

NASSAU COUNTY COMMUNITY HEALTH ASSESSMENT AND COMMUNITY HEALTH IMPROVEMENT PLAN 2022-2024



December 2022

Revised August 2023

**200 County Seat Drive
Mineola, NY 11501**

Executive Summary of the Community Health Assessment and Community Improvement Plan for Nassau County, NY.

Located in the western region of Long Island, Nassau County is home to some 1,395,774 residents. Nassau's populace lives within roughly 287 square miles of the county's 453 total square miles – the rest is occupied by water. The following report provides a snapshot of the health of Nassau County's residents and a plan for improving it. This assessment was based on demographic, publicly available morbidity and mortality, additional hospitalization data provided by shared groups of healthcare organizations and qualitative data. The results consistently demonstrated that Nassau County's wealth translates to overall excellent health. However, a closer examination of underserved and minority communities finds that a significant part of Nassau County's population experiences poor health outcomes and conditions. This is true for hospitalizations due to chronic disease, specific infectious diseases, and perinatal outcomes. Vital statistics demonstrate that chronic diseases are the leading cause of death as the population ages, though clearly deaths from COVID-19 had a large impact.

New York State Department of Health (NYSDOH) identifies health issues as part of its Prevention Agenda from which counties are required to select two health priorities that it will address during a Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) cycle. Two health priorities were selected for Nassau County and its partners to address: (1) preventing chronic disease with a focus on chronic disease preventive care and management and (2) promoting well-being and preventing mental and substance use disorders with a focus on mental and substance use disorder prevention.

These priorities, chosen from NYS Department of Health's Prevention Agenda, despite the pandemic, are similar to priorities selected from the prior CHA and CHIP cycles. Chronic disease and mental health are multifactorial, not quickly remedied and continue to be reflected in the qualitative and quantitative. They are impacted by multiple determinants of health including behavior, economics, social barriers, access to quality clinical care, and the environment. Therefore, to achieve improvement in the health of Nassau County, collaboration across multiple agencies is necessary. The Long Island Health Collaborative (LIHC) was created in 2013. It is a regional partnership including local health departments from both Nassau and neighbor Suffolk County, hospitals, academic institutions, community-based organizations, associations and the Nassau-Suffolk Hospital Council which serves as the coordinating agency. The advantage of this broad-based collaborative is that it provides expertise in the areas of 1) statistical analysis and methodology, 2) clinical care and community-based programs, 3) evidence-based interventions, and 4) community feed-

back. The health departments provide expertise in data analysis, methodology, connection to the community and understanding its needs, evidence-based programs, and organization. The hospitals provide much of the direct health care to the community including chronic disease community-based programs and interventions. The hospitals are distributed throughout the county and increase the accessibility to residents. Academic institutions provide capacity to collect qualitative data and expertise in assessment methodology. Community based organizations and associations offer insight of the public's need and methods for outreach. In addition, the LIHC contributes staff to coordinate its overall efforts, provides communication, and education and reports for members and residents.

Nassau County Health Department relies on the community for input into the CHA and CHIP. The community was solicited to identify these two priorities through the following: The Community Member Survey, Community Based Organization Survey, In-Depth Interviews of Key Informants who work in community-based organizations and, research results from the Long Island's Libraries: Caretaking of the Region's Social Support and Health Needs. During the pandemic, the collaborative meetings continued to meet via video communication affording different sectors of the community to participate. As a result, the community provided feedback on the priorities and the CHIP's interventions. Nassau County's Community Health Improvement Plan describes specific, ongoing programs among hospitals, the LIHC and the Nassau County Health Department which addresses the two selected health priorities. Evidence-based strategies for interventions were chosen with community resources in mind. Such interventions include education, community walking programs, support groups and services, trainings, and linkages to care. These programs are tracked collectively and regularly to determine their impact by measuring satisfaction, use, and overall improvement in health. Overall health is monitored by periodic review of hospitalization and vital statistics data. The NYS Prevention Agenda dashboard, an online reporting tool, is an important gauge providing the community with feedback on the progress of the priorities.

Nassau County Department of Health continuously seeks to improve the health of the community by regularly assessing its health, developing a plan and providing services. The emphasis on chronic disease and mental health reflects not only the health outcomes but the desires of the community. Nassau County leads a public health system that works to create healthy communities. Through services and community partnerships, its mission is to promote and protect all who live, work, and play in Nassau County. This community assessment and plan provides a framework by which to achieve this.

Important websites and resources:

Nassau County Department of Health: <https://www.nassaucountyny.gov/1652/Health-Department>

Long Island Health Collaborative: <https://www.lihealthcollab.org/>

NYSDOH Prevention Agenda: https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/index.htm

NYSDOH Community Health Indicators: <https://www.health.ny.gov/statistics/chac/indicators/>

NYS Community Health Indicators by Race/Ethnicity: <https://www.health.ny.gov/statistics/community/minority/county/>

NYS Health Profiles [Hospitals by Region/County and Service \(ny.gov\)](#)

NYS COVID-19 Testing Tracker [COVID-19 Testing Tracker | Department of Health \(ny.gov\)](#)

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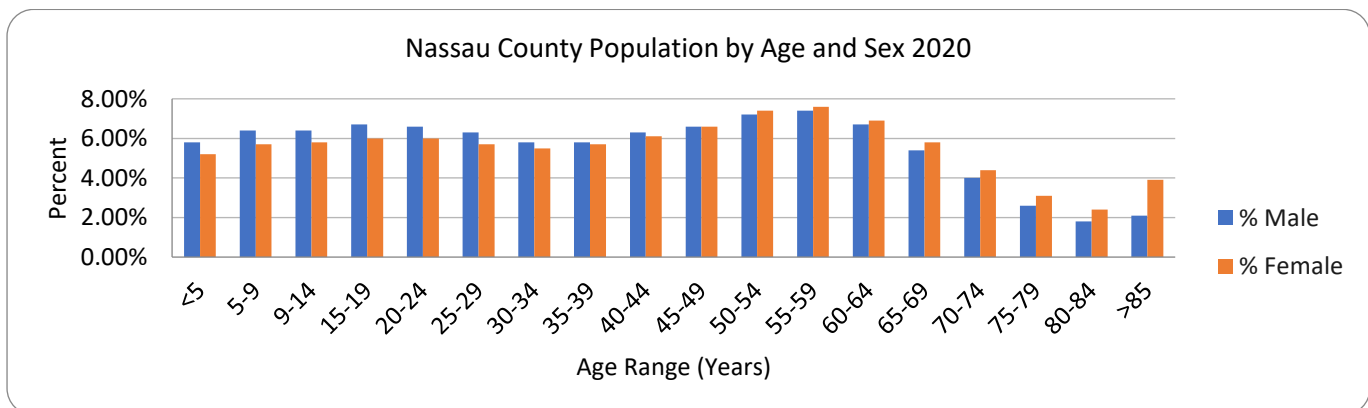
CHIP WORKPLAN

Chapter 1: Nassau County and its Demographics



Located in the western region of Long Island, Nassau County is home to some 1,395,774 residents. Nassau's populace lives within roughly 287 square miles of the County's 453 total square miles—the rest is occupied by water. Formally recognized as a county of New York in 1899, Nassau County is bordered by New York City's Queens County to the west and Suffolk County to the east. Nassau County is composed of three towns (North Hempstead, Hempstead, and Oyster Bay) and two cities (Glen Cove and Long Beach).

