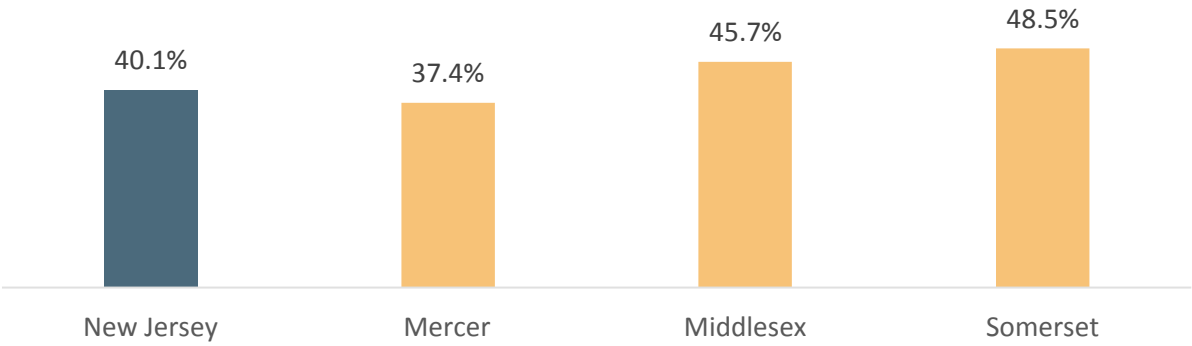
Figure 101. Percent of Substance Use Treatment Admissions by Age at Admission, New Jersey, 2019



DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2019

Quantitative data about unmet demand for substance use treatment, which represents the percentage of estimated adults who did not receive treatment in the 12 months prior to the interview but who felt they needed and wanted treatment, shows that unmet demand is higher in Somerset and Middlesex Counties than the state overall (Figure 102).

Figure 102. Percent of Substance Abuse Treatment Demand Unmet, New Jersey and by County, 2019



DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2019
NOTE: Unmet demand are those estimated adults who did not receive treatment in the 12 months prior to the interview but who felt they needed and wanted treatment

Infectious and Communicable Disease

COVID-19 was the dominant topic in conversations about infectious and communicable diseases. Challenges with vaccination were most often mentioned. As one interviewee explained, "*now we have a vaccine wall, we can't administer all the vaccine that we have and this is worrisome to me*." Others shared challenges reaching home-bound residents and overcoming issues related to misinformation and lack of trust. Another interviewee stated, "*there is not too much trust in the minority community with the COVID vaccine. Many think it is a conspiracy theory and they believe it was put here to kill and sift out minorities*." Those working in the health and community sectors reported that they have been working hard to reach out to these groups, including through partnerships with local faith institutions. The success of these efforts, participants report, has been varied.

As of August 3, 2021, there are over 35 million confirmed cases of COVID-19 and over 611,000 deaths due to this disease in the United States (Table 13). In New Jersey, there have been over 910,000 confirmed cases of COVID-19 fluctuated from January 2020 throughout 2021; notable peaks in cases include April 5, 2020 (>4,000 cases), December 12, 2020 (>6,000 cases), January 13, 2021 (nearly 7,000 cases), and April 1, 2021 (almost 4,700 cases).

The COVID-19 death rate in New Jersey is 272 deaths per 100,000 population, which is higher than the United States (184 deaths per 100,000 population). In the three counties, deaths rates were slightly smaller than New Jersey, ranging from 228 deaths per 100,000 population in Somerset County to 263 per 100,000 population in Middlesex County (Table 13).

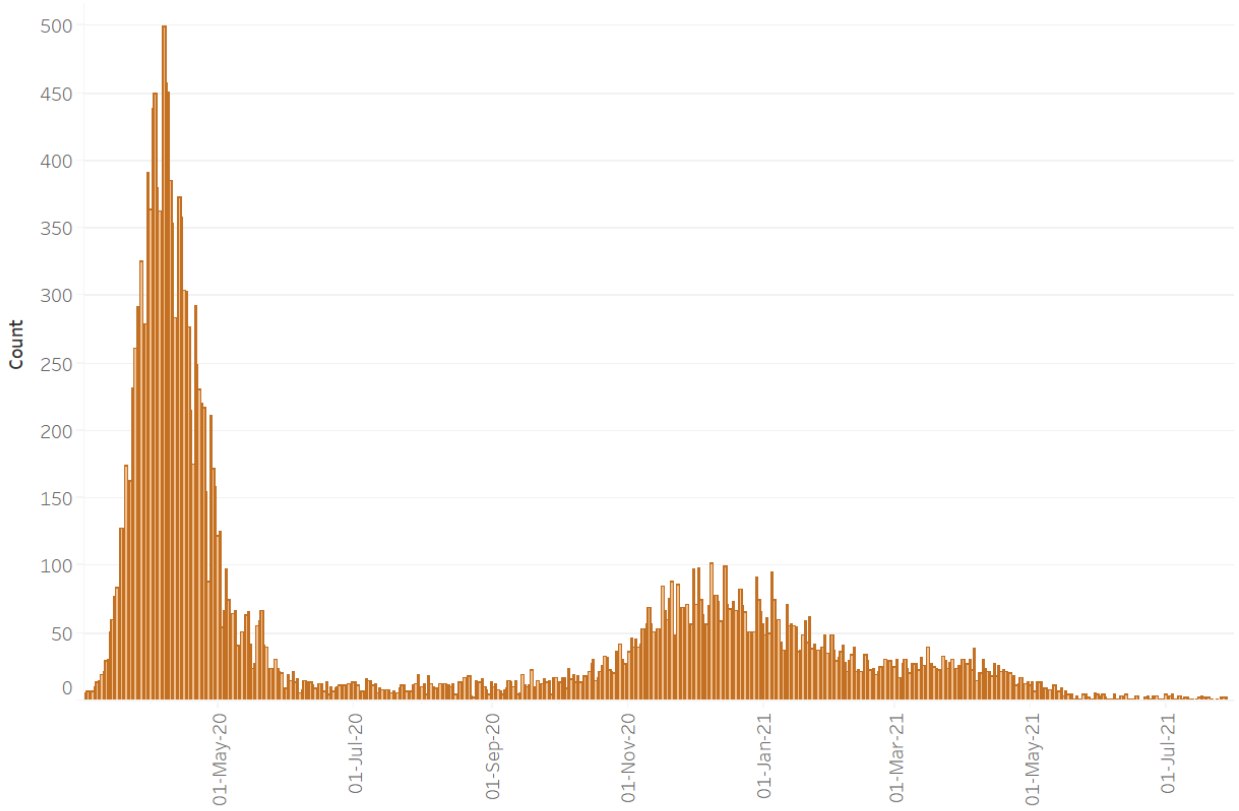
Table 13. COVID-19 Cases and Deaths, by United States, New Jersey and County, 2021

	Confirmed Cases	Case Rate per 100,000	Confirmed Deaths	Death Rate per 100,000
United States*	35,171,679	10,594	611,791	184
New Jersey+	910,183	10,353	23,895	272
Mercer+	32,189	8,782	918	250
Middlesex+	86,758	10,713	2,127	263
Somerset+	24,982	7,724	737	228

DATA SOURCE: +New Jersey Department of Health, COVID-19 Dashboard, 2021; *Centers for Disease Control and Prevention, COVID Data Tracker, 2021
NOTE: Data as of 8/3/2021

Figure 103 shows the total deaths due to COVID-19 by the onset of illness; with peaks in May 2020 and December 2020.

Figure 103. Deaths by Illness Onset Date, by New Jersey, 2020-2021



DATA SOURCE: New Jersey Department of Health, COVID-19 Dashboard, 2021
NOTE: Data as of 8/3/2021; If illness onset date is unknown the date of earliest positive specimen collection of the date of NJDOH notification is used, whichever is earlier; data on deaths is obtained through public health investigation and is supplemented through review of electronic death certificates; shows laboratory confirmed COVID-19 positive deaths

There are racial/ethnic disparities among COVID-19 deaths in New Jersey. Other, non-Hispanic residents (530.3 deaths per 100,000 population) and Black, non-Hispanic residents (349.2 deaths per 100,000 population) have died at higher rates than Asian, Hispanic/Latino, and White residents from COVID-19 (Table 14).

Table 14. COVID-19 Deaths by Race/Ethnicity, New Jersey, 2021

	Confirmed Deaths	Death Rate per 100,000
Asian, non-Hispanic	1,147	137.4
Black, non-Hispanic	3,938	349.2
Hispanic or Latino	4,438	247.5
Other, non-Hispanic	1,083	530.3
White, non-Hispanic	12,921	262.7

DATA SOURCE: New Jersey Department of Health, COVID-19 Dashboard, 2021
NOTE: Data as of 8/3/2021. Rates based on population from U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019

As of August 3, 2021, 5,315,049 individuals in New Jersey have been fully vaccinated, representing around 60% of the population (using the 2019 census population estimates to calculate the percentage); the most doses have been administered to the White population, followed by Hispanic or Latino population (Table 15). In the United States overall, 165,081,416 individuals, or 50% of the total population has been fully vaccinated while 58% of individuals have had at least one vaccination (data now shown).

Table 15. COVID-19 Vaccinations Administered by Race/Ethnicity, New Jersey, 2021

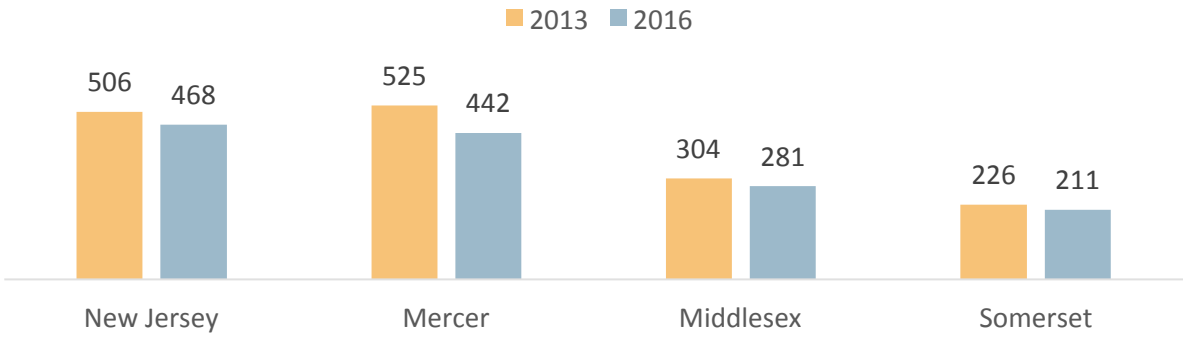
	Doses Administered	Percent of Total Doses
Asian	1,120,654	10.6%
Black	782,427	7.4%
Hispanic or Latino	1,654,888	15.7%
Other	996,181	9.5%
Unknown	902,317	8.6%
White	5,073,549	48.2%

DATA SOURCE: New Jersey Department of Health, COVID-19 Dashboard, 2021
NOTE: Data as of 8/3/2021

Immunization and STIs

The HIV infection rate in all three counties in 2015 was lower than that of the state (Figure 104). The rate in Mercer County (442 infections per 100,000 population) was over twice as high as that in Somerset County (211 infections per 100,000 population). Between 2013 and 2016, the rate of HIV infections fell.

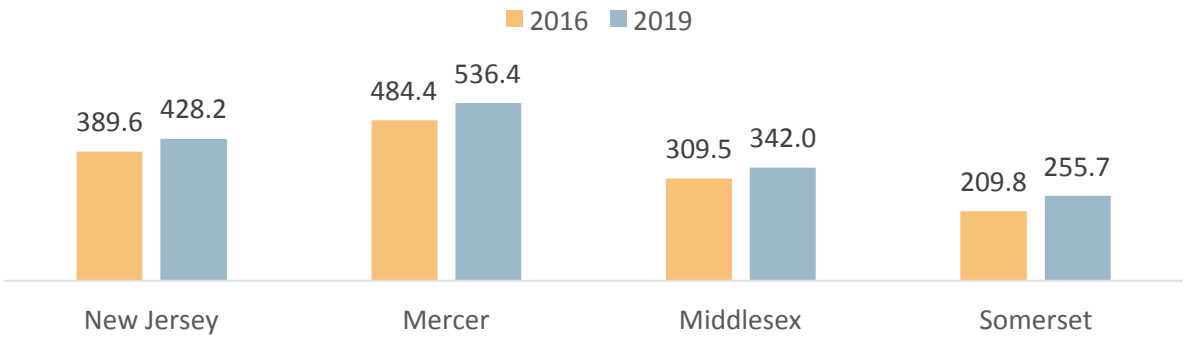
Figure 104. HIV Prevalence Rate per 100,000 Population, New Jersey and by County, 2013 and 2016



DATA SOURCE: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2013 and 2016

Mercer County also had the highest rates of chlamydia in 2019, with incidence rates almost twice as high as in Somerset County (Figure 105). Chlamydia infection rates rose in all three counties and the state between 2016 and 2019.

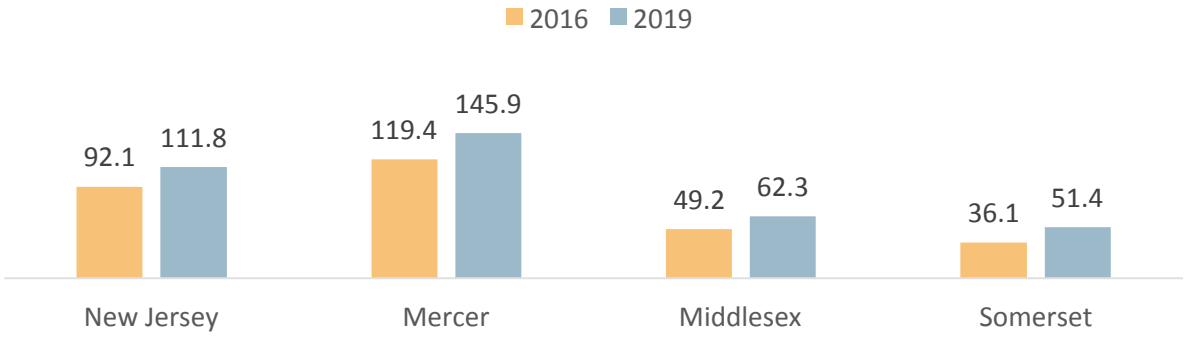
Figure 105. Chlamydia Incidence Rate per 100,000 Population, New Jersey and by County, 2016 and 2019



DATA SOURCE: Communicable Disease Reporting and Surveillance System, New Jersey Department of Health, Division of HIV, STD, and TB Services, 2016 and 2019

The rate of gonorrhea infection was also highest in Mercer County in 2019 (Figure 106), over three times higher than in Somerset County and over twice as high as in Middlesex County. Between 2016 and 2019 rates increased in all three counties and the state.

