



### About Virtua Health – Here for Good

Virtua Health comprises five hospitals and more than 300 other locations throughout the South Jersey area dedicated to building a healthier community through its mission statement, "Be Well, Get Well and Stay Well." Virtua has earned critical acclaim for patient quality and safety as well as employee satisfaction from local and national organizations, including U.S. News & World Report, NRC Health, Press Ganey, Philadelphia Business Journal and more. Only a handful of healthcare organizations across the nation have the distinct honors below — and Virtua is one of them.

A Magnet-recognized health system ranked by U.S. News & World Report, Virtua has received multiple awards for quality, safety, and outstanding work environment. In addition to five hospitals, seven emergency departments, seven urgent care centers, and more than 300 other <u>locations</u>, Virtua is committed to the well-being of the community. That means bringing life-changing resources and health services directly into communities through telehealth, home health, rehabilitation, mobile screenings, paramedic programs, and convenient online scheduling. Virtua is also affiliated with Penn Medicine for cancer and neurosciences, and the Children's Hospital of Philadelphia for pediatrics. Virtua's specialties include:

- Cardiovascular Health
- Maternity & Newborn Care
- Neurosurgery
- Oncology & Cancer Care
- Orthopedics
- Primary Care
- Surgery
- Urgent Care



Virtua Health's five hospitals are located throughout South Jersey.



### Virtua Marlton Hospital

90 Brick Road Marlton, NJ 08053

Directions

**3** 856-355-6000





### **Virtua Mount Holly Hospital**

175 Madison Avenue Mount Holly, NJ 08060

- Oirections
- **3** 609-914-6000



### **Virtua Voorhees Hospital**

100 Bowman Drive Voorhees, NJ 08043

- **Q** Directions
- **3** 856-247-3000



### Virtua Willingboro Hospital

218A Sunset Road Willingboro , NJ 08046

- Oirections
- **3** 609-835-2900



# Virtua Our Lady of Lourdes Hospital

1600 Haddon Avenue Camden, NJ 08103

- Oirections
- **3** 856-757-3500







### **South Jersey Health Collaborative**

The South Jersey Health Collaborative, consisting of hospitals, health systems, and health departments within Burlington, Camden, and Gloucester counties, came together to undertake a comprehensive regional community health needs assessment (CHNA). The South Jersey Health Partnership included the following partners: Cooper University Health Care, Jefferson Health, Virtua Health, and the Health Departments of Burlington, Camden, and Gloucester counties.

# South Jersey Health Collaborative 2022 CHNA













The South Jersey Health Collaborative partners have worked together since 2013 to create a collective CHNA for the region, as rigorous and inclusive process conducted every three years, in accordance with the with the Affordable Care Act. This collective action has generated robust, shared regional data and Community Health Improvement Plans for collective action to further the hospitals' commitment to community health and population health management.

This 2022 CHNA builds upon Virtua Health's 2013, 2016 and 2019 collaborative regional reports in accordance with the timelines and requirements set out in the Affordable Care Act. A wide variety of methods and tools were used to analyze the data collected both from community members and other sources throughout the region, leveraging socially distanced in person conversations, video conferencing, phone calls and survey tools. The findings gathered through this collaborative, inclusive process will be used to guide community benefit initiatives at Virtua Health and will engage the South Jersey Health Collaborative agencies and other community partners to address Virtua Health's identified needs.



# **Table of Contents**

Community Health Needs Assessment Background	2
South Jersey Collaborative CHNA Steering Committee	2
Executive Summary of CHNA Findings	3
Summary of Previous CHNA	7
2022 Research Methods	7
Primary Research and Community Engagement	8
Context for the Creation of this Community Health Needs Assessment	9
Determining Community Health Priorities	10
Approval and Adoption of CHNA and CHIP	11
Demographics: Who Lives in South Jersey?	12
Our Community and Residents	13
Community Diversity	16
Many Roads Lead to Home	18
Income and Work	20
Food Security	24
Education	26
Our Homes and Where We Live	28
Social Determinants of Health and Health Equity	37
COVID-19: Impact on Communities	53
A Closer Look at Health Statistics	57
Access to Care	57
Chronic Disease	62
Behavioral Health	73
Substance Use	77
Populations of Special Interest	82
Older Adults	82
Youth	86
Pregnancy, Birth and Babies	96
Findings: Key Informant Survey	104
Findings: Emergency Department Data	114
Appendix A: Secondary Data References	117
Appendix B: Community Feedback: Focus Groups and Key Informant Interviews	119
Appendix C: Evaluation of Impact: 2019-2022	120





### **Community Health Needs Assessment Background**

Since 2013, the South Jersey Health Collaborative (SJHC) has combined efforts to better understand the factors that influence health of the people living in the South Jersey region. Together, these institutions have committed to conducting a collaborative Community Health Needs Assessment (CHNA) and Community Health Improvement Plan (CHIP). By working together, sharing strengths, and generating ideas, the SJHC fosters a common understanding of the resources and challenges among the communities of South Jersey. Leveraging the collective and individual strengths across each institution, the SJHC is working toward a healthier, more equitable South Jersey for all.

### **South Jersey Health Collaborative CHNA Steering Committee**

Representatives from the following institutions met bi-weekly from December 2021 through June 2022 to lend expertise, insight, and collaborative action towards the creation of this CHNA and CHIP.

Health Department Representatives	Hospital Network Representatives
Burlington County Health Department	Cooper Health
Holly Funkhouser Cucuzella	Sharon Dostmann
Cristina Martins	Nancy Ellis
	Maxwell Kursh
Camden County Health Department	Nancy Narvell
Koren Norwood	Elizabeth Nice
John Pellicane	
Lynn Rosner	Jefferson Health
	Kyleigh Heins
Gloucester County Health Department	Amanda Kimmel
Michelle L. Baylor	Tanya McKeown
Annmarie Ruiz	Lisa Morina
	Shawn Thurber
	Virtua Health
	Bageshree Cheulkar
	Debra Moran

#### **Our Research Partner:**



A New Jersey certified Small Business Enterprise (SBE) and Women Owned Business Enterprise (WBE), 35th Street Consulting specializes in transforming data into action that advances health and social equity through practical and impactful strategies. Our interdisciplinary team of community development experts, health planners, researchers, and data analysts have worked with hundreds of healthcare providers, payors, public health departments, government agencies, health and human service providers, and other community-based organizations to direct action and funding to reimagine policies and achieve realistic, measurable social impact.



## **Executive Summary of CHNA Findings:**

Virtua Health, comprising five hospitals and more than 300 locations throughout South Jersey, is a key member of the South Jersey Health Collaborative, a partnership comprising Cooper Health, Jefferson Health and Virtua Health Networks plus Burlington, Camden and Gloucester County Health Departments. Together, these institutions work together to meet the diverse health needs of the people living in this South Jersey region.

This 2022 South Jersey Health Collaborative CHNA together has reviewed health indicators, engaged community participation through 14 focus groups with diverse populations, including youth, and solicited feedback through a key informant survey and stakeholder interviews to interpret the quantitative and qualitative information collected through a lens of **health equity** – working towards equitable outcomes for all people - and a focus on the **social determinants of health**. This area is diverse, home to rural, suburban and urban areas, including the City of Camden, the area's largest urban center.

### 2020 Population by Race and Ethnicity

Green = 10+ percentage points above Red = 10+ percentage points below

	White	Black or African American	Asian	Other Race*	Latinx origin
Burlington County	65.5%	16.8%	5.7%	33.9%	8.7%
Camden County	56.0%	19.3%	6.2%	32.1%	18.2%
Camden City	10.3%	42.0%	1.7%	4.0%	52.8%
Gloucester County	76.1%	10.9%	3.1%	28.4%	7.3%
New Jersey	55.0%	13.3%	10.2%	76.7%	21.5%
United States	61.6%	12.4%	6.0%	48.4%	18.7%

Source: US Census Bureau, American Community Survey \*Includes American Indian, Native Hawaiian, Some Other Race and Two or More Races together

As a whole, this region is affluent compared to the rest of the nation. Data across many measures of consistently demonstrate that people of color experience more poverty, lower median wages and are less likely to receive preventive and life-saving healthcare. As a majority-minority city, Camden is impacted by structural inequities based on race. Income is a factor in quality and length of life.

#### Income and Poverty 2015-2019

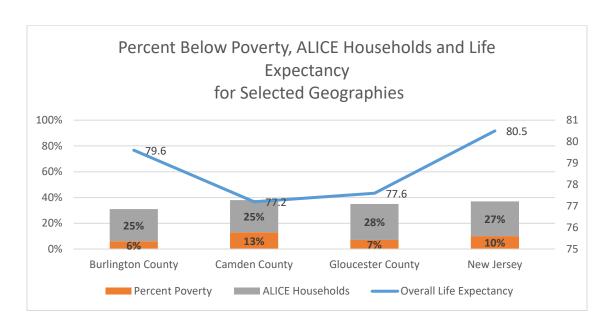
Green = 10+ percentage points above Red = 10+ percentage points below the other categories

	Burlington County	Camden County	Camden City	Gloucester County	New Jersey	United States
Median household income	\$87,416	\$70,451	\$27,015	\$87,283	\$82,545	\$62,843
People in poverty	6.1%	12.2%	36.4%	7.4%	10.0%	13.4%
Children in poverty	8.5%	17.4%	47.4%	8.4%	14.0%	18.5%
Adults (65+) in poverty	4.5%	9.0%	25.6%	5.9%	8.3%	9.3%

Source: US Census Bureau, American Community Survey



When one takes a closer look, clear disparities emerge demonstrating a relationship between income, race and health outcomes. The ALICE (Asset Limited Income Constrained) Index measures the proportion of working households that do not earn enough to meet all of their needs given the local cost of living. When viewed together, this graph shows that that 1 in 4 South Jersey households met the ALICE threshold before the COVID-19 pandemic, and all South Jersey Counties had lower life expectancies than New Jersey as a whole.



The arrival of the COVID-19 pandemic served to exacerbate many of the underlying struggles and barriers impacting all people, highlighting and widening the gaps in negative outcomes between people of different races and different socioeconomic status. These examples swell beyond disparities—or differences between outcome measures between population groups; they point at underlying inequities, driven by long-standing systemic racism. These inequities culminate in higher poverty levels, higher death rates from preventable diseases, and increased trauma, which accumulates in significant differences in overall death rates and length of life. Camden and South Jersey are not unique in experiencing disparity impacted by long-standing systemic racism, as evidenced through findings through the Centers for Disease Control<sup>1</sup> and the State of New Jersey<sup>2</sup>, among others.

In response to the arrival of COVID-19 in early 2020, Virtua Health, in partnership with the South Jersey Health Collaborative partners, swiftly responded to the emerging needs. Some of these actions included implementing safety measures to protect patients and staff, transitioning to telehealth and remote monitoring protocols to meet patient needs without increasing exposure to COVID-19 through travel and congregating with others, as well as robust collaborative efforts between health systems, health departments, community based agencies and others to roll out community testing sites, public education about the virus, vaccination, as well as coordination of food distribution, technology support

<sup>&</sup>lt;sup>1</sup> https://www.cdc.gov/healthequity/racism-disparities/index.html

<sup>&</sup>lt;sup>2</sup> https://nurturenj.nj.gov/wp-content/uploads/2021/01/20210120-Nurture-NJ-Strategic-Plan.pdf

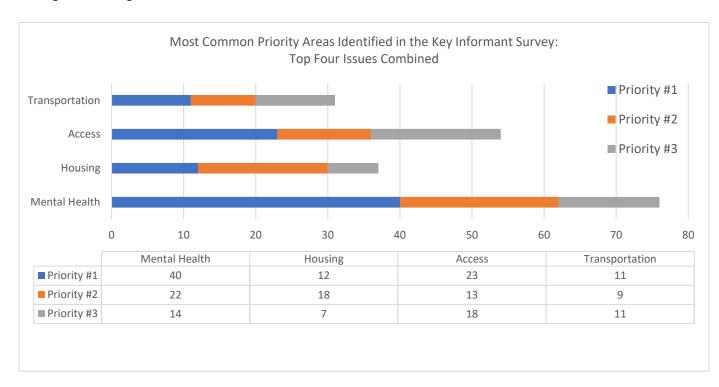


and efforts. All of these actions were collaborative, responsive to changing needs, and focused on ensuring the highest possible levels of community safety.

Despite these effort, COVID-19 still has had lasting negative impacts in South Jersey and worldwide. Identifying the barriers and gaps most impacted by the COVID-19 experience are essential to creating effective strategies for health improvement. The qualitative research identified the following themes as the key elements impacted by the changes brought about by COVID-19 that are driving inequities in health outcomes across Burlington, Camden and Gloucester Counties.

**Staffing:** health and Representation matters: workforce **Transportation** is Lack of trust in worse than ever struggle to attract new should better reflect before workers and retain the the population they serve Unexamined bias and **Isolation** has had a systemic racism profound and lasting Fear remains an issue crave community but need help connecting directly impacts care impact

The themes identified above affect a wide range of health outcomes and can be exacerbated or improved by addressing some of the social determinants of health that impact the root causes of the disparities between population groups. With focus on addressing social determinants of health and fostering health equity, the key informant survey identified the following priority areas for action throughout the region.





The impact of the inequities in social determinants of health are most evident among health outcomes in four key health outcomes: chronic disease, behavioral health, maternal and child health, and mental health among youth in particular.

Chronic Disease and Life Expectancy	Behavioral Health	Maternal And Child Health	Youth Mental Health
Quantitative Measure	Quantitative Measure	Quantitative Measure	Quantitative Measure
Cancer and other	Roughly 1 in 5 adults	Black/African	More than 1 in 3
chronic disease	were diagnosed with	American babies in	young people in South
incidence and death is	depression in South	Camden County die at	Jersey felt sad or
higher in South Jersey	Jersey before the	2.5x the Healthy	hopeless before the
for almost all	COVID-19 Pandemic	People 2030 Goal	COVID-19 Pandemic
population groups			
Community Feedback	Community Feedback	Community Feedback	Community Feedback
<ul> <li>Delayed care and</li> </ul>	<ul> <li>Providers have</li> </ul>	<ul> <li>Lack of trust in</li> </ul>	<ul> <li>Overwhelming</li> </ul>
screenings	100% telehealth	healthcare at a	sense of isolation
increased severity	private practice =	new high	<ul> <li>Parents don't know</li> </ul>
and missed early	shortages for low-	<ul> <li>Representation</li> </ul>	what to do and
diagnoses	income people	matters: need	can't get help
<ul> <li>Economics and</li> </ul>	<ul> <li>Families</li> </ul>	more diverse	Disconnected from
social networks	overwhelmed by	providers and staff	community and
before COVID-19	homebound +	Without trust,	don't know how to
impacted access to	economic struggles	difficult to educate,	get in
food, medicine,	+ isolation +	inform	<ul> <li>Have seen parents</li> </ul>
health care, human	COVID-19 + grief	<ul> <li>Insurance</li> </ul>	overworked and
interaction	<ul> <li>Representation</li> </ul>	differences impact	struggle and don't
<ul> <li>Isolation created</li> </ul>	matters: need	access to needed	want that life
new/worsening	diverse workforce	services	<ul> <li>Acute Behavioral</li> </ul>
Behavioral Health	Even crisis care has		Health needs,
needs	wait lists		limited resources

With this in mind, Virtua Health, in partnership with the South Jersey Health Collaborative and other community partners, uses these data to collaboratively and strategically reframing policy and action to foster equity in length and quality of life for the people of Burlington, Camden and Gloucester Counties.



### **Summary of Previous CHNA**

The 2019 Community Health Needs Assessment for Virtua Health was also conducted as a collaborative effort through the South Jersey Health Collaborative, in alignment with the requirements of the IRS guidelines. The IRS guidelines for collaborating hospital facilities, such as SJHC, stipulate that a single joint CHNA fulfills the IRS requirements so long as the CHNA report contains the information that would be present in separate reports and the joint CHNA covers the entire community served by the collaborating hospital facilities. The 2019 analysis revealed four main health needs along with a crosscutting theme. The four health needs are **Behavioral Health: Mental Health and Substance Abuse**; **Accessing Care**; **Communications and Relationships**; and **Obesity**. The cross-cutting theme is Population Health: Social Determinants of Health. This theme shows how the specifics of health needs vary with population. All completed Community Health Needs Assessment Reports including the 2019 New Jersey report are available to the public through the following website: <a href="https://www.virtua.org/about/community-action-plan">https://www.virtua.org/about/community-action-plan</a>

Virtua Health, as a comprehensive healthcare system with a mission to help the South Jersey Community to Be Well, Get Well, and Stay well, embraces the opportunity to utilize its resources to assist its SJHC partners in addressing these priority areas. The CHNA team collaborated with colleagues across the Virtua system to identify resources that could be leveraged to provide solutions to the problems and gaps identified by South Jersey residents. This collaboration revealed both the vast amount of work already underway within Virtua and the opportunity to coordinate this work to best address the needs identified in the 2019 CHNA. Following a series of meetings involving a multidisciplinary group of Virtua leaders, goals, objectives, strategies were developed as part of the Community Health Improvement Plan (CHIP) for 2020-2022 period. Over the following three years, Virtua Health, in collaboration with our community partners and local public health agencies worked toward implementing these strategies to address the concerns identified by our community. Virtua embraces the challenge of confronting the needs identified by the community and providing the resources to Be Well, Stay Well, and Get Well. An Evaluation of Impact from the 2019 CHNA and CHIP reports are included in Appendix C.

### **2022** Research Methods

The 2022 CHNA was conducted following IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Patient Protection and Affordable Care Act (PPACA), the Public Health Practice Standards of Performance for Local Boards of Health in New Jersey, and the Public Health Accreditation Board Standards and Measures.

The 2022 CHNA was conducted from December 2021 to May 2022 and included quantitative and qualitative research methods to determine health trends and disparities in Burlington, Camden and Gloucester Counties and the City of Camden where applicable. Secondary research methods were used to identify and analyze statistical socioeconomic and health indicators. Data were compared across zip codes and neighborhoods where available, and compared to the counties, New Jersey state, and national benchmarks.

Secondary data, including demographic, socioeconomic, and public health indicators, were analyzed for Burlington, Camden, and Gloucester counties in New Jersey (NJ) to measure key data trends and priority





health issues, and to assess emerging health needs. Data were compared to state and national benchmarks and Healthy People 2030 (HP2030) goals, as available, to assess areas of strength and opportunity. Healthy People 2030 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

All reported demographic and socioeconomic data were provided by the US Census Bureau, American Community Survey, unless otherwise noted. Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, maternal and child health, and older adult health. Data were compiled from secondary sources including the New Jersey Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, Community Needs Index, among other sources. A comprehensive list of data sources can be found in Appendix A.

The most recently available data at the time of publication is reported throughout the report. Reported data typically lag behind "real time" by as much as one to two years. It is important to note that many data do not reflect the impact of COVID-19. Anecdotal evidence suggests that socioeconomic conditions and health status have been negatively impacted by COVID-19.

Age-adjusted rates are referenced throughout the report to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

### **Primary Research and Community Engagement**

Through this comprehensive view of statistical health indicators and community stakeholder feedback, a profile was created of health indicators and socioeconomic factors that influence the health and wellbeing of people living in Burlington, Camden and Gloucester Counties. Primary research methods then used to solicit input from public health experts and key community stakeholders representing the broad interests of the community utilizing interviews, an online key informant survey and through focus groups. These findings will guide Virtua Health, the South Jersey Health Collaborative and their community partners in creating a collaborative, coordinated effort to address community health needs. The 2022 CHNA Primary Research and Community Engagement study methods include:

- An analysis of existing secondary data sources, including public health statistics, demographic and social measures, and healthcare utilization
- One on one key informant interviews with key individuals representing diverse health, policy and community perspectives
- A key informant survey completed by 206 individuals throughout the area who represent first responders, health care providers, social services professionals, educators, faith-based leaders and community leaders
- ▶ 14 focus groups with 74 individuals representing diverse, underserved, minority and historically disadvantaged populations including youth
- An analysis of Emergency Department utilization data from 2019, 2020 and 2021



### **Context for the Creation of this Community Health Needs Assessment**

The COVID-19 global pandemic has been in the forefront of the world's concerns since 2020, coinciding with the research informing this Community Health Needs Assessment (CHNA) and the CHIP. The COVID -19 pandemic has created unprecedented challenges for people across South Jersey —and the world—and has demanded rapid and robust response from healthcare, social services, government, businesses, families, and individuals. COVID-19 exacerbated existing disparities within the health and social service systems and exposed long-standing inequities in power and socioeconomic opportunities within our society.

COVID-19 exposed long-standing inequities that taught us we need a more equitable healthcare response

COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19, and potentially other infectious diseases. During this time, the disparity in access to vaccination and testing and the resulting negative outcomes amongst people of color and other disenfranchised communities was of substantial concern and urgency. Therefore, recognizing the ongoing needs —and recovery— from the COVID-19 pandemic that have disproportionately negatively impacted communities of color emerged as a priority.

While COVID-19 is still with us, it's impact on people and communities continues to evolve rapidly as medical professionals learn more about the virus, the virus itself changes, and our public policies and social norms change. This moment, spring of 2022, finds us in a different time, where collaborative vaccination efforts have led us to more equitable vaccination, greater access to testing, more availability of treatment options and lower levels of hospitalizations and deaths than in the two previous springs. Therefore, the lessons learned from this collective action to confront the inequities in opportunity, access, education, and trust revealed by COVID-19 have been integrated into every priority set out in this report. This underscores an effort to create a culture of greater health equity and trust, and to prepare for an equitable response for future emergencies.

I think because people were so not near other people for so long, people lost social cues and realistic expectations. People were scared, upset and angry during that time and never properly addressed those feelings and still have them.

Focus Group Participant



### **Determining Community Health Priorities**

In 2021, the South Jersey Health Collaborative, comprised of key representatives from Cooper Health, Jefferson Health, Virtua Health, Burlington County Health Department, Camden County Health Department, and Gloucester County Health Department worked alongside the 35<sup>th</sup> Street Consulting team to update statistical data, develop and administer the key informant survey, conduct focus groups with key stakeholders, and analyze emergency department data. These data are included in this report and are designed to generate priority actions for Virtua Health in alignment with collective action priorities among the South Jersey Health Collaborative partner agencies.

To determine priorities, statistical data and primary qualitative data were analyzed to determine community health priorities. Statistical data includes health indicators and socioeconomic measures to document health disparities and underlying inequities experienced by people living throughout Burlington, Camden and Gloucester Counties, as well as a focus on people living in the City of Camden. Perspectives on data trends and direct feedback on community health priorities were collected via one-on-one interviews and collected the perspectives of more than 206 individuals through the key informant surveys. These data were then analyzed to determine key areas of need representing the quantitative data, the survey results and the key informant interview perceptions. From this process, the following specific health needs were identified as priorities:

- Chronic Disease
- Behavioral Health
- Behavioral Health among young people (age 24 and younger)
- Maternal and Child Health

These findings were similar to the priority areas identified in the 2019 CHNA, which were Behavioral Health: Mental Health and Substance Abuse, Accessing Care, Communications and Relationships, and Obesity.

In 2022, when reviewing the data regarding these health issues in the context of the COVID-19 pandemic, the South Jersey Health Collaborative sought to explore and target upstream, social determinants of health factors that have been exacerbated by the physical, emotional and structural changes brought about because of the COVID-19 pandemic. Nationwide, the shifts that individuals, families and institutions, including health care providers, have undertaken to thwart the spread of COVID-19 have intensified the negative outcomes for these health conditions and increased inequities among key populations. The rapid pace of societal change due COVID-19 has dramatically exposed and exacerbated the underlying inequities that have existed for generations that continue to fuel disparities in health outcomes.

To help identify cross cutting factors for collective action and to identify potential upstream solutions, 14 focus groups including 74 individuals were conducted with a wide variety of people representing the four priority health areas. These community conversations were designed to identify themes that impact Chronic Disease, Behavioral Health, Youth Behavioral Health and Maternal and Child Health to determine barriers and strategic opportunities for intervention. These conversations allowed the opportunity to better understand the experiences of real people who experience these health concerns through personal experience and work, find the points of intervention opportunities, and learn what real people found helpful for themselves and others during this unprecedented time in South Jersey.





From the focus groups, the following cross cutting themes for strategic action were identified through conversations with diverse populations, including young people, across Burlington, Camden and Gloucester Counties.

**Transportation** is worse than ever before

Staffing: health and human services struggle to attract new workers and retain the ones they have Representation matters: workforce should better reflect the population they serve

Lack of trust in healthcare is at a new high

**Isolation** has had a profound and lasting impact on all ages

Unexamined bias and systemic racism directly impacts care People of all ages crave community but **need help connecting** 

Fear remains an issue

### **Priorities for Action: Building Trust and Equity**

Using an equity lens, the themes identified above represent the following priority areas for collective action for the South Jersey Health Collaborative:



### **Equity Approach:**

- Achieve equitable outcomes for all residents by challenging structural and institutional inequities
- Leverage collaboration to counteract social drivers of health
- Change processes and policies to reimagine equitable distribution of services

#### Access

#### Access to Care:

Goal: Achieve equitable access to services for all people regardless of race, ethnicity, age, insurance, zip code, income, gender or language.

### Life Expectancy

# Chronic Disease and Life

Expectancy: Goal: Achieve equitable life expectancy for all people regardless of race, ethnicity, zip code, insurance, income, gender or language.

### **Build Resilience**

### Behavioral Health, Trauma and Adverse Childhood Experiences: Goal:

Foster community building opportunities to ameliorate the impact of traumatic events designed for all ages.

### **Equal Start**

# Women and Children's Health:

Goal: Achieve equitable outcomes and support for all babies and people who give birth.

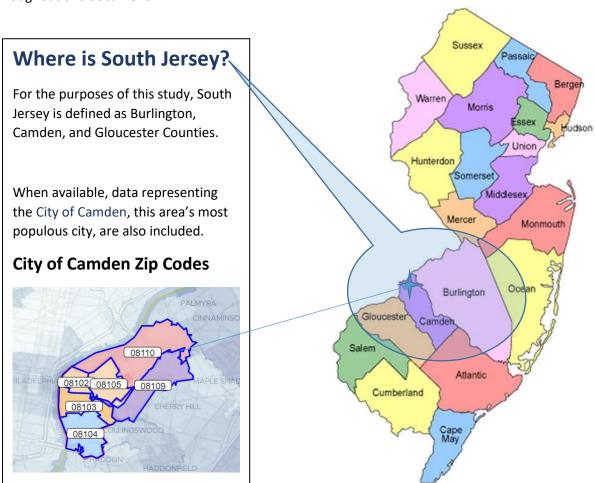
### Approval and Adoption of the CHNA: The Virtua Health Board of Directors

reviewed and approved this report to address these priority areas on November 29, 2022. The report is widely available to the public through Virtua's website: <a href="https://www.virtua.org/about/community-action-plan">https://www.virtua.org/about/community-action-plan</a> . For more information, feedback or comments, please email Bageshree Cheulkar <a href="mailto:BCheulkar@virtua.org">BCheulkar@virtua.org</a>



### **Demographics: Who Lives in South Jersey?**

Burlington, Camden and Gloucester Counties comprise a significant portion of the area considered to be South Jersey, and contains rural, suburban and urban communities. For the purposes of this report, South Jersey is defined as including Burlington, Camden and Gloucester Counties. This area runs along the Delaware River, which divides New Jersey from neighboring Pennsylvania. The most populous city in this area, Camden, lies directly across the Delaware River from Philadelphia. As the largest urban center, where available, data reflecting demographics and outcomes for the City of Camden are also provided throughout this document.