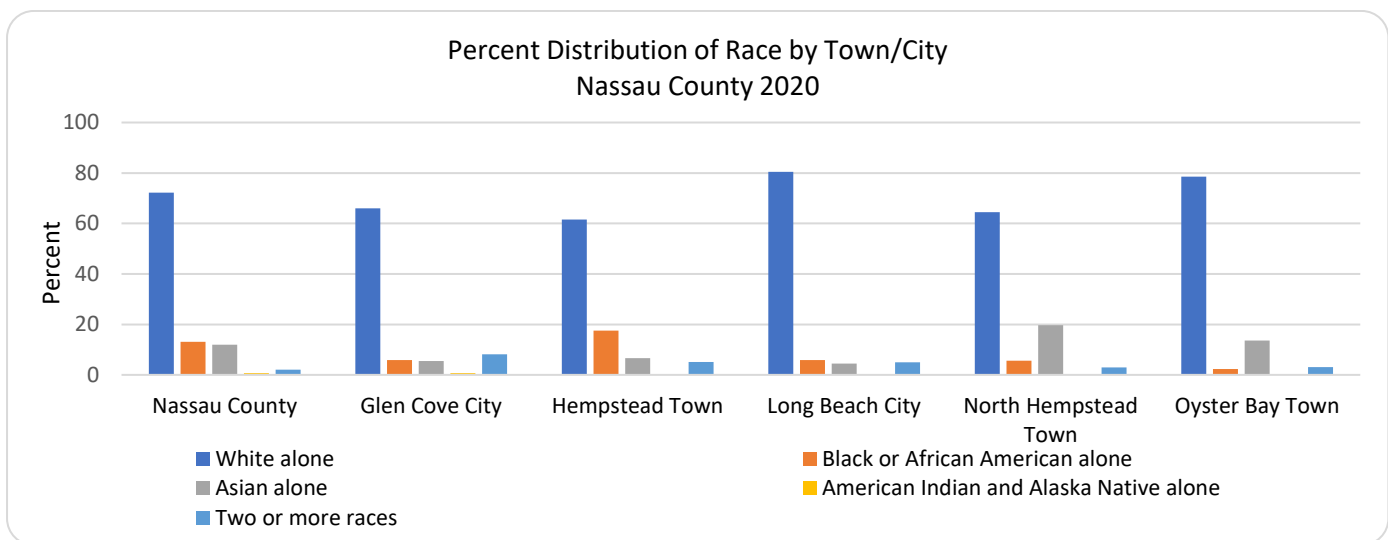
Age and Sex



With a median age of 41.9 years, Nassau County is generally an older community compared to New York State (39 years of age) and the United States (38.2 years of age). In 2020, there was an estimated 51.3%-female and 48.7%-male population in Nassau County. Statewide, there was a 51.5%-female and 48.5%-male population, nearly identical to the countywide percentages. The gender-based percentages nationwide were similar as well, with 50.8% of residents identifying as female and 49.2% of residents identifying as male.

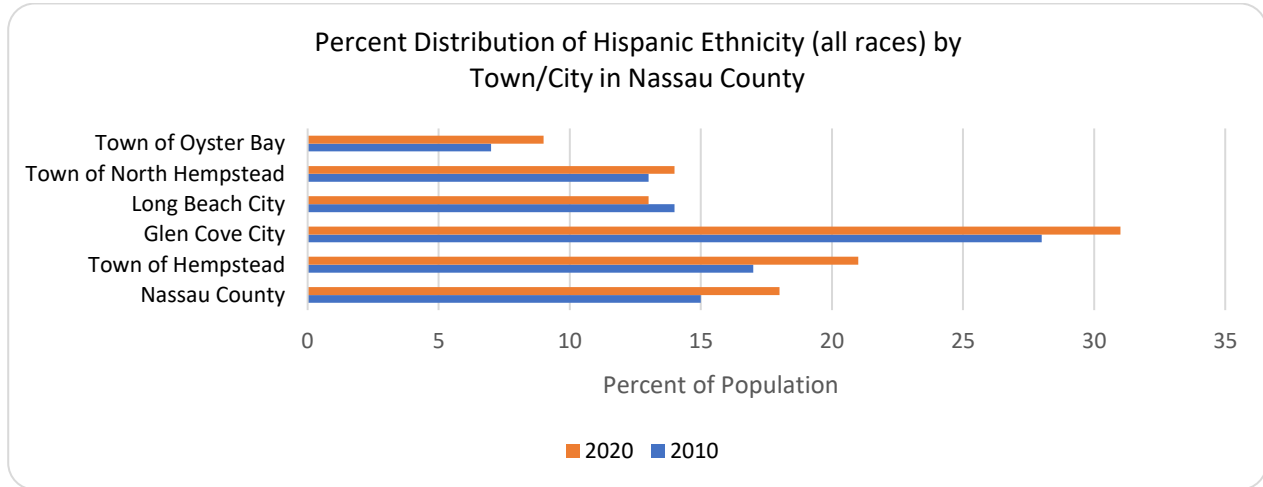
Race and Ethnicity

There are some interesting trends among the data regarding race and ethnicity for Nassau County in 2020. Accounting for nearly 56% of the population, Nassau's 779,454 self-identified, non-Hispanic Whites make up most of the population. After factoring out ethnicity, the number of those identifying as White slightly rises to 817,196, or about 59% of Nassau's population. The next largest populations by race are those that identify as Asian, 164,201 or approximately 12% of the population, followed by those who identify as Black, 153,274 or 11% of the population. Compared to New York State (NYS), Nassau County has a larger population of Whites (55% of NYS residents), a lower percentage of Blacks (15% of NYS residents), and a higher percentage of Asians (10% of NYS residents).



The above graph provides insight into the distribution of races by towns and cities in Nassau County. Whites are in the majority in each location. Blacks are the second highest, except in North Hempstead and Oyster Bay where Asians make up the second largest population. Those identifying as American Indian/Alaska Native alone are the smallest populations percentagewise across Nassau County.

Nassau County has observed an increase in the percentage of those identifying as Hispanic, from 15% in 2010 to 18% in 2020. This trend is more pronounced in some communities, though most of the County has seen a net increase in Hispanic residents over the past decade.

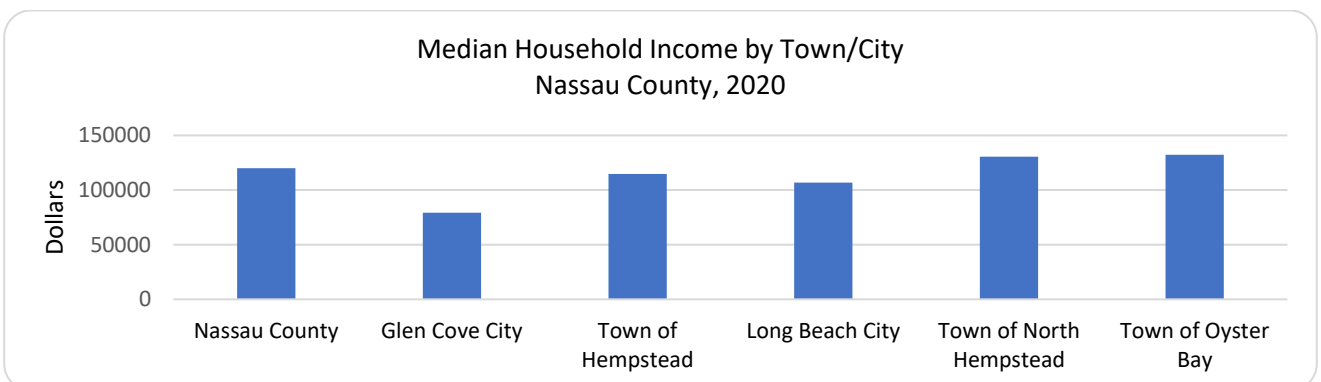


The above bar graph demonstrates both the change in percent of those identifying as Hispanic over time since 2010, as well as the percentage of Hispanics by towns and cities. The Town of Hempstead and Glen Cove City are the two locations that have the largest Hispanic populations, respectively.