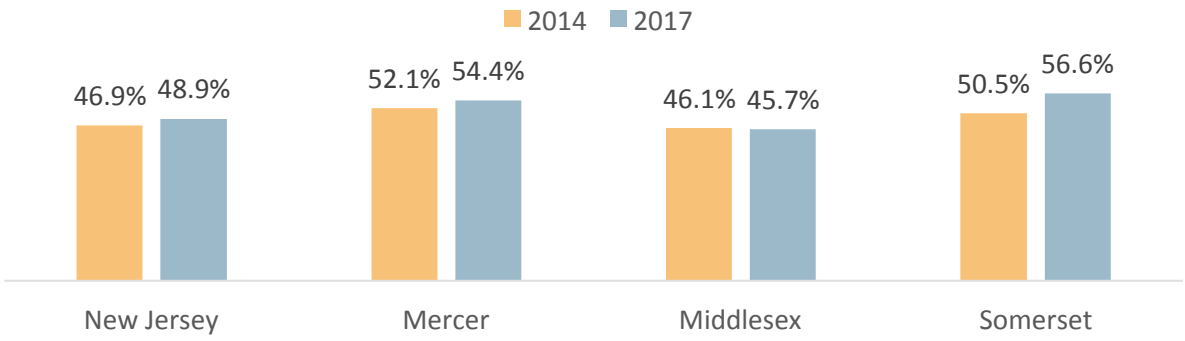
Figure 106. Gonorrhea Incidence Rate per 100,000 Population, New Jersey and by County, 2016 and 2019



DATA SOURCE: Communicable Disease Reporting and Surveillance System, New Jersey Department of Health, Division of HIV, STD, and TB Services, 2016 and 2019

Immunization rates for flu among those over age 50 were higher in Mercer and Somerset Counties in 2017 than in Middlesex County or the state overall (Figure 107). In 2017, Mercer County had the highest rate of flu immunization of the counties and higher than the state overall.

Figure 107. Percent Adults Aged 50+ Reported to Have Had Flu or Influenza Vaccination in Past Year, New Jersey and by County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

Reproductive and Maternal Health

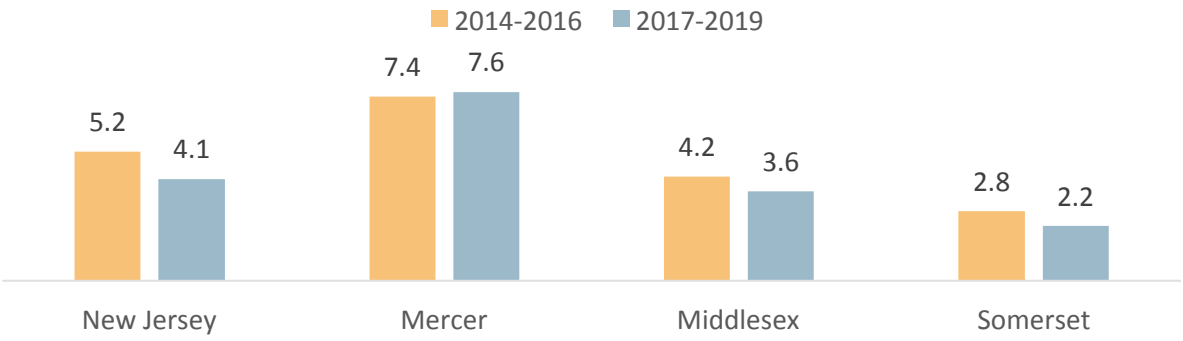
The health and well-being of mothers, infants, and children are important indicators of community health. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system.[xxxiv] Understanding the current status of and disparities within infant mortality rates, low birthweight and preterm births, and access to prenatal care, is important to predict infant survival, child development, and well-being as well as potential health care resources needed and costs of care.[xxxv] Infants born prematurely, for example, are at risk for neurological disabilities, respiratory conditions, or developmental delays.[xxxvi]

While maternal/reproductive health was not a prominent theme in conversations (similar to 2018), participants in the parent focus group mentioned a few concerns including the poor quality of local drinking water and the little time medical providers spent discussing health concerns with them. Participants also named challenges to accessing healthcare for those who do not have insurance or transportation. Also related to healthcare access, one participant shared that the region has experienced some contraction in hospital maternity wards over the years. Finally, a couple of focus group participants shared challenges with childcare and family leave. They noted the importance of early bonding time with babies and shared that some smaller employers provide little time off after delivery, especially for fathers, which creates stresses for the entire family.

Adolescent Birth Rate

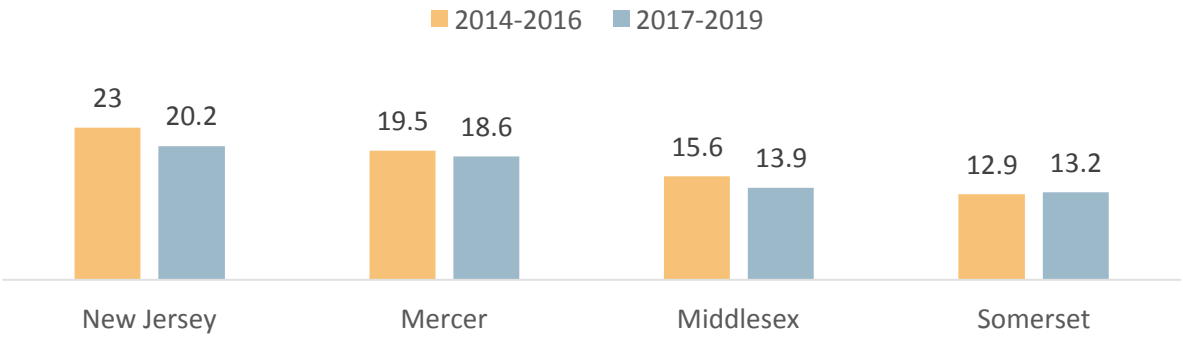
Data show that the rate of teen and adolescent births was highest in Mercer County in 2019 compared to Middlesex and Somerset Counties (Figure 108 and Figure 109). Teen birth rates across both age groups declined between 2016 and 2019 for all three counties and the state overall, except for a slight increase in births to females aged 18-19 in Somerset County.

Figure 108. Adolescent Birth Rate per 1,000 Females Aged 15-17, New Jersey and by County, 2014-2016 and 2017-2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2014-2016 and 2017-2019

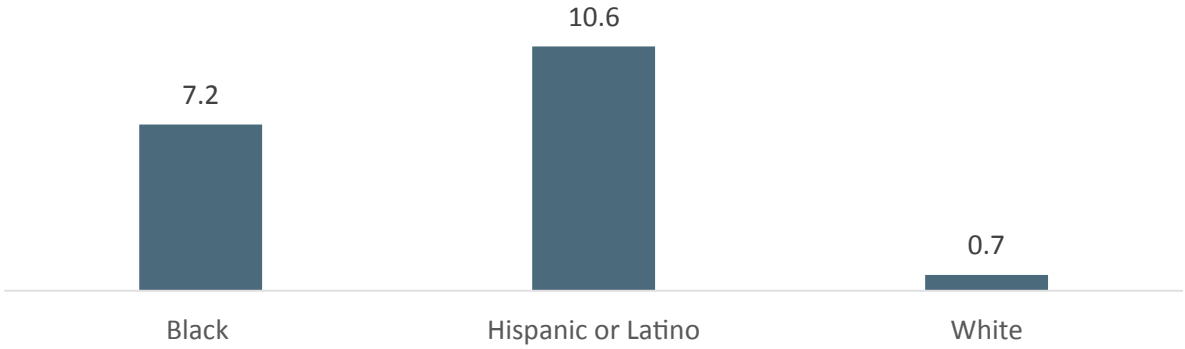
Figure 109. Adolescent Birth Rate per 1,000 Females Aged 18-19, New Jersey and by County, 2014-2016 and 2017-2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2014-2016 and 2017-2019

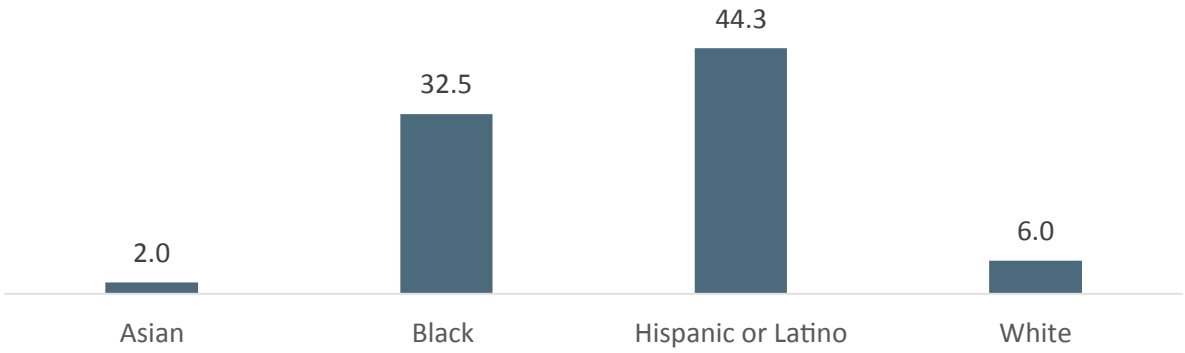
Among the racial/ethnic groups shown below, teenage birth rate data show that the rate of teen and adolescent births was highest among Hispanic or Latino teens, followed by Black teens, both of which were at least five times that of White teens (Figure 110 and Figure 111). Though data were only available for Asian teens aged 18-19, this rate was lower than other racial/ethnic groups among all groups.

Figure 110. Adolescent Birth Rate per 1,000 Females Aged 15-17 by Race/Ethnicity, New Jersey, 2017-2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2017-2019

Figure 111. Adolescent Birth Rate per 1,000 Females Aged 18-19 by Race/Ethnicity, New Jersey, 2017-2019

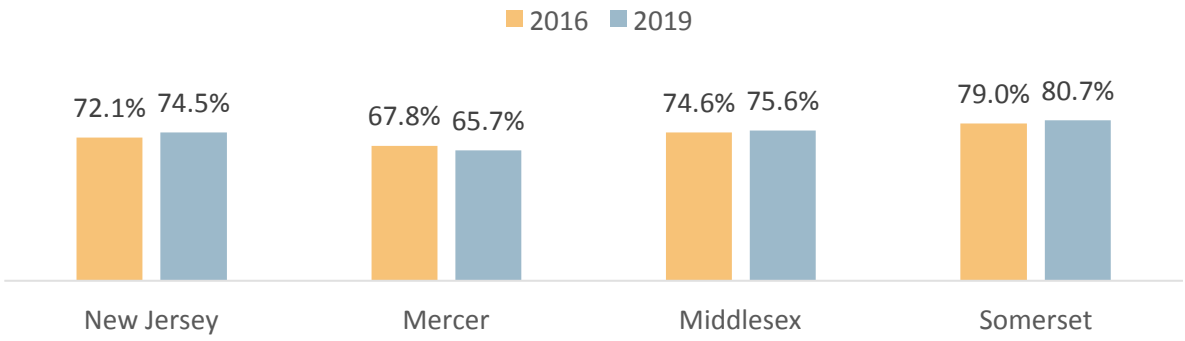


DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2017-2019

Prenatal Care

A smaller proportion of women from Mercer County (65.7%) accessed prenatal care in their first trimester in 2016 than women from Middlesex (75.6%) or Somerset (80.7%) or the state overall (74.5%) (Figure 112).

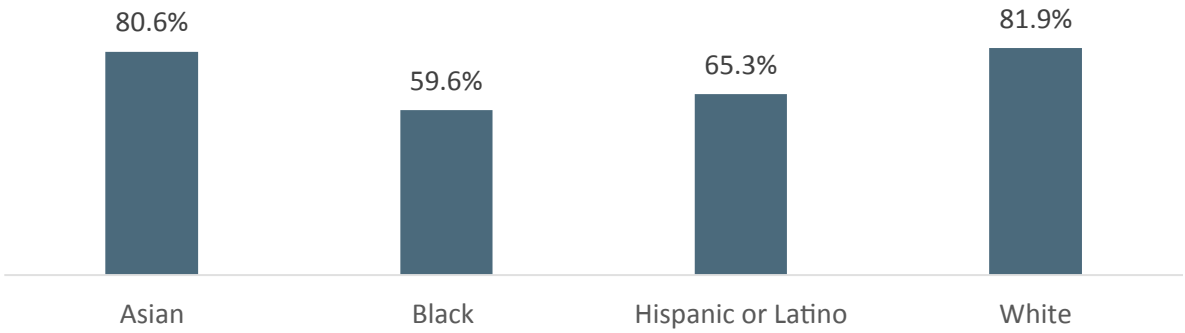
Figure 112. Percent Births with Prenatal Care in First Trimester, New Jersey and by County, 2016 and 2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016 and 2019

When examining these data by race/ethnicity in the state, Black mothers in New Jersey had the lowest percent of births with prenatal care, below that of the state, while White mothers had the highest percentage (Figure 113).

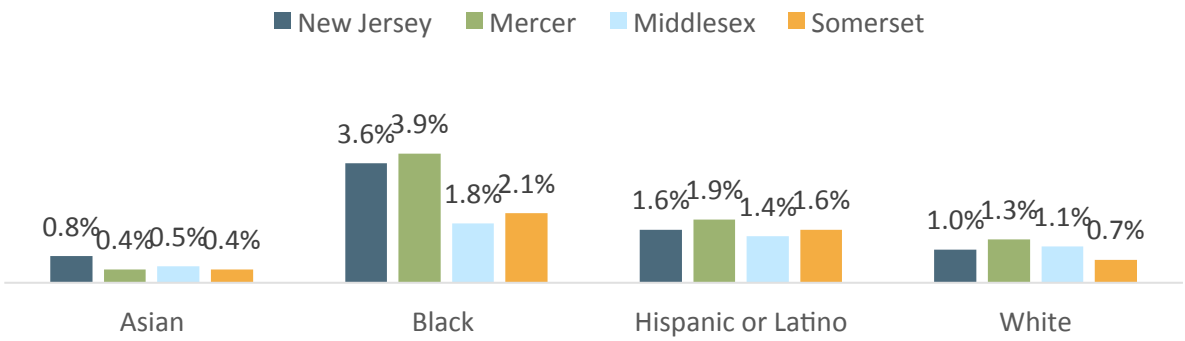
Figure 113. Percent Births with Prenatal Care in First Trimester by Race/Ethnicity, New Jersey, 2016-2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016-2019

The proportion of women with no prenatal care was about 1-2% across the three counties and the state (see Appendix D). The range of proportion of women with no prenatal care widened when examining rates across racial and ethnic groups; Black mothers experienced births with no prenatal care at least twice as often as other mothers in the state (Figure 114).