As much as communities are shaped by those who live there, people are impacted by the social context of the places where they live. Social context includes family, neighborhoods, school and work environments, political or religious systems, and other interpersonal infrastructures within a community. People's lived experiences within their social context play a significant role in good health and well-being. Feeling like you belong, are appreciated, and are valued in your community reinforces protective health factors that help people and communities overcome adversity. Poverty, violence, poor housing, racism, and discrimination create Adverse Community Environments that perpetuate trauma and increase Adverse Childhood Events that have lasting impact on people and their communities.



### **Our Community and Residents**

Understanding changes in population demographics is critical to plan for changes in healthcare, housing, economic opportunity, education, social services, transportation, and other essential infrastructure elements. Burlington, Camden and Gloucester Counties all increased in population between 2010-2020, but by a smaller proportion than New Jersey or the United States as a whole. Meanwhile, in the City of Camden, the population decreased during the same time period.

2020 Total Population

	Total Population	Percent Change Since 2010
Burlington County	461,860	+2.9% 👚
Camden County	523,485	+1.9% 👚
Camden City	71,791	-7.2% 棏
Gloucester County	302,294	+4.9% 👚
New Jersey	9,288,994	+5.7%
United States	331,449,281	+7.4%

Source: US Census Bureau, Decennial Census

The City of Camden is younger than all other geographies. These differences in age distribution between the three counties and the City of Camden indicate that their social and healthcare needs and interests likely vary widely. Similarly, healthcare and prevention interventions, such as injury prevention activities, will likely manifest differently in communities comprised of a large proportion of youth and young adults versus predominantly older adults.

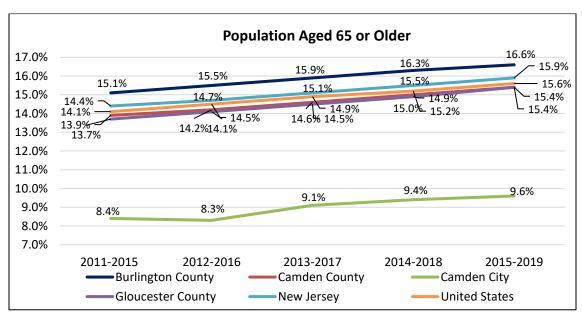
2015-2019 Population by Age

==== ==== : operation by 7.8c									
	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median	
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	Age	
Burlington County	21.1%	8.5%	12.4%	12.3%	14.8%	14.4%	16.6 %	41.6	
Camden County	22.9%	8.4%	13.8%	12.6%	13.6%	13.4%	15.4%	38.8	
Camden City	30.8%	10.2%	15.0%	13.4%	10.4%	10.5%	9.6%	30.8	
Gloucester County	22.1%	8.9%	12.3%	12.5%	14.7%	14.1%	15.4%	40.5	
New Jersey	22.1%	8.7%	12.8%	12.8%	14.2%	13.6%	15.9%	39.9	
United States	22.6%	9.4%	13.9%	12.6%	13.0%	12.9%	15.6%	38.1	

Source: US Census Bureau, American Community Survey

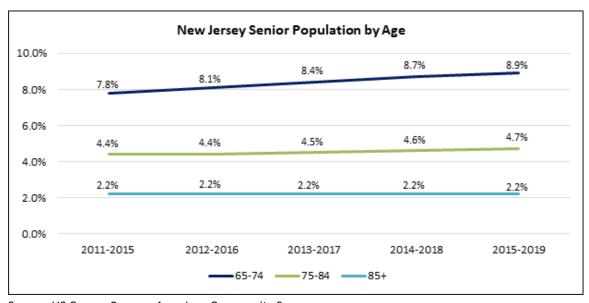
The graphs and maps below demonstrate that Burlington County has consistently been populated by proportionately more older people than any of the other counties, New Jersey or the US. Burlington and Camden Counties have gradually proportionately gotten older from 2011-2019. Meanwhile, the City of Camden has proportionately far fewer adults over the age of 65 and far more people under 18 than any of the other geographies. These age-related trends are important to ensure that planning and investment in infrastructure, outreach and services meet the age-related needs of the people served.





Source: US Census Bureau, American Community Survey

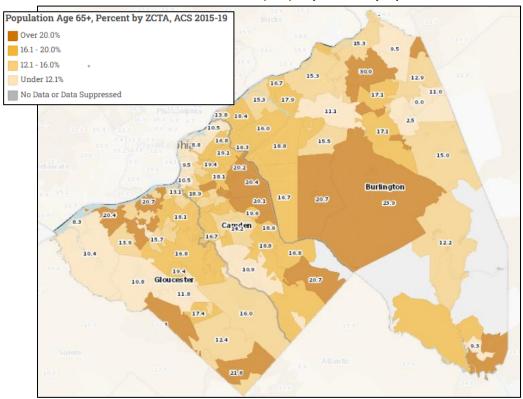
Considering age distribution aids in making effective investments in infrastructure, outreach and services that are appropriate to community needs now and in the



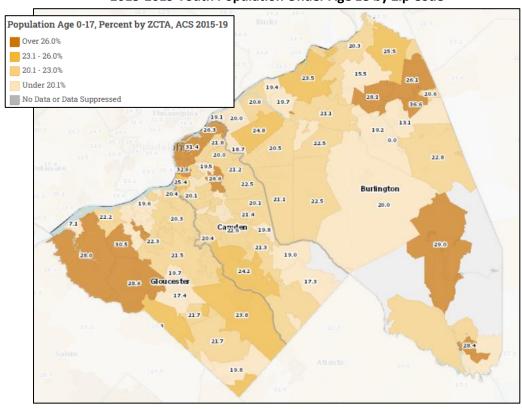
Source: US Census Bureau, American Community Survey



### 2015-2019 Older Adult (65+) Population by Zip Code



### 2015-2019 Youth Population Under Age 18 by Zip Code





### **Community Diversity**

Disparities in health, economic, education and safety outcomes between people of different races, incomes, education level or neighborhoods are often the result of historical structural barriers that prevented equal access to opportunity based on race.

Recognizing the role that structural racism plays on access to the elements needed for healthy living can help clear a path towards a

Did you know?

The City of Camden is a majority minority City.

better quality of life for all. The experience of feeling discrimination increases stress and impacts the choices people make to live their best lives.

### 2020 Population by Race and Ethnicity

**Green** = 10+ percentage points above the other geographies

Red = 10+ percentage points below the other geographies

	White	Black or African American	Asian	Other Race*	Latinx origin
Burlington County	65.5%	16.8%	5.7%	33.9%	8.7%
Camden County	56.0%	19.3%	6.2%	32.1%	18.2%
Camden City	10.3%	42.0%	1.7%	4.0%	52.8%
Gloucester County	76.1%	10.9%	3.1%	28.4%	7.3%
New Jersey	55.0%	13.3%	10.2%	76.7%	21.5%
United States	61.6%	12.4%	6.0%	48.4%	18.7%

Source: US Census Bureau, American Community Survey

#### Population Change among Prominent Racial and Ethnic Groups, 2010 to 2020

Red = decrease in population between 2010-2020

	White	Black or African American	Asian	Other Race*	Latinx origin (any race)
Burlington County	-8.5%	4.4%	35.3%	133.5%	40.1%
Camden County	-12.6%	0.7%	24.1%	87.3%	30.3%
Camden City	-45.2%	-18.8%	-22.4%	31.9%	4.2%
Gloucester County	-4.4%	13.7%	25.4%	173.1%	61.4%
New Jersey	-15.2%	1.2%	30.9%	141.2%	28.8%
United States	-8.6%	5.6%	35.5%	109.5%	23.0%

Source: US Census Bureau, American Community Survey

A consequence of a many factors stemming from the COVID-19 Pandemic is the reduction of trust in the health care system, often among the most vulnerable and disenfranchised segments of the population. Language and cultural affinity as well as humility and a willingness for understanding from providers

<sup>\*</sup>Includes American Indian, Native Hawaiian, Some Other Race and Two or More Races together

<sup>\*</sup>Other race includes American Indian, Native Hawaiian, Some Other Race and Two or More Races together



were often expressed as bridges to restoring trust in medical providers among focus group participants as populations become increasingly diverse.

> "[We are looking for] providers who understand the community, they feel comfortable in it, are educated, and can empathize"

Youth focus group participant

## 2015-2019 Non-White Population by Zip Code Population, Minority (Non-White), Percent by ZCTA, ACS 2015-19 Over 25.0% 10.1 - 25.0% **EE** 5.1 - 10.0% Under 5.1% No Minority Population Reported No Data or Data Suppressed 28.2 9.4 439 820 Burlington 346 10.5 Camplen san 21.5

"Representation really matters...we are predominately White providers but do not serve a CIS-gender Caucasian population."

Focus group participant



### **Many Roads Lead to Home**

As much as communities are shaped by those who live there, people are also impacted by the social determinants of health that exist within the places they live. Diversity of race, language, culture, and perspective can enrich communities.

### 2015-2019 Nativity and Citizenship Status

**Green** = 10+ percentage points above the other categories

Red = 10+ percentage points below the other categories

	US citizen, born in the US	US citizen by naturalization	Not a US citizen	Speak Primary Language Other Than English
Burlington County	88.2%	6.3%	3.4%	13.1%
Camden County	85.5%	6.4%	4.6%	20.5%
Camden City	74.5%	5.3%	8.6%	45.6%
Gloucester County	93.3%	3.8%	1.7%	9.0%
New Jersey	75.2%	12.7%	9.8%	31.3%
United States	84.9%	6.7%	6.8%	21.6%

Source: US Census Bureau, American Community Survey

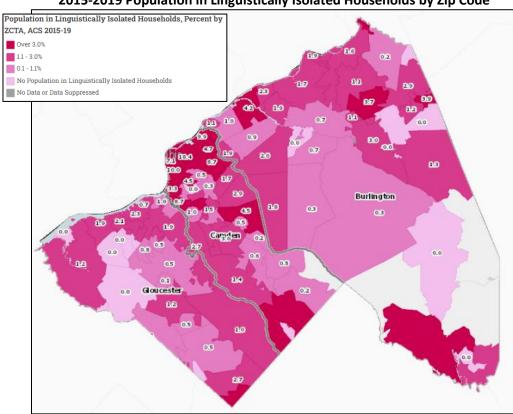
2015-2019 Foreign-Born Population by Region of Birth

	Latin America	Europe	Asia	Africa	Other
Burlington County	28.0%	17.8%	40.6%	11.5%	2.0%
Camden County	42.1%	11.9%	39.1%	5.5%	1.5%
Camden City	85.4%	0.4%	11.2%	2.7%	0.2%
Gloucester County	27.9%	19.5%	42.1%	7.1%	3.3%
New Jersey	46.1%	14.6%	32.6%	5.6%	1.0%
United States	50.6%	10.8%	31.0%	5.1%	2.5%

Source: US Census Bureau, American Community Survey







2015-2019 Population in Linguistically Isolated Households by Zip Code

People share with people who understand their experiences...I speak Spanish and others here do, too. I think word got out. With the comfort level [of speaking in Spanish], people shared their experience [here] with their friends because they feel respected.

Focus Group Participant



### **Income and Work**

Income impacts health outcomes. The relationship between income and health outcomes is well documented. For example, many Americans access health insurance through their job, although not all types of work provide access to health insurance. Beyond health insurance, making healthy choices, such as purchasing lean meats and fresh produce or joining a gym, all cost money. Securing employment that allows individuals to provide a safe and decent home, nutritious food, transportation, child and elder care services, leisure activities, exercise and medical needs depends on many factors. The type of work one does and the income it provides is impacted by education, age, access to employment opportunities, racism, language and literacy and other factors, enhancing disparities in health outcomes based on income level.

Burlington, Camden and Gloucester counties all report high median income compared to the US. However, the median income in the City of Camden is less than half of the US median income. This disparity in economic resources impacts the ability of people with lower incomes to engage in health promoting activities, creating differences in the choices available to people in Camden to live their healthiest lives. This inequity in income in the City of Camden, particularly amid higher median income in the surrounding area, contributes to decreased health outcomes in the City of Camden.

#### **Economic Indicators**

**Green** = 10+ percentage points above Red = 10+ percentage points below the other categories

	• .	, , ,			•				
	Burlington County	Camden County	Camden City	Gloucester County	New Jersey	United States			
Income and Poverty	Income and Poverty (2015-2019)								
Median household income	\$87,416	\$70,451	\$27,015	\$87,283	\$82,545	\$62,843			
People in poverty	6.1%	12.2%	36.4%	7.4%	10.0%	13.4%			
Children in poverty	8.5%	17.4%	47.4%	8.4%	14.0%	18.5%			
Older adults (65+) in poverty	4.5%	9.0%	25.6%	5.9%	8.3%	9.3%			
Households with SNAP* Benefits	5.0 %	11.5 %	38.5%	7.2%	8.7%	11.7%			
Unemployment									
January 2020	3.6%	4.5%	4.1%	4.2%	3.7%	3.5%			
2020 average	8.2%	10.1%	9.2%	9.3%	9.8%	8.1%			
September 2021	5.2%	6.7%	5.9%	5.8%	7.1%	4.8%			

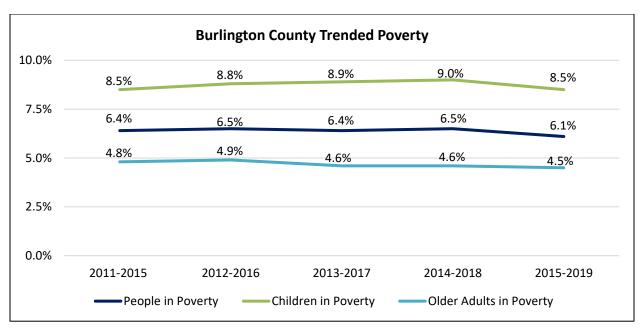
Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics \*Supplemental Nutrition Assistance Program.

Camden has great people here, but nobody is watering this community.

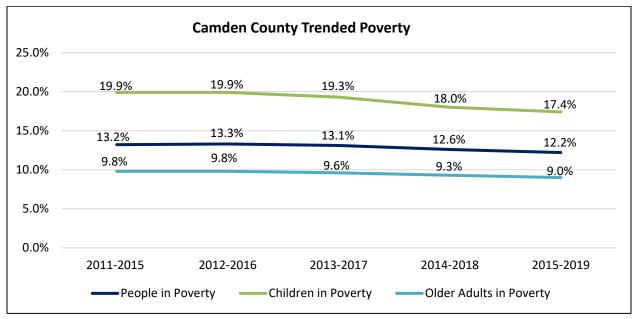
Youth focus group participant

<sup>&</sup>lt;sup>3</sup> Chetty R, Stepner M, Abraham S, et al. The Association Between Income and Life Expectancy in the United States, 2001-2014 [published correction appears in JAMA. 2017 Jan 3;317(1):90]. *JAMA*. 2016;315(16):1750-1766. doi:10.1001/jama.2016.4226 (Chetty R, 2016, & doi:10.1001/jama.2016.4226)



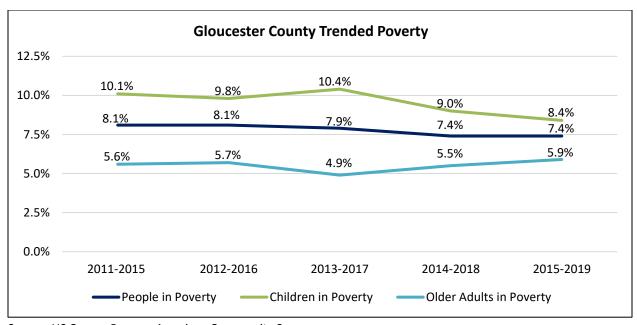


Source: US Census Bureau, American Community Survey

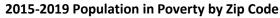


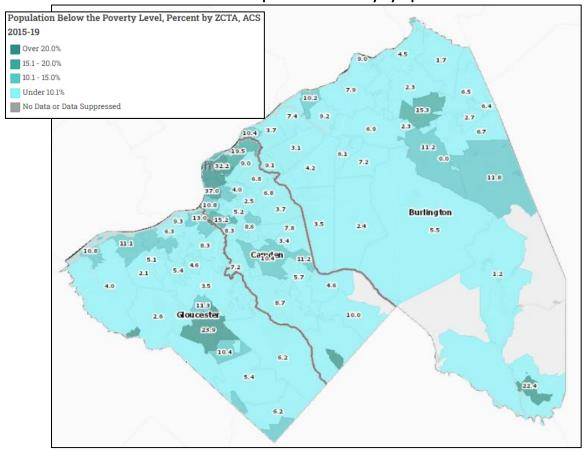
Source: US Census Bureau, American Community Survey





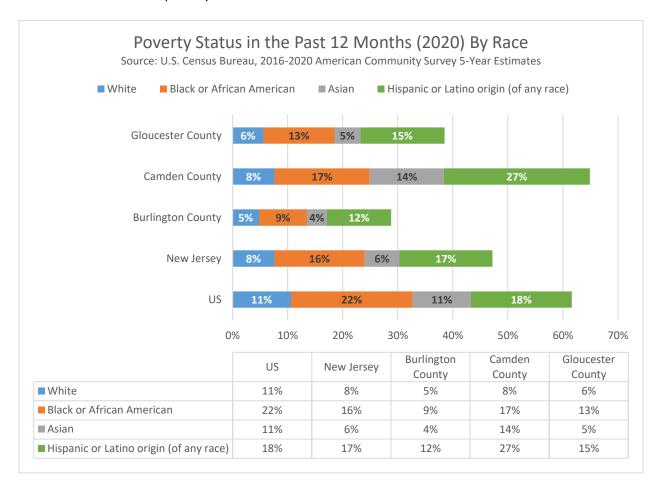
Source: US Census Bureau, American Community Survey







When reviewed by race and geography, clear disparities emerge. Data across many measures of health and social indicators consistently demonstrate that people who identify as Hispanic or Latino of any race and people who identify as Black/African American experience more poverty, lower median wages than people who identify as White and are less likely to receive preventive and life-saving healthcare due to barriers associated with poverty.





### **Food Security**

Where you live impacts what you eat. The United Nations' Committee on World Food Security defines food security to mean that everyone has physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.<sup>2</sup> Food security depends on many factors. The availability and accessibility of venues to purchase fresh foods, such as supermarkets and farmers markets, is an important component.

**Trended and Projected Food Insecurity** 

	Burlington County	Camden County	Gloucester County	New Jersey	United States		
All Residents							
2021 (projected)	9.7%	13.2%	10.8%	11.7%	12.9%		
2020 (projected)	10.0%	13.4%	11.2%	12.0%	13.9%		
2019	6.6%	9.5%	7.5%	8.6%	10.9%		
2018	7.5%	10.3%	7.8%	8.7%	11.5%		
2017	9.3%	11.8%	9.2%	9.6%	12.5%		
Children							
2021 (projected)	14.1%	19.5%	14.6%	15.3%	17.9%		
2020 (projected)	14.8%	20.0%	15.6%	16.1%	19.9%		
2019	8.8%	13.0%	8.9%	9.9%	14.6%		
2018	10.4%	14.1%	11.2%	11.3%	15.2%		
2017	11.4%	14.6%	12.4%	13.2%	17.0%		

Source: Feeding America

Even though fresh foods are available for sale, it doesn't mean that fresh foods are accessible to everyone. Food costs money. The following table demonstrates the proportion of children eligible for free and reduced lunches in each area.

Every year we sponsor several families over the holidays. We ask them what they want help with for the holidays and the answer was always presents for the kids. This year, the only thing families asked for was food or toiletries; not one family asked for gifts, toys.

Key Informant Interview, program administrator



### 2020-2021 School Year Students Enrolled in Free or Reduced-Price Lunch Program by School District

	Total Student Enrollment	Students Participating in Free Lunch Program	Students Participating in Reduced-Price Lunch Program
Burlington County	66,788	21.1%	4.5%
Camden County	75,638	35.5%	4.7%
Gloucester County	45,579	20.7%	3.7%
New Jersey	13,43,440	31.0%	4.4%

Source: New Jersey Department of Education

Note: The percentage of participating students was calculated as an average across the districts with each county.

Increasing awareness and helping families enroll in programs like free and reduced school lunch and SNAP benefits can help family make up the shortfall of food security.





### **Education**

Education is one of the best predictors of good health and long lives. Education builds a strong foundation to create a path for young people and their community that includes more choices for health and well-being. Availability of accessible, well-funded and well-resourced public education opportunities and exposure to diverse employment pathways, such as in the healthcare and social services fields, increase the opportunity for upward mobility, economic security, and better health outcomes.

"Education should also be recognized as an essential requirement for the disruption of the cycle of poverty and inequity in health"

Hahn, R. A., & Truman, B. I. (2015). Education Improves Public Health and Promotes Health Equity. International journal of health services: planning, administration. evaluation. 45(4). 657–678.

Educational achievement has a direct impact on employment pathways that increase upward mobility, economic security, generational wealth, and better health outcomes. In the City of Camden, there are more than three times the proportion of adults who do not have a high school diploma, and roughly one-third of the proportion of adults who have completed a bachelor's degree than in the rest of South Jersey counties.

#### 2015-2019 Population (Age 25 or Older) by Educational Attainment

**Green** = 10+ percentage points above the other geographies

Red = 10+ percentage points below the other geographies

	Less than high school diploma	High school graduate (includes GED)	Some college or associate degree	Bachelor's degree	Graduate or professional degree
Burlington County	6.3%	28.1%	27.7%	24.3%	13.7%
Camden County	15.3%	29.5%	26.7%	20.3%	12.2%
Camden City	32.3%	34.0%	23.9%	7.0%	2.8%
Gloucester County	7.1%	32.0%	27.9%	21.5%	11.5%
New Jersey	10.2%	27.2%	22.9%	24.2%	15.5%
United States	12.0%	27.0%	28.9%	19.8%	12.4%

Source: US Census Bureau, American Community Survey

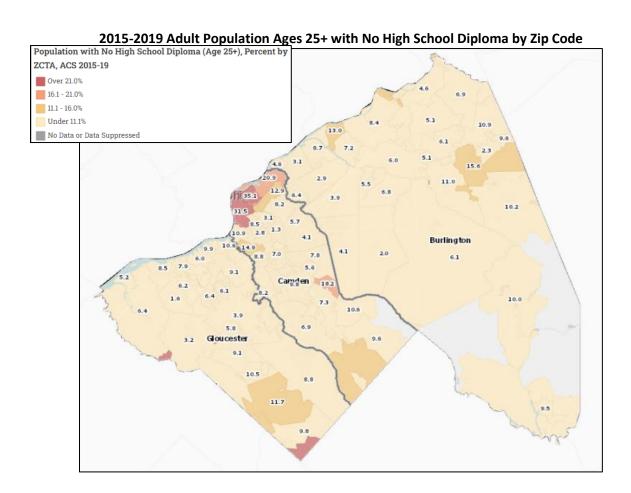
This means that roughly 1 in 3 Camden City adults have not completed high school, creating a barrier to both employment and health literacy. This disparity alludes to structural inequities that present barriers to educational attainment for a long time.

**Having less than a high school diploma limits employment choices**, making a living wage or a job with benefits more challenging to find. Higher levels of education create access to a wider range of employment opportunities, leading to increased access to healthy living resources including health insurance and transportation.



### **Equity in Education**

Education builds a strong foundation to create a path for young people and their community that includes more choices for health and well-being. Availability of accessible, well-funded and well-resourced public education opportunities and exposure to diverse employment pathways, such as in the healthcare and social services fields, increase the opportunity for upward mobility, economic security, and better health outcomes.





### **Our Homes and Where We Live**

Where you live impacts the choices available to you. These choices impact your income, wellness, and ultimately how long you live. These place-based choices and lived experiences like discrimination and racism, also inform perception of opportunities.

Owning a home is an investment. For many families, their home is their largest asset. However, historically, structures have been in place that prevent people of color and others from purchasing a home. Today, this historic structural inequity manifests in the financial assets that certain populations have been able to pass on to future generations. The security of knowing one has a home can also reduce chronic stress, a significant factor in developing chronic disease.

For neighborhoods, a higher proportion of homeownership means greater neighborhood stability. Greater neighborhood stability means greater opportunities for investment in infrastructure, such as schools, roads, public transportation and green spaces, key elements for healthy living.

Roughly 1 in 3 homeowners and 1 in 2 renters in the South Jersey region are housing cost burdened, meaning they pay 30% or more of their income towards housing. In Camden City, housing vacancy ranges from 40-60%, about half of all available housing stock. While the median home value and median rent in Camden City are less expensive than the other areas, half of all homeowners and renters in Camden City are housing cost burdened. The combination of large proportions of vacant houses, high-cost burden and low home values is both a result and a cause of sustained economic strain in Camden City.

#### **2015-2019 Housing Indicators**

**Green** = 10+ percentage points above the other geographies

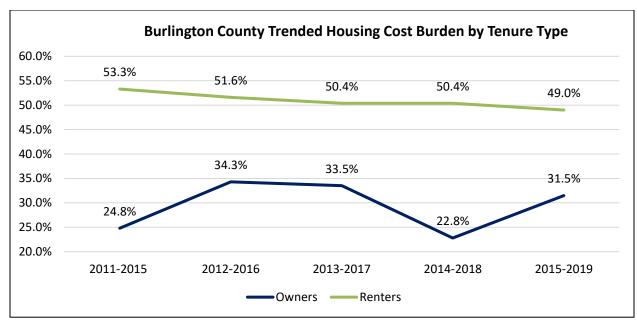
Red = 10+ percentage points below the other geographies

	Owners			Renters			
	Occupied Units	Median Home Value	Cost- Burdened*	Occupied Units	Median Rent	Cost- Burdened*	
Burlington County	75.4%	\$251,200	31.5%	24.6%	\$1,346	49.0%	
Camden County	66.8%	\$197,800	32.7%	33.2%	\$1,079	54.8%	
Camden City	39.3%	\$84,000	46.3%	60.7%	\$922	64.8%	
Gloucester County	80.1%	\$219,700	29.3%	19.9%	\$1,225	53.3%	
New Jersey	63.9%	\$335,600	35.3%	36.1%	\$1,334	51.4%	
United States	64.0%	\$217,500	27.8%	36.0%	\$1,062	49.6%	

Source: US Census Bureau, American Community Survey

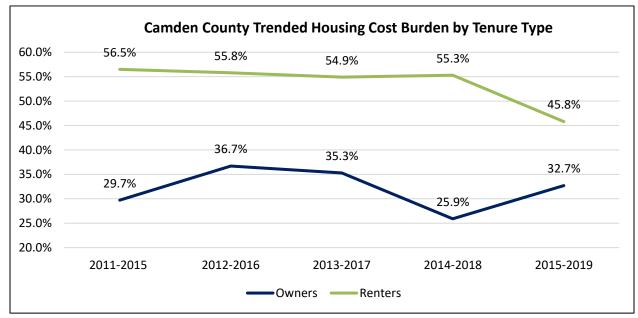
<sup>\*</sup>Defined as spending 30% or more of household income on rent or mortgage expenses.