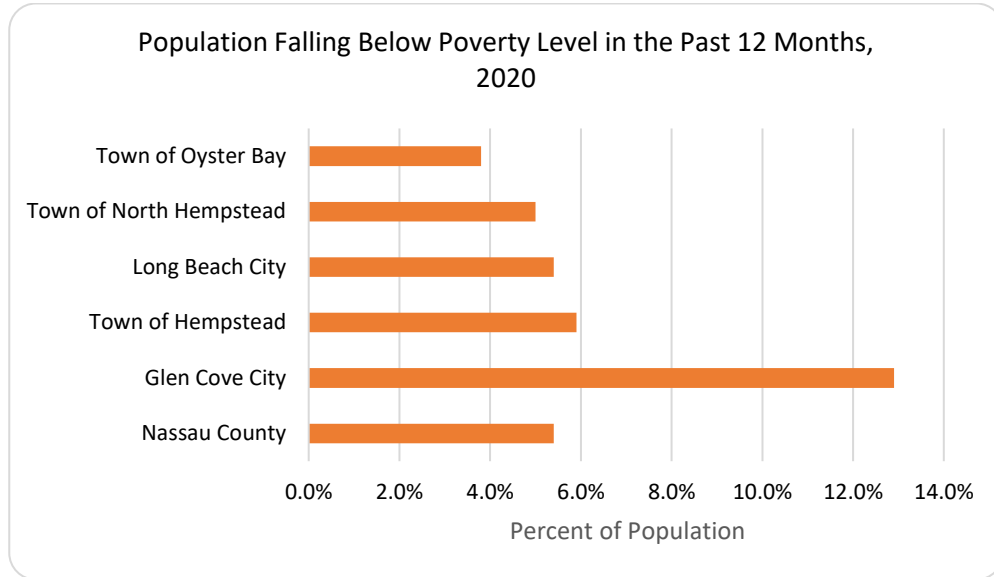
Households and Families

In 2020, Nassau County was composed of 449,967 households. Families made up 76.9% (346,312) of total households with an average family size of 3.41. Of the total families in Nassau County, 78.9% are married-couple families while 21% are single parent families. Of the total households in Nassau County, 81.1% are owner occupied and 18.9% are renter occupied.

Income, Poverty, Unemployment, and Income



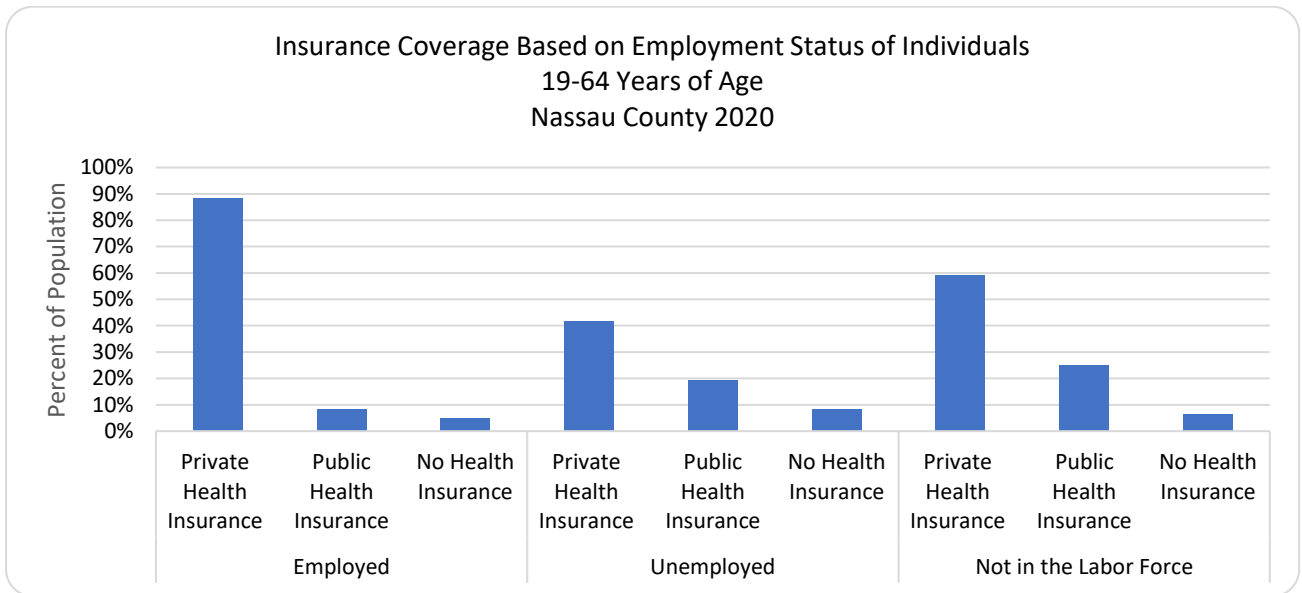
According to the 2020 American Community Survey (ACS) 5-yr Estimates, Nassau County residents earned a median household income of \$120,036, significantly higher than both the New York State median household income of \$71,117 and the country's median household income of \$64,994.



In addition, where poverty status is known, 5.4% of Nassau residents fall below poverty level. This estimate is lower compared to both for New York State (13.6%) and the nation (12.8%). The highest percentage of people falling below poverty level in Nassau County is in Glen Cove City (12.9%).

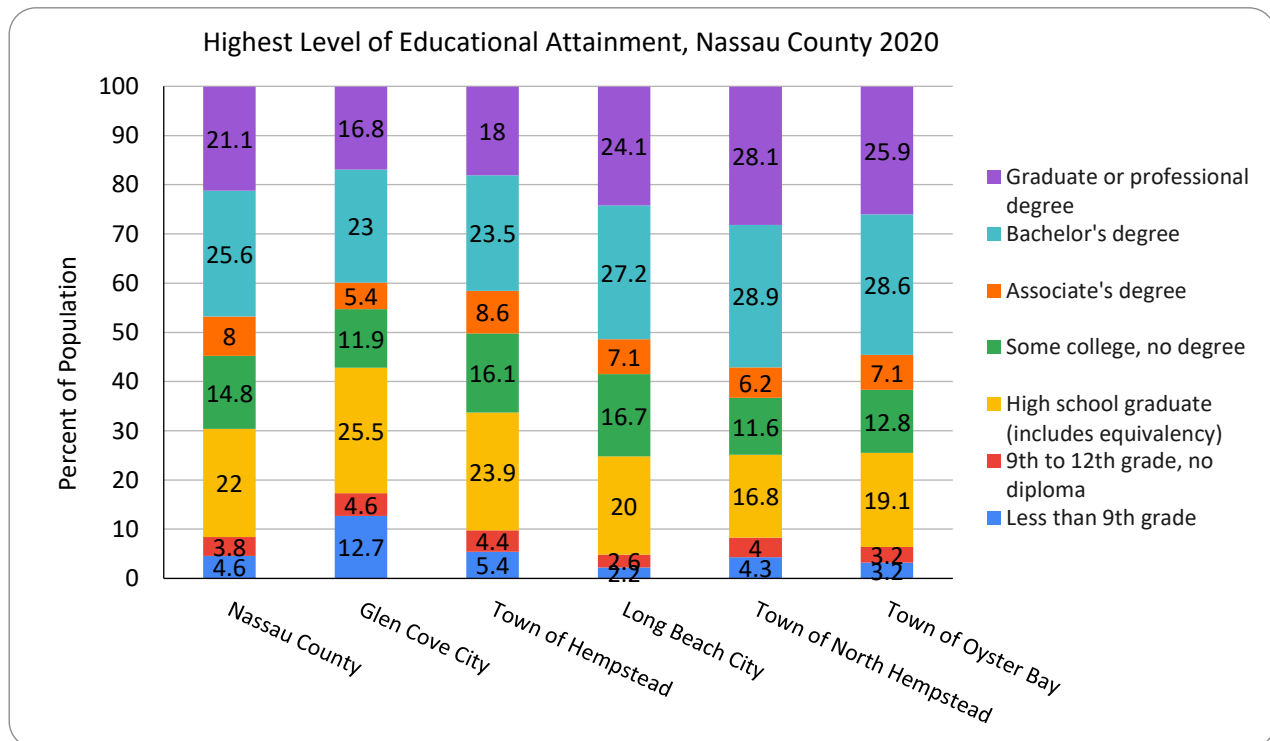
Nassau County also experiences a lower unemployment rate compared to the State and the nation. Approximately 2.7% of Nassau's civilian labor force of residents 16 years and over were unemployed as per the 2020 ACS 5 Year Estimates. This percentage is in contrast to an estimated 3.6% of New York State residents, and about 3.4% of the United States residents for the same timeframe.