Figure 114. Percent Births with No Prenatal Care by Race/Ethnicity, New Jersey and by County, 2016-2019

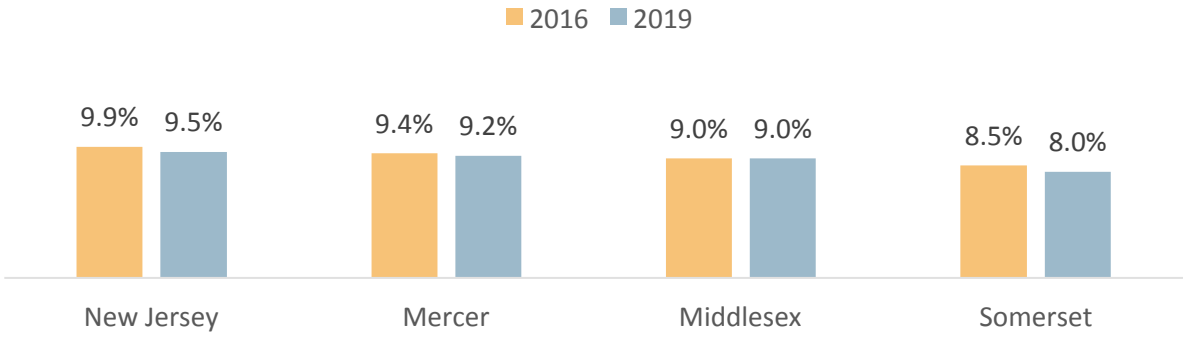


DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016-2019

Preterm and Low Birth Weight Births

The proportion of preterm births are similar across the counties and the state with the lowest percentage of preterm births in Somerset County (Figure 115). Rates for preterm births have remained similar between 2016 and 2019.

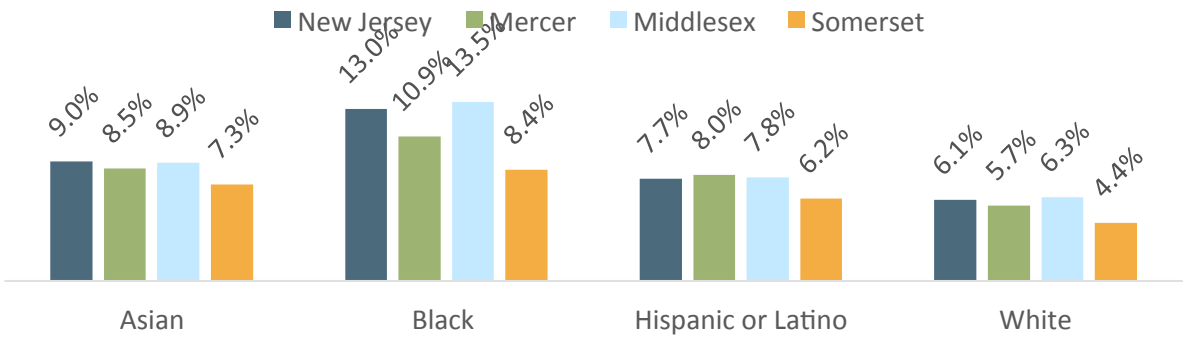
Figure 115. Percent Preterm Births, New Jersey and by County, 2016 and 2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016 and 2019
NOTE: Preterm as defined as less than 37 weeks gestation

The proportion of low birthweight babies are roughly similar across the counties and the state (8%), with a slightly lower percentage in Somerset County (see Appendix D). Rates have remained similar between 2016 and 2019, with a slight decline in Somerset County. When examining the proportion of low birthweight babies by race and ethnicity in the state and three counties, data reveal that disparities exist: Black mothers experience low birth weight births approximately twice the rate of White mothers across all geographic areas (Figure 116).

Figure 116. Percent Low Birth Weight Births by Race/Ethnicity, New Jersey and by County, 2019

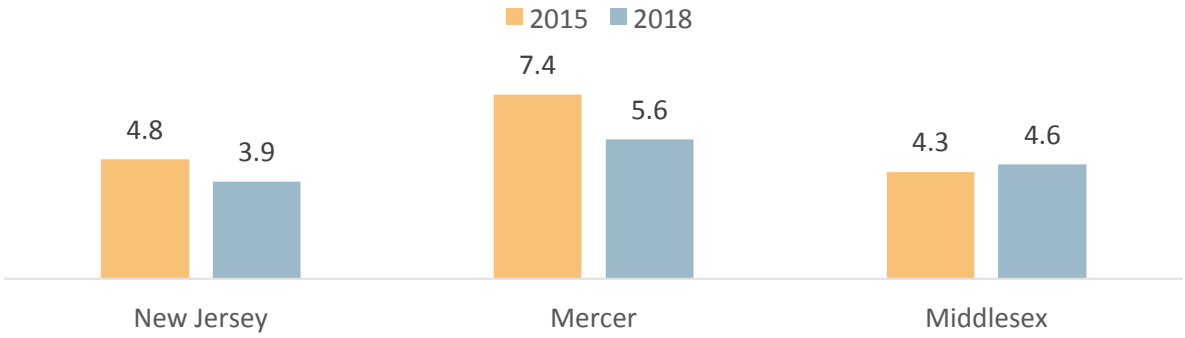


DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2019
NOTE: Low birth weight as defined as less than 2,500 grams

Infant Mortality

Infant mortality in 2018 was higher in Mercer County than in Middlesex County or the state (data for Somerset are unavailable) (Figure 117). Infant mortality rates declined in New Jersey and Mercer County while the rate increased in Middlesex County between 2015 and 2018.

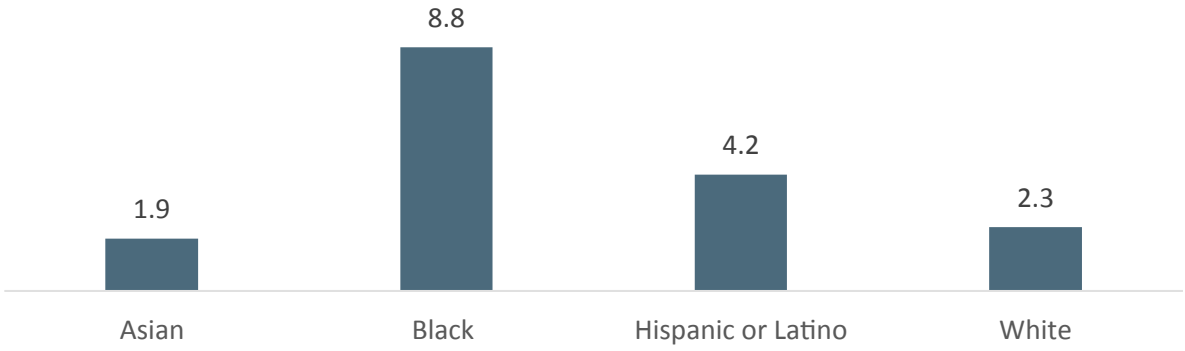
Figure 117. Infant Mortality Rate per 1,000 Births, New Jersey and by County, 2015 and 2018



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2015 and 2018
NOTE: Somerset County rate not available due to insufficient data to calculate reliable rate

When examining infant mortality rates across racial and ethnic groups, data shows that Black babies have the highest rates of infant mortality (8.8 per 1,000 births) in the state, followed by Hispanic or Latino babies (Figure 118). Black infants die at more than three times the rate of White infants and more than four times the rate of Asian infants.

Figure 118. Infant Mortality Rate per 1,000 Births by Race/Ethnicity, New Jersey, 2018



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2015 and 2018

The top five leading causes of death among infants are depicted below; as noted above, Black, non-Hispanic infants had the highest mortality rate with the most common cause being disorders related to short gestation and low birth weight (Table 16).

Table 16. Top Five Leading Causes of Death Among Infants by Mother's Race/Ethnicity, Crude Rate per 1,000, New Jersey, 2014-2018

Rank	All	Black, non-Hispanic	Hispanic	White, non-Hispanic
1	Congenital malformations, deformations and chromosomal abnormalities 0.75	Disorders related to short gestation and low birth weight, not elsewhere classified 1.68	Congenital malformations, deformations and chromosomal abnormalities 1.03	Congenital malformations, deformations and chromosomal abnormalities 0.52
2	Disorders related to short gestation and low birth weight, not elsewhere classified 0.69	Congenital malformations, deformations and chromosomal abnormalities 1.14	Disorders related to short gestation and low birth weight, not elsewhere classified 0.64	Disorders related to short gestation and low birth weight, not elsewhere classified 0.41
3	Sudden infant death syndrome 0.33	Sudden infant death syndrome 0.75	Newborn affected by maternal complications of pregnancy 0.24	Sudden infant death syndrome 0.32
4	Newborn affected by maternal complications of pregnancy 0.23	Newborn affected by maternal complications of pregnancy 0.41	Sudden infant death syndrome 0.23	Newborn affected by maternal complications of pregnancy 0.16
5	Respiratory distress of newborn 0.16	Bacterial sepsis of newborn 0.34	Respiratory distress of newborn 0.22	Intrauterine hypoxia and birth asphyxia 0.12

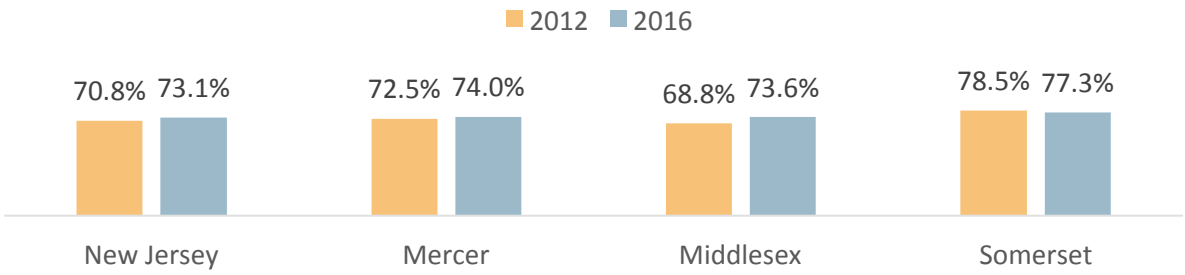
DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Linked Birth / Infant Death Records Data 2007-2018 on CDC WONDER Online Database, 2014-2018

Oral Health

Oral health was not frequently mentioned as an area of concern in the region among focus group participants or key informants, although one interviewee shared that dental expenses are an issue for seniors since Medicaid and Medicare have limited dental coverage.

BRFSS data for 2016 indicate that a higher proportion of adults in all three counties reported that they had a dental visit in the past year than the state overall (Figure 119), the highest proportion of which was in Somerset County. The proportion of adults having dental visits increased slightly between 2012 and 2016 in all geographies, except for a slight decrease in Somerset County. In 2016, White residents (78.4%) were more likely to have had a dental visit in the past year, as compared to Asian (70.4%), Black (66.5%), or Hispanic (61.8%) residents in New Jersey (see Appendix D). Community health survey respondents in the Multiracial or Other Race/Ethnicity group (20.0%) more often rated accessing dental or oral health services as difficult than White respondents (3.2%).

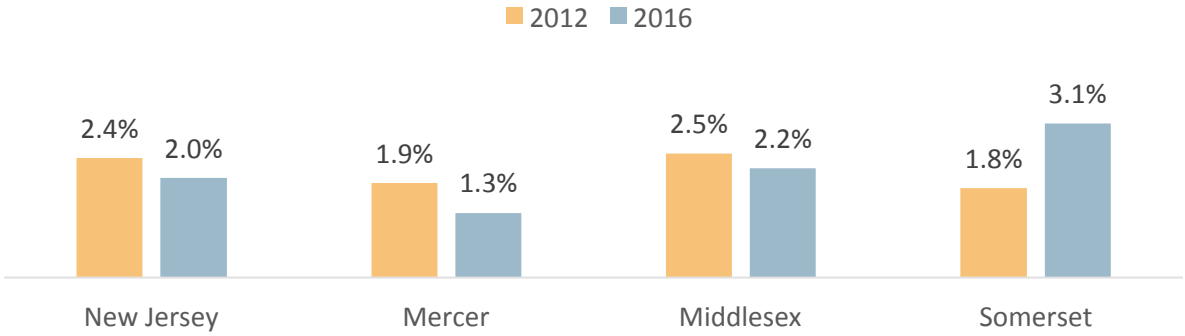
Figure 119. Percent Adults Reported to Have Had a Dental Visit in Past Year, New Jersey and by County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

A higher proportion of adults in Somerset County (3.1%) than in the other counties or the state reported in 2016 that they had all their natural teeth extracted (Figure 120). While this percentage decreased from 2012 to 2016 in New Jersey overall and Mercer and Middlesex counties, there was a slight increase from 2012 to 2016 in Somerset County.

Figure 120. Percent Adults Reported to Have Had All Natural Teeth Extracted, New Jersey and by County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

COMMUNITY PERCEPTIONS AND VISION FOR THE FUTURE

Top Issues for Action

Community health survey respondents were asked to rate a list of issues as low, medium, or high priority for future funding and resources. Figure 121 below shows the top seven issues that were selected as high priority by the greatest number of respondents. The top issues among respondents across geographic regions was similar (see Appendix D). The top two priorities in this survey (*Quality educational opportunities for all people* and *safe, stable, quality, well-compensated work for all people*) were not included in the 2018 survey. A higher percentage (68.2% and 59.1%, respectively) of Black respondents ranked both of these priorities much higher than other respondents (40-45% and 33-45%, respectively). Of priorities included in both 2018 and 2021 surveys, *increasing the number of services to help the elderly stay in their homes* was the top priority for the greatest number of respondents. However, while this priority was ranked first by White respondents, it was not ranked in the top five by people of color.