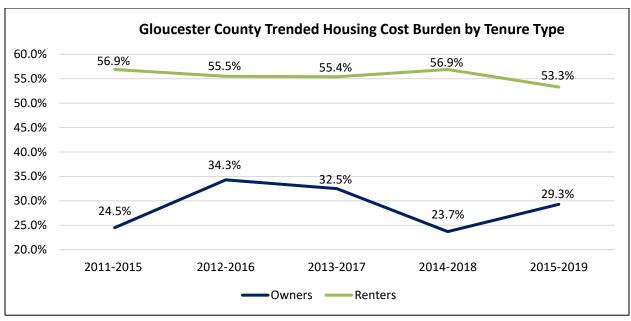
Source: US Census Bureau, American Community Survey

Housing is often the largest single monthly expense for households and should represent 30% of a household's monthly income. When households spend more than 30% of their income on housing, that leaves fewer resources for other necessities like food, transportation, and childcare.



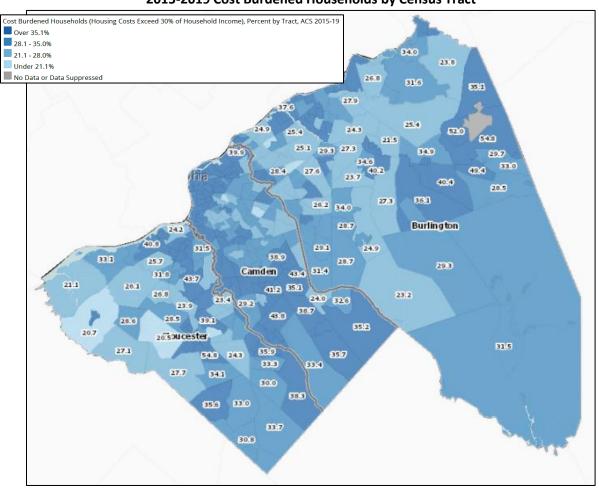
Source: US Census Bureau, American Community Survey





Source: US Census Bureau, American Community Survey

### 2015-2019 Cost Burdened Households by Census Tract





### **Housing and Lead**

There is no known safe level of lead exposure. The exposure and ingestion of lead through paint dust, pipes and other sources has lifelong detrimental effects on health, including brain development in children. Therefore, prevention of exposure to lead, especially among children and pregnant women, can remove lifelong barriers to health and well-being.

#### 2015-2019 Housing by Year Built

**Green** = 10+ percentage points above other geographies

Red = 10+ percentage points below other geographies

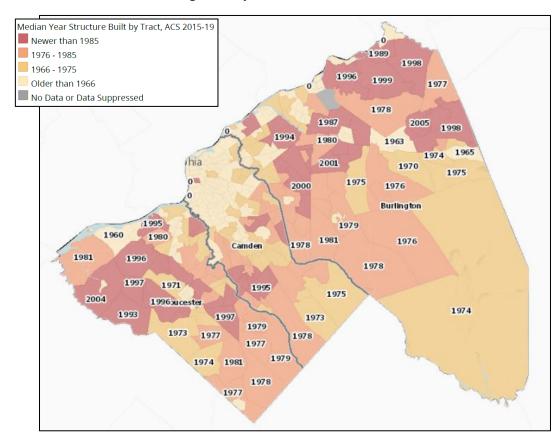
	Before 1980	1980-1999	2000-2009	2010-2013	2014 or later
Burlington County	57.4%	28.9%	10.4%	1.8%	1.3%
Camden County	73.8%	18.6%	5.7%	1.1%	0.7%
Camden City	86.3%	6.1%	6.3%	1.1%	0.1%
Gloucester County	53.1%	27.5%	15.4%	2.3%	1.7%
New Jersey	66.4%	21.3%	9.0%	1.7%	1.6%
United States	53.6%	27.3%	14.0%	2.7%	2.5%

Source: US Census Bureau, American Community Survey

More than half of all homes in Burlington, Camden and Gloucester Counties were built before 1980. This is of concern because lead paint, which is a key cause of lead poisoning in children, was commonly used inside homes until it was banned in 1978. In Camden City, most houses, more than 8 in 10, were built before 1980, indicating that most homes in Camden City are at risk for having lead paint. While this is a continuing concern, the amount of time spent indoors at home during 2020-2021 due to the COVID-19 pandemic increased exposure to lead among people living in older homes, particularly rental properties.

During 2020 and in to 2021, people of all ages stayed home, working remotely, attending school remotely, and avoiding public places. For many people, including children of all ages, this kept them away from COVID-19 but exposed them to other physical, emotional, and environmental hazards in their homes, including lead.





#### 2015-2019 Median Year of Housing Build by Census Tract

### **Housing and Asthma**

Poor indoor air quality, including the presence of mold, pests and other hazards in the home, are risk factors for asthma, a chronic disease that impacts quality of life. Poor indoor air quality is impacted by environmental factors inside homes as well as within neighborhoods. Therefore, although asthma has a range of contributing risk factors for adults and children, place, including housing age and neighborhood environmental factors, impacts asthma and health.

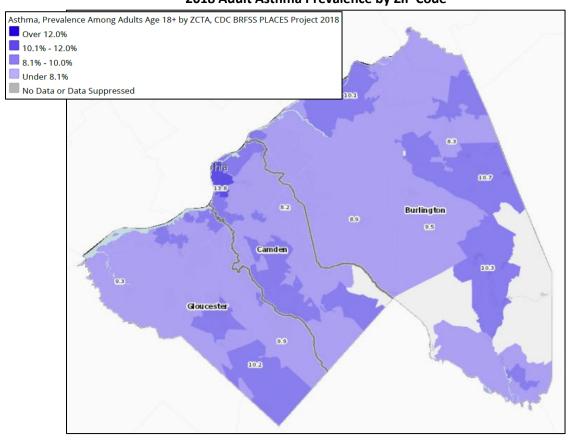


2019 High School Students Ever Diagnosed with Asthma

	New Jersey	United States
Total	22.9%	21.8%
Race and Ethnicity		
Asian	19.5%	22.6%
Black or African American	23.8%	29.2%
Latinx origin (any race)	22.0%	21.0%
White	23.6%	19.8%

Source: Centers for Disease Control and Prevention, YRBS

# 2018 Adult Asthma Prevalence by ZIP Code





# **People Experiencing Homelessness**

The Point-in-Time (PIT) count is a count of sheltered and unsheltered people experiencing homelessness on a single night in January, which is mandated by the U.S. Department of Housing and Urban Development (HUD) in communities nationwide. Sheltered locations include emergency shelters and transitional housing. Unsheltered locations include cars, streets, parks, etc. PIT data provides insight into the numbers of people experiencing homelessness in communities and service gaps. Monarch Housing Associates conducts the PIT Count for all of New Jersey.

The 2021 PIT count was greatly affected by the COVID-19 pandemic, and does not reflect the same data collected in previous years. As a result, the 2021 counts do not fully reflect the total population experiencing homelessness and are not comparable to previous PIT counts. Therefore, the results from the 2021 PIT count was excluded from this CHNA study.

**2020 Point-in-Time Count of People Experiencing Homelessness** 

		Persons Experien	cing Homelessness	
	New Jersey	<b>Burlington County</b>	Camden County	Gloucester County
Total Individuals	9,663	553	633	122
Total Households	7,365	366	563	63
Household Type				
Families with children	1,076	77	27	28
Individual Characteristics				
Chronic homeless	1,743	97	212	8
Veterans	595	8	124	1
Young adults	514	46	46	10
Shelter Type				
Emergency Shelter	6,030	498	260	104
Transitional Housing	1,837	30	165	12
Unsheltered	1,786	25	208	6

Source: New Jersey Coalition to End Homelessness

# 2020 Camden City Point-in-Time Count of People Experiencing Homelessness

Total Persons Experiencing Homelessness	Percent of Total in Camden County	Sheltered Persons Experiencing Homelessness	Unsheltered Persons Experiencing Homelessness
458	76.5%	295	163



# Internet Access - A Bridge and a Barrier

When reviewed as a group, nearly all households in the South Jersey area have access to a computer device, laptop or smartphone as well as access to the internet. However, when Camden City is reviewed independently, the proportion of households with access to a computer, laptop or smartphone range from 50-79%, and roughly 1 in 3 households do not have internet access, despite

Telehealth is here to stay. It is amazing for following up with care and increasing access to patients with social anxiety or anxious because of COVID from leaving their home.

Focus Group Participant

being a densely populated urban area. *This* 

disparity prevents families from accessing school and educational resources, remote work opportunities, online support services and public benefits, telehealth services, behavioral health services and connections to social support such as faith-based services, family and friends.

## 2015-2019 Households by Digital Access

**Green** = 10+ percentage points above the other geographies

Red = 10+ percentage points below the other geographies

	W	ith Computer Acce	With Internet Access		
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Burlington County	93.3%	85.7%	82.3%	89.2%	88.8%
Camden County	90.2%	77.9%	79.5%	84.2%	83.9%
Camden City	79.5%	50.1%	70.9%	64.2%	63.9%
Gloucester County	92.6%	84.2%	81.1%	88.3%	88.0%
New Jersey	91.4%	81.6%	81.3%	86.1%	85.8%
United States	90.3%	77.8%	79.9%	83.0%	82.7%

Source: US Census Bureau, American Community Survey

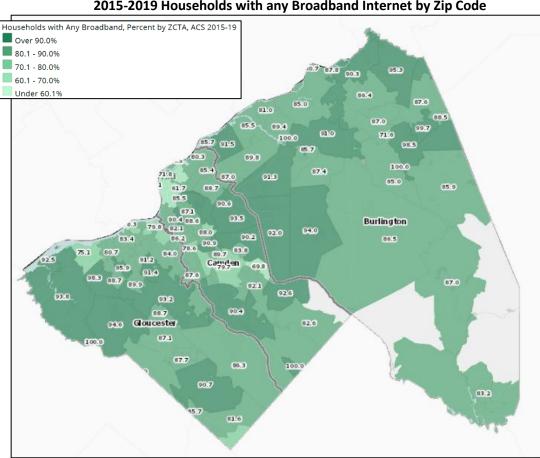
Starting the utilization of telemedicine in situations where you couldn't see them before - people with disabilities who couldn't easily get to the office, or people who are not feeling well – they could still be seen. We remain at about 60% telehealth in my office, and I don't see that changing.

**Focus Group Participant** 

Having access to the internet, whether through computers or cell phone connects people to school, employment opportunities, health care, family and friends, and special interest groups.

Barriers to accessing the internet – ranging from not understanding how to use devices, availability or cost of broadband access or the limits of data plans – stop people of all ages and walks of life from making connections to care, services and one another.





2015-2019 Households with any Broadband Internet by Zip Code

Older patients need more help with telehealth and MyChart. They need help with how to use it and how to work it and had to rely on family members.

Focus Group Participant

I think virtual stinks, but as a person who works with youth, there's also a beauty in it because it's easier to meet with clients instead of driving. It's really easy to do virtual visits instead of home visits, and I can help more people.



# **Social Determinants of Health and Health Equity:**

# Where we live impacts choices available to us

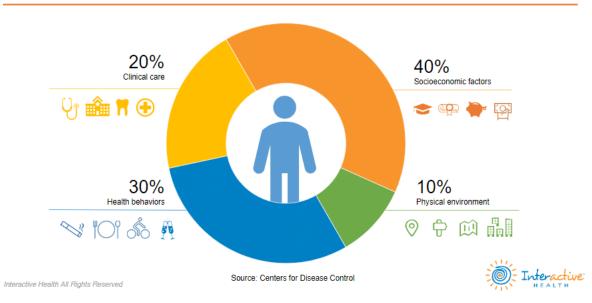
The mix of ingredients that influence each person's overall health profile include individual behaviors, genetics, accessibility and quality of health services, the physical or built environment, and socioeconomic conditions known as "social determinants of health." Public health agencies, including the US Centers for Disease Control (CDC), widely hold that at least 50% of a person's health profile is determined by social determinants of health.

These choices impact your income, wellness and ultimately how long you live. These place-based

# Until everyone has the same choices, we don't have health equity.

choices combined with lived experiences like discrimination and racism, inform the decisions everyone makes. Disparities or differences in health outcomes between different groups of people are often find their roots in social structural factors that have been in place long before today. Social determinants of health are typically grouped into five domains: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Addressing social determinants of health is a primary approach to achieving *health equity*.

#### WHAT MAKES US HEALTHY?



In order to achieve health equity, we need to look beyond the healthcare system to dismantle systemic inequities born through racism and discrimination that have overt and implied in many of our social structures, like power and wealth distribution, education and job opportunities, and housing and safe environments. By acknowledging the impact of many of the structural inequities that have existed in our communities, we can make more equitable and effective plans to build a healthier community for all people now and in the future.

Virtua Health 2022 CHNA 

To all the second of the second



# **Tools for Identifying Disparity and Inequities**

A host of indexes are available to illustrate the potential for health disparities and inequities at the community-level based on social determinants of health (SDoH). A description of each index used in this report is provided below, followed by data visualizations of each tool that show how well South Jersey communities fare compared to state and national benchmarks.

Community Need Index (CNI): The CNI is a zip code-based index of community need calculated nationwide, based on socioeconomic barriers, including income, culture, education, insurance, and housing. The CNI scores zip codes on a scale of 1.0 to 5.0, with 1.0 indicating a zip code with the least need and 5.0 indicating a zip code with the most need compared to the US national average of 3.0. The CNI is strongly linked to variations in community healthcare needs and is a good indicator of a community's demand for a range of healthcare services.

**GINI Index:** (World Bank estimate) The Gini Index, measures the distribution of income across a population. The GINI Index combines a variety of economic and social indicators to create an index score ranging from 0-100, with a score of 0 representing perfect equality and a score of 100 representing perfect inequality. This GINI Index is used to identify the level of economic inequality within a municipality, demonstrating the breadth of disparity within a town or city.

**Area Deprivation Index (ADI):** The ADI has been in use by Heath Resources and Services Administration (HRSA) for more than 30 years to inform health care delivery and policy. The ADI provides a census block group measure of socioeconomic disadvantage based on income, education, employment, and housing quality. A block group is a subdivision of a census tract and typically contains between 250 and 550 housing units.

**County Health Rankings (CHR):** The CHR captures a wide range of health, economic, and social indicators on a county level for all counties across the US. Each year CHR publishes key indicators and ranks each county by state based on their reported outcomes. The CHR model illustrates where action can be taken to improve health and eliminate disparate barriers to opportunity.

Asset Limited Income Constrained Employed (ALICE): The ALICE threshold is an index that measures the minimum income level required for survival for an average sized household, based on localized cost of living and local average household sizes. The ALICE index captures the percent of households whose income is above the federal poverty level, but below the threshold necessary to meet all basic needs according to the cost of living in specific communities.

**COVID-19 Community Vulnerability Index (CCVI):** The CCVI, developed by Surgo Ventures, assesses every US community 's vulnerability to infectious disease spread based on existing health, economic, and social factors. These factors include socioeconomic status, language barriers, population density, and housing insecurity with access to healthcare and comorbidities among the population. Communities with higher vulnerability have preexisting economic, social, and physical conditions that may make it hard to respond to and recover from an outbreak like COVID-19.

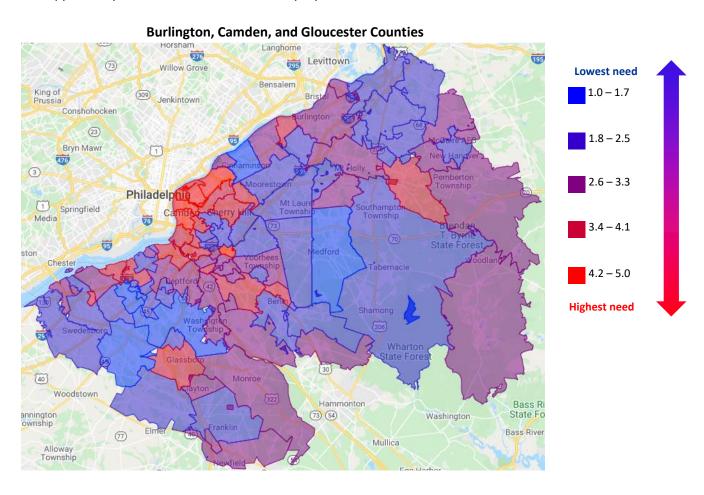


# **Community Need Index (CNI)**

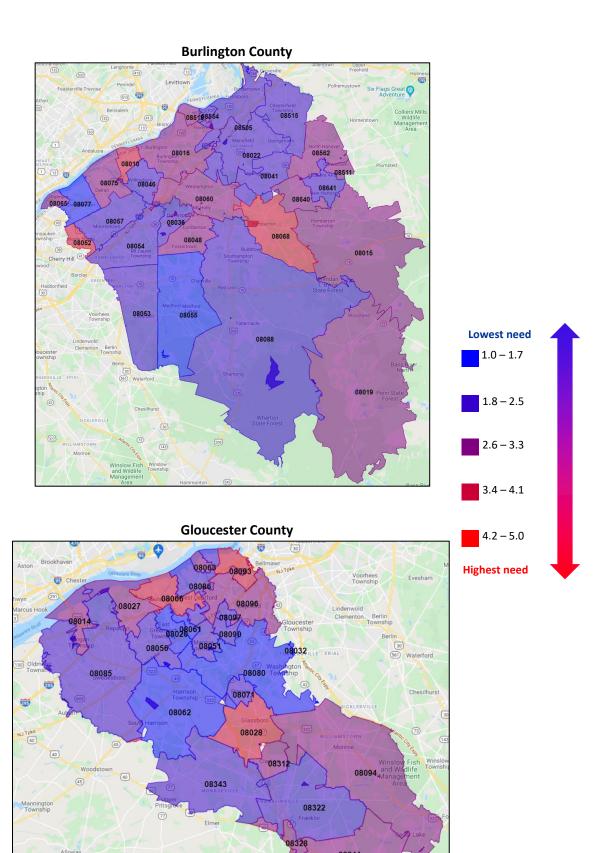
Developed in 2004 by Dignity Health and IBM Watson Health<sup>™</sup>, the CNI score is an average of five different factors that measure various socioeconomic indicators (income, cultural barriers, education, health insurance, housing) for each community using 2020 source data to determine overall health needs. The CNI is strongly linked to variations in community healthcare needs and is a good indicator of a community's demand for a range of healthcare services, and as such, represents a useful planning tool for prioritization of geographic interventions.

The zip codes within South Jersey reflect the full CNI spectrum. The map demonstrates that across the region, pockets of high need exist in tandem to well-resourced communities. The distinct socioeconomic characteristics that make up neighborhoods drive overall need.

The CNI helps better target specific neighborhoods that may need more robust exploration, intervention, and opportunity in order to increase health equity for all.







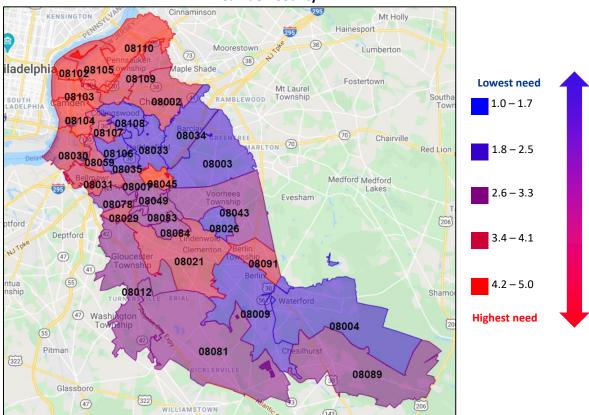
Virtua Health 2022 CHNA 40

Pittsgrove

Quinton







2015-2019 Social Determinants of Health by Camden City and Neighboring Community Zip Code

	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than HS Diploma	Without Health Insurance	CNI Score
08105, Camden	32.2%	44.6%	63.6%	35.1%	14.7%	5.0
08104, Camden	37.0%	45.7%	31.6%	31.5%	8.1%	5.0
08103, Camden	39.9%	52.7%	27.5%	24.5%	11.1%	5.0
08102, Camden	47.2%	59.4%	52.6%	41.1%	12.0%	5.0
New Jersey	10.0%	14.0%	31.3%	10.2%	7.8%	NA

Source: US Census Bureau, American Community Survey

2015-2019 Population by Race and Ethnicity

	White	Black or African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
08105, Camden	29.7%	24.5%	3.5%	37.9%	3.6%	68.4%
08104, Camden	18.5%	57.6%	0.5%	16.8%	6.2%	36.1%
08103, Camden	17.5%	58.8%	1.9%	16.9%	3.7%	32.9%
08102, Camden	27.9%	27.1%	1.0%	39.9%	4.1%	63.9%
New Jersey	67.8%	13.5%	9.5%	6.3%	2.7%	20.2%

Source: US Census Bureau, American Community Survey





## **GINI Index by Municipality**

The GINI Index measures economic inequality within municipalities, combining standardized economic indicators to measure the economic heterogeneity of a community. The index derived for each municipality comprises a variety of social and economic indicators that are combined and weighted to create a score for each community that can be compared to any other municipality.

The GINI Index looks within each town to measure the inequities within the town borders and determines a score that can be compared to other towns. This approach helps identify areas where systemic barriers and social determinants of health can be addressed at a small-scale level.

A large GINI Index represents more inequality, while a smaller GINI Index represents greater economic equity. The municipalities within Camden City generally have greater economic inequity than New Jersey (48.14%) or the US (48.23%) as a whole.

**GINI Index by Municipality** 

	GINI Index
08105, Camden	48.25%
08104, Camden	49.38%
08103, Camden	50.49%
08102, Camden	53.74%
New Jersey	48.14%
United States	48.23%

Source: US Census Bureau, 2015-2019

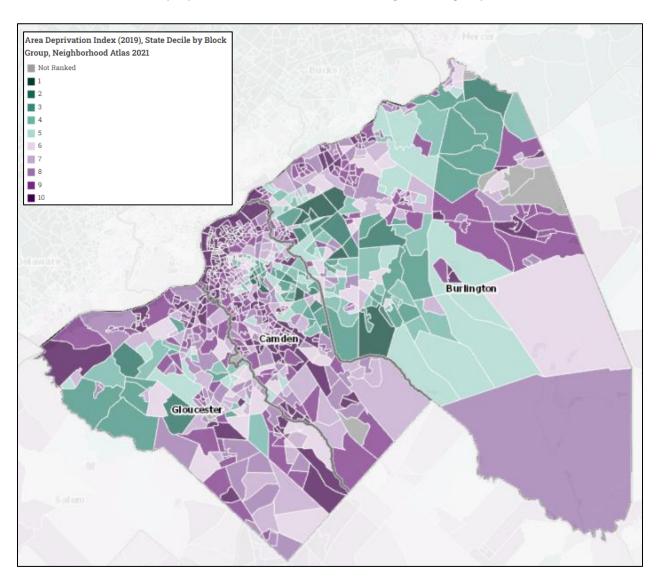
Things have never been great for everybody. Life has always been miserable for lots of people.

Key Informant Interview, healthcare provider



## **Area Deprivation Index (ADI)**

The ADI is a national index that enables ranking of neighborhoods by a weighted measurement of socioeconomic disadvantage. The ADI allows particular neighborhoods to be compared with surrounding neighborhoods by census block group, as well as with neighborhoods measured in the same way throughout the United States. A score of 1 (dark green) indicates the least disadvantaged block groups, while a score of 10 (dark purple) indicates the most disadvantaged block groups.





# **County Health Rankings (CHR)**

Each year, the University of Wisconsin Population Health Institute, in partnership with the Robert Woods Johnson Foundation, releases the County Health Rankings report measuring the health of every county in every state in the nation. These data are then analyzed to create rankings of counties within each state based on standardized indicators that impact health.

# County Health Rankings Out of 21 Counties in New Jersey

(1 is the best, 21 is the lowest)

	Burlington County			Ca	mden Cour	nty	Gloucester County		
	2021 Ranking	2020 Ranking	2019 Ranking	2021 Ranking	2020 Ranking	2019 Ranking	2021 Ranking	2020 Ranking	2019 Ranking
Health Outcomes	13	13	10	19	18	20	15	15	16
Length of life	12	12	11	17	17	17	16	16	14
Quality of life	12	12	9	17	18	20	14	14	18
Health Factors	8	7	8	16	15	15	11	13	13
Health behaviors	11	7	10	17	19	17	16	16	18
Clinical care	6	6	5	13	13	12	14	14	14
Social and Economic Factors	7	7	6	15	16	14	10	10	10
Physical environment	20	21	21	21	13	16	9	20	20

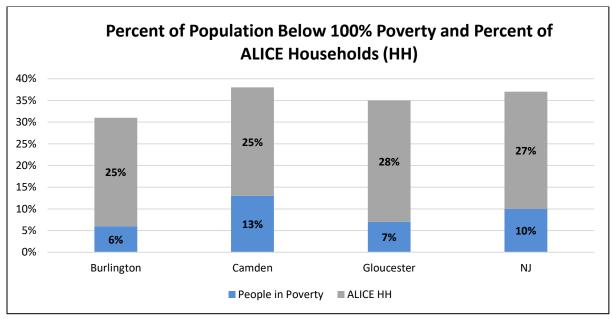
Source: County Health Rankings, 2019-2021



#### Asset Limited Income Constrained Employed (ALICE)

The ALICE threshold is an index that measures the minimum income level required to meet all basic needs for an average sized household, based on localized cost of living and local average household sizes. The ALICE index captures the percent of households whose income is above the federal poverty level, but below the threshold necessary to meet all basic needs according to the cost of living in specific communities. ALICE measures the proportion of working poor and households who struggle to meet basic needs and are a paycheck or two away from acute financial strife.

While the proportion of people living below the poverty level is relatively low across South Jersey, 1 in 4 households met the ALICE threshold of working but not being able to make ends meet **before the start of the COVID-19 pandemic.** While the data regarding these measures during the pandemic are not yet available, anecdotal information suggests it is likely that the proportion of struggling households has increased during more recent years.



Source: United for ALICE, 2018

People who are impoverished, it has gotten worse for them. If anybody was already in a bad way, COVID, families were not able to be cared for. It was already terrible, but when they got COVID they couldn't get the care they needed and were in close quarters and it was mainly happening in needy and dense populations. It's hard to come back from that.

**Focus Group Participant** 



## **COVID-19 Vulnerability Index by Census Tract**

COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19, and potentially other infectious diseases.

Surgo Ventures developed the COVID-19 Community Vulnerability Index (CCVI) to measure existing structural issues, such as population density, existing levels of chronic disease, proportions of uninsured, and others, to determine the scale of a community's vulnerability to an infectious disease event such as COVID-19.