The following figure displays the number of Nassau County residents who have private, public, or no health insurance according to their employment status. In general, most of the private insurance is made available to residents who are employed and are between the ages of 19-64. Residents who are unemployed have less insurance coverage as compared to those who are employed or are no longer a member of the labor force.



Educational Attainment

In Nassau County, an estimated 91.6% of residents above the age of 25 received a high school degree or GED equivalent. For comparison, 87.2% of New York State residents and 88.5% of US residents in the same age category have also received high school diplomas or GED equivalents. Furthermore, an estimated 46.7% of Nassau County residents have received a bachelor's degree, compared to approximately 37.5% of New York State residents and 32.9% of US residents.



This graphical representation details the distribution of educational attainment by town, essentially demonstrating the spread of degree type throughout Nassau County and its subregions. For instance, Glen Cove City has the highest percent of those with high school diplomas/GED equivalents while having the lowest percentage of those with graduate/professional degrees. North Hempstead has the highest percentage of those with bachelor's degrees, as well as graduate/professional degrees compared to the other areas. Similarly, Nassau County as a whole has a large percentage of those holding college degrees, as well as graduate/professional degrees.

Chapter 2: Population Health Status

Based on its health factors, including socioeconomic determinants, health behaviors, clinical care, and physical environment, Nassau County was ranked 1st in New York State by the 2022 Wisconsin County Health Ranking,¹ a well-known public health reference. Nassau, the nation's 10th wealthiest county,² received this ranking relative to the 61 other counties in New York State based on morbidity (i.e., hospitalizations) and mortality data.³ For Nassau County, this landscape of wellness is not every resident's health reality. Nassau has populations which suffer significantly more from disease morbidity and mortality. This can be true for minority populations. In some cases, the affluence of Nassau County masks the needs of those severely underserved residing within the County.

This chapter discusses the state of the health of Nassau County residents using several data sources. New York State Community Health Indicator Reports (CHIRS) tracks about 350 indicators organized by 15 health topics providing the most recent year of data available for these indicators. Also included is the County's relationship to its region and to New York State. The County Health Indicators by Race/Ethnicity (CHIRE) provides health indicators by race and ethnicity. The Prevention Agenda 2019-2024 is New York State's health improvement plan, the blueprint for State and local action to improve the health and well-being of all New Yorkers and to promote health equity in all populations who experience disparities. Additional data was derived from a 5-year historical data (2017-2021) from the Regional Health Information Organization (RHIO) in Nassau County, known as Healthix. This data included the population of patients

¹ <http://www.countyhealthrankings.org/>

² <https://www.usnews.com/news/healthiest-communities/slideshows/richest-counties-in-america?slide=7>

³ <http://www.countyhealthrankings.org/>

who were registered in Healthix and who live in zip codes listed in Nassau County. Selected, primary diagnostic codes (ICD-10) codes were included in the report. Not all diagnostic codes were included, and this data does not include all potential providers in the area, as all providers do not participate. Data includes both inpatient and outpatient data.

Chronic Disease

Chronic diseases are long-lasting conditions that can be controlled but not cured. These largely preventable conditions are also our nation's leading causes of death and disability. According to the Centers for Disease Control and Prevention (CDC),⁴ as a nation, 90% of our healthcare dollars go to the treatment of these pathologies. Nassau County, in general, has a lower burden of disease compared to New York State as a whole. This relationship changes slightly when New York City (NYC) is excluded from the State statistics. However, in Nassau County's minority population, the burden of many chronic diseases is disproportionately higher than that of the County, as a whole.

Cancer

In general, site-specific cancer rates in Nassau County are less than NYS excluding NYC, and NYS as a whole. However, incidence rates for breast and prostate cancer are significantly higher in Nassau County compared to both New York State categories. Within Nassau County, the incidence rates were higher for Blacks with late-stage breast, colorectal, and cervical cancers compared to other race/ethnicity categories. RHIO data shows that for both hospitalizations and outpatient visits, Blacks have higher rates of prostate cancer. Lung cancer incidence was highest among Whites. Colorectal screening in Nassau County does not meet the Prevention Agenda objective, as established by the New York State Department of Health (NYSDOH).

Community Health Indicators (CHIRS) 2016-2018	Nassau		NYS excluding NYC		New York State	
	Number	Rate (or) Percent	Rate (or) Percent	Significant Difference	Rate (or) Percent	Significant Difference
Age-adjusted all cancer incidence rate per 100,000	26,801	502.9	507.3	No	480.7	Yes
Age-adjusted all cancer mortality rate per 100,000	6,935	122.6	144.8	Yes	139.6	Yes
Age-adjusted lip, oral cavity and pharynx cancer incidence rate per 100,000	570	10.7	12.3	Yes	11.4	No
Age-adjusted lip, oral cavity and pharynx cancer mortality rate per 100,000	84	1.5	2.2	Yes	2.2	Yes
Age-adjusted colon and rectum cancer incidence rate per 100,000	2,020	38.1	38.1	No	37.6	No
Age-adjusted colon and rectum cancer mortality rate per 100,000	597	10.5	11.8	Yes	12.1	Yes
Age-adjusted lung and bronchus cancer incidence rate per 100,000	2,922	52.7	64.9	Yes	57.6	Yes
Age-adjusted lung and bronchus cancer mortality rate per 100,000	1,395	24.6	35.5	Yes	31.3	Yes