Figure 121. Top Community Priorities Ranked High Among Respondents, by Race/Ethnicity, 2021

	Total (N=1,698)	White (N=932)	Hispanic/ Latino (N=208)	South Asian (N=132)	East Asian (N=103)	Other Race/ Ethnicity (N=40)	Black (N=22)
1	Quality Educational Opportunities for all people (43.9%)	Increasing services to help the elderly stay in their homes (47.4%)	Safe, stable, quality, well-compensated work for all people (44.7%)	Quality Educational Opportunities for all people (40.9%)	Quality Educational Opportunities for all people (40.8%)	Mental Health Services (50.0%)	Quality Educational Opportunities for all people (68.2%)
2	Safe, stable, quality, well-compensated work for all people (41.9%)	Quality Educational Opportunities for all people (43.3%)	Quality Educational Opportunities for all people (43.8%)	Safe, stable, quality, well-compensated work for all people (36.4%)	Health & Medical Services for Low-Income Individuals (37.9%)	Expanding programs or services to help patients navigate the health care system (47.5%)	Health & Medical Services for Low-Income Individuals (63.6%)
3	Increasing services to help the elderly stay in their homes (41.2%)	Safe, stable, quality, well-compensated work for all people (42.5%)	Health & Medical Services for Low-Income Individuals (43.3%)	More programs or services to prevent chronic diseases (34.8%)	Increasing the health/medical services that are close by and easy to get to (35.0%)	Safe, stable, quality, well-compensated work for all people (45.0%) *	Safe, stable, quality, well-compensated work for all people (59.1%) *
4	Health & Medical Services for Low-Income Individuals (40.9%)	Mental Health Services (41.8%)	Increasing providers/ staff that speak languages other than English (38.5%)	Health & Medical Services for Low-Income Individuals (32.6%)	Safe, stable, quality, well-compensated work for all people (33.0%)	Quality Educational Opportunities for all people (45.0%) *	Mental Health Services (59.1%) *
5	Mental Health Services (39.8%)	Health & Medical Services for Low-Income Individuals (41.1%)	Increasing Healthy Food Access (38.0%)	Increasing Healthy Food Access (30.3%)	Mental Health Services (32.0%)	Health & Medical Services for Low-Income Individuals	Increasing availability of sidewalks or parks (50.0%)

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021
NOTE: * indicates priorities were tied.

Suggestions for Future Programs, Services, and Initiatives

When asked about needed programs and services, focus group participants and interviewees shared numerous thoughts and these mirrored suggestions provided in previous years. They included behavioral health services, prevention and community education programs, programs and services to support seniors, strengthened health care services, attention to social determinants of health, and enhanced engagement with community organizations.

Behavioral Health Services

In the community health survey, 39.8% of respondents would like to see more counseling or mental health services provided; this priority was especially seen among Black (59.1%) respondents. Given the substantial mental health and substance misuse concerns in the community, focus group participants and interviewees prioritized attention to behavioral health. Suggestions included:

- *Expand services, including telehealth*. As in 2018, participants identified a need to increase services to address mental health and substance use in the community including more beds, more therapists, more programs, and better distribution of these services across communities. Participants of one focus group, for example, suggested satellite urgent care for mental health and substance misuse. Interviewees saw great promise in telehealth approaches to address access constraints and advocated for continued expansion of these, along with appropriate reimbursement.
- *Support community-based providers and programs*. Interviewees advocated for more and stronger community-based services to identify and address needs before patients need acute care, and to provide support after acute events such as an involuntary admission. One provider explained, *"[I] would love to get folks to get stabilized. Mental health and mental illness – it's not like I take out your spleen and pain goes away. I would like to not see the same person five times a year*." Suggestions included: embedding behavioral health services into existing health care services such as psychiatric nurse practitioners in PCP offices; training and more providers to identify and address psychiatric needs of seniors, including identification of dementia and Alzheimer's; and developing community-based drop-in mental health services. One interviewee suggested continued support and expansion of programs in which licensed professionals go out into communities to identify homeless and other residents suffering from mental health and/or SUD and connect them to services. Participants also noted that the state has increased funding for community-based recovery programs; they believed more residents need to be made aware of these services.
- *Provide more programs and services for children and youth.* Focus group participants and interviewees would like to see more attention paid to addressing the behavioral health needs of children and youth. Participants advocated for more providers experienced in addressing trauma and more education about trauma for those who work with students and young adults. School-based staff stated that more social workers and counselors are needed in schools; they also recommended greater attention be given to addressing students' mental health needs outside of school hours through wrap-around service approaches. School nurses and young professionals suggested development and expansion of programs that directly reach students to educate them about mental health, including how to identify mental health concerns in their peers and ways to take care of their own mental health needs through techniques such as mindfulness. As one young person shared, *"our high school did a pretty good job of teaching us how to eat well, exercise, and sex ed, but they didn't really teach us about mental health and*

what to look for in our classmates and what to do." Educational programs and resources for parents about youth mental health and substance misuse was also mentioned.

- *Address stigma.* While focus group participants and interviewees perceived that behavioral health is more openly discussed these days, several saw a need to continue to normalize these topics. Some mentioned expanded outreach and programming for professionals who have traditionally resisted mental health support and who face tremendous stress (e.g., police officers, fire fighters, and first responders). Participants of the young adult focus group wished the same for their peers, with one participant saying, "*I hope in the future that mental health is more normalized for the younger generation. Just knowing that whatever they're going through is totally normal and that there are options out there to help them feel better."*
- *Address systems barriers.* Some participants also pointed to the need to address the broader, systemic structures that create barriers to effective and sustained action to address behavioral health needs. These included increasing reimbursement and compensation to attract more mental health providers to the field. This also requires, according to participants, rethinking the overall reimbursement structure which currently rewards providers for overnight visits, rather than preventative approaches and those that focus on effective follow-up care.

Prevention and Community Education Programs

As in 2018, participants saw a need for more programs and supports that enhanced residents' ability to maintain and improve their health. Specific suggestions included:

- *Expand education*. Focus group participants and interviewees saw a need for more community-based education to raise awareness and foster behavior changes necessary for good health. Training directly in the community was seen as critical, as one focus group participant noted: *"they need to do more trainings in the community with less emphasis on people going to the hospital. They need to bring the hospital to the community*." Suggested topics included:
    - *Nutrition*. Numerous participants stated that more programming was needed to encourage healthy eating habits, across all age groups. They recommended community-based education programs led by nutritionists that include information about the importance of both nutrition, including how to buy and use fresh foods, as well as exercise. Partnerships with schools was seen as critical to reaching students and families while partnerships with senior centers and senior housing were suggested as venues for reaching older residents.
    - *Behavioral health*. As described above, participants saw a need for more education about mental health and SUD, particularly in the middle and high schools, and including trauma. Another suggestion was youth-focused education on the harm of excessive technology uses, including social media.
    - *Health care*. Several participants suggested programs that educated community members about the importance of prevention such as annual exams and routine screenings, explained health insurance, and helped residents understand appropriate use of medical resources, including 911 and EMS services.
- *Expand community-based health programs*. To complement community-based education programs, participants also recommended more health services provided directly into the community. Suggestions included: expanding cancer screening programs, bone density screening programs, more immunization clinics for students, health fairs where screening

services and dental services could be provided, and community gardens to support healthy eating.

- *Partner with schools and local corporations*. Schools were seen as important partners to reach students as well as families and participants saw potential to increase collaboration with these institutions to expand health education and programming. Given their reach in the community, corporations such as Amazon, 3M and others were described as potential partners for both employee and community-based programming.
- *Enhance community outreach and ensure education and programs are tailored to community members*. Participants stressed the importance of bringing programs to communities across the region, with an emphasis on those who are typically hard to reach, including undocumented residents. They suggested maximizing multiple forms of outreach including social media as well as paper copy such as pamphlets, mailers, and flyers. In-person outreach and connection through active engagement of trusted community partners including schools and faith institutions was seen as critical. As one interviewee shared, "*I think going into the community during events you can probably impact and reach a broad set of people. You can definitely get a lot through electronic means, but boots on the ground is probably a really good option as well*." Given concerns about misinformation and mistrust of health care institutions currently, on the ground outreach and work through trusted partners was described as essential. There are many diverse communities in the PMPH service area and to be successful, health education and programming need to address unique issues faced by different groups and utilize effective engagement approaches. As one participant advised, *"be cognizant of the diversity in the towns and focus on building trust with residents."* One interviewee suggested that education and outreach efforts begin with research about the needs of the different communities and what outreach methods work best.
- *Ensure programs are low cost and consider incentives.* Cost is a substantial barrier to participation in prevention programs according to participants; they advocated for low cost or no cost programs. Given the many demands on residents' time, participants of one focus group recommended providing incentives to encourage program participation.

<u>Senior Health Services and Programs</u>

Senior focus group participants and those working with seniors identified several needs unique to this population:

- *Increase in-home supports.* In the community health survey, 41.2% of all respondents prioritized increasing the number of services to help the elderly stay in their homes. This need was greater among White (47.4%) respondents. Senior focus group participants recommended more supports to help seniors continue to live independently for as long as possible. This included senior helpers as well as people who can help seniors with minor home maintenance issues. Suggestions included connections to volunteer organizations or Boy or Girl Scouts and that senior centers and health providers provide a bulletin board listing these types of services, *"I have 2 hours, I can offer this service, or I need a certain service."*
- *Provide caregiver support.* As in 2018, several participants suggested that more is needed to support caregivers of seniors who often face substantial challenges and feel alone. Support groups and educational programs were recommended. A couple of participants noted the importance of paying attention to the cultural aspects of caregiving, especially among Southeast Asian families.

- *Enhance support by patient advocates.* Seniors saw great value in advocates or navigators who could help patients coordinate their health care, transition from hospital to home care, and manage their medications. As one person shared, *"so many people are by themselves with no family members. Who speaks for them? Who knows?"*
- *Provide education.* Seniors suggested that they could benefit from more education programs, especially those focused on use of technology, fall prevention, and utilization and coverage by Medicare and private insurance. As one person stated, *"I think reaching out to help those seniors who have no internet connection at all. It's that they are frightened, that they can't even imagine handling an iPad*."
- *Facilitate access to hearing aids and dental services.* Seniors also mentioned the importance of ensuring that seniors are able to get hearing aids and dental services, perhaps through financial support programs. As one senior stated, *"I don't know how to solve the hearing aid and oral health care issues, but these are so important for overall health."*

Strengthened Health Care Services

Several participants shared a vision of health excellence and continued high quality health care in the region. Specifics of this included:

- *Continue to expand hospital services*. Those working at PMPH would like to see the hospital system continue its path toward excellence, including expansion in cancer and cardiac care.
- *Continued focus on cultural competency*. Focus group participants and interviewees recommended that health care providers and organizations continue to focus on cultural competency. Suggestions included expanding language access, incorporating medical traditions of non-western cultures (e.g., Chinese medicine), and training in care for LGBTQ+ patients. Diversifying staff was described as key. As one interviewee stated, "*we need to attract more talent of the communities that we serve*."
- *Enhance connections to schools*. School nurse focus group participants advocated for hospital presence in the schools to help connect students to care and provide things like immunizations. As one stated, *"it would be wonderful if PMPH could come into the schools to provide medical care when needed*."

Attention to Social Determinants of Health

While not a prominent theme, several participants saw a need for greater attention to the social determinants of health as a pathway to improve community health. This included:

- *Supporting affordable housing*. A couple of interviewees recommended greater attention to increasing affordable housing, with work at a policy level. Over a third (35.5%) of community health survey respondents identified increasing access to affordable housing as a priority.
- *Expanding transportation*. Several participants advocated for continued hospital support for local transportation services and even expansion of these services to make access to the Plainsboro campus easier.
- *Environment*. Participants of one focus group suggested more should be done to enhance the environmental issues affecting health including air and drinking water quality, urban blight, and food deserts. An interviewee suggested greater investment in parks and urban farms.

Enhanced Engagement with Community Organizations

As in 2018, focus group participants and interviewees saw the importance of partnerships with local community institutions, including schools, faith institutions, and employers. A few participants suggested that the hospital do more to:

- *Communicate about hospital services*. Participants working in community organizations suggested that the hospital provide information about services and programs available at the hospital and in the community. As one interviewee shared, "*I can't think of when [hospitals] have ever reached out or let us know what programs they offer or would like to offer."*
- *Engage community groups*. Some saw the opportunity for greater partnership with community-based organizations to address some fundamental issues affecting community health, including the social determinants. Suggestions included engagement of school nurses, schools, EMS providers, community-based nonprofits, and housing communities.

KEY THEMES AND CONCLUSIONS

This community health needs assessment integrates quantitative and qualitative data from a variety of sources to provide an overview of the current health status of Mercer, Middlesex, and Somerset County residents, identify priority health issues, and explore community assets, resources and gaps. Overall, many of the issues identified in the 2018 CHNA continue to be pressing needs in the region. Overarching themes that emerged from this synthesis include:

- **The PMPH service area has several community strengths and assets.** Generally, residents are well-educated and affluent compared to other communities in New Jersey. The service area's continually growing diversity is seen as a strength, as are its amenities and social cohesion. Human, economic, and health care resources were identified as assets of the service area.

- **Considerable disparities among racial and ethnic groups in PMPH's service area were detected through secondary data and the community health survey.** Disparities between residents of color and white residents were observed in the social determinants of health, such as employment, education, housing, and the built environment. For example, New Jersey unemployment rates were nearly double among Black, American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander residents compared to White, non-Hispanic residents. Additionally, White residents (76.4%) in New Jersey were almost twice as likely to own their homes than people of color (42.7%)

- In addition to racial and ethnic groups, several themes emerged related to **specific populations**, **including the LGBTQ community and seniors**. LGBTQ health concerns rose as one of the top five health issues for community health respondents, both for the community and for respondents. For the LGBTQ population, a lack of adult was identified as well as the need to improve provider competency in caring for LGBTQ patients. Specific concerns for seniors were elevated, including accessing housing, transportation, and health care.

- Unlike the 2018 CHNA, the **COVID-19 pandemic was an emergent theme in focus groups and interviews**. Community health survey respondents also identified COVID-19 as a top health issue for their community. Additionally, COVID-19 necessitated a virtual approach to qualitative data collection. The pandemic has increased the unemployment rate and residents reported that mental health concerns have worsened and substance use has increased. Since the pandemic, virtual health care visits have been increasingly utilized, helping to address some long-standing access and provider challenges including in the area of behavioral health.