**VERY HIGH** 

HIGH

**MEDIUM** 

LOW

LOW

LOW

**VERY LOW** 

#### **Burlington County What makes Burlington County Vulnerable Population density** LOW Minorities & non-English speakers **Unemployment & low income** Burlington County, NJ has lower vulnerability than most U.S. counties. **Crowded living & working areas Housing & transport challenges** NEW **JERSEY Health system challenges** on Florence Bensalem Older age & health issues enham Cinnaminson Manchester Lumberton Toms Township ia Mount Laurel Berke Medford ldon Towns Voorhees Township rd Shamong Township Wareto Barnec Stafford oro Township Winslow Little Egg Harbor Township Overall Vulnerability 0.4

Source: COVID Act Now



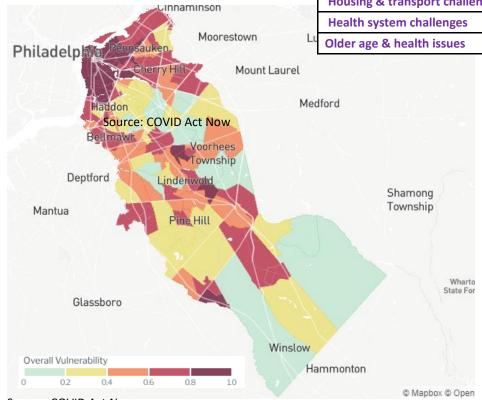
# **Camden County**

#### **VERY HIGH**



Camden County, NJ is  $\mbox{more vulnerable than 80\%}$  of U.S. counties.

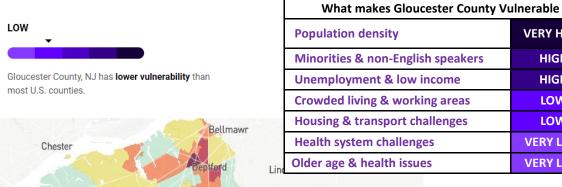
What makes Camden County Vi	ulnerable
Population density	VERY HIGH
Minorities & non-English speakers	VERY HIGH
Unemployment & low income	HIGH
Crowded living & working areas	HIGH
Housing & transport challenges	HIGH
Health system challenges	MEDIUM
Older age & health issues	LOW
	Population density  Minorities & non-English speakers  Unemployment & low income  Crowded living & working areas  Housing & transport challenges  Health system challenges



Source: COVID Act Now



# **Gloucester County**



**VERY HIGH** 

HIGH

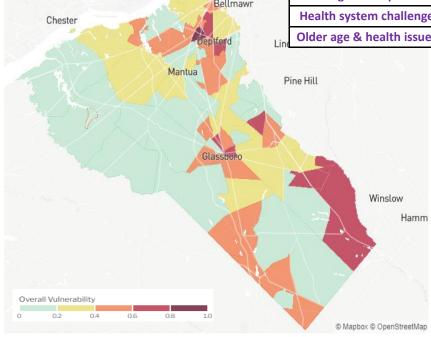
HIGH

LOW

LOW

**VERY LOW** 

**VERY LOW** 

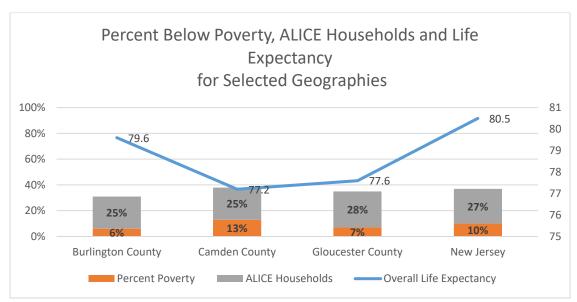


Source: COVID Act Now



## Life Expectancy

Where we live impacts how long we live. Structural factors, including housing quality and affordability, environmental conditions, employment, education, transportation, food security and the experience of racism all play a role in impacting the quality and length of lives.

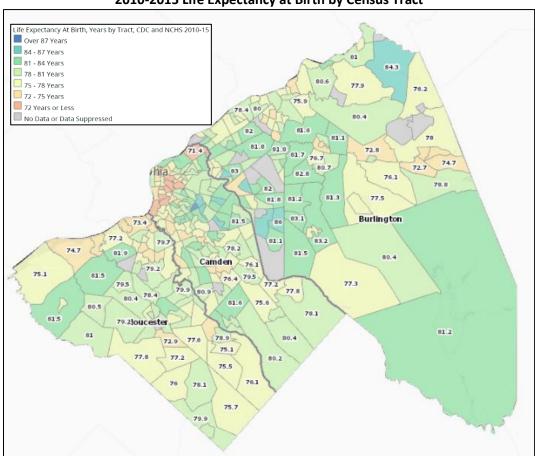


Source: National Vital Statistics System91.3 2017-2019; United for ALICE 2018

Income is a factor in both quality and length of life. The graph below shows the association between the percent of the population below the federal poverty level, the percent of working households meeting the ALICE threshold, indicating that they are unable to meet basic needs based on the local cost of living despite having an income, and life expectancy. This graph shows that that 1 in 4 South Jersey households met the ALICE threshold before the COVID-19 pandemic, and all South Jersey Counties had lower life expectancies than New Jersey as a whole.



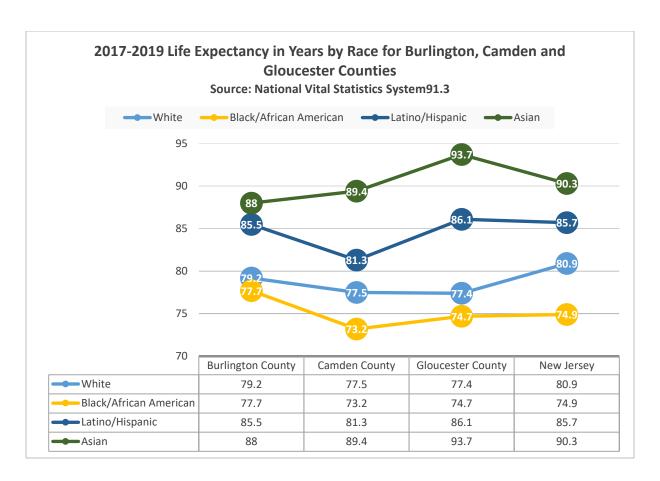
When reviewed by Census Tract, this map which shows life expectancy at birth by census tract, illustrates that where you live plays a role in how long you live.



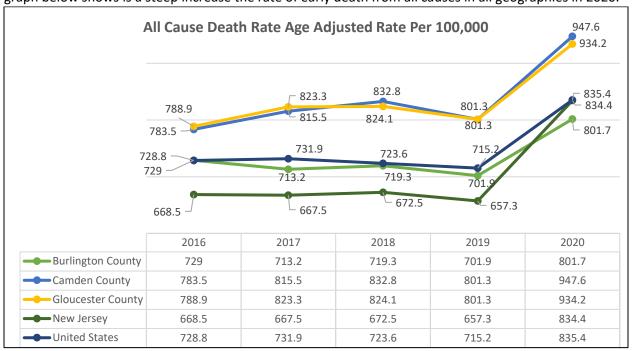
2010-2015 Life Expectancy at Birth by Census Tract

Place of residence is not the only factor impacting the length and quality of life. **Structural factors** affect the range of choices available such as the **quality of local schools**, the **availability of healthy foods**, and the **experience of discrimination and racism** as a barrier to accessing tools for healthy living and a source of chronic stress all play a role in the quality and length of life. When life expectancy is reviewed by race and ethnicity, **clear differences by race and ethnicity appear**.





While there is variation between the counties, the death rate due to all causes has consistently been higher in Burlington, Camden and Gloucester Counties than New Jersey as a whole over time. What the graph below shows is a steep increase the rate of early death from all causes in all geographies in 2020.





Source: Centers for Disease Control and Prevention

The steep increase in 2020 identified above is evidence of the impact of COVID-19, not only as an emerging source of early death, but also as a contributing factor in early death from other leading causes of death. The top ten leading causes of death throughout New Jersey for the years preceding the COVID-19 pandemic are listed here.

	Ten L	eading (	Causes o	f Death	among N	lew Jers	ey Resid	dents, 20	010-201	9
Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Heart Disease									
	18,739	18,340	18,343	18,462	18,323	18,649	18,598	18,842	19,048	18,729
2	Cancer									
	16,824	16,716	16,485	16,319	16,593	16,270	16,377	16,262	16,012	15,705
							Unintentional	Unintentional	Unintentional	Unintentional
3	Stroke	Stroke	Stroke	Stroke	Stroke	Stroke	Injury	Injury	Injury	Injury
	3,404	3,422	3,439	3,456	3,419	3,413	3,840	4,484	4,676	4,658
						Unintentional				
4	CLRD	CLRD	CLRD	CLRD	CLRD	Injury	Stroke	Stroke	Stroke	Stroke
	3,108	3,159	3,273	3,245	3,048	3,219	3,401	3,475	3,444	3,553
	Unintentional	Unintentional	Unintentional	Unintentional	Unintentional					
5	Injury	Injury	Injury	Injury	Injury	CLRD	CLRD	CLRD	CLRD	CLRD
	2,491	2,688	2,991	3,029	2,970	3,202	3,065	3,228	3,213	3,055
6	Diabetes	Diabetes	Diabetes	Diabetes	Diabetes	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's
	2,098	2,222	1,989	2,043	2,062	2,260	2,435	2,830	2,710	2,633
7	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's	Septicemia	Diabetes	Diabetes	Septicemia	Septicemia
	1,881	1,962	1,883	1,812	1,962	1,957	1,949	1,908	1,948	1,983
8	Septicemia	Septicemia	Septicemia	Septicemia	Septicemia	Diabetes	Septicemia	Septicemia	Diabetes	Diabetes
	1,660	1,727	1,672	1,785	1,764	1,933	1,925	1,897	1,881	1,934
	Kidney									
9	Disease									
	1,582	1,492	1,431	1,400	1,502	1,582	1,535	1,591	1,672	1,622
	Influenza &									
10	Pneumonia									
	1,129	1,258	1,131	1,356	1,234	1,402	1,208	1,337	1,465	1,270

The increase in deaths due to **unintentional injury** is due to the increase in unintentional poisoning deaths, which include unintentional drug overdoses.

Data source: New Jersey Death Certificate Database. Retrieved on 5/7/21 from New Jersey Department of Health, New Jersey State Health Assessment Data

Prepared by: Center for Health Statistics, New Jersey Department of Health

NJSHAD: <a href="http://nj.gov/health/shad">http://nj.gov/health/shad</a>

5/7/202





# **COVID-19: Impact on Communities**

COVID-19 is the name of the disease caused by the <u>SARS-CoV-2</u> virus. "CO" stands for corona, "VI" for virus, and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. Some refer to COVID-19 as simply "COVID."

## **COVID-19 Prevalence**

The prevalence of COVID-19 infection in a community is typically measured by case incidence, which looks at the number of daily new cases per 100,000 population. It also is important to identify differences in the spread of infection along racial, ethnic, and economic lines. Nationwide, it has been documented that Black/African American and Latinx people are much more likely than others to be infected with COVID-19 and to die from the disease. Although data is still sparse, we know Indigenous people and other people of color are also infected at much higher rates. In the future, it will be possible to get these data specific to South Jersey to understand the nature and severity of these disparities. Currently, the following aggregate data paint a picture of the impact of the pandemic.

New Jersey DVERALL COVID RISK	High	Burlington County, New Jersey OVERALL COVID RISK	High
VEEKLY NEW CASES PER 100K	• 391.0	WEEKLY NEW CASES PER 100K	• 403.7
VEEKLY COVID ADMISSIONS PER 100K	• 11.8	WEEKLY COVID ADMISSIONS PER 100K	• 13.9
PATIENTS W/ COVID (% OF ALL BEDS)	• 4.0%	PATIENTS W/ COVID (% OF ALL BEDS)	• 4.0%
		CovidActNow.org Last Upda	
CovidActNow.org Last Upda	ated 5/27/2022	Covid Activoworg Last Upda	ted 5/27/2022
CovidActNow.org  Last Upda  Camden County, New Jersey  OVERALL COVID RISK	High	Gloucester County, New Jersey OVERALL COVID RISK	High
Camden County, New Jersey		Gloucester County, New Jersey OVERALL COVID RISK	
Camden County, New Jersey OVERALL COVID RISK WEEKLY NEW CASES PER 100K	High	Gloucester County, New Jersey OVERALL COVID RISK	High
Camden County, New Jersey OVERALL COVID RISK	• 371.8	Gloucester County, New Jersey OVERALL COVID RISK  WEEKLY NEW CASES PER 100K	High 348.0



# **Age Adjusted Rates**

The CDC and the State of New Jersey track COVID-19 infections and deaths by race and ethnicity to identify, prevent, treat, and vaccinate communities most impacted by COVID-19. The method of determining effects between different groups is arrived upon by calculating an age adjusted rate per 100,000 population. Age adjusting is a statistical method of making a fair comparison of two or more groups who have different age distributions. For example, in New Jersey, Black/African American and Latinx racial and ethnic groups have younger age distributions than White non-Hispanics. Since negative outcomes such as hospitalization and death from COVID-19 increase with advanced age, by age adjusting, the impact of COVID-19 on groups with different distributions of age can be compared as if the effect of age distribution is the same in all populations.

Although the number of infections, hospitalizations, and deaths among Whites in New Jersey are larger numbers, when the raw numbers are adjusted to reflect a standardized age distribution that are also proportional to the number of individuals of each race and ethnic category in New Jersey, the negative impact of COVID-19 is more significant among Black/African Americans and Latinx people.

The preliminary list of the leading causes of death in New Jersey during 2020 indicate that for Black/African American, Asian, and Latinx/Hispanic people, COVID-19 became the #1 leading cause of death in 2020, but is #3 among White non-Hispanic New Jerseyans.

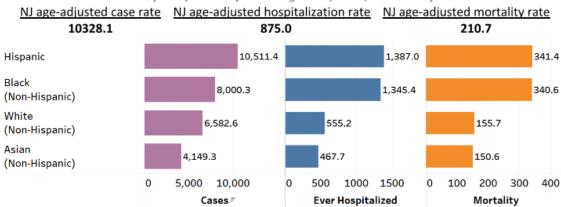
	Leading Causes of Death among New Jersey Residents by Race/Ethnicity, Preliminary 2020 Data												
	White, non-Hispanic		Black, non-Hispanic		Hispanic (of any rad	ce)	Asian, non-Hispanic						
	Cause	Count	Cause	Count	Cause	Count	Cause	Count					
Rank	All causes of death	65,243	All causes of death	13,623	All causes of death	10,831	All causes of death	3,795					
1	Heart disease	14,585	COVID-19	2,544	COVID-19	3,505	COVID-19	947					
2	Cancer	11,415	Heart disease	2,502	Heart disease	1,478	Heart disease	623					
3	COVID-19	8,801	Cancer	1,867	Cancer	1,301	Cancer	610					
4	Unintentional injuries	2,785	Unintentional injuries	742	Unintentional injuries	640	Stroke	168					
5	Stroke	2,550	Stroke	585	Diabetes	352	Diabetes	149					
6	CLRD	2,366	Diabetes	536	Stroke	305	Unintentional injuries	119					
7	Alzheimer disease	2,163	Kidney disease	345	Alzheimer disease	210	Septicemia	89					
8	Septicemia	1,401	CLRD	335	Influenza and pneumonia	203	Kidney disease	82					
9	Diabetes	1,293	Septicemia	324	Septicemia	193	Influenza and pneumonia	80					
10	Influenza and pneumonia	1,103	Essential hypertension	276	Chronic liver disease	169	Alzheimer disease	58					



The following graphics were designed by the New Jersey Department of Health to demonstrate the counts and age adjusted rates of COVID-19 infections, hospitalizations and deaths by race and ethnicity in New Jersey as of August 2021.

#### All data are preliminary and subject to change

Age-adjusted laboratory confirmed case, hospitalization, and mortality rates by race/ethnicity as of *August 19, 2021*, New Jersey



Age-adjusted laboratory confirmed case, hospitalization, and mortality rates by race/ethnicity per 100,000:

	Race/Ethnicity	Cases	Ever Hospitalized	Mortality
	White	6582.6	555.2	155.7
Age-adjusted rate per	Black	8000.3	1345.4	340.6
100,000	100,000     Hispanic     10511.4     1387.0       Asian     4149.3     467.7       White     6601.0     790.1       Black     8142.1     1407.3	341.4		
	Asian	4149.3	467.7	150.6
	White	6601.0	790.1	265.3
Crudo roto nor 100 000	Black	6582.6 555.2 8000.3 1345.4 10511.4 1387.0 4149.3 467.7 6601.0 790.1 8142.1 1407.3 10231.8 1166.5 4262.9 464.6 322979 38657 93646 16186 188200 21456 37223 4057 42.2% 44.3% 12.2% 18.6% 24.6% 24.6% 4.9% 4.7% N) 765307 87168	343.8	
Crude rate per 100,000	Hispanic	10231.8	1166.5	242.4
	Asian	4262.9	464.6	131.7
	White	322979	38657	12980
Cara caumta	Black	93646	16186	3954
case counts	Hispanic	188200	21456	4459
	Asian	37223	4057	1150
	White	42.2%	44.3%	54.9%
Age-adjusted rate per 100,000  Crude rate per 100,000  Case counts  (%)  To  Total laboratory- onfirmed cases: 130,076 Total hospitalized cases: 1,711	Black	12.2%	18.6%	16.7%
	Hispanic	24.6%	24.6%	18.9%
(%)	Asian	4.9%	4.7%	4.9%
	Total cases (N)	765307	87168	23628
Total laboratory- confirmed cases: 930,076	Percent of total records with age and	82.3%	95.0%	98.5%
Total hospitalized cases: 91,711 Total deaths: 24,000	race/ethnicity data			

#### Notes

- This report includes PCR positive records (cases, hospitalized and mortality) with known race/ethnicity and age information.
- Data are obtained from Communicable Disease Reporting and Surveillance System (CDRSS).
- . COVID-19 associated deaths are identified through public health investigations (i.e., Disease Surveillance) and NJDOH's vital statistics system.
- Hospitalization data have been collected through public health investigations.
- Age-adjusted rates on cases who identify as American Indian/Alaska Native and Native Hawaiian/Pacific Islander, or Other race categories were
  excluded. Hispanic/Latino includes people of any race; White, Black, Asian and Other exclude Hispanic ethnicity.
- Confirmed case rates include cases who died, case and mortality data are not <u>mutually exclusive</u>.
- Age is standardized using U.S. 2000 standard population, source: https://www-doh.state.nj.us/doh-shad/home/AARate.html
- Crude rates are calculated using 2018 NJ population estimates obtained from NJ Department of Labor.







# **COVID-19 Vaccines**

Social distancing and wearing masks can help protect us all from the spread of the disease. When a large portion of a community (the herd) becomes immune to a disease, the spread of disease from person to person becomes less likely. This phenomenon is called herd immunity. Vaccines are a necessary component of reaching herd immunity, since it is still unclear how well natural immunity protects people from reinfection.

COVID-19 Vaccination Count and Percent by Age and Dosage as of 12.10.2021

	Burlingto	n County	Camdei	n County	r County	
Age	At least One Dose	Fully Vaccinated	At least One Dose	Fully Vaccinated	At least One Dose	Fully Vaccinated
Total	354,688	306,967	372,977	315,195	200,569	166,509
% Of Total Population	79.6%	68.9%	73.6%	62.2%	69.0%	57.1%
% Of Population ≥ 12 Years of Age	89.1%	78.3%	84.0%	72.1%	77.7%	65.2%
% Of Population ≥ 18 Years of Age	91.4%	80.2%	86.0%	73.6%	80.0%	66.9%
% Of Population ≥ 65 Years of Age	95.0%	89.6%	95.0%	81.7%	95.0%	77.2%

Source: Centers for Disease Control and Prevention



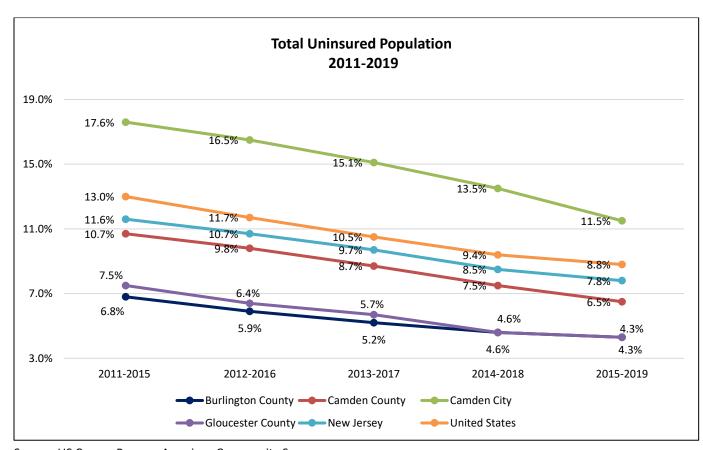
# A Closer Look at Health Statistics

#### Access to Healthcare

The South Jersey area has an abundance of high-quality health and social services, education, and businesses, which contribute to creating a healthy place to live. However, not everyone has the same access to these community resources. A closer look at the data illuminates disparities among black and brown communities and those with lower incomes in receiving the services they need when they need them. The data illustrate the critical importance of social determinants of health as root causes of health disparities.

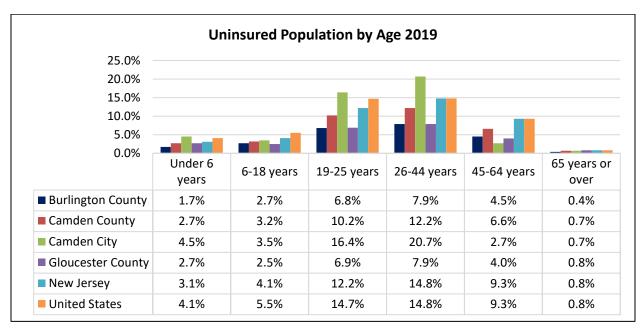
The barriers that keep people who need services from receiving them are varied and many. We know that social determinants of health, lack of access to a computer or internet connection, limited English language capacity, lack of childcare or transportation and lack of health insurance persist as barriers to accessing care.

Lack of health insurance is a barrier to accessing health care. Preventative care, such as prenatal care and cancer screenings, can detect small problems that can be treated more easily and effectively than if treatment is delayed. Not having health insurance, the high cost of care, and not having a regular doctor are barriers to accessing preventative care, including prenatal care. While the percent of all populations without health insurance is steadily decreasing, more than 1 in 10 people in the City of Camden lack health insurance.

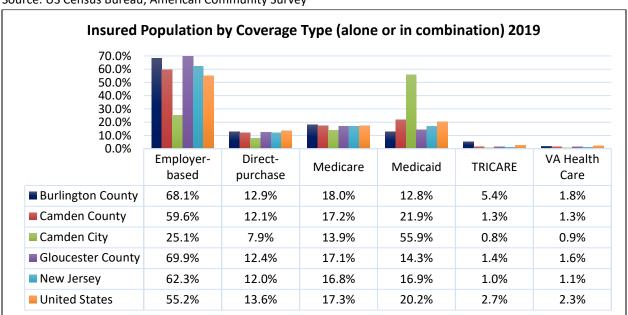


Source: US Census Bureau, American Community Survey



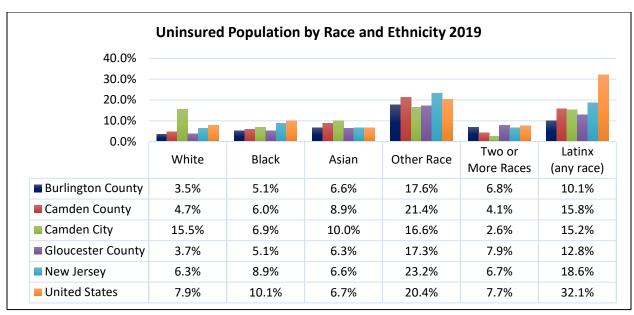


Source: US Census Bureau, American Community Survey

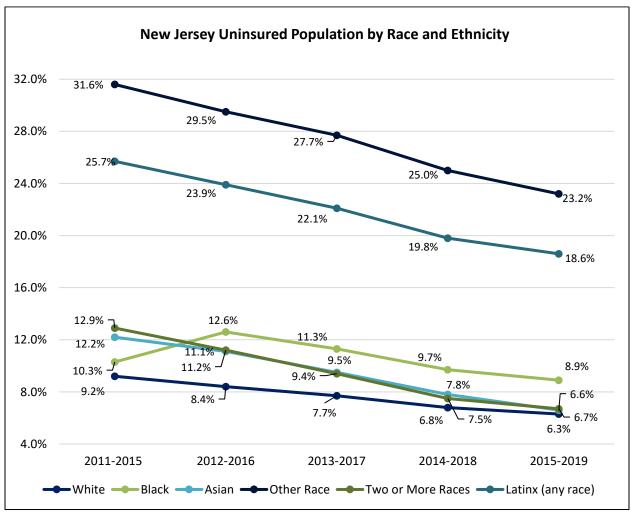


Source: US Census Bureau, American Community Survey





Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

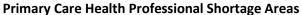


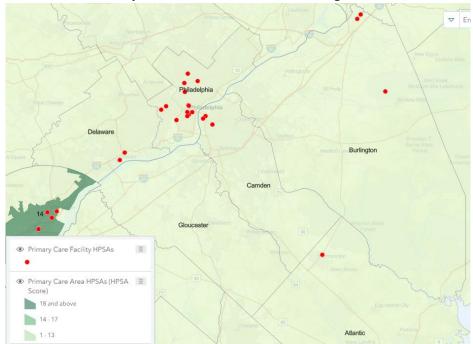
The availability of providers of health care impacts access to care as well. There is wide variability in the availability of primary care and dental providers between the South Jersey counties. This variability is also reflected in the proportion of people who accessed routine care.

**Primary and Dental Provider Rates and Adult Healthcare Access** 

	Primar	y Care	Dental Care		
	Physicians per 100,000 Population (2018)	Routine Checkup within Past Year (2018)*	Dentists per 100,000 Population (2019)	Dental Visit within Past Year (2018)*	
Burlington County	84.8	73.1%	74.7	72.3%	
Camden County	102.9	82.2%	82.1	67.4%	
Gloucester County	54.2	89.3%	46.2	70.9%	
New Jersey	84.7	79.2%	88.0	71.3%	
United States	75.8	75.0%	71.4	66.2%	

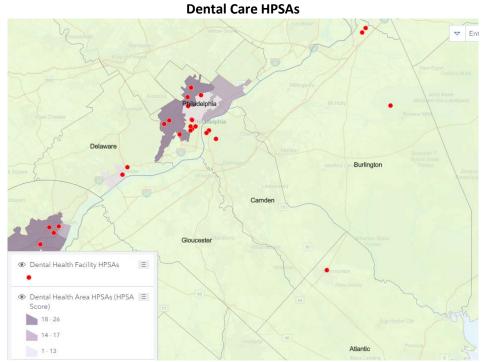
Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, BRFSS \*Data are reported as age-adjusted percentages.





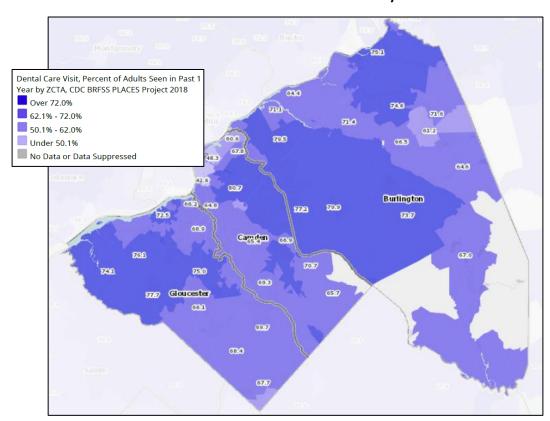
Source: Health Resources and Services Administration, 2021





Source: Health Resources and Services Administration, 2021

# 2018 Adults with an Annual Dental Visit by ZIP Code





# **Chronic Disease**

Prior to 2020, the top leading causes of death among all populations in the U.S. were chronic diseases including (in order of U.S. mortality rates) heart disease, cancer, unintentional injuries, chronic lower respiratory diseases, stroke, and Alzheimer's disease. Across South Jersey, it is clear that preventive care, early diagnosis, and comprehensive treatment are effective at managing disease and prolonging the length and quality of life. However, wide health disparities exist between those that benefit from these lifesaving services and those that die prematurely.