⁴ <https://www.cdc.gov/chronicdisease/about/costs/index.htm>

Age-adjusted female breast cancer incidence rate per 100,000	3,955	145.4	139.2	Yes	133.8	Yes
Age-adjusted female breast cancer mortality rate per 100,000	548	17.8	18.5	No	18.7	No
Age-adjusted female breast cancer late-stage incidence rate per 100,000	1,084	40.8	41.1	No	41.4	No
Age-adjusted cervix uteri cancer incidence rate per 100,000	156	6.6	6.7	No	7.6	No
Age-adjusted cervix uteri cancer mortality rate per 100,000	41	1.5	1.7	No	2.0	No
Age-adjusted ovarian cancer incidence rate per 100,000	350	12.7	11.5	No	11.4	No
Age-adjusted ovarian cancer mortality rate per 100,000	174	5.6	6.4	No	6.4	No
Age-adjusted prostate cancer incidence rate per 100,000	3,679	140.1	131.6	Yes	129.4	Yes
Age-adjusted prostate cancer mortality rate per 100,000	341	14.2	16.5	Yes	17.5	Yes
Age-adjusted prostate cancer late-stage incidence rate per 100,000	522	19.9	25.4	Yes	25.2	Yes
Age-adjusted melanoma cancer mortality rate per 100,000	93	1.6	2.0	No	1.6	No
Percentage of women aged 21-65 years receiving cervical cancer screening based on 2012 guidelines (2018)	N/A	87.4	86.1	No	84.7	No
Percentage of women aged 50-74 years receiving breast cancer screening based on recent guidelines (2018)	N/A	79.7	80.9	No	82.1	No
Percentage of women (aged 50-74 years) who had a mammogram between 10/1/17 – 12/31/19 (2019)	N/A	69.0	65.9	Yes	71.0	Yes

Nassau County Health Indicators by Race/Ethnicity, 2016-2018

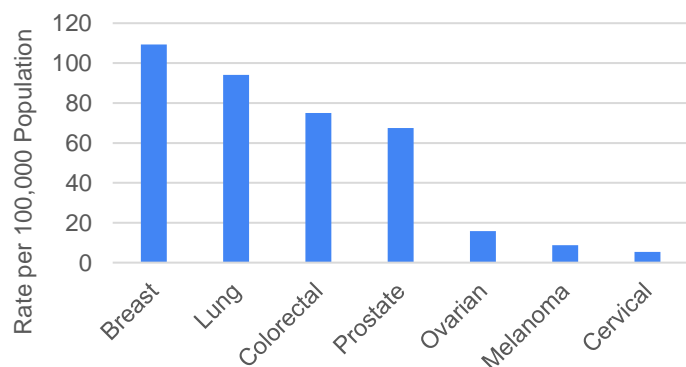
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Lung cancer incidence per 100,000 population, age-adjusted	59.3	37.4	32.6	26.3	52.7
Colorectal cancer mortality per 100,000 population, age-adjusted	11.7	10.5	6.6	5.3	10.5
Colorectal cancer incidence per 100,000 population, age-adjusted	39.8	41.5	27.1	29.0	38.1
Female breast cancer mortality per 100,000 female population, age-adjusted	19.0	19.2	7.4	12.8	17.8
Female late-stage breast cancer incidence per 100,000 female population, age-adjusted	43.8	46.2	32.6	28.0	40.8
Cervical cancer incidence per 100,000 female population, age-adjusted	5.6	9.8	4.1	8.8	6.6

Prevention Agenda (PA) Indicator, 2018	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Percent	Percent	Percent	Percent
Percentage of adults who received a colorectal cancer screening based on the most recent guidelines - Aged 50-75 years	65.2	63.3	66.5	80

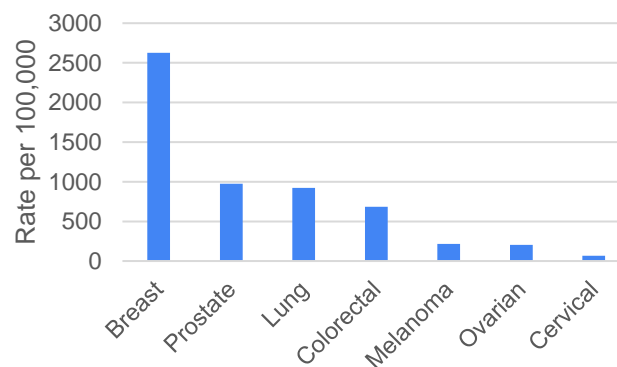
Red – Does not meet PA objective Green- Meets PA objective

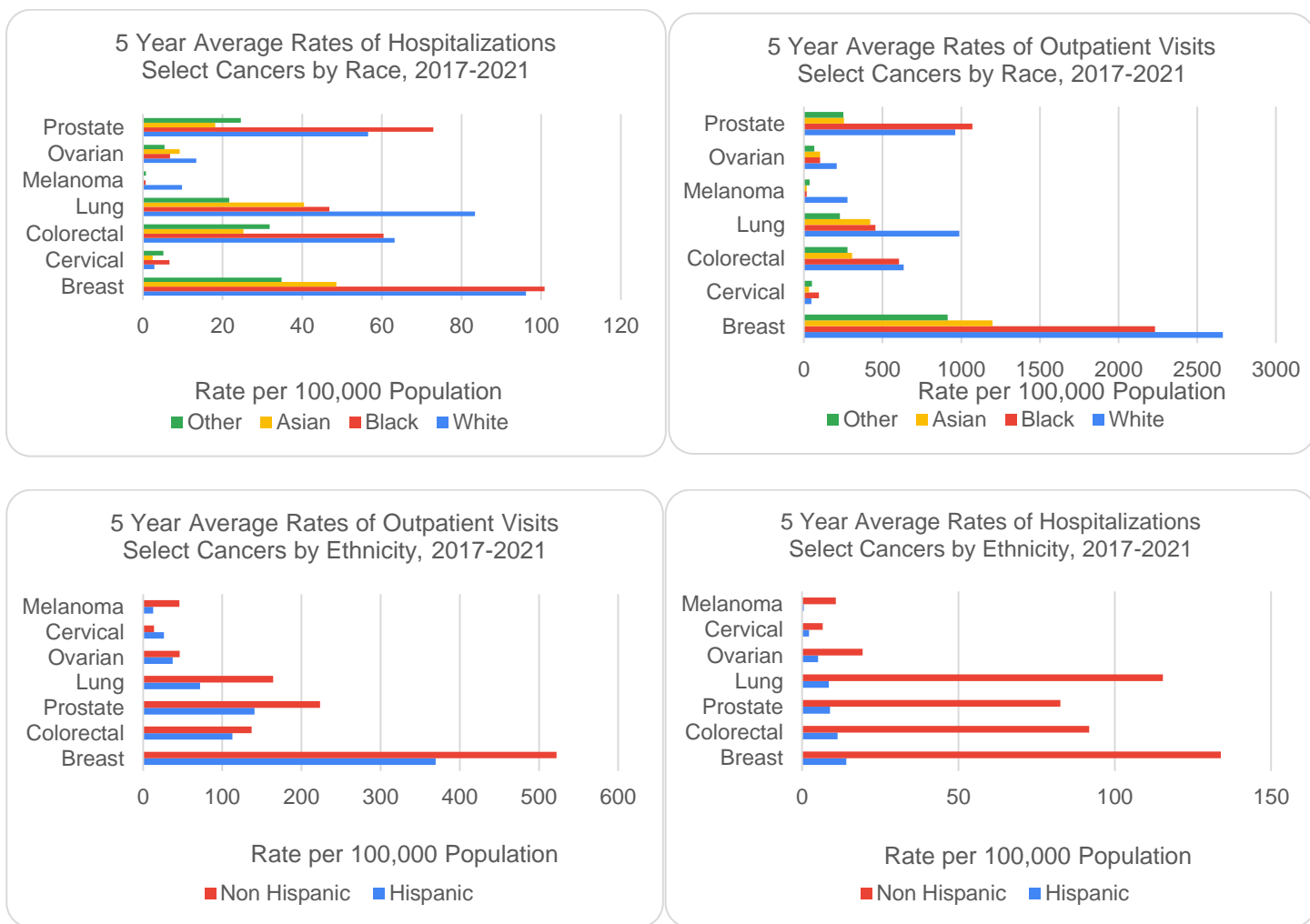
RHIO/Healthix Data 2017-2021

5 Year Average Rates of Hospitalizations
Select Cancers, 2017-2021



5 Year Average Rates of Outpatient Visits
Select Cancers, 2017-2021





Cardiovascular Disease

Mortality and hospitalization rates due to cardiovascular disease, diseases of the heart, and coronary heart disease are significantly higher in Nassau County compared NYS excluding NYC. Within the County, mortality and hospitalization rates related to diseases of the heart, stroke, and coronary heart disease are highest among Blacks. Whites have the highest congestive heart failure mortality rate. RHIO data shows that Whites also have higher rates of hospitalizations and outpatient visits for diseases of the heart and cerebrovascular disease. Nassau County meets the Prevention Agenda objective for high blood pressure medication compliance.