- Providers and focus group participants reported that the **range and severity of mental health concerns in the community is growing**. Similar to 2018, counseling/mental health care and alcohol/drug treatment/prevention were the two health care services rated as "hard" or "very hard" to access by the greatest number of survey respondents. However, the ratios of the population to mental health providers decreased across New Jersey and all three counties from 2017 to 2019, indicating a growth of mental health providers in the region. Drug poisoning mortality rates increased across the three counties and the state overall between 2015 and 2019.

- Although not as extensively discussed as in 2018, focus group participants and interviewees shared that **residents face challenges with chronic diseases such as cardiac issues, obesity and diabetes, and cancer**. Similar to 2015 and 2018, heart disease and cancer remain the leading causes of death in PMPH's service area, although death rates from these causes are declining. As in prior years,

obesity and diabetes were mentioned by focus group participants and interviewees as a substantial health concern in the PMPH service area, with communities of color especially affected. Lack of physical activity, access to healthy foods, and understanding about the importance of good nutrition and how to prepare healthy foods were cited as top drivers of chronic disease by focus group participants and interviewees.

- While **cancer** did not emerge as a key concern in this assessment, it is the second leading cause of death across all geographic regions and racial/ethnic groups (with the exception of being the first leading cause of death of Asian residents).

- While there are numerous high-quality health care facilities in the region, residents identified several **barriers or concerns with health care access and utilization** including provider availability, insurance problems/lack of coverage, language barriers and cultural competence, transportation, health care hesitancy/delay, cost and quality of care, and navigating health care. Additionally, disparities were generally seen in experiences of discrimination and health care access (e.g., insurance, a main source of medical care, proximity to medical services, dental care, mental health, alcohol/drug services/programs) between residents of color and white residents. For example, in New Jersey, Hispanic or Latino residents were over four times as likely to be uninsured as compared to White, non-Hispanic residents.

- **Given these identified needs, various recommendations were offered by residents** including an expansion of behavioral health services, tailored prevention and community education programs, an increase of senior health services and programs, strengthened health care services, a greater attention to the social determinants of health, and enhanced engagement with community-based organizations.

PRIORITY HEALTH NEEDS OF THE COMMUNITY

Process and Criteria for Prioritization

In August and September 2021, HRiA led a facilitated process with senior leaders from Penn Medicine Princeton Health. In August 2021, HRiA presented the priorities identified by the 2021 community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2022-2024 Strategic Implementation Plan (SIP).

Prioritized Description of Significant Community Health Needs

Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2022-2024 Strategic Implementation Plan (SIP) in the following clustered priority categories:

- Priority 1: Chronic Disease, Obesity, and Healthy Eating and Active Living (HEAL)
- Priority 2: Behavioral Health
- Priority 3: Health Care Access
- Priority 4: Maternal Child Health
- Priority 5: Elder Health

These priority needs continue from the previous CHNA-SIP process, as they are ongoing needs and several initiatives are still in progress to address them. In September 2021, HRiA led SIP planning sessions that included mapping current and emerging programs and initiatives against these needs, as well as decision-making regarding which existing programs and initiatives would be continued and what new programs or initiatives would be developed. All areas highlighted by the 2021 CHNA are being addressed by the 2022-2025 Strategic Implementation Plan.

APPENDICES

APPENDIX A. Penn Medicine 2021 Review of Initiatives – TO BE POPULATED BY PMPH

As a result of their 2018 Community Health Needs Assessment, Penn Medicine Princeton Health developed a plan to address identified key health needs and issues. Since the 2018 Needs Assessment, Penn Medicine Princeton Health has provided a variety of services and programming to address the identified key needs and issues. These services and programming are summarized in the table below.

Strategic Initiatives	**Outcomes**		
	FY 2019	**FY 2020**	**FY 2021**
Priority Area 1: Chronic Disease, Obesity, and Healthy Eating Active Living (HEAL) **GOAL: Promote optimal health and reduce the impact of chronic diseases (e.g., cancer, obesity, diabetes, heart disease) and to enhance overall outcomes and quality of life.**			
	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]
3. Conduct ongoing community events, including nutrition and exercise programs, health screenings, lectures, and webinars to raise awareness among children and adults regarding obesity and chronic diseases.	3. -**Nutrition** 37prog/910ppl -**Exercise** 5prog/50ppl -**HF** 57 fairs/8,550ppl -**Obesity/Chronic Dis** 117prog/1,804ppl	3. -**Nutrition** 31prog/349ppl -**Exercise** 35prog/189ppl -**HF** 10 fairs/308ppl -**Obesity/Chronic Dis** 86prog/1,324ppl	3. -**Nutrition** 15prog/152ppl -**Exercise** 42prog/48ppl -**HF** 22 fairs/1,763ppl -**Obesity/Chronic Dis** 74prog/905ppl (through Qtr 3)
4. Continue to utilize partnerships with the fitness centers to identify special population needs and collaborate around programming. In consultation with the medical advisory board, enhance programs for specialty populations (e.g., MS, Parkinson's, orthopedics, cardiac rehab, bariatrics, cancer, diabetes, etc.).	4. 4 programs 32 attendees	4. 5 programs 84 attendees	4. 11 programs 82 attendees (through Qtr 3)

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
5. Continue to collaborate with the Y's in Princeton and Hamilton to develop and enhance the Healthy Living Program.	5. 23 programs 237 attendees	5. 1 programs 11 attendees	5. 30 programs 132 attendees (through Qtr 3)
6. Expand current Psycho-social Distress Screening to include survivorship population for UMCP cancer patients.	6. Started Yr 2	6. 78 patients	6. Initiative completed. Psycho-social distress screening has expanded.
7. Redesign on-site support group for cancer caregivers.	7. Planning phase	7. Postponed due to COVID	7. Postponed due to COVID
8. Continue to provide community-based screenings for prostate, skin, and lung cancers.	**8. Cancer Screenings** -Skin 67 participants -Prostate 46 ppl -Lung 47 ppl	**8. Cancer Screenings** -Skin cancelled -Prostate 17 ppl -Lung 5 pp.	**8. Cancer Screenings** -Prostate 19 ppl -Lung 50 ppl (as of 11/21/21)
9. Conduct Cancer Survivors Day event annually in the community.	9. Postponed to 2020	9. Postponed due to Covid restrictions	9. Postponed due to Covid restrictions.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
10. Continue to offer community education events related to healthy living specific to cancer prevention.	10. 6 programs, 101 attendees	10. 8 programs, 276 attendees (224 from Ustreams)	10. 8 programs, 120 attendees (through Qtr 3)
11. Conduct annual Kids Marathon for children K-8, including pre-race offerings of cooking classes, nutrition classes, exercise, and gardening.	11. 206 attendees	11. KM on hold due to COVID.	11. KM on hold due to COVID.
12. Continue to provide comprehensive Diabetes Self-Management Education in the ADA Recognized OP Diabetes Management Program since 1997.	12. 17 programs 134 attendees	12. 11 programs 85 attendees	12. 16 programs 41 attendees (through Qtr 3)
13. Implement Healthy Robbinsville 2021 with schools and local economy.	13. Visited 5 Robbinsville & 28 Hamilton School Districts (33 total)	13. On hold due to COVID, will resume in 2022.	13. On hold due to COVID, will resume in 2022.
14. Participate with Penn Medicine's Healthy Hospital Partnership.	14. Planned to begin in Yr 2.	14. On hold due to Covid restrictions.	14. On hold due to Covid restrictions.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
15. Provide integrated therapy for patients receiving cancer treatment in partnership with volunteer services.	15. 57 classes with 167 attendees	15. 45 classes with 167 attendees	15. 42 classes with 144 attendees
16. Develop and implement the Osteoporosis and Fragility Program.	16. Begin Year 3	16. Begin Year 3	16. Developing Plan will begin March 2022
Priority Area 2: Behavioral Health **GOAL: Enhance and expand the integration of behavioral health principles and practices into specialty treatment (trauma, first responders, acute and outpatient pain management, opioids), inpatient and emergency department settings, and the department of medicine.**			
	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]
1. Continue inpatient HepC Program at Princeton House, including full-time social worker for community follow up.	1. 44 new patients	1. 31 new patients. Grant discontinued in Qtr 3.	1. Initiative completed
2. Continue inpatient program to address behavioral health stressors among first responders (police, fire, EMS, corrections officers, etc.).	2. 114 admissions	2. 175 new patients	2. 189 Admissions

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
3. Provide inpatient treatment for co-occurring mental health and substance use disorders including detoxification for primary addictions in adults.	3. 1,170 admissions	3. 1,652 admissions	3. 892 co-occurring admissions & 442 detox admissions
4. Provide transportation at no additional cost via a fleet of vehicles to reduce the barrier to treatment for those who are eligible.	4. 6,251 rides	4. Postponed due to COVID	4. Postponed due to COVID
5. Provide behavioral health Community Education programs to educate and raise awareness of mental health, substance use, and medication safety services available to the community.	5. 2 programs 465 attendees	5. 18 programs 233 attendees	5. 18 programs 505 attendees (through Qtr 3)
6. Continue to offer specialized services for teens, women, and men who have experienced trauma.	6. 536 admissions 10,169 visits	6. 262 admissions	6. Data calculated after 4th quarter
7. Continue to integrate behavioral health nurse practitioners into medical practices (the Primary Care Initiative).	7. Begin year 2	7. 1 Behavioral Health Advanced Practice Nurse	7. 1 Licensed Clinical Social Worker

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
8. Maintain integrated medical and behavioral health Eating Disorders Unit.	8. 102 admissions	8. 181 admissions	8. 219 admissions
9. Implement a clinical initiative to educate the units (nurses, doctors, and medical/surgical residents) to help them better assess, intervene and treat the behavioral health issues that accompany the medical issues they are treating.	9. Begin year 2	9. Postponed due to COVID restrictions.	9. Postponed due to COVID restrictions.
10. Incorporate Medication Assisted Therapy (MAT) for substance use disorder patients into the Princeton House outpatient continuum.	10. Program in development phase	10. Postponed due to Covid.	10. Data calculated after 4th quarter
11. Implement animal assisted therapy in the child/adolescent outpatient program.	11. 3 groups a week	11. Cancelled. Services provided virtually due to COVID.	11. Cancelled due to COVID. 100% virtual
12. Expand inpatient access through the addition of new inpatient psychiatric beds to better meet community demand.	12. Begin year 2	12. On hold due to COVID restrictions.	12. On hold due to COVID restriction.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
Priority Area 3: Health Care Access **GOAL: Identify and overcome barriers to patients obtaining high quality and cost-effective care when they need and where they need it.**			
[Insert initiatives]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]
1. Expand primary care practice hours and explore whether additional primary care practices are needed in locations across our service area.	1. 2 expanded hours. Yes, did not have any new locations onboard in 2019.	1. 0 expanded hours Yes, worked through contracting with Montgomery Internal Medicine and Princeton Urogynecology. Began planning work on multispecialty sites in Robbinsville, Pennington, and Hillsborough	1. 6 expanded hours Yes, on boarded Montgomery Internal Medicine (Princeton and Hillsborough locations), Princeton Urogynecology. Began construction on multispecialty site in Robbinsville (6/1/22 opening), began planning for multispecialty site in Princeton
3. Continue to serve as a site for Certified Application Counselors to assist people in securing ACA health insurance.	3. 34 for Qtr 1 & 2	3. 88 calls	3. 109 calls (through 10/2021)

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
4. Expand access to care coordinators at Princeton Health Care primary care practices to provide a direct line of communication between high risk patients and RNs who serve as navigators.	4. 6.5 care coordinators each year	4. 6.5 care coordinators each year	4. 6.5 care coordinators each year
5. Provide centralized access to outpatient services in behavioral health, triaging, and redirecting throughout the state through the appropriate screening process.	5. 19,870 calls in Qtr 1 & 2	5. 5,402 in Qtr 4	5. Data calculated after 4th quarter.
6. Create awareness and increase use of the Patient Portal to enable access to electronic medical records (EMR), services, and messaging between patients and their care team.	6. Brochures distributed at event	6. On hold due to covid. Will begin again on 2022 assessment.	6. On hold due to covid. Will begin again on 2022 assessment.
7. Continue to utilize translators/bilingual staff, and the language line to facilitate access for all patients.	7. Planning phase	7. 12,825 calls	7. Data calculated after 4th quarter.
10. Provide culturally competent community education outreach and screenings. Provide these services in other languages as needed..	10. 36 screenings 1783 participants	10. 6 programs 122 attendees	10. 3 programs 360 attendees (through Qtr 3)
13. Provide assistance to qualifying patients for transportation to cancer treatment and supportive care.	13. 26 patients	13. 10 patients (no rides in Apr - Aug bc of COVID).	13. 21 patients

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
14. Provide financial assistance to cancer patients identified with risk for treatment related financial toxicity.	14. 96 patients assisted	14. 9 patients assisted	14. Data calculations after 4th quarter
15. Provide community education outreach that recognizes and celebrates diversity and inclusion among people of various ethnicities, races, sexual orientation and gender identify.	15. Qtr 1 & 2 12 programs 546 attendees	15. 6 programs 64 attendees	15. 3 programs 24 attendees
16. Expand Oncology Nurse Navigation Program by developing tumor specific pathways for breast, lung, and colorectal cancer patients.	16. Begin Y 2	16. Postponed. Volumes did not increase to warrant expansion of navigation services.	16. Pathway for GI cancers (colorectal) being developed.
Priority Area 4: Maternal and Child Health **GOAL: Enhance the level of care for women, mothers, babies, and their families before, during, and after delivery, including the primary family unit and the extended family system.**			
	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
1. Continue and enhance the Pelvic Wellness Program utilizing a nurse navigator to provide a variety of treatments to increase the quality of life throughout a woman's lifespan and provide services beyond women.	1. 218 new pt calls in Qtr 1. New pelvic pain class developed.	1. 604 patients.	1. Ongoing
2. Continue and enhance enrollment in the Total Control Programs® to provide low-impact exercise-based classes for women of all ages who are experiencing incontinence.	2. Maintenance 10 classes/ 39 attendees. TC 1 class 7 attendees.	2. Maintenance 531 attendees TC 37 attendees	2. Ongoing
3. Continue to conduct prenatal breastfeeding classes.	3. 235 attendees	3. 288 attendees	3. 200 attendees through Qtr 3
4. Continue the Breastfeeding Support Group twice weekly through Community Education.	4. 673 attendees	4. 166 attendees	4. 172 attendees through Qtr 3
5. Continue to provide follow up phone calls to all mother baby discharged patients by certified lactation consultants to discuss lactation and postpartum care.	5. 1,026 calls	5. 1,126 calls	5. 1,094 calls through Qtr 3