While great innovations expanded the use of home-based monitoring of chronic conditions and telehealth services helped connect people with providers more easily than before, these interventions were not equally accessible for all people for a variety of reasons. The restrictions put in place to help prevent the spread of COVID-19 made accessing screenings and maintenance care for many chronic conditions more challenging. The data reinforce that social determinants of health directly impact health outcomes for chronic disease, resulting in inequities in life expectancy by race and neighborhood. The data presented below provide evidence that prevention, identification, and treatment of chronic disease remains an area of concern throughout South Jersey.

2018 Age-Adjusted Adult (18+) Physical Health Outcomes

	Percent ofPhysically Unhealthy Days Over the Past 30 Days	14 or More Days of Poor Physical Health Over the Past 30 Days
Burlington County	4.0%	11.0%
Camden County	4.2%	12.0%
Gloucester County	3.9%	11.0%
New Jersey	3.7%	11.0%
United States	3.7%	11.8%

Source: County Health Rankings

Smoking and obesity are health behaviors that contribute to the onset of a variety of chronic diseases. While the percentage of adults in Burlington, Camden, and Gloucester Counties are variable, they are generally higher than statewide percentages. These factors contribute to the higher prevalence of most chronic diseases in the South Jersey area when compared to the state and the nation.

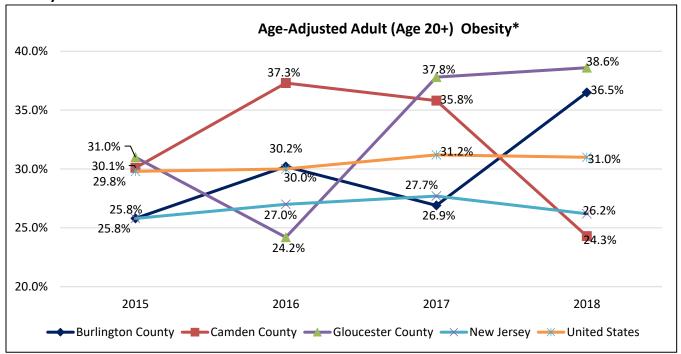
2018 Age-Adjusted Adults (18+) Who Are Current Smokers

	Percentage
Burlington County	17.3%
Camden County	20.0%
Gloucester County	15.8%
New Jersey	13.5%
United States	15.9%

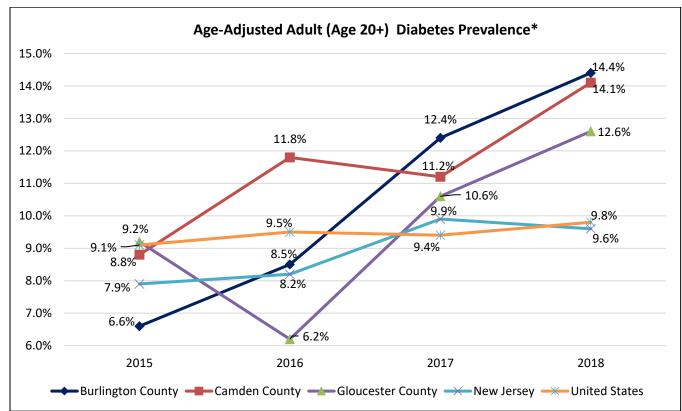
Source: Centers for Disease Control and Prevention, BRFSS and New Jersey Department of Health



# **Obesity and Diabetes**



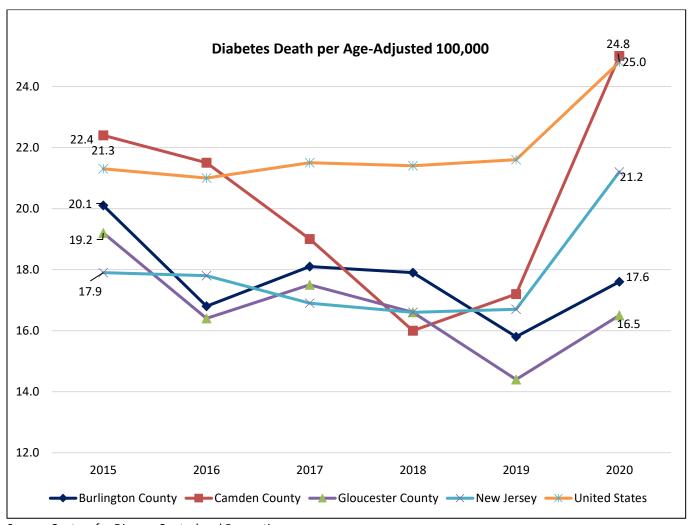
Source: Centers for Disease Control and Prevention, BRFSS, and New Jersey Department of Health \*State and national data are reported as a percentage of adults age 20+ based on data availability.



Source: Centers for Disease Control and Prevention, US Diabetes Surveillance System, and BRFSS \*State and national data are reported as a percentage of adults age 18+ based on data availability.



Despite the high prevalence of diabetes in South Jersey counties, the rate of death due to diabetes in Burlington and Gloucester Counties is lower than the state and the nation. **This is a positive finding, indicating that diabetes is being well managed in these areas.** While Camden County has a higher rate of death due to diabetes than the neighboring counties, it is commensurate with the national death rate, despite having a higher prevalence of diabetes than the nation. While there is opportunity for improvement, this is not necessarily a negative finding for Camden County.



Source: Centers for Disease Control and Prevention



When stratified by race, it is evident that the death rates for White people in South Jersey are far lower than for anyone else. In particular, the table below demonstrates that the rate of death from diabetes amongst Black/African American and Hispanic people in Camden County is notably higher than White people.

## 2020 Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

**Green** = 5+ points below the other geographies

Red = 5+ points above the other geographies

	Total Population	White, Non- Hispanic	Black or African American, Non- Hispanic	Latinx origin (any race)
Burlington County	17.6	13.4	37.0	NA (n= <u>&lt;</u> 10)
Camden County	25.0	22.1	40.1	35.7
Gloucester County	16.5	13.2	NA (n=13)	NA (n= <u>&lt;</u> 10)
New Jersey	21.2	16.5	47.8	25.4
United States	24.8	21.1	46.8	30.9

Source: Centers for Disease Control and Prevention

As we apply lessons learned through COVID-19, we need to apply understanding of persistent disparities among Black/African American and Latinx people in particular and respond to the wide inequality in death rates due to chronic disease.

#### **Heart Disease**

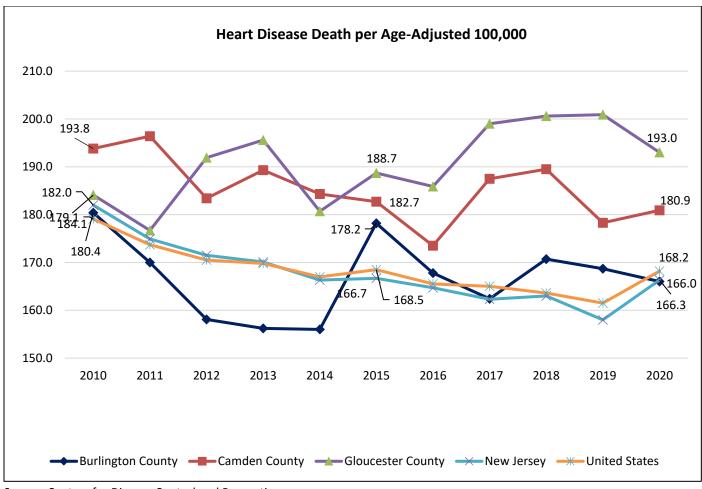
High blood pressure and high cholesterol are both risk factors for death due to heart disease and cardiovascular disease. The prevalence of diagnosed high blood pressure and high cholesterol in all South Jersey counties is generally consistent with New Jersey, which is slightly higher than the nation.

2017 Age-Adjusted Adult (Age 18+) Heart Disease Risk Factors Prevalence

	<del>`</del>	
	Adults with High Blood Pressure	Adults with High Cholesterol
Burlington County	31.7%	29.7%
Camden County	34.1%	33.3%
Gloucester County	32.2%	29.0%
New Jersey	32.5%	31.7%
United States	29.7%	29.3%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS, New Jersey Department of Health





Source: Centers for Disease Control and Prevention

Death due to heart disease in Burlington, Camden, and Gloucester Counties has varied over the past decade, but has generally been higher than state and national rates.

# 2020 Heart Disease Death Rate per Age-Adjusted 100,000, by Race and Ethnicity

**Green** = 10+ points better than the other geographies

Red = 10+ points worse than the other geographies

	Total Population	White, Non- Hispanic	Black or African American, Non- Hispanic	Latinx origin (any race)
Burlington County	166.0	172.6	165.6	N/A (n=17)
Camden County	180.9	186.1	212.9	141.0
Gloucester County	193.0	193.6	224.3	N/A (n=12)
New Jersey	166.3	173.7	219.2	113.7
United States	168.2	165.8	221.9	122.7

Source: Centers for Disease Control and Prevention



#### Cancer

Death from cancer is consistently one of the leading causes of death across the U.S. However, many forms of cancer, if identified early, can be effectively treated and managed. The state of New Jersey has set targets to ensure all people are regularly screened according to established guidelines for common and treatable cancers. These screenings include mammograms, cervical cancer screenings, and colon cancer screenings which, when used according to guidelines, can help identify cancer earlier, increasing the likelihood of a positive outcome. Burlington County met the Healthy New Jersey screening goal for prostate cancer in 2018. None of the other targets for cancer screening were met during that time.

This is of concern because during 2020 2021, in-person appointments (including screening) were reduced in an effort to keep pace with the demand for COVID-19 treatment, as well as reduce the spread of the virus. Additionally, the qualitative data collected suggests that fear of COVID-19, combined with growing mistrust of health care, increased barriers to routine health screenings such as cancer screenings. Delayed screenings can result in later detection of cancer, potentially limiting treatment options.

2016-2018 Age-Adjusted Adult Cancer Incidence and Screening Practices

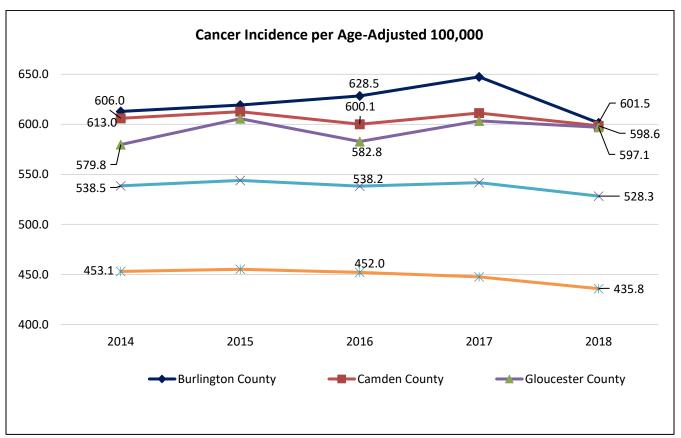
	Invasive Cancer Incidence Rate per 100,000 (2018)	Mammogram in the Past 2 Years (50-74 years)	Cervical Cancer Screening 2 years (21-65 years)	Colon Cancer Screening (50-74 years)
Burlington County	537.9	80.5%	75.6%	73.6%
Camden County	524.6	79.0%	85.8%	68.7%
Gloucester County	533.3	76.8%	86.1%	67.8%
New Jersey	479.8	80.0%	81.5%	66.7%
United States	436.8	77.8%	85.5%	65.0%
Healthy NJ Target	NA	87.5%	93.6%	70.2%

Source: NJSHAD, New Jersey Cancer Registry. Centers for Disease Control and Prevention. United States Cancer Statistics.





The incidence of all cancers has been consistently greater in Burlington, Camden and Gloucester Counties than the state and the nation.



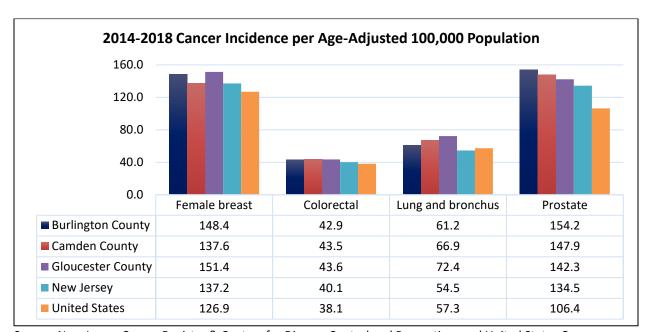
Source: Centers for Disease Control and Prevention

2014-2018 Age-Adjusted Cancer Incidence and Death per 100,000 Population by Race and Ethnicity

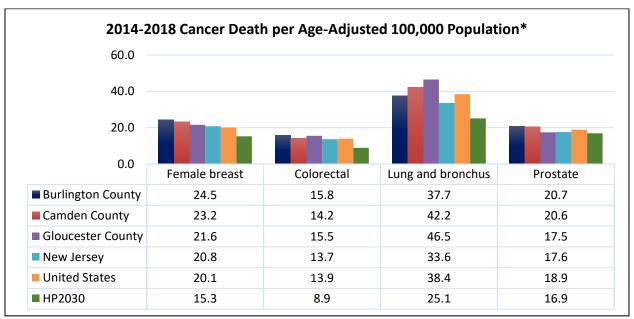
	Burlington County	Camden County	Gloucester County	New Jersey	United States
Cancer Incidence					
Total Population	530.2	527.4	542.1	487.0	449.0
White	541.0	532.2	542.8	499.1	451.3
Black or African American	490.8	541.8	503.4	450.7	445.4
Asian	304.0	314.5	356.8	282.5	291.5
Latinx origin (any race)	469.8	431.5	398.6	392.9	345.5
Cancer Death					
Total Population	162.1	168.8	172.6	148	155.6
White	166.4	169.9	174.2	152.1	156.4
Black or African American	163.1	187.4	185.0	167.1	177.6
Asian	79.1	99.2	NA	74.8	97.4
Latinx origin (any race)	109.7	120.4	NA	97.7	111.3

Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations





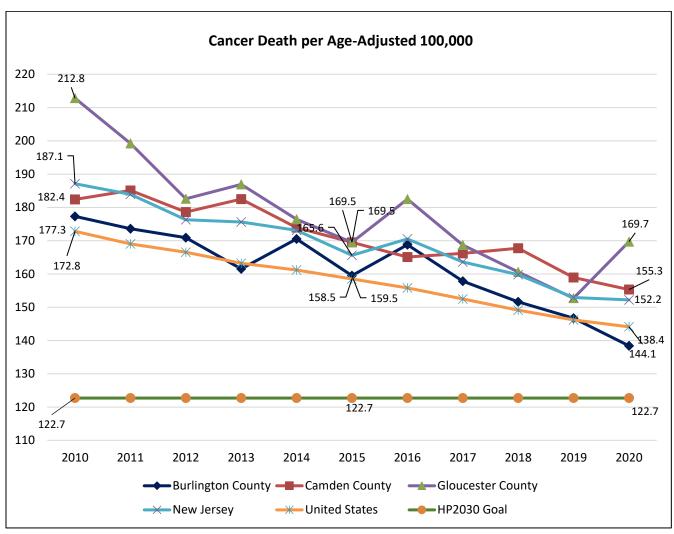
Source: New Jersey Cancer Registry & Centers for Disease Control and Prevention, and United States Cancer Statistics.



Source: Centers for Disease Control and Prevention, and United States Cancer Statistics.



While the rate of death due to all cancers has been variable across all South Jersey counties, it has generally been higher than the state and the nation.



Source: Centers for Disease Control and Prevention



#### **Respiratory Disease**

Lung and respiratory diseases are among the leading causes of death nationwide and contribute towards diminished quality of life. The presence of respiratory disease is the result of a variety of environmental, social, clinical, and individual factors. Therefore, interventions aimed at improving quality of life factors and social determinants of health can have a direct impact on the prevention of respiratory disease, as well as an improvement in the quality of life and longevity among people who have already been diagnosed with a respiratory ailment.

Chronic obstructive pulmonary disease (COPD) refers to a group of diseases that cause breathing related problems including emphysema and chronic bronchitis. These conditions can lead to diminished quality of life and are a leading cause of early death. Smoking is the primary cause of COPD, but environmental pollutants in the home, community, and workplace also play a role. While there is no cure for COPD, there are interventions that can help manage the effects and progression of the disease, but only if the disease is diagnosed. The prevalence of asthma and COPD among adults is particularly high in Burlington

County. 2018 Age-Adjusted Adult Respiratory Disease Prevalence

	Adults with Current Asthma Diagnosis	Adults with COPD
Burlington County	16.1%	14.0%
Camden County	7.4%	2.8%
Gloucester County	9.4%	12.3%
New Jersey	8.4%	5.2%
United States	9.1%	6.2%

Source: Centers for Disease Control and Prevention, PLACES and New Jersey Department of Health.

2018-2020 CLRD Death Rate per Age-Adjusted 100,000, by Race and Ethnicity

	Total Population	White, Non- Hispanic	Black or African American, Non- Hispanic	Latinx origin (any race)
Burlington County	25.8	28.2	20.9	NA
Camden County	31.2	35.4	26.7	16.1
Gloucester County	43.7	46.5	36.4	NA
New Jersey	26.4	30	28.2	12.9
United States	38.1	43.2	29.8	16.3

Source: Centers for Disease Control and Prevention



Because issues relating to chronic disease remain a concern in the South Jersey area, three focus groups with providers, who specialize in chronic disease care, and their patients were conducted. In each group conversation, the participants raised the issues of how access, maintenance and care for people with chronic disease was impacted by COVID-19 emerged in each small group conversation:

The <u>volume</u> of people presenting with chronic disease is <u>not</u> <u>necessarily greater</u> than before the pandemic

The <u>acuity</u> of the manifestation of the chronic disease is <u>far</u> <u>beyond</u> what has been prior

Greater proportions of patients with <u>higher acuity</u> is <u>more</u> <u>complex</u> and challenging to adjust and manage

Existing chronic disease that was not well managed during COVID-19 period has also increased risk for additional chronic disease diagnoses

Staffing shortages, burnout, is a factor for meeting need

Fear is a barrier to accessing care

Screenings were delayed, leading to diagnoses at a later, more acute stage that often presents greater challenges to treat Economics and limited social networks that existed before COVID dramatically impacted access to food, medicine, health care, human interaction for people with chronic illnesses

The isolation, disruption of care, increased stress and impact of the COVID-19 virus have contributed to new or worsening behavioral health needs amongst people with chronic disease



#### **Behavioral Health**

Mental and behavioral disorders span a wide range of diagnoses, including anxiety disorders, Schizophrenia, and other delusional disorders, as well as mood disorders such as depression or

personality disorders. The disorders are not induced by alcohol and other psychoactive substances, but they may co-occur with or be exacerbated by substance use disorder.

The table demonstrates the percentages of adults reporting frequent mental distress or a diagnosis of depression, that roughly 1 in 5 adults in Burlington and Camden Counties indicated one or the other of these conditions before the COVID-19 pandemic.

People who are isolated – It became more apparent that people with chronic illnesses may have went into depression because they had very little contact with other people. I noticed it with my friends.

Focus Group Participant

#### 2018 Adult (Age 18+) Poor Mental Health Days

	Diagnosed With Depression	Frequent Mental Distress: 14 or More Poor Mental Health Days per Month	
Burlington County	22.0%	18.4%	
Camden County	23.7%	17.4%	
Gloucester County	12.5%	14.8%	
New Jersey	18.6%	16.7%	
United States	18.9*%	12.9%	

Source: Centers for Disease Control and Prevention, BRFSS, and New Jersey Department of Health 2018

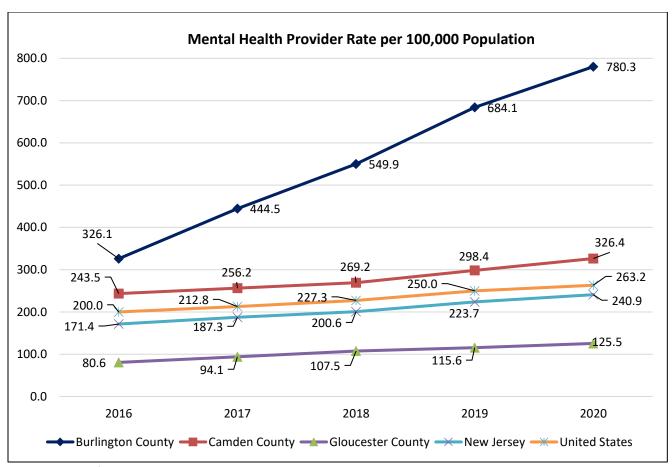
Having health insurance reduces some barriers to accessing care but having enough providers and capacity among available providers are also critical components. The following graph shows that the availability of behavioral health providers in South Jersey is increasing. However, these ratios do not capture what kind of insurance any of these providers accept, their hours of operation, language capacity beyond English, or cultural competence.

Mental health acuity and the increase in PTSD, anxiety, depression, and cooccurring SUD - clients are sicker now. They have gone a long time without seeing a provider so they're coming to us after potentially years of not being medicated, being on the street. They are exponentially worse so it takes so much more to treat them, and we are doing it with fewer staff. More experienced, better licensed staff are doing the work from home, so the staff who come are directly from school with little experience.

Focus Group Participant

<sup>\*</sup>Centers for Disease Control and Prevention, 2019



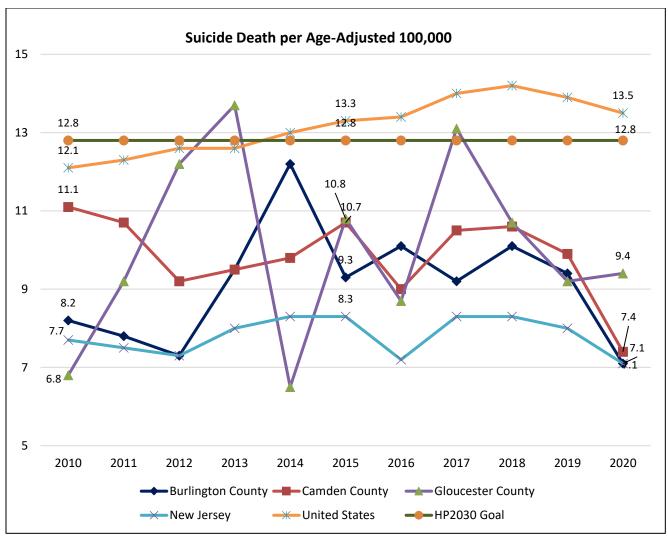


Source: Centers for Medicare and Medicaid Services

I'm seeing CAVE syndrome related to the pandemic. People are at a complete loss on how to integrate back into the environment. It's creating more anxiety to interact with other people. They are seeking additional mental health services, but they can't get it, and they are getting worse and worse.

Focus Group Participant





Source: Centers for Disease Control and Prevention

Mental distress and suicide do not impact all people equally. Underlying inequities and social determinants of health have a notable impact on negative outcomes from mental distress and behavioral health impacts.

Patients wobble before they fall. We need to catch them before they fall.

Key Informant Interview, healthcare provider



2017-2019 Statewide Suicide Deaths, Demographic Characteristics

	Age-Adjusted Rate per 100,000
Female	3.7
Male	12.3
15-24	7.5
25-34	9.8
35-44	9.2
45-54	11.7
55-64	12.5
65-74	9
75-84	9.4
White, Non-Hispanic	10.2
Black/African American, Non-Hispanic	4.7
Asian, Non-Hispanic	5.3
Latinx origin (any race)	4.8

Source: Centers for Disease Control and Prevention

The social isolation that was part and parcel of the efforts to reduce the spread of COVID-19 took its toll on the emotional well-being of people of all ages. For those who were already struggling, the isolation exacerbated existing concerns increasing acuity. For many others, isolation, grief illness

existing concerns, increasing acuity. For many others, isolation, grief, illness, economic strife, food security, and other concerns brought about new concerns, driving demand for services and increasing volume. Across the spectrum of age, income, and neighborhood, respondents across South Jersey reported an overall increase in anger as a common response in many situations.

Huge increase in the acuity of patients that are coming in. I have never done more safety plans than in the past 6 months. Their mental status deterioration seems to be commensurate with COVID waves. There is nothing available for higher levels of care, especially for Medicaid patients with complex trauma and co-occurring disorders.

Focus Group Participant

Everyone is more angry and upset about things. There is a more sense of entitlement – people are short -fused. The slightest thing that doesn't go right, people respond in anger rather than being rational now. Everyone seems quick to get angry now since COVID. I see an increase in that personality wherever I go.

Focus Group Participant

<sup>\*</sup>Rates by age category are not age-adjusted.



#### **Substance Use**

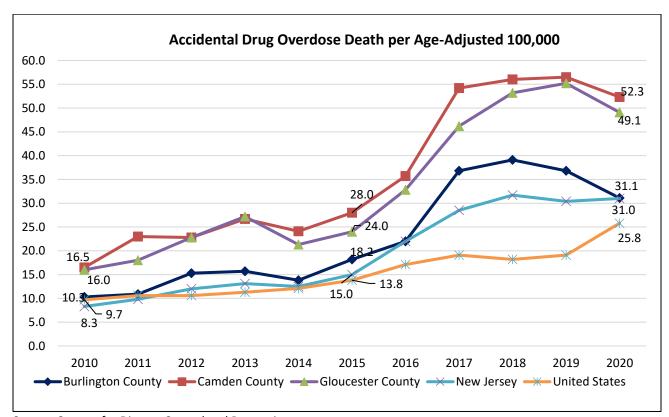
Substance use disorder is a diagnosable disease that affects a person's brain and behaviors and leads to an inability to control the use of substances, including alcohol, marijuana, opioids, and other substances. Alcohol use disorder is the most prevalent addictive substance among adults. Substance use disorder is both a cause of and outcome from ACES. Therefore, the prevalence of substance use disorder suggests the opportunity for interventions to both address current issues and underlying ACES to build resilience and prevent trauma through community-level interventions.

Excessive alcohol use increases the risk for chronic diseases and other problems including high blood pressure, liver disease, cancers, decreased mental health, and injury. Excessive drinking refers to heavy drinking (two or more drinks per day for men and one or more drinks per day for women) and binge drinking (five or more drinks on one occasion for men and four or more drinks on one occasion for women).