Community Health Indicators (CHIRS) 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Rate (or) Percent	Rate (or) Percent	Significant Difference	Rate (or) Percent	Significant Difference
Age-adjusted cardiovascular disease mortality rate per 100,000	13,719	222.0	209.4	Yes	210.8	Yes
Cardiovascular disease premature death (aged 35-64 years) rate per 100,000	1,427	86.9	102.4	Yes	104.2	Yes
Age-adjusted cardiovascular disease hospitalization rate per 10,000	74,792	135.6	122.9	Yes	125.0	Yes
Age-adjusted disease of the heart mortality rate per 100,000	11,421	184.3	165.3	Yes	169.4	Yes

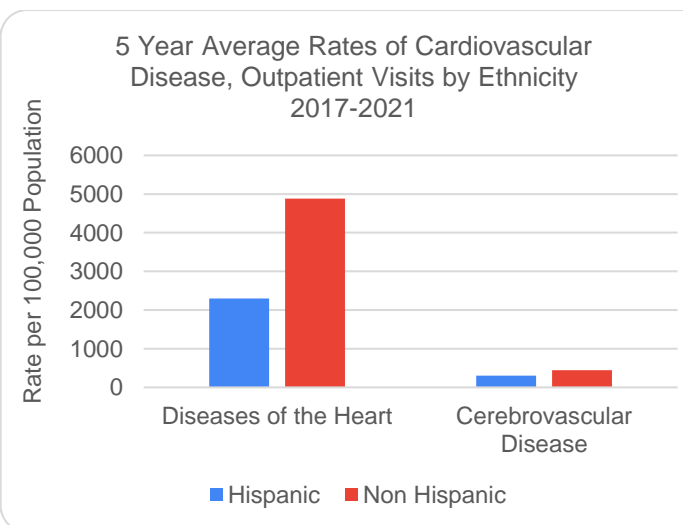
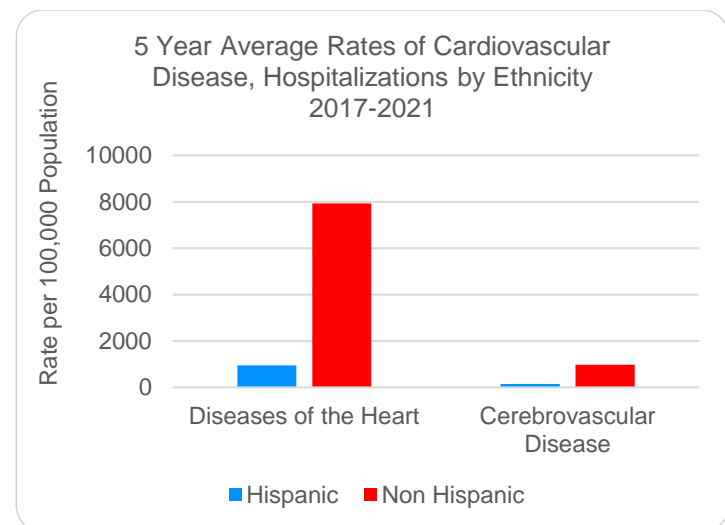
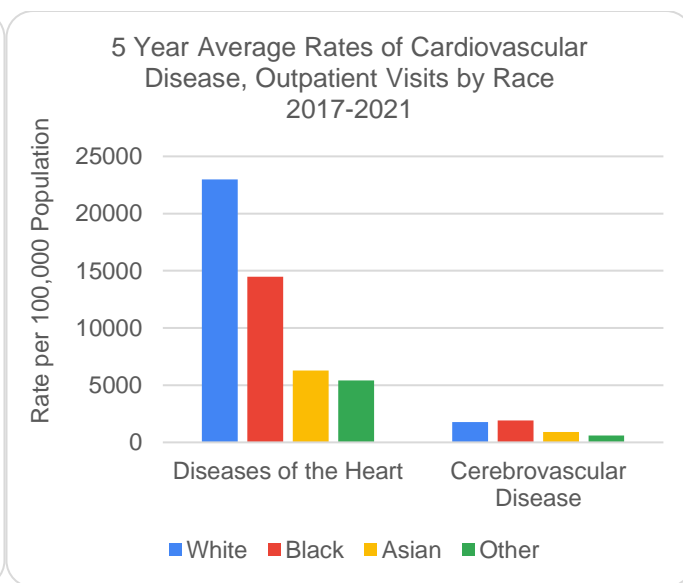
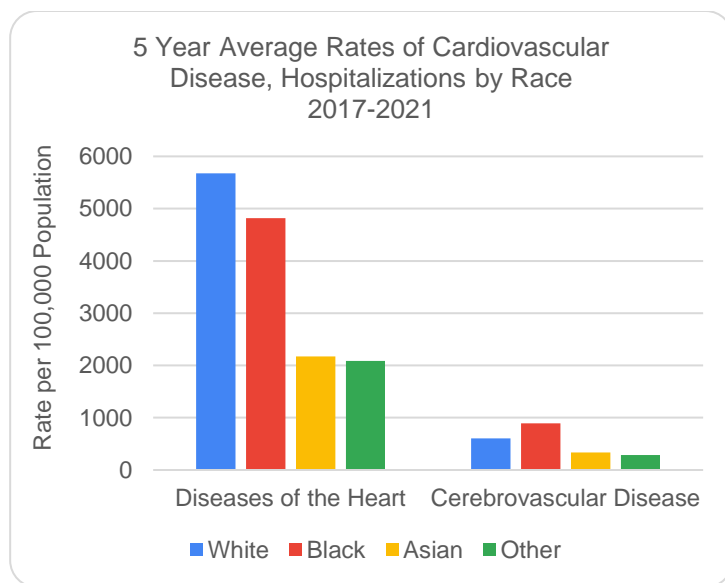
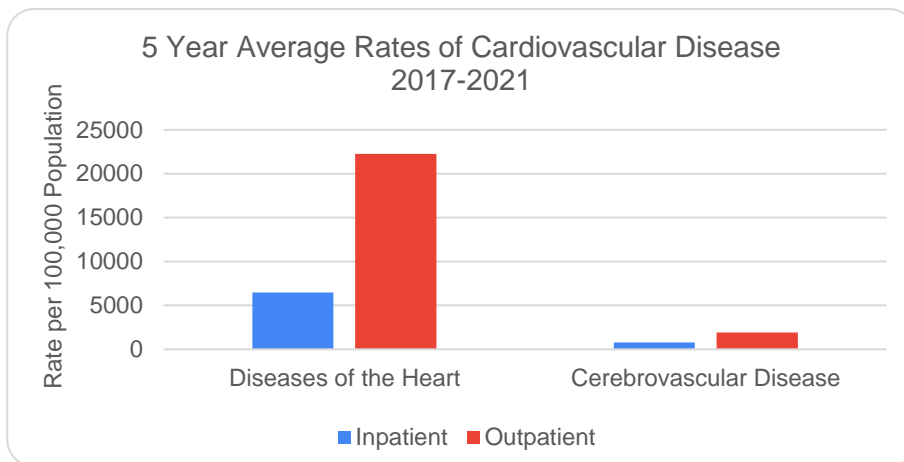
Disease of the heart premature death (aged 35-64 years) mortality rate per 100,000	1,179	71.8	82.4	Yes	83.9	Yes
Age-adjusted disease of the heart hospitalization rate per 10,000	53,538	96.2	84.0	Yes	84.2	Yes
Age-adjusted coronary heart disease mortality rate per 100,000	9,399	151.6	114.6	Yes	131.0	Yes
Coronary heart disease premature death (aged 35-64 years) rate per 100,000	979	59.6	59.7	No	66.4	Yes
Age-adjusted coronary heart disease hospitalization rate per 10,000	16,406	29.7	24.9	Yes	25.2	Yes
Age-adjusted heart attack hospitalization rate per 10,000	7,656	13.9	14.6	Yes	13.4	Yes
Age-adjusted heart attack mortality rate per 100,000	990	16.2	25.8	Yes	22.8	Yes
Age-adjusted congestive heart failure mortality rate per 100,000	644	10.0	15.3	Yes	11.1	Yes
Congestive heart failure premature death (aged 35-64 years) rate per 100,000	24	1.5	3.2	Yes	2.4	Yes
Potentially preventable heart failure hospitalization rate per 10,000 - Aged 18 years and older	13,973	43.8	42.0	Yes	42.4	Yes
Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000	1,379	22.7	27.2	Yes	24.1	No
Cerebrovascular disease (stroke) premature death (aged 35-64 years) rate per 100,000	129	7.9	11.2	Yes	10.8	Yes
Age-adjusted cerebrovascular disease (stroke) hospitalization rate per 10,000	10,740	19.5	21.3	Yes	21.3	Yes
Potentially preventable hypertension hospitalization rate per 10,000 - Aged 18 years and older	2,675	8.4	6.1	Yes	7.7	Yes
Hypertension without heart failure hospitalization rate per 10,000 (any diagnosis) - Aged 18 years and older	171,783	537.9	502.2	Yes	478.9	Yes
Hypertension without heart failure emergency department visit rate per 10,000 - Aged 18 years and older	8,786	27.5	27.3	No	31.2	Yes
Hypertension without heart failure emergency department visit rate per 10,000 (any diagnosis) - Aged 18 years and older	316,229	990.2	1,034.2	Yes	1,070.3	Yes
Age-adjusted percentage of adults with cardiovascular disease (heart attack, coronary heart disease, or stroke), 2018	N/A	6.2	7.4	No	7.0	No