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
6. Continue to provide post-partum support services (including the Community Wellness warm line number for community members who have lactation questions, the Breastfeeding Support Group twice weekly meetings, Postpartum Adjustment Support Group, Outpatient lactation visits for those who require or request a visit with a lactation consultant, and opportunity for patients to purchase or rent breast feeding pumps, lactation pillows and maternity items via the hospital retail shop).	6. - 9 SG attendees in Qtr 1 -151 calls on warm line	6. -266 SG attendees -243 Lactation Callbacks -5 private LC	6. 269 attendees through Qtr 3
7. Continue the weekly Bright Beginnings Group to provide support to families post- delivery to crawlers.	7. 47 classes 695 attendees	7. QTR 1 - 141 attendees Q2/3/4 - Cancelled due to COVID	7. 388 attendees through Qtr 3
8. Continue Daddy Boot Camp Class offerings is designed for fathers-to-be to gain knowledge in parenting skills and to develop hands-on skills for caring for their newborns as well as the importance of parental teamwork.	8. 7 classes 81 attendees	8. 72 attendees	8. 74 attendees
9. Offer appointments weekly to provide free car seat safety inspections by certified child safety seat inspectors.	9. 386 attendee	9. 246 attendees	9. 275 attendees
10. Continue to develop our partnership with Children's Hospital of Philadelphia at the new outpatient site located on Princeton HealthCare System campus including four annual events with Community Wellness.	10. Developing relationships with key leaders at CHOP.	10. On hold due to COVID restrictions.	10. On hold due to COVID restrictions. Will resume in 2022.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
11. Initiate Great Beginnings to increase exclusive breastfeeding rates and provide infant feeing support services.	11. Ongoing. Breastfeeding class added on the unit. Preparing budget for IBCLC.	11. 50 % breastfeeding rate in Qtr 1	11. Ongoing
12. Implement the Purple Program for parents regarding shaken baby syndrome and child abuse.	12. 5 attendees in Qtr 1	12 Ongoing	12. Ongoing
13. Implement Heart Healthy Motherhood.	13. Ongoing	13. Ongoing	13. Ongoing
14. Maintain Perinatal Certification through Joint Commission.	14. Maintained.	14. Reawarded certification.	14. Awarded certification.
15. Develop a business plan to expand pelvic wellness center and square footage.	15. Changed to evaluate space in Monroe. Will not build in the MAP.	15. Completed expansion in Monroe in Yr 1.	15. Completed expansion in Monroe in Yr 1.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
16. Provide prenatal lactation to hospital owned OBGYN practice.	16. 22 consults	16. Postponed due to COVID, patients encouraged to attend community wellness programs.	16. Postponed due to COVID restrictions, will resume in 2022.
17. Implement Baby Fair collaborative event for new families highlighting hospital and community services.	17. 278 attendees	17. Postponed due to COVID restrictions.	17. Postponed due to COVID restrictions.
18. Participate in Fit Kids partnership with pediatricians and Princeton Fitness and Wellness Center.	18. Begin Year 2.	18. Postponed due to COVID restrictions	18. Postponed due to COVID restrictions
19. Establish Direct Access – CHOP presence in the emergency department from 2 p.m. to 10 p.m. daily.	19. Initiative established.	19. Initiative established.	19. Initiative established.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
Priority Area 5: Elder Care **GOAL: Address the physical health, mental health, and safety needs of seniors during transitions of care, in the home, and in the community.**			
[Insert initiatives]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]	[Insert process or outcome indicators – e.g., # of participants, # of classes, change in behavior, etc.]
1. Continue the Partial Hospital Day Treatment Program for geriatric outpatients with behavioral health issues such as depression, social isolation, loss, and later life issues.	1. 397 in Qtr 2	1. 26 patients admitted in Qtr 4	1. Data calculation in 4th quarter
3. Provide clinician and community education directed toward senior care issues such as palliative care, caregiver stressors, end of life, transitions in care, medication safety, fall safety, bereavement etc.	3. Qtr 1 12 programs 238 attendees	3. 25 programs 249 attendees	3. 26 programs 203 attendees
5. Continue continuity of care via onsite visits and relationship cultivation at long-term care facilities.	5. Evaluate in Year 2	5. Postponed due to COVID restrictions	5. Postponed due to COVID restrictions. To begin in 1st quarter 2022.

Strategic Initiatives	Outcomes		
	FY 2019	FY 2020	FY 2021
6. Provide education to families and community on end-of-life care, including Hospice benefits.	6. 22 programs 194 attendees	6. 6 programs 10 attendees	6. Data calculation in 4th quarter
8. Expand virtual Dementia tour to additional disciplines in the hospital, community, and other healthcare providers/partners.	8. Begin year 2	8. 400 total people have actively participated including board members. Was put on hold March 2020 due to Covid.	8. On hold due to COVID restrictions.
9. Investigate needs of senior population regarding diversity and inclusion and incorporate into SIP as appropriate.	9. Begin year 3	9. Begin year 3	9. 6 collaborative meetings with NJ pride. Programming to begin 2022. 6 collaborative meetings with New Hope Celebrates 2 programs/23 attendees.

APPENDIX B. List of Focus Group and Interview Sectors

Organizations involved in focus group (n=60 participants) recruitment:

1. Emergency Medical Services (EMS) Workers (6 participants)
2. Hamilton Y Board of Directors (4 participants)
3. Health Officers in Mercer & Middlesex Counties (6 participants)
4. Korean Central Church of Princeton (3 participants)
5. New Hope Celebrates [Lambertville area] & Princeton area (8 participants)
6. Penn Medicine Princeton Health food pantry (3 participants)
7. Penn Medicine Princeton Health patients in maternity classes (12 participants)
8. Penn Medicine Princeton Health senior patients (6 participants)
9. Rider University, Mercer County Community College (6 participants)
10. School nurses (6 participants)

Key stakeholders (n=11) representing the following institutions were interviews:

1. Capital Region Minority Chamber of Commerce (2 participants)
2. Penn Medicine Princeton Health Human Resources
3. Penn Medicine Princeton Health Leadership (CEO)
4. Penn Medicine Princeton Health Volunteer Services
5. Princeton Community Housing
6. Princeton Health Foundation
7. Princeton House Behavioral Health Leaders (2 participants)
8. Princeton Orthopaedic Associates
9. St. Anthony of Padua Catholic Church (Latino community)

APPENDIX C. 2021 Community Health Needs Assessment Survey Instrument

(English; also offered in Spanish)

1. What is the zip code where you live? ___ ___ ___ ___ ___

2. What is the zip code where you work, volunteer, worship, or go to school (if applicable)? (If more than one applies, then indicate the zip code where you work.) ___ ___ ___ ___ ___

Community Health

We recognize this is a unique time we are in. We would like to understand what issues have personally affected you and your family now and prior to the COVID-19 pandemic.

3. For each health issue, please check if the issue was something that affected you or your family personally now and/or prior to COVID - or has not affected you or your family at either time period. You can check any that apply.

	Currently affects me or my family	Affected me or my family prior to COVID	Does not affect me or my family now nor prior to COVID
Access to health care services	☐	☐	☐
Access to healthy foods	☐	☐	☐
Access to affordable housing	☐	☐	☐
Aging health concerns (e.g., Alzheimer's, dementia)	☐	☐	☐
Alcohol use disorder	☐	☐	☐
Asthma	☐	☐	☐
Cancer	☐	☐	☐
Caregiving (e.g., elder care, childcare)	☐	☐	☐
Children's health concerns	☐	☐	☐
Chronic disease (e.g., diabetes, heart disease, hypertension)	☐	☐	☐
Community violence (e.g., gangs, street crime)	☐	☐	☐
Coronavirus/COVID-19	☐	☐	☐
Dental and oral health	☐	☐	☐
Environmental health issues (e.g., lead poisoning, air pollution, climate change)	☐	☐	☐
Infectious/contagious disease other than COVID-19, like tuberculosis, pertussis, pneumonia, flu, etc.	☐	☐	☐
Injuries (e.g., car accidents, falls, concussion)	☐	☐	☐
Interpersonal violence (e.g., domestic violence, sexual violence, bullying)	☐	☐	☐
LGBTQ health concerns	☐	☐	☐
Mental health issues (e.g. anxiety, depression, suicide)	☐	☐	☐
Musculoskeletal issues (e.g. joint pain, arthritis)	☐	☐	☐
Neuroscience issues (e.g. epilepsy, seizures)	☐	☐	☐
Overweight or obesity	☐	☐	☐

Sexually transmitted infections (e.g., HIV/AIDS, chlamydia, gonorrhea)	☐	☐	☐
Substance use disorder (e.g., heroin, other opioids, marijuana, cocaine)	☐	☐	☐
Unintended pregnancy	☐	☐	☐
	Currently affects me or my family	Affected me or my family prior to COVID	Does not affect me or my family now nor prior to COVID
Women's health issues (e.g., reproductive health, etc.)	☐	☐	☐
Other (please specify): _____	☐	☐	☐

4. Please select the TOP 5 HEALTH ISSUES impacting you or your family personally and the community in which you live. Please select 5 health issues FOR EACH column below. You can select the same or different issues for each.

	You/Your family	Community where you live
Access to health care services	☐	☐
Access to healthy foods	☐	☐
Access to affordable housing	☐	☐
Aging health concerns (e.g., Alzheimer's, dementia)	☐	☐
Alcohol use disorder	☐	☐
Asthma	☐	☐
Cancer	☐	☐
Caregiving (e.g., elder care, childcare)	☐	☐
Children's health concerns	☐	☐
Chronic disease (e.g., diabetes, heart disease, hypertension)	☐	☐
Community violence (e.g., gangs, street crime)	☐	☐
Coronavirus/COVID-19	☐	☐
Dental and oral health	☐	☐
Environmental health issues (e.g., lead poisoning, air pollution, climate change)	☐	☐
Infectious/contagious disease other than COVID-19, like tuberculosis, pertussis, pneumonia, flu, etc.	☐	☐
Injuries (e.g. car accidents, falls, concussion)	☐	☐
Interpersonal violence (e.g., domestic violence, sexual violence, bullying)	☐	☐
LGBTQ health concerns	☐	☐
Mental health issues (e.g., anxiety, depression, suicide)	☐	☐
Musculoskeletal issues (e.g., joint pain, arthritis)	☐	☐
Neuroscience issues (e.g., epilepsy, seizures)	☐	☐
Overweight or obesity	☐	☐
Sexually transmitted infections (e.g., HIV/AIDS, chlamydia, gonorrhea)	☐	☐
Substance use disorder (e.g., heroin, other opioids, marijuana, cocaine)	☐	☐
Unintended pregnancy	☐	☐
Women's health issues (e.g., reproductive health, etc.)	☐	☐

Other (please specify): _____	□	□

5. n general, how would you describe the overall health of the following currently?

	Excellent	Very Good	Good	Fair	Poor
The community in which you live	□	□	□	□	□
The community in which you work, volunteer, worship, or go to school (if applicable)	□	□	□	□	□

6. In general, how would you describe the overall health of the following before COVID?

	Excellent	Very Good	Good	Fair	Poor
The community in which you live	□	□	□	□	□
The community in which you work, volunteer, worship, or go to school (if applicable)	□	□	□	□	□

7. What do you see as the strengths of your community? (Please check all that apply.)
   - £ My community is close to medical services
   - £ My community has good access to resources
   - £ My community has people of many races and cultures
   - £ People speak my language
   - £ People accept others who are different than themselves
   - £ People care about improving their community
   - £ People are proud of their community
   - £ People feel like they belong in this community
   - £ People like to work together in this community
   - £ People can deal with challenges in this community
   - £ There are innovation and new ideas in my community
   - £ None of the above

Access to Services

8. Please think about the different health care services in your community. In general, how easy or hard is it to access the following health care services in your community?

	Very easy	Easy	Not easy or hard	Hard	Very hard	Don't know
Alcohol or drug treatment or prevention services for adults (age 18+)	□	□	□	□	□	□
Alcohol or drug treatment or prevention services for youth (under 18 years)	□	□	□	□	□	□
Cancer care/treatment	□	□	□	□	□	□
Cancer screening	□	□	□	□	□	□
Counseling/mental health care for adults (age 18+)	□	□	□	□	□	□
Counseling/mental health care for children or adolescents (under 18 years)	□	□	□	□	□	□
Dental or oral health services	□	□	□	□	□	□
Emergency department services	□	□	□	□	□	□

	Very easy	Easy	Not easy or hard	Hard	Very hard	Don't know
Health or medical services for children or adolescents (under 18 years)	□	□	□	□	□	□
Health or medical services for seniors (age 65+)	□	□	□	□	□	□
Health or medical services for women (e.g. reproductive health, pregnancy, breast health, pelvic health)	□	□	□	□	□	□
Hospital services	□	□	□	□	□	□
Immunizations	□	□	□	□	□	□
Occupational therapy	□	□	□	□	□	□
Outpatient services such as lab work or radiology (e.g. X-rays, MRIs)	□	□	□	□	□	□
Physical therapy	□	□	□	□	□	□
Primary care physicians	□	□	□	□	□	□
Specialty care (e.g. gastroenterologist, cardiologist, endocrinologist, nephrologist, neurologist, etc.)	□	□	□	□	□	□
Urgent care services	□	□	□	□	□	□
Vision services	□	□	□	□	□	□

9. When trying to get medical care, how often have YOU PERSONALLY felt discriminated against based on any of the following characteristics:

	Frequently	Sometimes	Never
Your race or ethnicity	□	□	□
Your cultural or religious background	□	□	□
Your language	□	□	□
Your age	□	□	□
Your income	□	□	□
Your body size	□	□	□
Your sexual orientation	□	□	□
Your gender or gender identity	□	□	□
Your disability (if not applicable, select "Never")	□	□	□

10. Have any of these issues made it difficult for you to get needed health services within the last two years? (Please check all that apply.)