#### **Alcohol Use Disorder Indicators**

	2018 Adults Reporting Binge or Heavy Drinking (age-adjusted)	2015-2019 Driving Deaths due to Alcohol Impairment (%, count)
Burlington County	19.8%	21.0%
Camden County	17.5%	20.0%
Gloucester County	18.9%	17.9%
New Jersey	15.9%	21.9%
United States	19.0%	27.0%

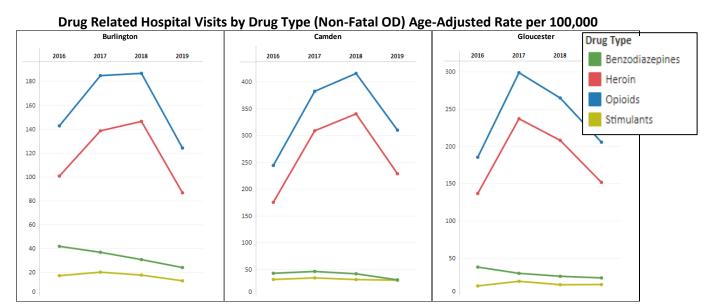
Source: Centers for Disease Control and Prevention, BRFSS



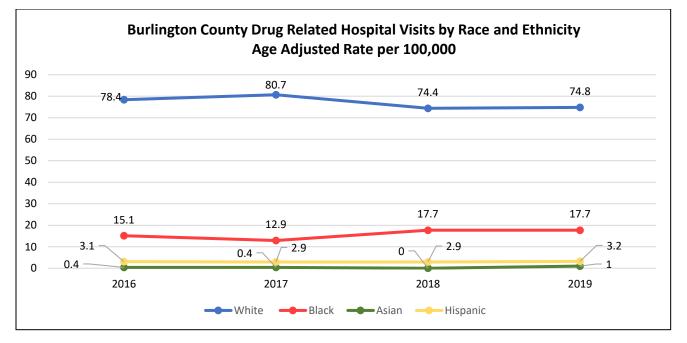
Source: Centers for Disease Control and Prevention



Over 70% of the 70,630 overdose deaths nationally in 2019 involved an opioid. Synthetic opioids such as fentanyl are laboratory produced and have similar effects as natural opioids, but can have far greater potency, increasing the risk for overdose and death. Across the U.S., heroin- and prescription opioid-involved deaths are declining, while synthetic opioid-involved deaths are increasing. The graphs below demonstrate that the same trends towards synthetic opiates can be seen across New Jersey.

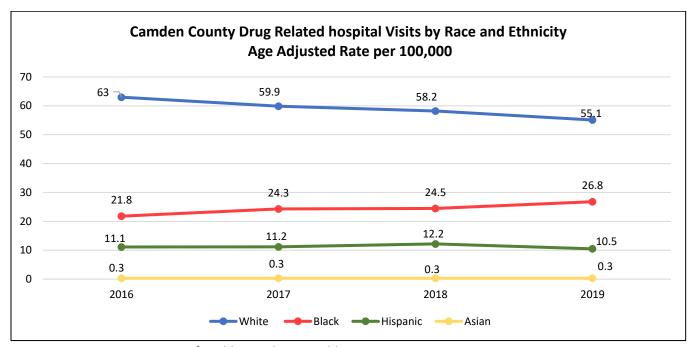


Source: New Jersey Department of Health, Population Health

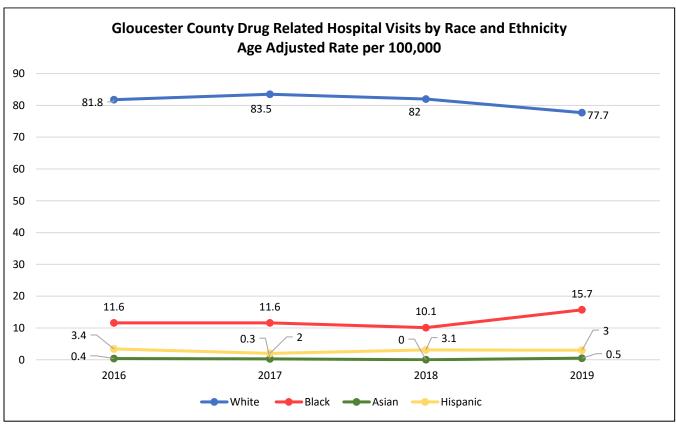


Source: New Jersey Department of Health, Population Health



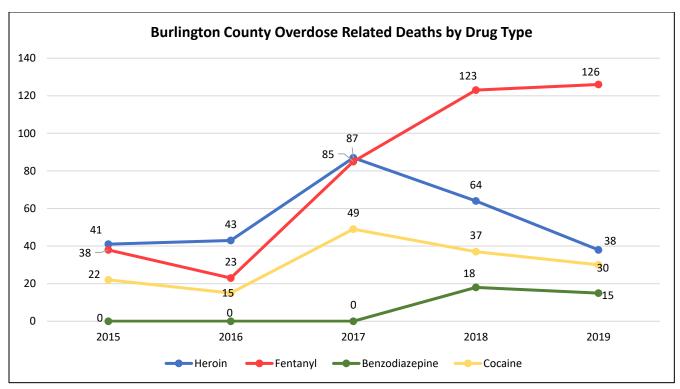


Source: New Jersey Department of Health, Population Health

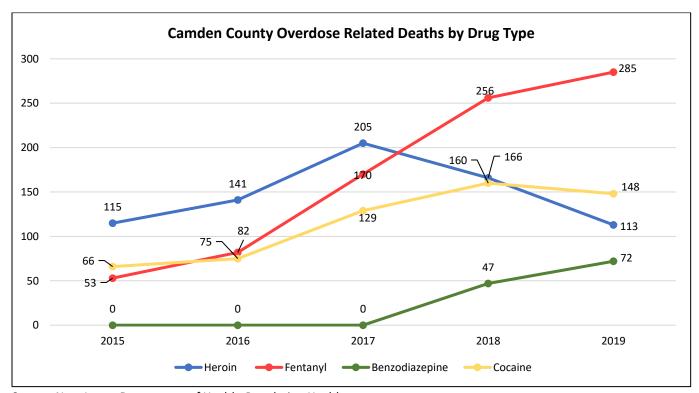


Source: New Jersey Department of Health, Population Healt**Drug Related Deaths by County** 



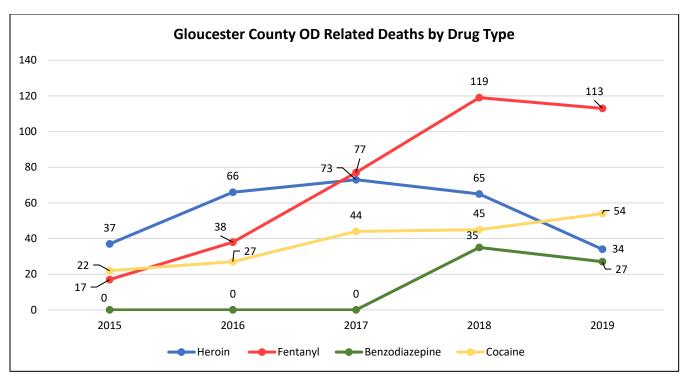


Source: New Jersey Department of Health, Population Health



Source: New Jersey Department of Health, Population Health





Source: New Jersey Department of Health, Population Health

The societal changes due to the impact of the COVID-19 pandemic have impacted the prevalence, severity, outcomes and treatment of substance use disorder. Providers from the behavioral health focus groups shared these perspectives regarding substance use during COVID-19.

We've seen an influx of patients with alcohol use disorder - an extreme rise - even more than opiates.

Lots of new patients are coming for benzos because it is for anxiety. It's easy to sell benzos on the street because demand is so high.

OD case reviews have yet to find one that had only one or two substances in their systems. It's often new substances I've never heard of before.

The patients we see are often the same people as before, but the degree of problems and disabilites they have now are increased.

We're seeing an increase in trauma patients are facing when we get our calls for sober living and doctors' visits for MAT.

I don't know that you can even find Heroin without fentanyl anymore.



# **Populations of Special Interest**

#### **Older Adults**

Older adults are generally considered a vulnerable population due to increasing likelihood of chronic disease, risk of social isolation, and economic instability, among other factors. Adhering to recommended schedules for preventive care can help reduce the burden of disease, limit health care utilization and costs, and improve quality of life for older adults.

Nationally, among Medicare beneficiaries, aged 65 years or older, the most common chronic conditions are hypertension, high cholesterol, and arthritis. Health care utilization and costs increase significantly with a higher number of reported chronic diseases, due in part to increased emergency department (ED) visits and readmissions.

2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Burlington County	24.5%	31.2%	25.3%	19.0%
Camden County	24.6%	29.2%	25.3%	20.9%
Gloucester County	24.1%	30.3%	25.3%	20.3%
New Jersey	24.4%	29.4%	25.3%	20.9%
United States	29.7%	29.4%	22.8%	18.2%

Source: Centers for Medicare & Medicaid Services

2015-2019 Older Adult Population by Disability Status

	Burlington County	Camden County	Gloucester County	New Jersey	United States
Total population	11.8%	13.5%	13.0%	10.3%	12.6%
65 years or older	31.4%	35.1%	35.7%	30.8%	34.5%
Ambulatory	20.0%	23.8%	24.1%	20.6%	21.9%
Hearing	12.4%	12.9%	14.9%	11.0%	14.3%
Independent living	13.1%	15.6%	15.2%	13.9%	14.2%
Cognitive	7.5%	8.3%	8.9%	7.5%	8.6%
Vision	5.2%	5.9%	7.4%	5.4%	6.3%

Source: US Census Bureau, American Community Survey

#### 2018 Age-Adjusted Older Adult (65+) Clinical Preventive Services\*

2010 Age-Adjusted Older Addit (05+) Cliffical Freventive Services					
Older Adult Men Who Are Up To Date On Clinical Preventive Services Date On Clinical Preventive					
Burlington County	32.0%	29.9%			
Camden County	28.2%	26.2%			
Gloucester County	30.7%	26.0%			
United States	32.7%	28.1%			

Source: Centers for Disease Control and Prevention, PLACES and BRFSS

<sup>\*</sup>Includes a flu vaccine in the past year, pneumococcal pneumonia vaccine ever, colorectal cancer screening, and mammogram in the past two years (women).



2018 Per Capita Standardized Spending\* for Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Burlington County	\$1,890	\$5,312	\$10,062	\$29,912
Camden County	\$1,881	\$5,135	\$10,162	\$30,561
Gloucester County	\$2,034	\$5,312	\$9,724	\$29,329
New Jersey	\$1,921	\$5,263	\$9,787	\$29,229
United States	\$1,944	\$5,502	\$10,509	\$29,045

Source: Centers for Medicare & Medicaid Services

2018 ED Visits per 1,000 Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Burlington County	95.6	269.3	564.1	1679.5
Camden County	110.8	285.8	613.8	1853.0
Gloucester County	117.3	274.9	529.5	1631.8
New Jersey	102.1	257.5	510.0	1558.2
United States	122.6	318.4	621.1	1,719.1

Source: Centers for Medicare & Medicaid Services

2018 Chronic Condition Prevalence among Medicare Beneficiaries Age 65 Years or Older

	Burlington County	Camden County	Gloucester County	New Jersey	United States
Alzheimer's Disease	12.2%	13.3%	11.5%	12.8%	11.9%
Arthritis	36.3%	37.9%	38.4%	36.3%	34.6%
Asthma	5.7%	6.1%	6.2%	5.3%	4.5%
Cancer	10.9%	10.5%	10.3%	10.7%	9.3%
Chronic Kidney Disease	25.8%	27.4%	26.1%	25.5%	24.9%
COPD	10.5%	10.7%	11.7%	11.1%	11.4%
Depression	14.4%	15.5%	15.1%	14.5%	16.0%
Diabetes	28.9%	30.7%	30.5%	31.5%	27.1%
Heart Failure	13.2%	14.6%	14.4%	15.8%	14.6%
High Cholesterol	59.3%	58.2%	59.4%	59.2%	50.5%
Hypertension	66.0%	64.9%	64.4%	65.2%	59.8%
Ischemic Heart Disease	29.2%	31.5%	32.1%	33.5%	28.6%
Stroke	4.9%	5.3%	5.5%	5.1%	3.9%

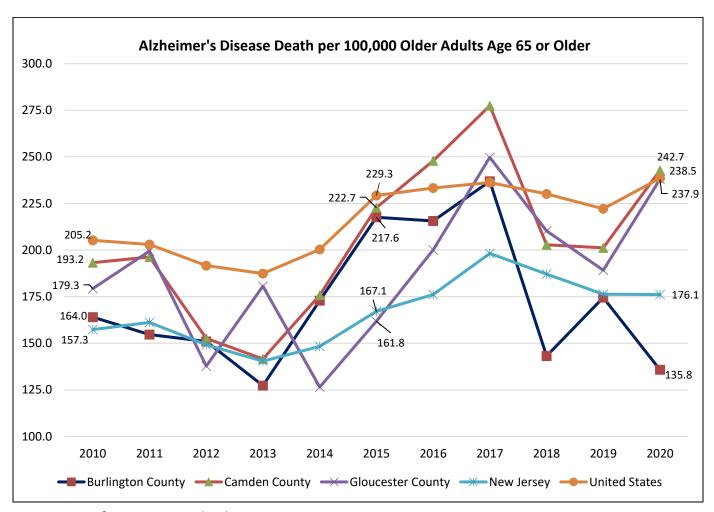
Source: Centers for Medicare & Medicaid Services

<sup>\*</sup>Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts).



#### Alzheimer's Disease

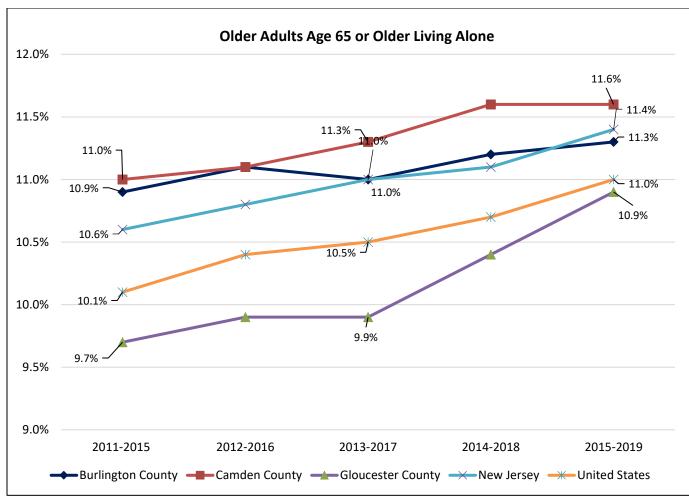
Alzheimer's disease is complex and has a diversity of risk factors. There are a variety of strategies to delay progression of the disease, but to date, there is no cure. As Alzheimer's disease progresses, people diagnosed with Alzheimer's require increasing levels of social, physical, and medical support. **Social determinants of health, such as income, neighborhood conditions, and access to transportation have direct impact on the quality of life for people with Alzheimer's and their families.** 



Source: Centers for Disease Control and Prevention

Social isolation, particularly among older adults, can impede effective chronic illness management and accelerate the negative impact of chronic diseases. A key indicator of social isolation among older adults is the percentage of adults ages 65 or older who live alone. During the COVID-19 pandemic, the needs of isolated and homebound seniors grew as people of all ages stayed home and refrained from social engagements, shopping, and regular appointments. While isolation during this time likely saved many lives from COVID-19 infection, it contributed to declines in physical and mental health among many older adults.





Source: US Census Bureau, American Community Survey

[Seniors] anxiety is really elevated; they want more support, want to talk through things a lot more, need more reassurance, and call more often for clarification. They just want more from us because there is so much social isolation, especially those in assisted living. Many were locked in their rooms to keep them safe but then they had much more cognitive decline because of it.

Focus Group Participant

[For seniors living alone] food became an issue. Patients with no family or friends couldn't get their prescription or go to the store to get food. We went out to drop off food or meds because whole families were in isolation and couldn't get food.

Focus Group Participant



#### Youth

The COVID-19 pandemic has made unprecedented changes to the lives and experiences of young people worldwide. These concerns represent Adverse Childhood Experiences (ACES).

#### What are Adverse Childhood Experiences (ACES)

Mental and behavioral health disorders can be both the result of and the cause of Adverse Childhood Experiences (ACES), defined as traumatic or stressful events that occur before the age of 18. ACES can have lifelong impacts on the economic, educational, mental, and physical health outcomes for individuals, and are associated with decreased life expectancy. While most ACES are the result of individualized experiences, the graphic below represents how adverse community environments amplify the impact of individual ACES.

I know a good handful of kids who started at 5 and are 8 now. I've seen them not be able to problem solve with their friends. They give up, yell, scream, throw things, then withdraw into their screens.

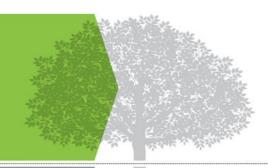
**Focus Group Participant** 

#### The Pair of ACEs

Source: Centers for Disease Control and Prevention

#### Adverse Childhood Experiences

- Emotional & Sexual Abuse Substance Abuse
- Domestic Violence



#### Adverse Community Environments

- Poverty Discrimination
- **Community Disruption**
- Lack of Opportunity,
- Economic Mobility, & Social Capital
- Poor Housing Quality

  & Affordability
- + Violence

Children need childhood; need to be part of a group. Social and emotional need has not been met. Their behaviors are exaggerated now, as they did not have much practice in dealing with emotions and normal childhood needs.

**Focus Group Participant** 

Among the Key Informant Interviews and in the Key Informant Surveys, the following emerged as themes: the impact of the extended social isolation; social, emotional, and learning loss during school disruptions; financial strain and food insecurity among families; increased exposure to negative environmental conditions: harmful relationships in the home; and the direct impact of the negative impacts of the virus.



In response to those concerns, four focus groups with diverse young people throughout the South Jersey region were conducted to capture more information about their experiences, what they need today, and what they'd like to see in the future.

The following graphic represents some of the themes that emerged from the focus groups with young people.



The following tables reflect some key metrics representing the behavioral health concerns and diagnoses among young people in the South Jersey region before the pandemic.

**High School Students Reporting an Attempted Suicide** 

	2013	2015	2017	2019
New Jersey	9.9%	N/A	N/A	5.9%
United States	8.0%	8.6%	7.4%	8.9%

Source: Centers for Disease Control and Prevention, YRBS



2019 High School Students Reporting an Attempted Suicide

	New Jersey	United States				
Gender						
Female	6.9%	8.9%				
Male	4.8%	6.6%				
Race and Ethnicity						
Asian	4.5%	7.7%				
Black or African American	11.3%	11.8%				
Latinx origin (any race)	5.3%	8.9%				
White	4.9%	7.9%				
Sexual Identity						
Lesbian, Gay, Bisexual (LGB)	13.2%	23.4%				
Straight	4.8%	6.4%				

Source: Centers for Disease Control and Prevention, YRBS

How do we make behavioral health care more accessible to people? Now I can see why schools get shot up because we have really sick kids who are not getting the care they need, and parents are overwhelmed and don't know what to do.

Focus Group Participan

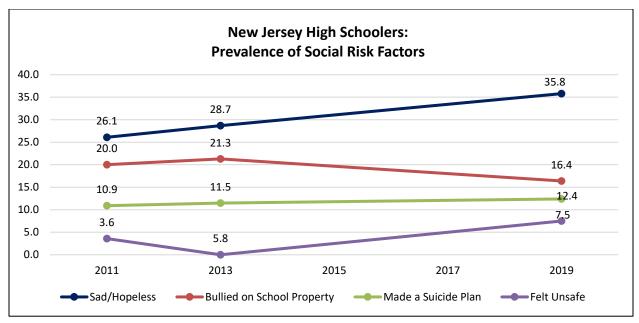
#### Teenage Deaths by Accident, Homicide, and Suicide Rate per 100,000

	2015	2016	2017	2018	2019
New Jersey	21	23	24	17	23
United States	36	38	39	37	36

Source: Annie E. Casey Foundation Kids Count Data Center







Source: Centers for Disease Control and Prevention, YRBS

#### Substance Use Among Teens (Tobacco, Alcohol, Drugs)

High School Students Reporting Current (within past 30 days) E-Cigarette Use

	2015	2017	2019
New Jersey	N/A	N/A	27.6%
United States	24.1%	13.2%	32.7%

Source: Centers for Disease Control and Prevention, YRBS

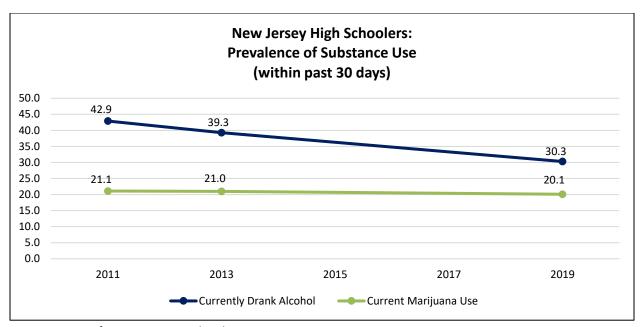
2019 High School Students Reporting Current (within past 30 days) E-Cigarette Use

2015 High outdoil of dutients reporting current (within past 50 days) 2 digutette ose				
	New Jersey	United States		
Gender				
Female	26.7%	33.5%		
Male	28.3%	32.0%		
Race and Ethnicity				
Asian	17.8%	13.0%		
Black or African American	18.4%	19.7%		
Latinx origin (any race)	28.0%	31.2%		
White	31.6%	38.3%		
Sexual Identity				
Lesbian, Gay, Bisexual (LGB)	29.9%	34.1%		
Straight	27.6%	32.8%		

Source: Centers for Disease Control and Prevention, YRBS

<sup>\*</sup>New Jersey data for 2015 and 2017 are not available.

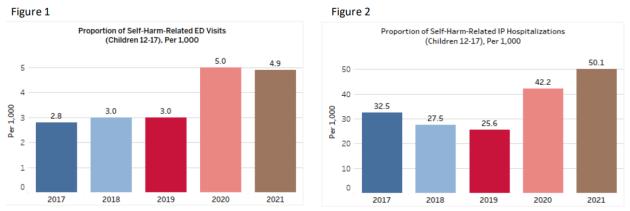




Source: Centers for Disease Control and Prevention, YRBS

New Jersey Hospital Association (NJHA)'s Center for Health Analytics, Research and Transformation (CHART) has been documenting the increases in prevalence of behavioral health visits among youth ages 12 to 17 in Emergency Department visits statewide from 2017-2021. The CHART analysis found an increase in prevalence of anxiety, depression, self-harm and eating disorders compared to pre-pandemic levels, particularly among females.

During the pandemic period, self-harm increased in number and proportion of ED visits, particularly among females ages 12-17 compared to pre pandemic levels. While eating disorders have remained a less common diagnosis than anxiety, depression and self-harm among youth ages 12-17, the proportion of eating disorder Emergency Department visits statewide increased 2.5 times between 2019 and 2021. The following graphs created by NJHA CHART reflect the prevalence of mental health disorders among youth ages 12-17 seeking Emergency Department care throughout New Jersey from 2017-2021.



Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART

<sup>\*</sup>New Jersey data for 2015 and 2017 are not available.



Figure 3

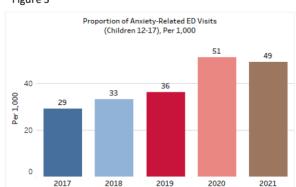


Figure 4

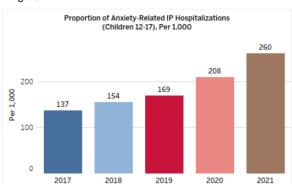
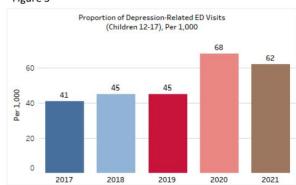
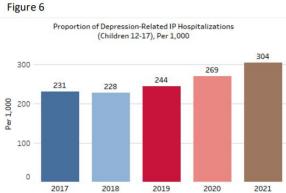


Figure 5





Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART

Figure 7

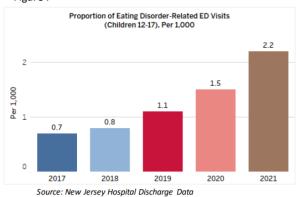
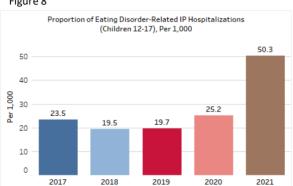


Figure 8



1) Diagnoses for self-harm include intentional self-harm poisonings from drugs, medicaments, biological substances, and nonmedical substances Notes: (ICD-10 codes T30-T65); self-inflicted injuries (X71-X83); and suicide attempts (T149)

- 2) Diagnoses for anxiety included ICD-10 codes F40- F419
- 3) Diagnoses for depression include ICD-10 codes F320-F339
- 4) Diagnoses for eating disorders include ICD-10 codes F5000-F509

Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART



Figure 9

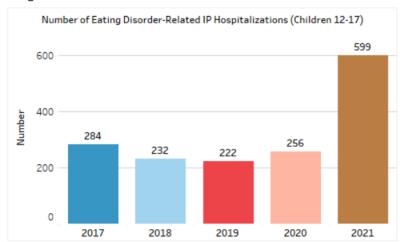
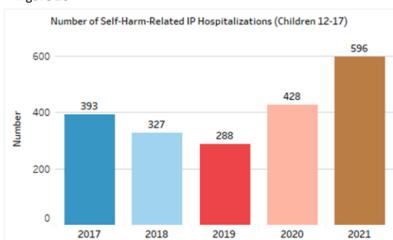
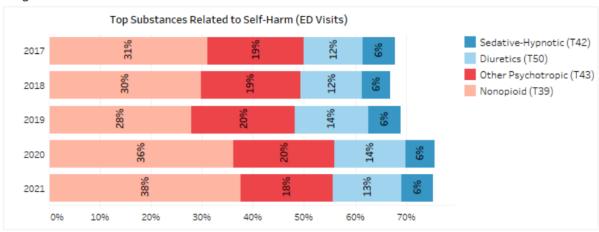


Figure 10



Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART

Figure 11



Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART



Figure 12

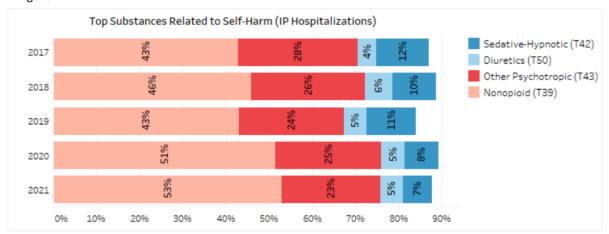
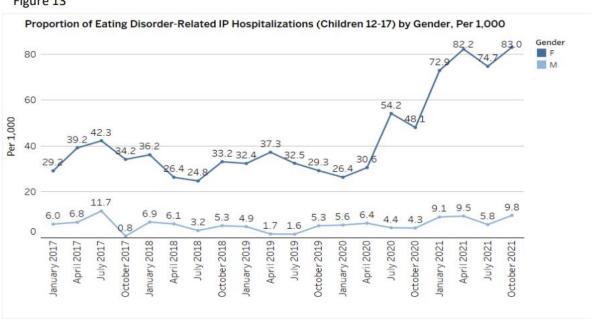


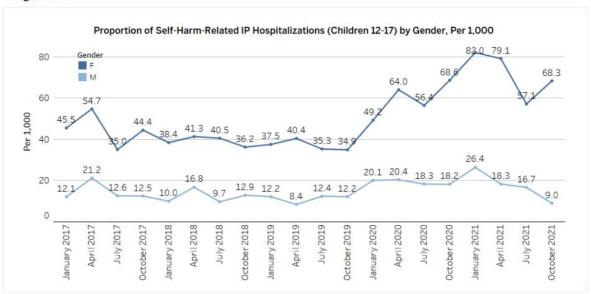
Figure 13



Source: New Jersey Hospital Discharge Data provided by NJHA CHART, June 2022, www.NJHA.com/CHART

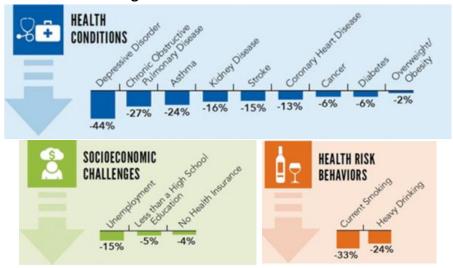


Figure 14



By taking an upstream approach to emphasize interventions that address adverse community environments such as promoting "trauma informed care," we can prevent, identify, and ameliorate the negative impacts of ACES. Focusing community health interventions on underlying social determinants of ACES, such as poverty and discrimination, can yield more effective and impactful treatment of downstream disease conditions, and pave the way for equitable health outcomes. The following diagrams created by the CDC illustrate the potential positive impact of addressing and preventing ACES on health conditions, socioeconomic challenges, and health risk behaviors.