Nassau County Health Indicators by Race/Ethnicity 2017-2019					
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Diseases of the heart mortality per 100,000 population, age-adjusted	188.9	205.4	92.1	126.8	184.3
Diseases of the heart hospitalizations per 10,000 population, age-adjusted	89.7	113.7	61.5	74.1	96.2
Cerebrovascular disease (stroke) mortality per 100,000 population, age-adjusted	21.6	23.5	17.8	22.4	22.7
Cerebrovascular disease (stroke) hospitalizations per 10,000 population, age-adjusted	16.0	32.3	14.6	17.3	19.5
Coronary heart disease mortality per 100,000 population, age-adjusted	154.8	175.9	78.3	104.3	151.6
Coronary heart disease hospitalizations per 10,000 population, age-adjusted	26.3	29.9	27.5	24.2	29.7
Congestive heart failure mortality per 100,000 population, age-adjusted	10.8	6.0	4.9	5.5	10.0
Potentially preventable heart failure hospitalization rate per 10,000 population - Aged 18 years and older (2017-2018)	47.4	56.5	17.0	21.8	43.8

Prevention Agenda (PA) Indicator, 2016	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Percent	Percent	Percent	Percent
Percentage of adults with hypertension who are currently taking medicine to manage their high blood pressure	81.4	82.4	77.6	80.7

Red – Does not meet PA objective Green- Meets PA objective

RHIO/Healthix Data 2017-2021



Cirrhosis, Diabetes, and Kidney Disease

Diabetes hospitalization and mortality rates are significantly lower in Nassau County compared to New York State and lower than New York excluding New York City. In Nassau County, Blacks and Hispanics have higher rates of hospitalizations due to diabetes compared to other groups. Rates of cirrhosis (liver disease) mortality is significantly lower in Nassau County than New York State and New York State excluding New York City. Chronic kidney disease hospitalization rates are also significantly lower than both NYS categories. When looking at the RHIO data, Type 2 Diabetes and chronic kidney disease hospitalizations and outpatient visits are higher for Blacks. This is also true for Hispanics and outpatient visits. Nassau County does not meet the Prevention Agenda objective for high blood sugar screenings.

Community Health Indicators (CHIRS), 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Rate (or) Percent	Rate (or) Percent	Significant Difference	Rate (or) Percent	Significant Difference
Age-adjusted cirrhosis mortality rate per 100,000 (2014-2016)	271	5.2	7.9	Yes	7.0	Yes
Age-adjusted cirrhosis hospitalization rate per 10,000	1,484	3.1	3.2	No	3.4	Yes
Age-adjusted diabetes mortality rate per 100,000 (2014-2016)	643	11.3	16.6	Yes	17.6	Yes
Age-adjusted diabetes hospitalization rate per 10,000 (primary diagnosis)	7,426	15.0	16.5	Yes	18.9	Yes
Age-adjusted diabetes hospitalization rate per 10,000 (any diagnosis)	106,560	196.3	195.6	No	214.2	Yes
Potentially preventable diabetes short-term complications hospitalization rate per 10,000 - Aged 18 years and older	1,172	3.7	6.0	Yes	6.2	Yes
Age-adjusted chronic kidney disease hospitalization rate per 10,000 (any diagnosis)	64,297	114.0	116.6	Yes	122.6	Yes
Age-adjusted chronic kidney disease emergency department visit rate per 10,000 (any diagnosis)	63,129	112.1	140.7	Yes	150.1	Yes
Age-adjusted percentage of adults with physician diagnosed diabetes, 2018	N/A	7.3	9.2	No	10.0	Yes

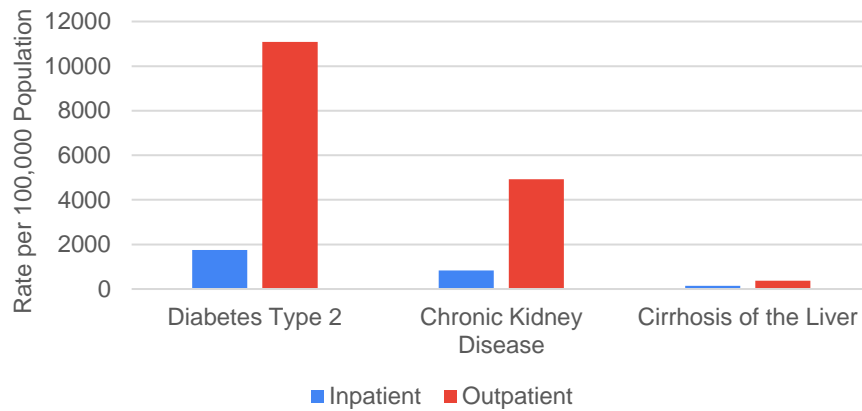
Nassau County Health Indicators by Race/Ethnicity, 2017-2019					
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Diabetes mortality per 100,000 population, age-adjusted	9.5	26.0	10.3	9.2	11.3
Diabetes (primary diagnosis) hospitalizations per 10,000 population, age-adjusted	10.4	34.2	7.8	19.0	15.0
Diabetes (any diagnosis) hospitalizations per 10,000 population, age-adjusted	153.4	341.1	167.0	216.3	196.3
Diabetes short-term complications hospitalizations per 10,000 population aged 18+ years	2.4	8.6	1.6	4.4	3.7