- □ Lack of transportation
- □ No provider available near me/services not available in my community
- □ Lack of information/ I don't know what types of services are available
- □ Office not accepting new patients
- □ Lack of evening or weekend services
- □ Long wait for an appointment
- □ Lack of specialists/specialty care services
- □ Insurance problems/lack of coverage
- □ Cost of care (e.g., deductibles, co-pays)
- □ Cost of prescription medications
- □ Language problems/could not communicate with health provider or office staff
- □ Unfriendly provider or office staff
- □ Afraid to have health check-up
- □ Afraid due to immigration status
- □ I have never experienced any difficulty in getting care

Community Priorities

11. Please check whether you consider these issues to be low, medium, or high priority for future funding and resources in your community.

	Low	Medium	High
Increasing transportation to area health/medical services	☐	☐	☐
Increasing the health/medical services that are close by and easy to get to	☐	☐	☐
Providing more language interpretation services	☐	☐	☐
Increasing the number of providers/staff that speak languages other than English	☐	☐	☐
Expanding programs or services designed to help patients navigate the health care system	☐	☐	☐
Providing more counseling or mental health services	☐	☐	☐
Providing more alcohol or drug prevention and treatment services	☐	☐	☐
Expanding cancer screening, diagnostics, and treatment services	☐	☐	☐
Expanding the health/medical services focused on seniors (65+)	☐	☐	☐
Increasing the number of services to help the elderly stay in their homes	☐	☐	☐
Expanding the health/medical services focused on children and adolescents (under 18 years)	☐	☐	☐
Expanding the health/medical services focused on women's health issues (e.g., pregnancy, well-visits, pelvic health)	☐	☐	☐
Expanding the health/medical services available to low-income individuals	☐	☐	☐
Expanding access to technology that can help me to monitor and maintain my health (e.g., health apps for smartphones)	☐	☐	☐
Offering community education programs on the environment and environmental sustainability	☐	☐	☐
Offering more programs or services focusing on physical activity and/or nutrition	☐	☐	☐
Offering more programs or services focusing on obesity/weight control	☐	☐	☐
Offering more programs or services focusing on prevention of chronic diseases like heart disease or diabetes	☐	☐	☐
Offering more programs or services focusing on wellness like meditation, yoga, acupuncture, or mindfulness	☐	☐	☐
Offering more programs or services to help people quit smoking	☐	☐	☐
Increasing access to affordable housing	☐	☐	☐
Increasing availability of sidewalks or parks	☐	☐	☐
Increasing availability of supermarkets/healthy food options people can afford	☐	☐	☐
Increasing the availability of safe, stable, quality, well-compensated work for all people	☐	☐	☐

Increasing the quality of educational opportunities for all people	☐	☐	☐
Other (please specify): _____	☐	☐	☐

Health Coverage and Information

12. Are you personally currently covered by any of the following types of health insurance or health coverage plans? (Check all that apply)
    - ☐ Insurance through a current or former employer or union (yours or another family member's)
    - ☐ Insurance purchased directly from an insurance company (by you or another family member) including coverage purchased through a healthcare exchange or marketplace such as Healthcare.gov, otherwise called 'Obamacare'
    - ☐ Medicare, for people age 65 and older, or people with certain disabilities
    - ☐ Medicaid, Medical Assistance (MA), the Children's Health Insurance Program (CHIP) or any kind of state or government-sponsored assistance plan based on income or a disability. You may know this type of coverage as 'NJ Family Care'
    - ☐ Tricare or other military health care, including Veteran's Administration health care
    - ☐ Any other type of health insurance coverage or health coverage plan
    - ☐ No insurance, uninsured

13. What is your MAIN SOURCE of medical care? (Please check one.)
    - ☐ Private doctor's office or group practice
    - ☐ Community health center (i.e. Clinic)
    - ☐ Emergency Room at a hospital
    - ☐ Walk-in medical clinic/urgent care center
    - ☐ Free medical program
    - ☐ Veteran's Administration facility
    - ☐ Tele-health or tele-medicine services (i.e. health services or consultations delivered via remote video link)
    - ☐ Do not have a main source of medical care
    - ☐ Other (please specify): _____

14. Have you ever used an online patient portal (like Princeton HealthConnect) to securely access your own or a family member's medical record, lab or radiology reports, medication lists, or other information about health care services received?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know/Not sure

15. Have you ever used your mobile device (e.g., smartphone) to access health care for yourself or a family member, for example by video-conferencing or virtually chatting with your health care provider?
    - ☐ Yes (GO TO Q17)
    - ☐ No
    - ☐ Don't know/Not sure

16. (IF YOU ANSWERED "YES" IN Q15, SKIP TO Q17) Would you be interested in accessing health care for yourself or a family member through your mobile device or smartphone (for example, video-conferencing or virtually chatting with your health care provider)?
    - ☐ Yes
    - ☐ No

Demographic Information

These few last questions are so we can see the range of people who will be answering this survey. Like your other answers, these answers will remain anonymous.

17. What category best describes your age?

- □ Under 18 years old
- □ 18-29 years old
- □ 30-39 years old
- □ 40-49 years old
- □ 50-64 years old
- □ 65-74 years old
- □ 75 years old or older

18. What is your gender?

- □ Male
- □ Female
- □ Transgender Male
- □ Transgender Female
- □ Gender neutral
- □ Additional Gender Category

19. How would you describe your ethnic/racial background? (Please check all that apply.)

- □ African American/Black
- □ East Asian/Pacific Islander (e.g., Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa)
- □ South Asian (e.g., India, Pakistan, Bangladesh, Sri Lanka, Nepal)
- □ Caucasian/White
- □ Hispanic/Latino(a)
- □ Middle Eastern/North African
- □ American Indian/Native American
- □ Additional ethnic/racial category (please specify): _____

20. What is the primary language you speak at home?

- □ English
- □ Spanish
- □ Chinese (including Mandarin and Cantonese)
- □ Portuguese / Cape Verdean Creole
- □ Haitian
- □ Vietnamese
- □ Cambodian/Khmer
- □ French (including Cajun)
- □ Tagalog/Filipino
- □ Gujarati
- □ Hindi
- □ Telugu
- □ Nepali/Marathi/Konkani
- □ Polish
- □ Urdu
- □ Arabic
- □ Korean
- □ Russian
- □ Other (please specify): _____

21. What is the highest level of education that you have completed?

- □ Primary or middle school
- □ Some high school
- □ High school graduate or GED
- □ Some college
- □ Associate or technical degree/certification
- □ College graduate
- □ Graduate or professional degree

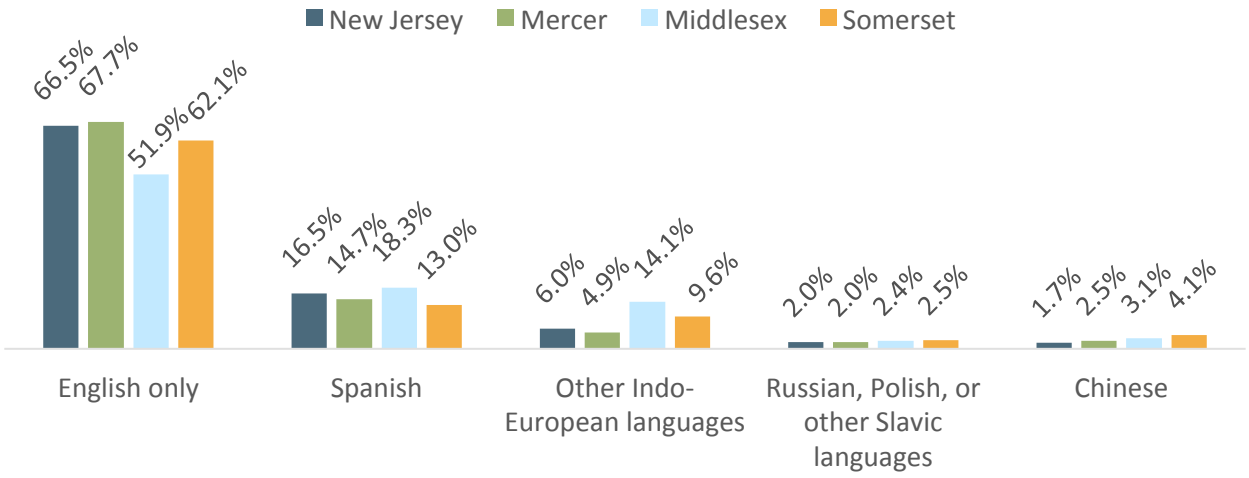
22. Are you the parent of a child under the age of 18? ☐ Yes ☐ No

Thank you for taking this survey! Results will be made available to the community in Fall 2021.

APPENDIX D. Additional Data

Language

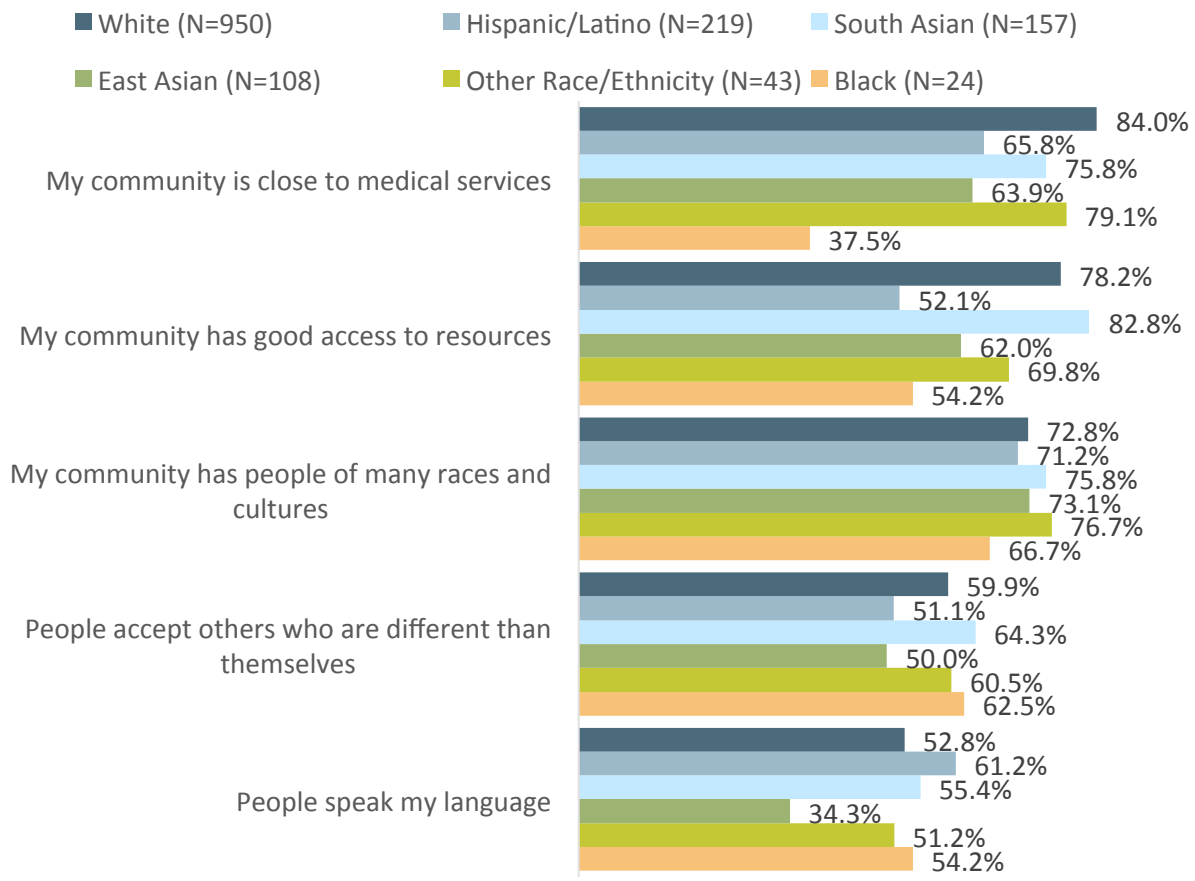
Figure 122. Most Common Language Spoken and Percent Population 5 Years and Over Who Speak the Language, by State and County, 2015-2019



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014 and 2015-2019

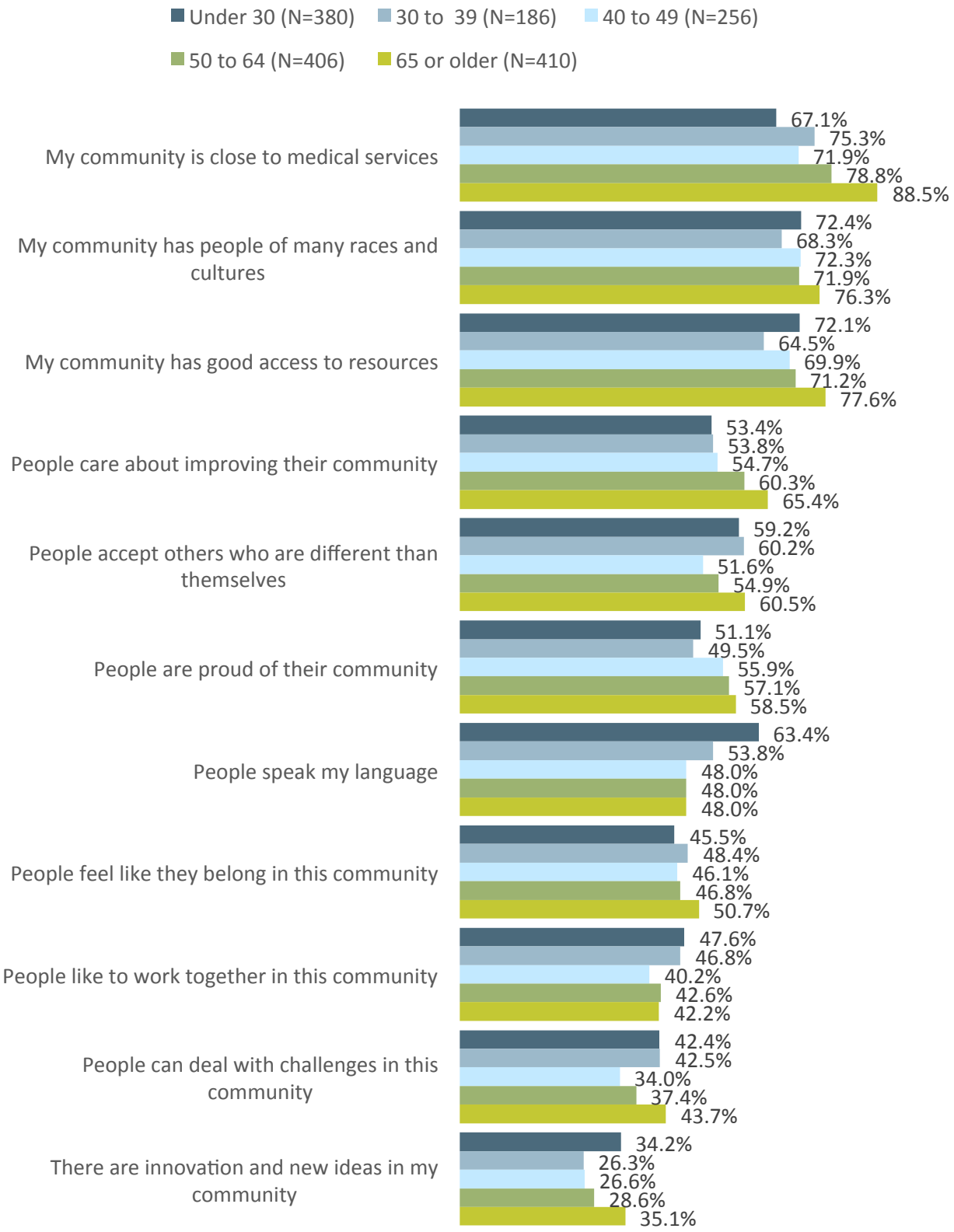
Community Resources and Assets

Figure 123. Most Frequently Endorsed Community Strengths, by Race/Ethnicity, 2021