Potential Reduction of Negative Outcomes in Adulthood if ACES Were Prevented



SOURCE: BRFSS 2015-2017, 25 states, CDC Vital Signs, November 2019.



# **Overweight and Obesity Among Teens**

**High School Students with Obesity** 

	2013	2015	2017	2019
New Jersey	8.7%	N/A	N/A	11.9%
United States	13.7%	13.9%	14.8%	15.5%

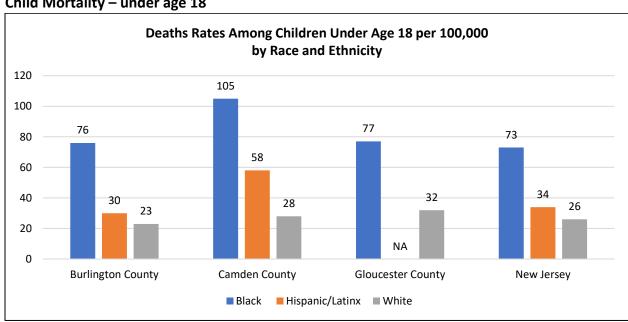
Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students with Obesity

2013 Ingli School Students With Obesity							
	New Jersey	United States					
Gender							
Female	9.9%	11.9%					
Male	13.9%	18.9%					
Race and Ethnicity	Race and Ethnicity						
White	10.4%	13.1%					
Black or African American	19.9%	21.1%					
Latinx origin (any race)	15.2%	19.2%					
Sexual Identity							
Lesbian, Gay, Bisexual (LGB)	21.0%	21.0%					
Straight	10.7%	14.4%					

Source: Centers for Disease Control and Prevention, YRBS

#### Child Mortality - under age 18



Source: National Center for Health Statistics - Mortality Files, 2017-2019

<sup>\*</sup>Data not available for Gloucester County – Hispanic/Latinx.



### Pregnancy, Birth, and Babies

Having a healthy pregnancy is the best way to have a healthy birth. According to the March of Dimes, infants born to mothers who have not received prenatal care have an infant death rate five times the rate of infants born to mothers accessing prenatal care starting in the first trimester of pregnancy.

The Healthy People 2030 target is 80.5% of pregnant mothers accessing prenatal care during the first trimester. None of the South Jersey counties have met this goal yet. When broken down by race and ethnicity, differences throughout the area regarding prenatal care become more evident. Only 2/3 of Black/African American pregnant people were able to access prenatal care during the first trimester throughout Burlington, Camden and Gloucester Counties compared to 4 out of 5 White pregnant people. The percentage of Black/African American babies who are born prematurely or at low birth weight is also higher than any other race or ethnic group.

#### 2020 Maternal and Infant Health Indicators by Race and Ethnicity

**Green** = 10% points above the other categories

Red = 10% points below the other categories

	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Non-Smoking during Pregnancy
Burlington County	79.1%	8.7%	6.9%	94.9%
Asian	79.4%	10.1%	9.5%	99.7%
Black/African American, non-Hispanic	68.9%	10.4%	10.3%	95.5%
White, non-Hispanic	84.7%	7.7%	5.0%	94.1%
Camden County	70.6%	9.9%	9.1%	94.8%
Asian	71.4%	9.0%	8.6%	99.7%
Black/African American, non-Hispanic	57.8%	14.0%	15.3%	94.9%
White, non-Hispanic	82.3%	8.0%	6.6%	93.4%
Gloucester County	79.3%	9.6%	7.7%	93.2%
Asian	82.4%	13.5%	13.5%	100.0%
Black/African American, non-Hispanic	63.6%	15.0%	16.6%	95.0%
White, non-Hispanic	83.3%	8.7%	6.1%	92.6%
New Jersey	75.2%	9.3%	7.6%	97.1%
Asian	83.5%	8.6%	8.9%	99.7%
Black/African American, non-Hispanic	62.4%	13.7%	13.1%	95.7%
White, non-Hispanic	83.4%	7.6%	5.8%	95.5%
United States	77.7%	10.1%	8.2%	94.4%
Asian	NA	NA	NA	NA
Black/African American, non-Hispanic	68.4%	14.4%	14.2%	95.4%
White, non-Hispanic	82.8%	9.1%	6.8%	91.8%
HP2030 Goal	80.5%	9.4%	NA	95.7%

Source: New Jersey Department of Health & Centers for Disease Control and Prevention



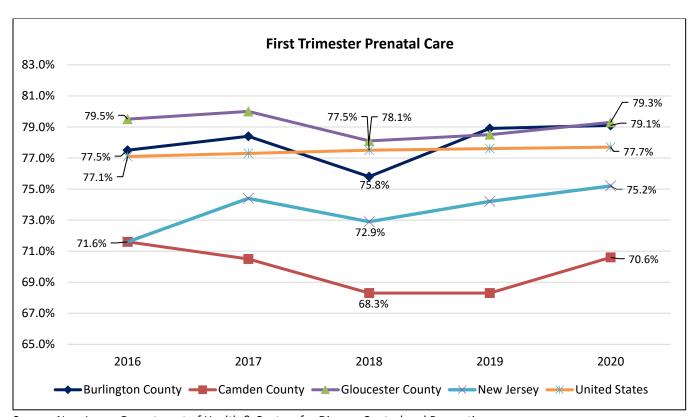


2020 Maternal and Infant Health Indicators by Race and Ethnicity

2020 Material and infant fleater materials by race and Ethinolty						
	Teen (15-17) Birth Percentage	Teen (18-19) Birth Percentage				
Burlington County	*	15.7				
Black/African American, non-Hispanic	*	22.3				
White, non-Hispanic	*	8.0				
Camden County	3.2	28.8				
Black/African American, non-Hispanic	9.8	38.8				
White, non-Hispanic	*	10.4				
Gloucester County	*	13.3				
Black/African American, non-Hispanic	*	*				
White, non-Hispanic	*	*				
New Jersey	3.6	20.5				
Black/African American, non-Hispanic	6.3	25.0				
White, non-Hispanic	0.4	4.3				
United States	6.3	26.5				
Black/African American, non-Hispanic	10.9	44.1				
White, non-Hispanic	3.4	17.9				

Source: New Jersey Department of Health & Centers for Disease Control and Prevention

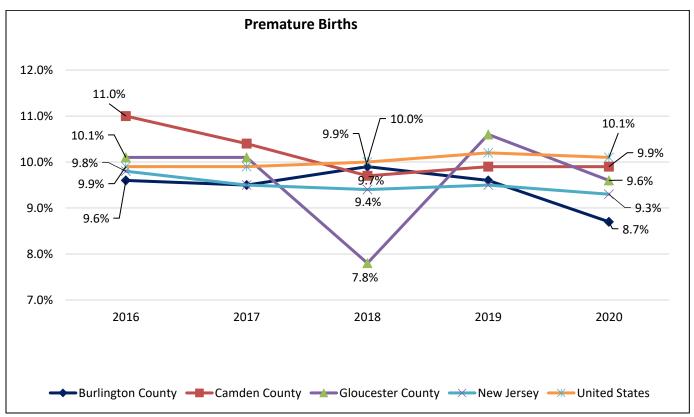
<sup>\*</sup>for cells with counts fewer than 20 occurrences a reliable rate cannot be calculated



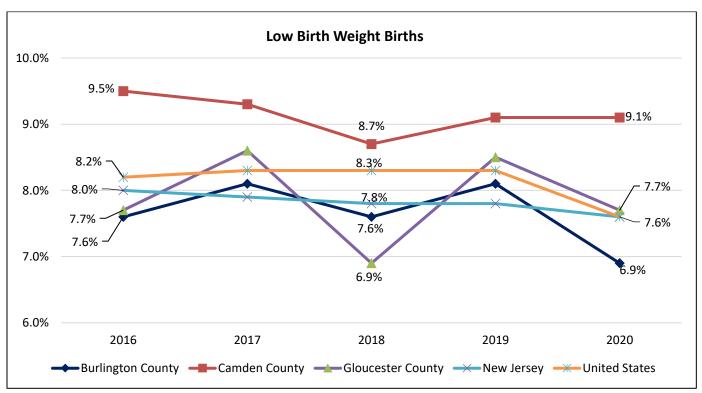
Source: New Jersey Department of Health & Centers for Disease Control and Prevention

<sup>\*</sup>In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.



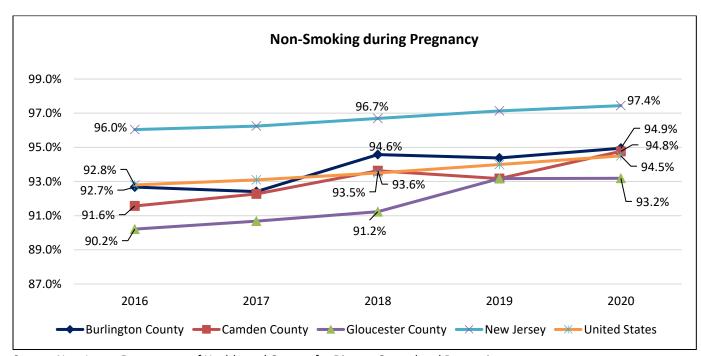


Source: New Jersey Department of Health, and Centers for Disease Control and Prevention



Source: New Jersey Department of Health, and Centers for Disease Control and Prevention





Source: New Jersey Department of Health, and Centers for Disease Control and Prevention

#### **Infant Mortality**

Infant mortality or the infant death rate measures the rate of death among people under one year of age per 1,000 live births and is internationally utilized as a key community health indicator. Infant mortality is widely regarded as an important community health indicator because it is particularly sensitive to structural factors including social and economic factors and quality of life conditions. Structural conditions, such as housing insecurity, educational attainment of the mother, and ACES have a significant impact on the health of infants in their first year of life and the life of their mothers. High infant mortality rates also create lowered life expectancy for a community because deaths during infancy represent many decades of life lost prematurely.

Disparities in infant mortality are measures of structural socioeconomic inequities that are at play well before a mother gets pregnant or gives birth. Because infant mortality is most impacted by the social and environmental conditions of birthing people, WHO uses infant mortality as an indicator of the overall well-being of women. Therefore, upstream strategies that address the root causes of inequities have far reaching impacts on infant mortality.

There is a concern that we don't have their best interest at heart, so it doesn't make sense to trust us in health care. Those who those who don't trust the system think we might hurt them.

**Focus Group Participant** 



Nurture New Jersey 2021, New Jersey's maternal and child health strategic plan, highlights addressing systemic racism as a means of impacting the very high rates of infant mortality among African American people. Camden County has an infant mortality rate that is among the highest among all New Jersey Counties. When stratified by race, the infant death rate across South Jersey demonstrates notable inequity. The table below shows that the Black/African American infant death rate in Camden County (13.4) is more than two times greater than the statewide rate (6.1), and 2 ½ times greater than the Healthy People 2030 goal (5.0). The high rate of infant deaths in Camden County, particularly among Black/African American babies, represents a substantial inequity that results in lives lost, suffering for families, and community absence lasting decades. The very high infant death rate among Black/African Americans in throughout South Jersey compared to other racial and ethnic groups is a quantifiable metric of the structural inequities disproportionately impacting Black/African American families.

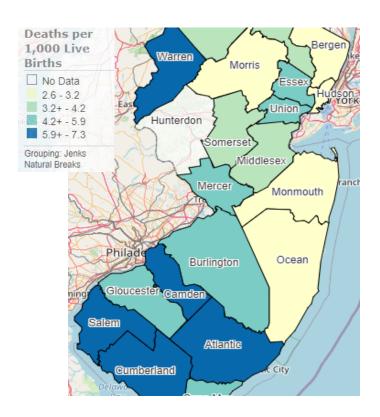
2015-2019 Infant Deaths per 1,000 Live Births

	Infant Deaths per 1,000 Live Births
Burlington County	5.0
White, Non-Hispanic	3.7
Black/African American, Non-Hispanic	6.9
Asian	*
Latina (any origin)	*
Camden County	7.3
White, Non-Hispanic	4.1
Black/African American, Non-Hispanic	13.4
Asian	*
Latina (any origin)	7
Gloucester County	5.1
White, Non-Hispanic	3.3
Black/African American, Non-Hispanic	*
Asian	*
Latina (any origin)	*
New Jersey	6.1
White, Non-Hispanic	2.6
Black/African American, Non-Hispanic	9.3
Asian	2.5
Latina (any origin)	4.2
HP2030 Goal	5.0

Source: New Jersey Department of Health and Centers for Disease Control and Prevention. \*for cells with fewer than 20 occurrences a reliable rate cannot be calculated.



#### Infant Deaths by Mother's County of Residence



Since COVID started, they ask if every loss is because of COVID. We saw an increase in the second year of COVID, but also saw increase in births in 2021. To me it still seems like a loss.

Focus Group Participant

Health equity and an understanding of the systems impacting access and utilization, and a more welcoming lens to people of various backgrounds and cultures and can communicate better and integrate that into the care. That's better than reacting based on lack of understanding or knowledge. Health care workers are trying to work the best they can, but there are so many systemic barriers that we haven't even realized.

**Focus Group Participant** 

Groups for maternal loss are full of white women...It's an equity issue. Addressing the fact that black women want to talk to a black group leader – women will be more honest and up front if they have someone like them leading it. That's where the trust is developed; we need to acknowledge that the trust is not about me personally. Otherwise, it will impede real progress.

Focus Group Participant



#### **Pregnancy Related Complications and Maternal Mortality**

Anecdotally, interviewees and focus group participants have suspected a rise in pregnancy related complications in recent years due to COVID-19. When asked why, participants speculated that some of the increase is due some of the following factors related to COVID -19:

- Underlying chronic disease such as diabetes and hypertension that was either undiagnosed or not appropriately managed during the pandemic
- Stress from myriad of factors related to the experience of the pandemic itself
- COVID-19 infection raises the risk of a variety of complications in pregnant people

The maternal death rate in New Jersey is higher than the national rate. Maternal mortality is driven by a variety of factors and disproportionately impacts pregnant people of color, Black/African American pregnant people in particular. Maternal mortality is most effectively combatted by addressing the root causes – racism, economic disparity, inequitable education opportunities, and the like.

#### 2018 Maternal Deaths\*per 100,000 Live Births

	Total Deaths	Total Death Rate	Black Death Rate	White Death Rate	Latina Death Rate
New Jersey	27	26.7	N/A	N/A	N/A
United States	658	17.4	37.1	14.7	11.8
HP2030 Goal		15.7			-

Source: Centers for Disease Control and Prevention. \* Maternal deaths include deaths of pregnant people or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Hypertension, preeclampsia, and strange clotting and bleeding have been occurring; are we just looking at that or is it real?

Yes, still seeing these risk factors even in lowrisk populations.

2 Focus Group Participants

I've seen this more since Omicron and now feel like the fear and stress and impact of COVID is less than when there was no vaccine; non vaccinated have more risk of developing the hypertension and micro clotting of the placenta are consistent with what we know about COVID; the needing to be induced because baby is not growing. Additionally, there is an issue among the unvaccinated. The vaccinated aren't having those issues. More work needs to be done about vaccination against COVID-19.

**Focus Group Participant** 



Many of the indicators above reflect outcomes from the time prior to the arrival of COVID-19, and updated statistics regarding birth outcomes are still being analyzed at the facility, county, state and federal levels. In an effort to gather a directional view of the impact of the COVID-19 pandemic on birth outcomes and pregnancy experience, focus groups were conducted with a wide range of stakeholders experiencing pregnancy during this time, or providing care to pregnant people, infants and children during 2019-2022. Key themes that emerged from each of the Maternal and Child Health focus groups are summarized below:

Suspected increase in pregnancies that <u>suddenly move to high risk</u> due to complications such as preeclampsia and pregnancy related diabetes

The rapid change in risk level among pregnant people <u>increases distrust</u> among the people most at risk

**Grief support** is an essential component of perinatal care, especially during COVID-19 times

<u>Trust</u> in the medical system is at <u>a new low</u>

In MCH in particularly, representation matters; <u>lack of diversity</u> of race, ethnicity, preferred language, and gender identity affect the comfort and reception of patients when receiving care.



# **Findings: Key Informant Survey**

An online key informant survey was conducted to gather data regarding the perceptions of the needs, strengths and changes among the people living in Burlington, Camden and Gloucester Counties. Two hundred and six diverse individuals completed the survey during the months of February and March 2022.

Respondents represent organizations throughout the area, as well as a diversity of constituents. The findings from the survey:

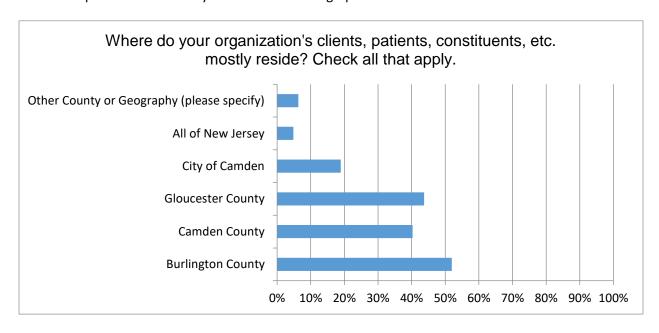
# Priority Areas of Need:

- Mental health
- Access to care
- Housing
- Transportation
- Chronic disease maintenance and screening
- Substance use

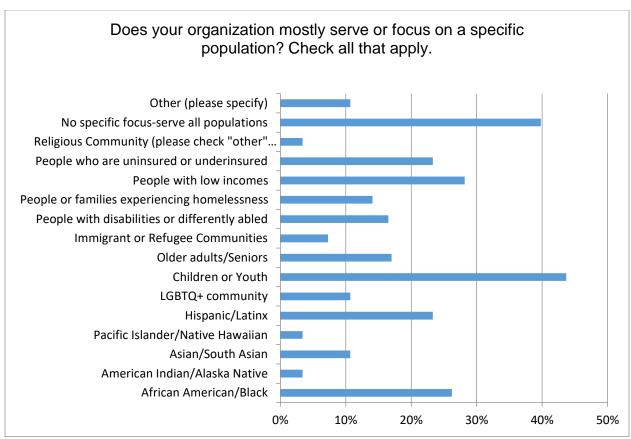
# Biggest Challenges Meeting the Needs:

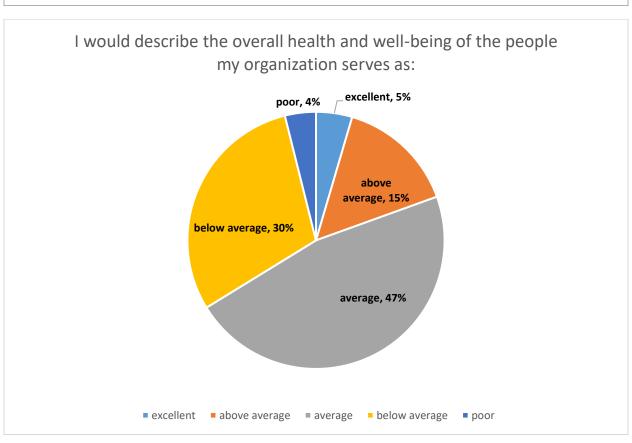
- Increase in numbers of people needing care
- Increase in the severity of the conditions
- Shortages of front line staff and essential workers impact all industries, including health care and social service
- Decreased trust in health care

The full responses to the survey are included in the graphs below.

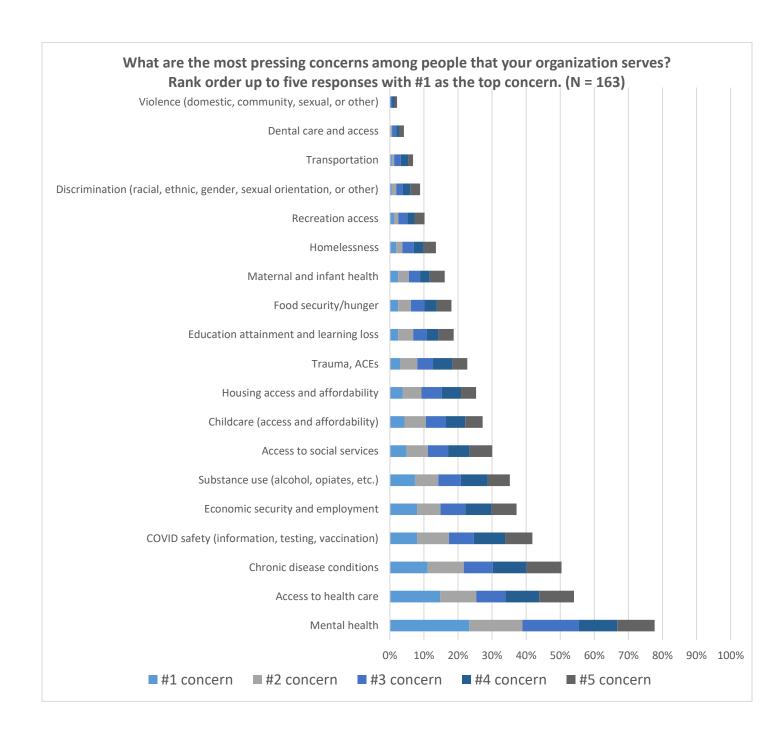




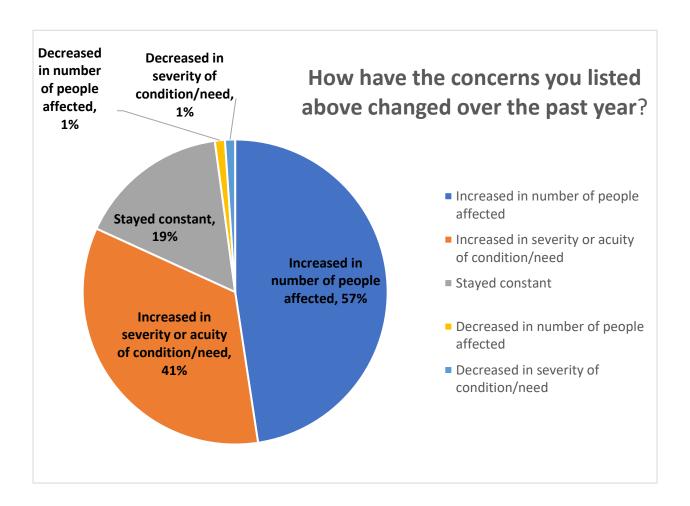




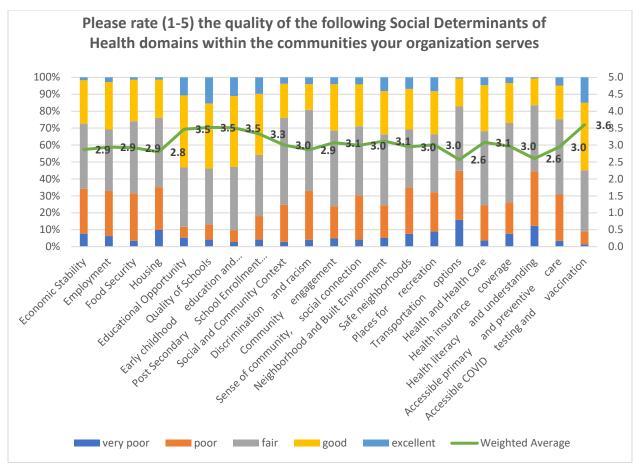


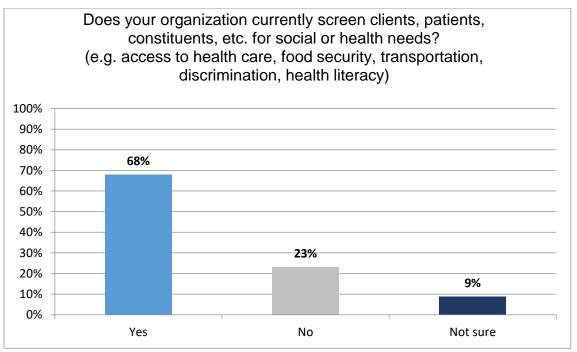




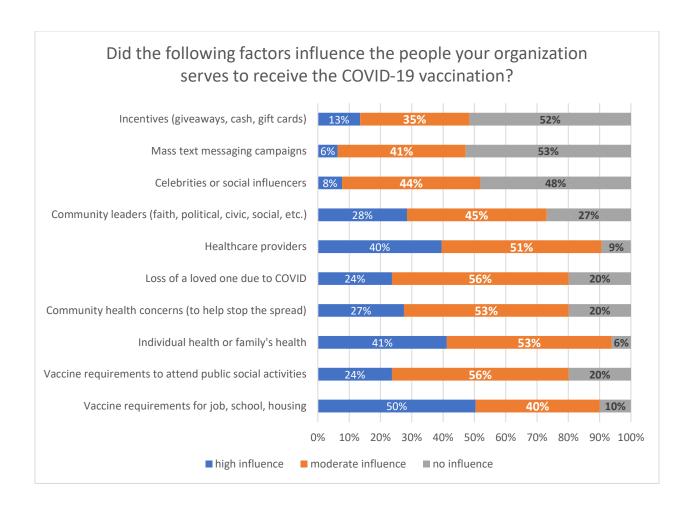




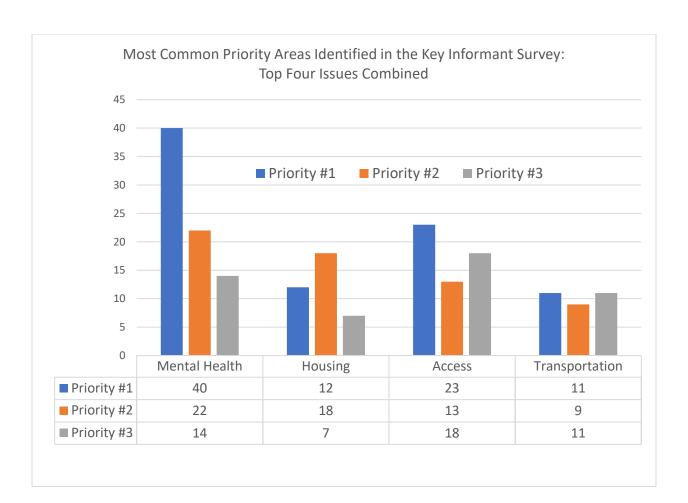




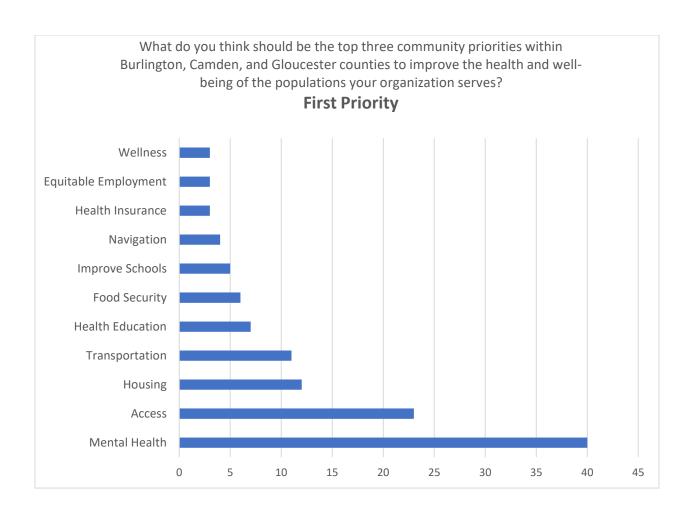




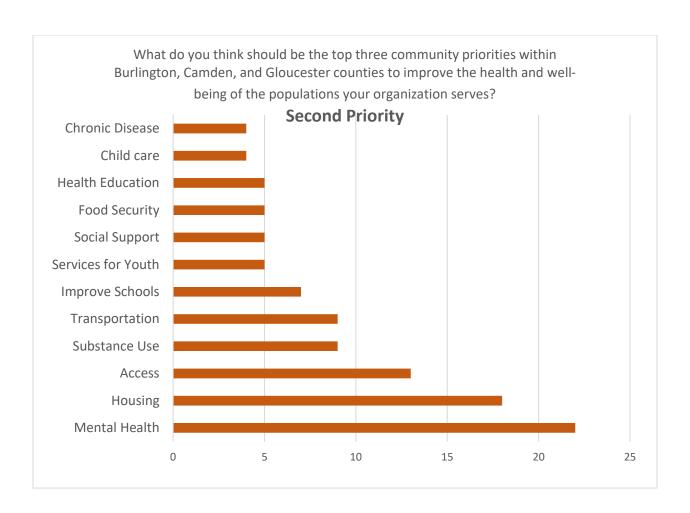




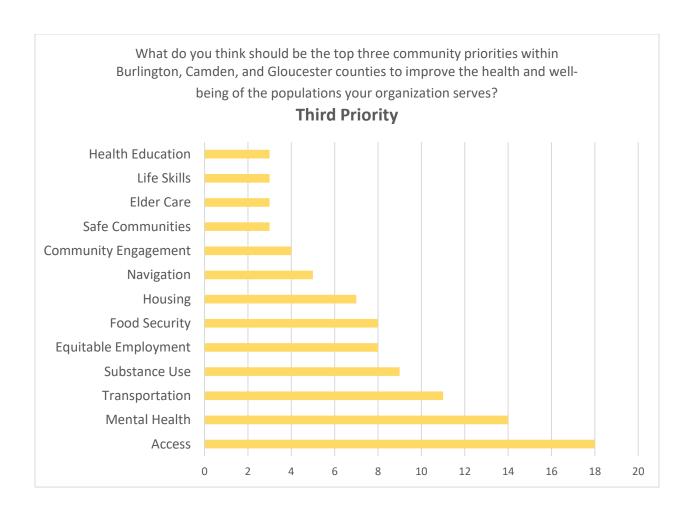














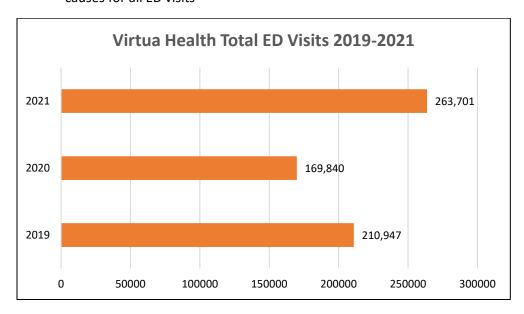
## **Findings: Emergency Department Data**

### **Methodology for ED Visit Classification**

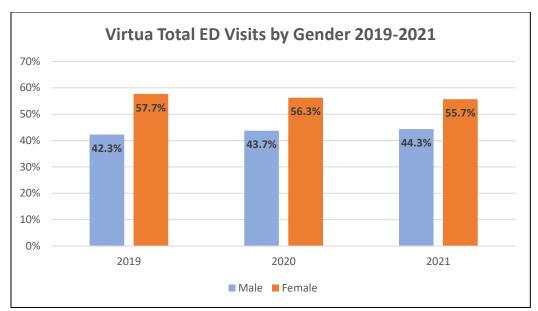
• The cause of Emergency Department (ED) visits was identified using the ICD-10 diagnosis variables from each of the source data provided by the hospital systems

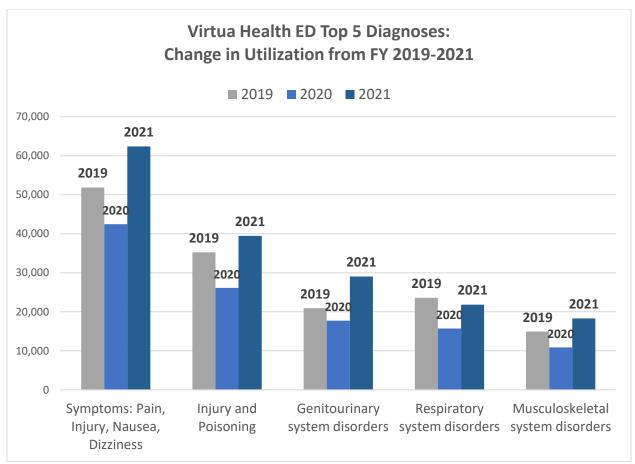
	Hospital System		
	Jefferson	Virtua	Cooper
Variable Name	ED Dx ICD10	PRIMARY_ICD10	Summary Data Only

- These ICD-10 diagnoses were then classified based on the classification provided in the ICD-10 Code Set (Source: <a href="https://www.icd10data.com/ICD10CM/Codes">https://www.icd10data.com/ICD10CM/Codes</a>)
- Once these categories were created, the diagnoses were further grouped into meaningful groups such that at least 90% of the visits were classified.
- ED visit disposition data was also available in the data. The three types of ED visits 1)
   Discharge/Release, 2) Admission/Inpatient and 3) Observation were combined to report the causes for all ED visits

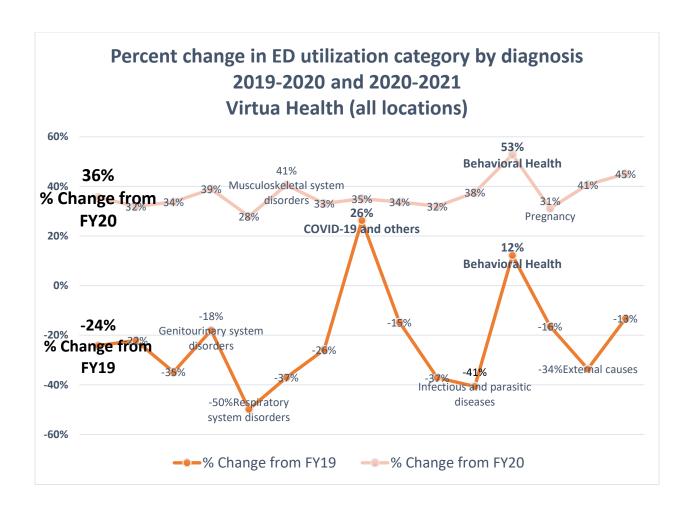
















# **Appendix A: Secondary Data References**

- Annie E Casey Foundation. (2020). *Kids Count Data Center*. Retrieved from https://datacenter.kidscount.org/
- Center for Applied Research and Engagement Systems. (2021). *Map room*. Retrieved from https://careshq.org/map-rooms/
- Centers for Disease Control and Prevention. (n.d.). *BRFSS prevalence & trends data*.

  Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html
- Centers for Disease Control and Prevention. (2020). *Diabetes data and statistics*. Retrieved from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html
- Centers for Disease Control and Prevention. (2020). *CDC wonder*. Retrieved from http://wonder.cdc.gov/
- Centers for Disease Control and Prevention. (2020). *Youth risk behavior surveillance system*.

  Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm
- Centers for Disease Control and Prevention. (2021). *National center for health statistics*. Retrieved from https://www.cdc.gov/nchs/data-visualization/mortality-trends/
- Centers for Disease Control and Prevention. (2021). *National vital statistics system*. Retrieved from https://www.cdc.gov/nchs/nvss/index.htm
- Centers for Disease Control and Prevention. (2021). *PLACES: Local data for better health*. Retrieved from https://www.cdc.gov/places/
- Centers for Disease Control and Prevention. (2021). *United States cancer statistics: data visualizations*.

  Retrieved from https://gis.cdc.gov/Cancer/USCS/#/StateCounty/
- Centers for Medicare & Medicaid Services. (2021). *Chronic conditions*. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and Reports/Chronic-Conditions/CC Main.html
- County Health Rankings & Roadmaps. (2021). *New Jersey*. Retrieved from http://www.countyhealthrankings.org/
- Covid Act Now. (2021). US covid risk & vaccine tracker. Retrieved from https://covidactnow.org
- Dignity Health. (2021). Community need index. Retrieved from http://cni.dignityhealth.org/
- Feeding America. (2021). *Food insecurity in the United States*. Retrieved from https://map.feedingamerica.org/
- Health Resources and Service Administration. (2021). *HPSA find*. Retrieved from https://data.hrsa.gov/tools/shortage-area/hpsa-find



- Monarch Housing Associates. (2020). *New Jersey 2020 point-in-time count of homeless*. Retrieved from https://cdn.monarchhousing.org/
- New Jersey Department of Education. (2021). *Fall enrollment reports*. Retrieved from https://www.nj.gov/education/doedata/enr/index.shtml
- New Jersey Department of Health. (2021). *New Jersey cancer registry*. Retrieved from https://www.cancer-rates.info/nj/
- New Jersey Department of Health. (2022). *New Jersey overdose data dashboard*. Retrieved from https://www.state.nj.us/health/populationhealth/opioid/
- New Jersey Department of Health. (2021). *New Jersey state health assessment data*. Retrieved from https://www-doh.state.nj.us/doh-shad/
- The World Bank. (2021). *Gini Index (World Bank estimate)*. Retrieved from https://data.worldbank.org/indicator/SI.POV.GINI
- United States Bureau of Labor Statistics. (2021). *Local area unemployment statistics*. Retrieved from https://www.bls.gov/lau/
- United States Census Bureau. (n.d.). *American Community Survey*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
- United States Department of Health and Human Services. (2021). *Healthy people 2030*.

  Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives
- United Way of Northern New Jersey. (2021). *United for ALICE*. Retrieved from https://www.unitedforalice.org/



# **Appendix B: Community Feedback**

# Focus Groups and Key Informant Interviews

Focus Groups – Behavioral Health	Focus Groups – Home Health and Chronic Disease	
4/06/2022 1pm	4/06/2022 10am	
4/14/2022 1pm	4/07/2022 1pm	
4/15/2022 1pm	4/21/2022 1pm	
Focus Groups – Maternal and Child Health	Focus Groups – Youth Mental Health	
4/11/2022 10am	4/05/2022 IDEA Youth	
4/13/2022 1pm	4/20/2022 Boys and Girls Clubs of Gloucester	
4/27/2022 10am	4/26/2022 Hopeworks, Camden	
5/4/2022 1pm	4/26/2022 Pennsauken High School	

### **Key Informant Interviews and Focus Group Participants:**

Jeff	Adams	Aiesha	Goldman	Ann	Peters
Donna	Antenucci	Alva	Gould	Gina	Pimentel
Diana	Archer	Brianna	Hanekom	Ashley	Pizarro
Robert	Bamford	Jeffrey	Hanna	Theresa	Post
Dominic	Barone	Abigale	Hassel	Lydia	Ramsey
Elisabeth	Bass	Joe	Hejlek	Agatha	Reidy
Amy	Benedetti-Ashlock	Jovanna	Hopkins	Mason	Richard
Donna Lee	Berry	Pam	Hubler	Priscilla	Rios
Toni	Brunson	Christopher	Huff	Antoine	Sabb
Emily	Buchenhorst	Luanne	Hughes	Isaiah	Seabreeze
Dr. John (Jay)	Case	Michelle	Hurwitz	Brittany	Spaeth
Stephanie	Catano	Lori	Jalkiewicz	Meredith	Stein
Dyhrame	Chua	Analoraine	Johnson	Zachary	Taylor
Dr. Andrew	Cohen	Larodge	Johnson	Lauryn	Tilghman
Kimberly	Coskery	Erom	Klein	Judy	Tobia-Johnson
Ann	Coyle	Nicole	Lamborne	Reanna	Torres
Ricardo	Cruz	Michelle	LaRue	Chris	Tracey
Amanda	Davis	Tracy	Little	Jessica	Velazquez
Alexander	Duong	Samantha	Martine	Rita	Veterano
Jase	Elam	Kari	Mastromonica	Sandi	Voynow
Christina	Geigges	Karen	McEvoy Shields	Lucy	Warburton
Venetia	Ghozlan	Angelica	Mercado	Merle	Weitz
Ngozia	Gibson	Russ	Micoli	Alexa	Williams
Suzanne	Gilbride	Barbara	Murtaugh	Amagin	Williams
Raymond	Glenn	Kara	Perle	Patricia	Withington
The students of Mrs. Sweeney's Health Occupations Program at Pennsauken High School					



## **Appendix C: Evaluation of Impact: 2019-2022**

### **Community Health Improvement Plan Progress Report**

Virtua Health's 2019 Community Health Needs Assessment (CHNA) was conducted by the South Jersey Health Collaborative (SJHC), within three Southern New Jersey counties: Burlington, Camden and Gloucester with assistance of the Walter Rand Institute for Public Affairs at Rutgers University-Camden (WRI). The primary goal of this CHNA was to carefully characterize community members' views on the health needs in our communities. The CHNA and CHIP are available to the public on Virtua Health's website: https://www.virtua.org/about/community-action-plan.

Four priority areas were identified in the 2019 CHNA that serve as the goals for the Virtua Health 2019-2022 CHIP are:

- Behavioral Health and Substance Abuse
- Accessing Care
- Communications and Relationships
- Obesity

Virtua Health, as a comprehensive health care system with a mission to help the South Jersey community to Be Well, Get Well, and Stay well, embraces the opportunity to utilize its resources to assist its SJHC partners in addressing these priority areas. The CHNA team collaborated with colleagues across the Virtua system to identify resources that could be leveraged to provide solutions to the problems and gaps identified by South Jersey residents. This collaboration revealed both the vast amount of work already underway within Virtua and the opportunity to coordinate this work to best address the needs identified in the 2019 CHNA. Following a series of meetings involving a multidisciplinary group of Virtua leaders, the following goals, objectives, strategies were developed as part of the Community Health Improvement Plan (CHIP) for the 2020-2022 period.

The arrival of COVID-19 shortly after the approval of the Virtua Health CHNA and CHIP shifted the priorities of our community and the world. Virtua Health swiftly adapted to enact measures to keep staff and patients safe, ensure continuity of care, integrate new technologies and strategies to adjust to the new environment, and leverage partnerships to meet emerging needs. A fifth section demonstrating Virtua Health's response to COVID-19 has been added. The following sections outline our work to impact the priority health needs and respond to COVID-19 in the South Jersey area.

#### 1. Behavioral Health: Mental Health and Substance Abuse

**Brief Description of Need:** Behavioral health describes the connection between a person's behaviors and the health and well-being of the body and mind. It includes strategies aimed at promoting and improving mental health, as well as strategies aimed at preventing or intervening in addictions. Broadly, community members described the prevalence of needs related to behavioral health, the links between mental health and substance abuse, the inadequacy of resources, and specific populations that are



particularly at risk for behavioral health challenges.

**Goal:** Offer a range of accessible behavioral health prevention and treatment options that fit the needs of individuals.

#### **Objectives:**

Increase screenings for behavioral health needs in a variety of health care settings.

Increase the number of individuals who receive treatment for mental health and/or substance abuse.

#### **Strategies:**

Provide Suicide Screenings to Emergency Department Patients and refer for treatment as needed.

Provide Depression screenings in Primary Care and Urgent Care.

Explore implementation of alcohol and substance use screening tool in Primary care.

Provide Medication Assisted Treatment (MAT) in inpatient and outpatient care setting.

Promote awareness about Virtua Health's online Behavioral Health resources.

Increase community awareness and understanding about mental health issues.

#### **Behavioral Health Accomplishments (2020-2022):**

- Increased the percentage of suicide screenings in the ED to 91% of all patients.
- Exceeded the target number of patients provided MAT at Berlin (55) by 10 times (597 visits).

### 2. Accessing Care

**Brief Description of Need:** Community members' concerns about accessing care took several forms, including the costs of care and insurance, the time involved in getting care, difficulty navigating the health care system and treatment plans, and transportation. Lack of providers generally was not seen as a major barrier to health care. Despite this, a lack of specialists and population-specific needs made providers an important need.

**Goal:** Offer supportive services that assist the community with achieving accessible health care.

#### **Objectives:**

Reduce transportation barriers for residents to receive care.

Improve navigation of health care services to link individuals to appropriate, transparent, and cost-effective care.

#### Strategies:

Improve access to services and resources in Virtua and the Community.

Continue to provide transportation services for patients experiencing transportation barriers.

Improve access to Virtua services by enhancing how we connect and support our community.

#### Access to Care Accomplishments (2020-2022):

- Increased the number of children under 6 years who receive influenza vaccine by 53%, far outperforming the goal of increasing by 10%.
- 100% of children under 6 identified with elevated BLL were referred to DOH, meeting the target.
- Increased the number of rides arranged for discharges from acute care and ER and primary/specialty care appointments by more than 300% since January 2020.





 Reduced barriers to accessing care by providing transportation resources for than 10,000 visits between 2020 and 2021.

### 3. Communications and Relationships

Brief Description of Need: Community members reported that communication around health care was a barrier to care. Rushed or unclear communication between patients and providers left community members feeling uncertain about their diagnoses and treatment plans. Community members and stakeholders alike worried that stigma associated with identity or diagnoses impacted effective communication between patients and providers. Stakeholders worried that poor communication between agencies resulted in duplicate services and kept patients from receiving available services. Community members and stakeholders mentioned a need for better communication between health systems and the public. In many cases, despite active promotion by health systems, community members were not aware of programs and services provided by the health systems. Finally, community members and stakeholders mentioned the need to have population-specific communications strategies.

Goal: Improve communication and coordination across the health care continuum, inclusive of patients, providers, and other community organizations.

#### **Objectives:**

Improve communication between providers and patients to establish clearer patient understanding of the care plan.

Assist patients in obtaining and understanding information regarding their health care.

Improve communication between health care agencies.

#### **Strategies:**

Educate staff and providers to reduce implicit bias and increase cultural competency.

Assist patients in obtaining and understanding information regarding their health care.

Improve communication between providers and patients to establish clearer patient understanding of the care plan.

Continue to promote Virtua health services and programs in the community.

Improve communication between health care agencies.

#### **Communications and Relationships Accomplishments (2020-2022)**

- Increased cultural competency by incorporating unconscious bias training into staff compliance training for all staff and providers.
- Actively participated in Mobilizing Action by Planning and Promotion (MAPP) meetings with Local County Boards of Health.
- Extended Chat platform to enhance direct patient access on Virtua.org by extending hours, adding a COVID-10 Chat queue; responded to more than 18,000 Chats.
- Consistently scored at 90 or above in the patient satisfaction survey.

#### 4. Obesity

**Brief Description of Need:** Community members ranked obesity as a top health issue in their communities. When asked to identify health issues facing their communities, over 1/3 of all responses were directly related to obesity, the causes of obesity, and the chronic diseases that are associated with





obesity. Across the Burlington, Camden, and Gloucester counties, just over half of community members identified adult obesity as an issue facing their community. Community members selected as important health issues the causes of obesity and its consequences.

# Goal: Increase access to education, healthy food options, and participation in physical activity.

#### **Objectives:**

Provide assistance so individuals can reduce unhealthy food choices.

Increase engagement in programming that promotes a healthy lifestyle.

#### **Strategies:**

Increase access to healthy food options.

Increase access to education around healthy lifestyle.

Increase access to physical activity.

#### **Obesity Accomplishments (2020-2022):**

Virtua Health was able to offer access to the following programs and services to address issues of access to healthy food options, healthy lifestyle, and access to physical activity:

- Healthy Food Offerings
  - Camden Farmers Market
  - Collingswood Farm Market
  - Hunger Action Month
  - Thanksgiving turkey dinner drive
  - Information through mixed media outlets
  - Cooking demonstrations

#### Addressing Obesity and Food Insecurity: COVID-19 Response to Food Insecurity:

Clinically Integrated Network: This program was created to support the most vulnerable patients of the Virtua physician networks by providing essential groceries and/or meals to keep them safe and healthy at home. Specifically targeted to those patients at high risk who cannot get food delivered because of lack of technology or capacity or resources, or who do not have access to help from family or neighbors. The project was funded 100% by philanthropy. Virtua Health provided the following services to vulnerable patients during the pandemic.

- Essential Grocery Kits (EGK) A box of supplemental groceries intended to last 14 days including staple non-perishables and some household items (ie: pasta, sauce, bread, peanut butter, jelly, low sodium soup, paper towels, toilet paper, hand soap, etc.). Pickup was hosted once per week by the fitness team, Mobile Pediatric Unit and team made deliveries.
- Frozen Meals frozen meals per week, per patient offered to those that are too unwell to prepare their own meals.

Number of grocery and essentials kits distributed	Number of frozen meals delivered to people unable to cook	Total number of individual patients served by the program
285	231	224





Mobile Farmer's Market: As of March 24th, 2020, the Mobile Farmer's Market was repurposed into a temporary mobile food pantry to provide much-needed staple dry goods (peanut butter, rice, beans, canned fruits and vegetables, soup, etc.) and produce, while supplies last, at six different distribution sites throughout the region each week. Below is an ongoing list of sites we have served with bags of fresh produce and staple non-perishable foods since pivoting to a mobile food pantry model:

- Pemberton Township and Browns Mills: Residents of Browns Woods; Browns Mills United Methodist Church; St. Mark's Lutheran Church senior residents and Spanish-speaking community members in need from Pemberton.
- Burlington City: SisterHood, Inc. in Burlington City
- Burlington County River Towns: Palmyra Community Center members and senior residents within Borough of Palmyra, Riverton, Riverside, and Cinnaminson.
- Camden City: Residents of Cooper Waterfront Homes (North Camden); Northgate II (North Camden); The Willows (North Camden); Faison Mews Senior Residence (62+); Market Fair (55+); Heart of Camden (Water Front South Neighborhood); Residents of Camden City's Water Front South Neighborhood and surrounding areas; Northgate I (HUD).

Number of	Total Pounds of
Mobile Farmer's	Food Distributed
Markets	
101	47,319

#### **Total COVID-19 Relief Food Access:**

Pounds of free food	Free food distributions (pop-up	Bags of free	Resident
distributed to the	markets) held March-September	food	interactions
community during COVID	2020	distributed	
76,843	198	16,519	10,134

#### Response to COVID-19

In response to the COVID-19 pandemic, Virtua Health swiftly adjusted to implement practices and strategies to continue to meet the medical needs of the communities we serve while keeping our staff and patients safe. This process included shifting to virtual health and remote monitoring, meeting unmet needs such as food security, providing testing, treatment, and eventually vaccination. None of these activities were possible without collaboration and support from a wide range of partners, from local government to the federal government, to other health care partners, social service agencies, and public health. Together, Virtua Health rose to the challenges brought about by COVID-19. The following represents some highlights of the efforts Virtua Health has made to meet community needs during the pandemic.

#### **Process Changes to Meet Community Need:**

Remote Patient Monitoring (to home): 227 COVID patients discharged from Virtua were monitored with Vivify kits for 14 to 30 days post discharge. Concept was to support earlier discharges to home and



a decrease in readmissions, which would then support patient and staff safety. 184 COVID patients monitoring through Care Companion; 379 COVID patients monitored with Vivify kits.

Water Out of the Wave Outreach Calls: 2,173 high-risk patients contacted during the initial wave of COVID to ensure patients had access to food, medications, their providers, socialization (virtual), mental health support, and more. The VIN partnered with Virtua's Eat Well Programs (food program) team to deliver food to 183 patients. The goal was to reduce the community COVID cases and the number of patients needing to be hospitalized during this time.

**COVID Emotional Support Group:** Virtual behavioral health support groups were created specifically to address the emotional needs of individuals impacted by grief, loss, anxiety, depression and other factors as a result of COVID-19. Participants attended 15 sessions, held in 2021.

#### **Emergency Preparedness: Collaboration to Meet Changing Needs**

As the Burlington County Healthcare Coordinator assigned to the County COVID-19 Task Force, Virtua Health is responsible for working collaboratively with both state and county health, state and county offices of emergency management to identify gaps in resources related to COVID-19. The COVID-19 Task Force responsibilities include:

- Developing educational materials based on current CDC information,
- Training health care and first responders on COVID-19 prevention,
- Fit testing, PPE donning, and doffing,
- Developing crisis standards of care and alternatives of protection during PPE shortages,
- Identifying testing, education and wrap around resources for exposed healthcare workers, first responders and their families,
- Coordinating PPE allocation to health care providers in the county

Virtua Health's Director of Rehab Services participates in a weekly Camden City Covid 19 Emergency Micro-Summit which is comprised of members from Cooper Health, Camden Coalition, Camden Health Department, Rutgers School of Nursing, and Project Hope.

#### **COVID-19 Testing**

Virtua Health opened its first COVID-19 testing site in Marlton in March 2020. Virtua Health provided over 141,000 COVID-19 tests, including 99,600 PCR tests for community members between March 2020 to December 2021 through six drive-up sites throughout the area. Starting in October 2020, all Virtua Health Urgent Care locations offer COVID testing for symptomatic patients. Between October 2020 and December 2021, 35,000 PCR tests and 6,700 rapid antigen tests were conducted in Virtua Health Urgent Care settings.

#### **COVID-19 Vaccination**

In December 2020, Virtua Health coordinated one of New Jersey's Megasite Vaccine Clinics, providing logistics and support for 7 days per week, 14 hours per day, from December 2020- August 2021, reopening in November 2021. Virtua Health's Megasite Vaccine Clinic remains the only site of its kind still open in New Jersey.



**Sensory Room** – Virtua Health hosts the only regional vaccine clinic specializing in providing vaccine to individuals with sensory concerns. More than 3,000 people with sensory concerns – ranging from autism, PTSD to dementia and others – have been vaccinated using Virtua's sensory room and services.

**Pop Up Sites** – Virtua Pediatric Mobile Services has partnered with the Department of Health and a wide range of community partners to provide pop up vaccine clinics in vulnerable communities throughout the area. Examples of some of the pop-up sites served by Virtua Health include:

- Cousin's Supermarket,
- Mount Ephraim Shopping Center,
- Heart of Camden,
- Family Dollar in Camden City and
- Virtua PT & Rehabilitation in Lindenwold.

Virtua Health continues to provide support to at least three pop-up COVID-19 vaccine clinics per month throughout Burlington and Camden counties. Virtua Health's COVID-19 clinics have administered more than 500,000 doses of vaccine to people throughout the South Jersey region.