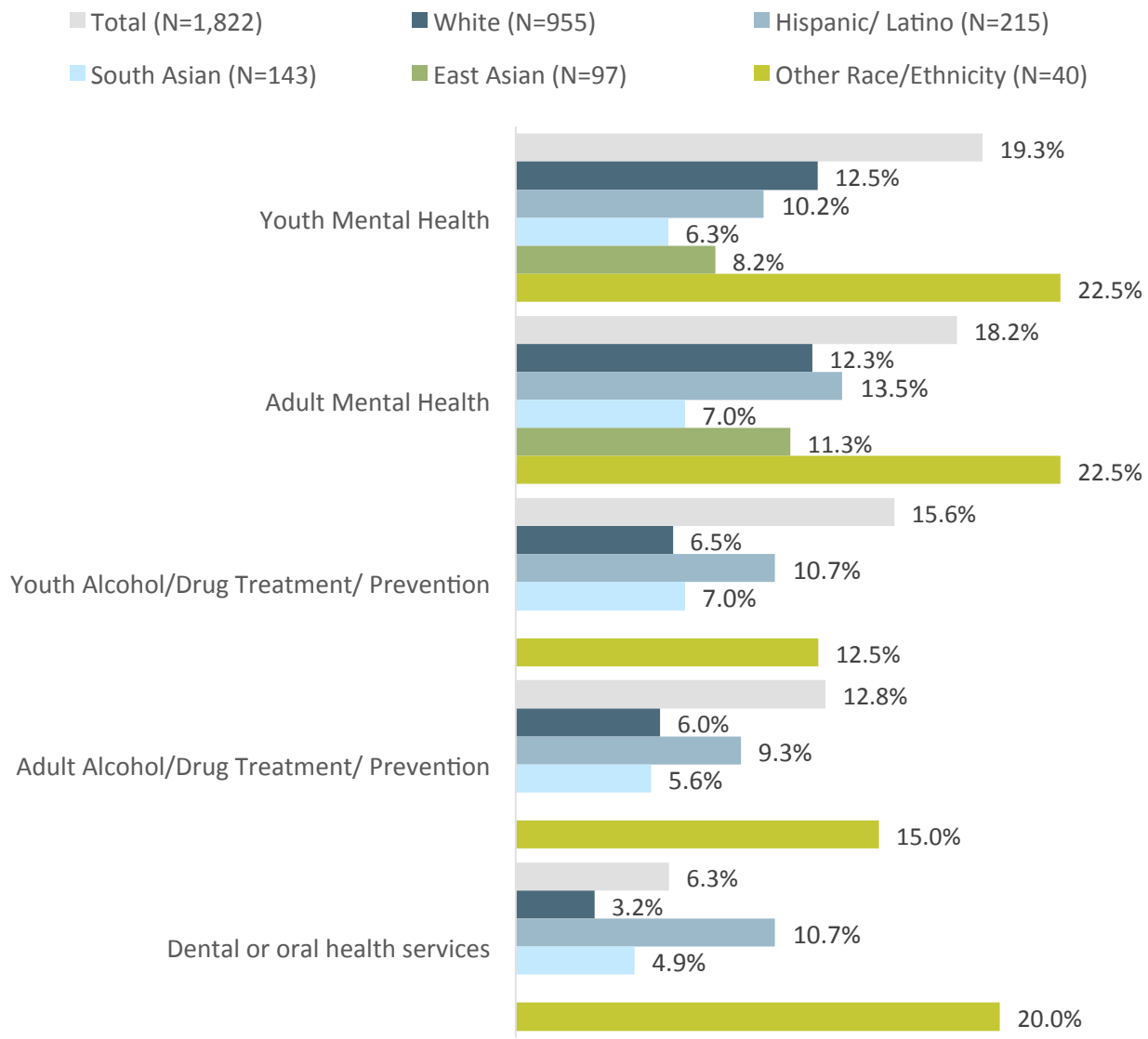
DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Figure 124. Most Frequently Endorsed Community Strengths, by Age Group, 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Figure 125. Healthcare Services Rated as Most Difficult to Access, by Race/Ethnicity, 2021



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

Overall Community Health Status and Health Concerns

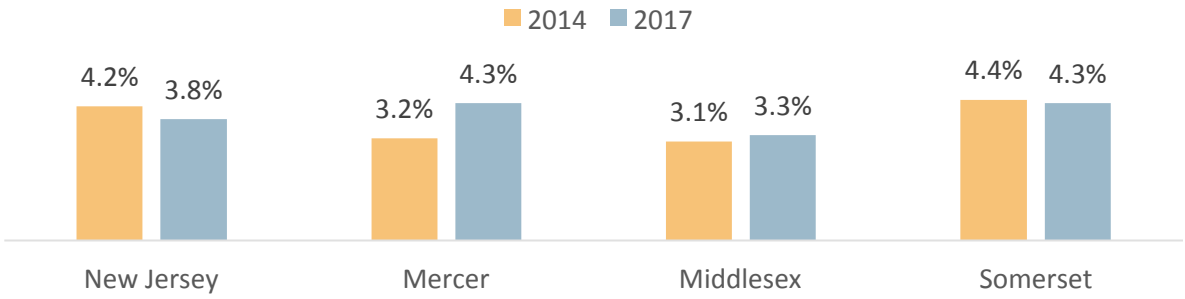
Table 17. Top Five Perceived Health Issues within the Community, by Race/Ethnicity, 2021

	White (N=882)	Hispanic/ Latino (N=211)	South Asian (N=101)	East Asian (N=46)	Other Race/ Ethnicity (N=39)	Black (N=11)
1	Access to affordable housing (23.9%)	Access to health care services (34.1%)	Coronavirus/ COVID-19 (28.7%)	Access to health care services (32.6%) *	Environmental health concerns (33.8%)	Access to affordable housing (24.9%)
2	Coronavirus/ COVID-19 (18.8%)	Access to healthy foods (33.2%)	Access to healthy foods (17.8%) *	Coronavirus/ COVID-19 (32.6%) *	Access to health care services (25.6%) *	-
3	Sexually transmitted infections (18.3%)	Access to affordable housing (31.8%)	Caregiving (17.8%) *	Aging health concerns (32.6%) *	Coronavirus/ COVID-19 (25.6%) *	-
4	Caregiving (17.2%)	Aging health concerns (28.0%)	Access to affordable housing (16.8%)	LGBTQ health concerns (32.6%) *	-	-
5	LGBTQ health concerns (17.0%)	Environmental health concerns (24.2%)	Neuroscience issues (14.9%)	Sexually transmitted infections; Access to healthy foods (26.1%) *	-	-

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

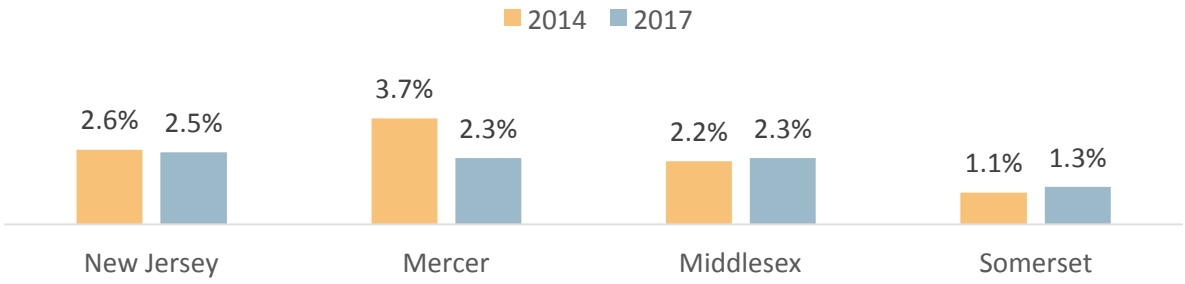
Heart Disease

Figure 126. Percent Adults Reported to Have Had a Heart Attack, by State and County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

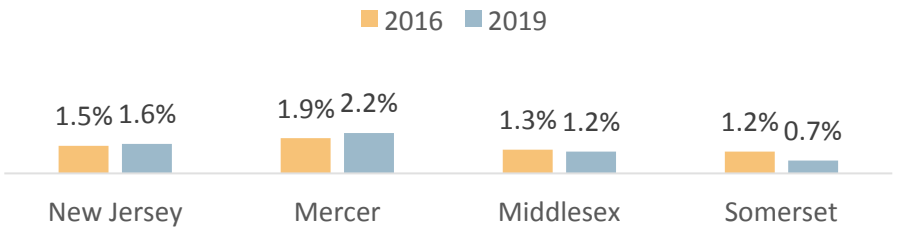
Figure 127. Percent Adults Reported to Have Had a Stroke, by State and County, 2014 and 2017



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2014 and 2017

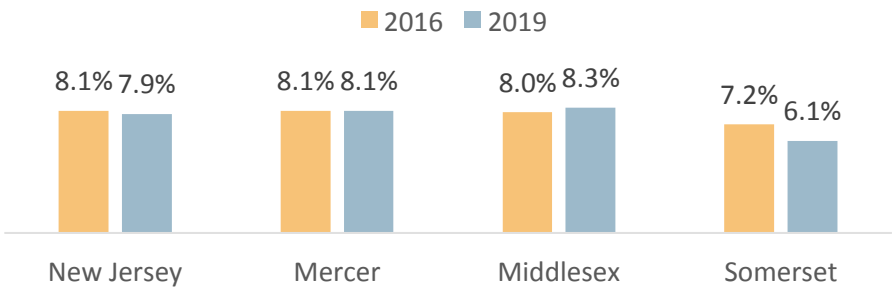
Reproductive and Maternal Health

Figure 128. Percent Births with No Prenatal Care, by State and County, 2016 and 2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016 and 2019

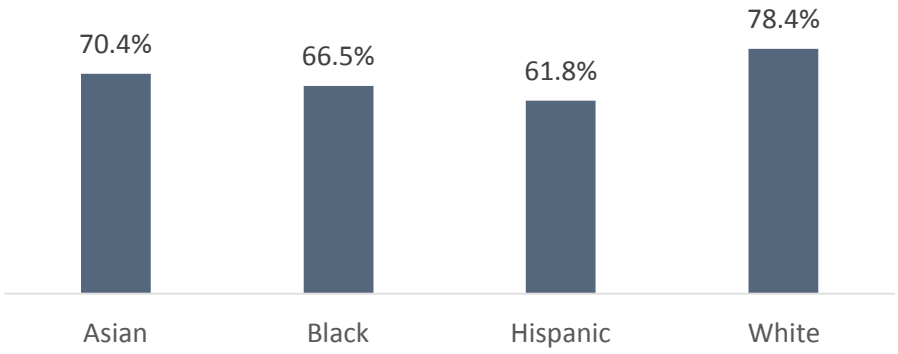
Figure 129. Percent Low Birth Weight Births, by State and County, 2016 and 2019



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2016 and 2019
NOTE: Low birth weight as defined as less than 2,500 grams

Oral Health

Figure 130. Percent Adults Reported to Have Had a Dental Visit in Past Year, by Race/Ethnicity, New Jersey, 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2016

Top Issues for Action

Table 18. Top Five High Community Priorities among Respondents, by Mercer, Middlesex, Somerset, and Other Counties, 2021

	Total (N=1,698)	Mercer (N=845)	Middlesex (N=452)	Somerset (N=127)	Other (N=204)
1	Quality Educational Opportunities for all people (43.9%)	Quality Educational Opportunities for all people (46.3%) *	Increasing the number of services to help the elderly stay in their homes (45.6%)	Increasing the number of services to help the elderly stay in their homes (41.7%)	Health & Medical Services for Low-Income Individuals (42.5%)
2	Safe, stable, quality, well-compensated work for all people (41.9%)	Safe, stable, quality, well-compensated work for all people (43.6%) *	Quality Educational Opportunities for all people (43.4%)	Safe, stable, quality, well-compensated work for all people (41.2%)	Quality Educational Opportunities for all people (39.4%)
3	Increasing the number of services to help the elderly stay in their homes (41.2%)	Health & Medical Services for Low-Income Individuals (41.1%)	Safe, stable, quality, well-compensated work for all people (42.5%)	Health & Medical Services for Low-Income Individuals (39.2%)	Mental Health Services (35.4%) *
4	Health & Medical Services for Low-Income Individuals (40.9%)	Increasing the number of services to help the elderly stay in their homes (40.9%)	Health & Medical Services for Low-Income Individuals (41.6%)	Quality Educational Opportunities for all people (36.3%)	Safe, stable, quality, well-compensated work for all people (35.4%) *
5	Mental Health Services (39.8%)	Mental Health Services (40.1%)	Mental Health Services (22.1%)	Offering more programs or services focusing on prevention of chronic diseases (33.3%)	Increasing access to affordable housing (35.4%) *

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2021

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