Prevention Agenda (PA) Indicator, 2018	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Percent	Percent	Percent	Percent
Percentage of adults who had a test for high blood sugar or diabetes within the past three years, aged 45+ years	62.9	62.4	61.0	71.7

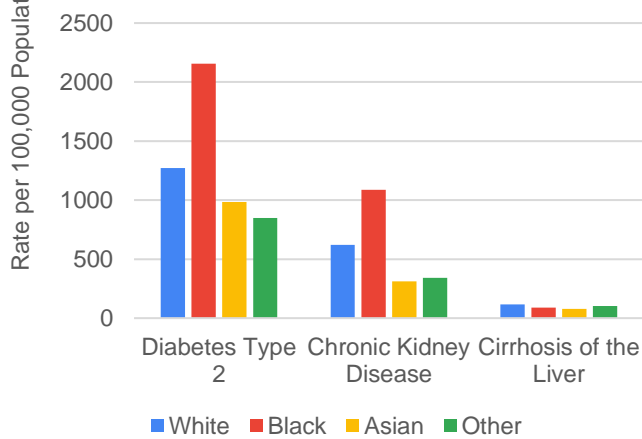
Red – Does not meet PA objective Green – Meets PA objective

RHIO/Healthix Data 2017-2021

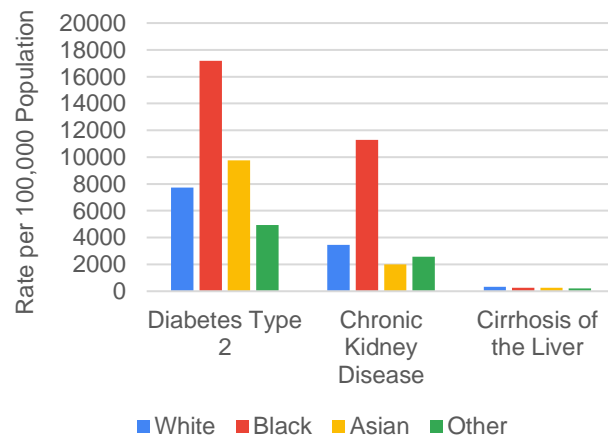
5 Year Average Rates of Select Diseases
2017-2021



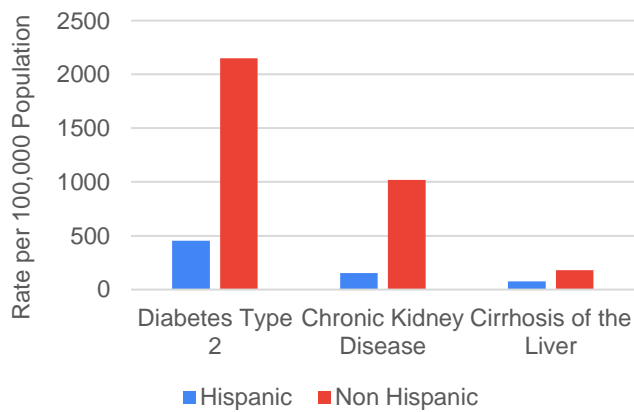
5 Year Average Rate of Hospitalizations
Select Diseases by Race, 2017-2021



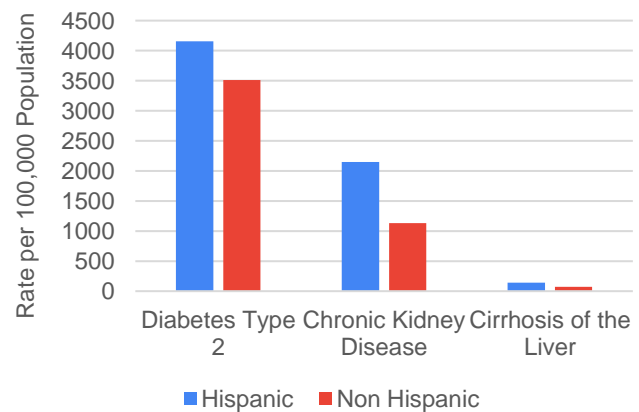
5 Year Average Rate of Outpatient Visits
Select Diseases by Race, 2017-2021



5 Year Average Rate of Hospitalizations
Select Diseases by Ethnicity, 2017-2021



5 Year Average Rate of Outpatient Visits
Select Diseases by Ethnicity, 2017-2021



Respiratory Diseases

The hospitalization and mortality rates for chronic lower respiratory disease (CLRD) is significantly lower in Nassau County than in New York State and New York State excluding New York City. However, in Nassau County, Blacks and Hispanics have higher hospitalization rates of CLRD than Whites. Whites have higher rates of CLRD mortality. The RHIO data also shows that Blacks have higher rates of hospitalizations and outpatient visits. It also shows that Hispanics have higher rates of outpatient visits. Asthma hospitalization rates are significantly lower in Nassau County than in New York State and significantly higher than New York State excluding New York City. Yet in Nassau County, Blacks and Hispanics have higher hospitalization rates than other groups. Nassau County meets the Prevention Agenda objective for pediatric ER visits but does not meet the objective for Medicaid managed patients identified as having persistent asthma and dispensed appropriate asthma controller medications.

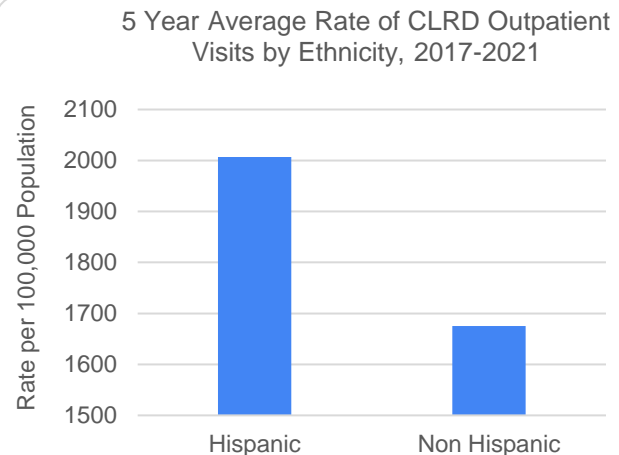
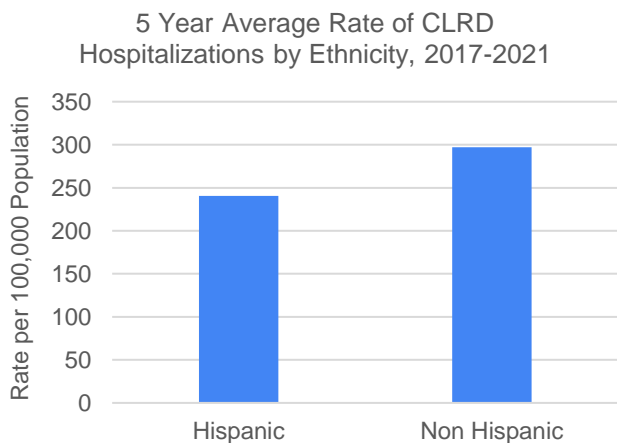
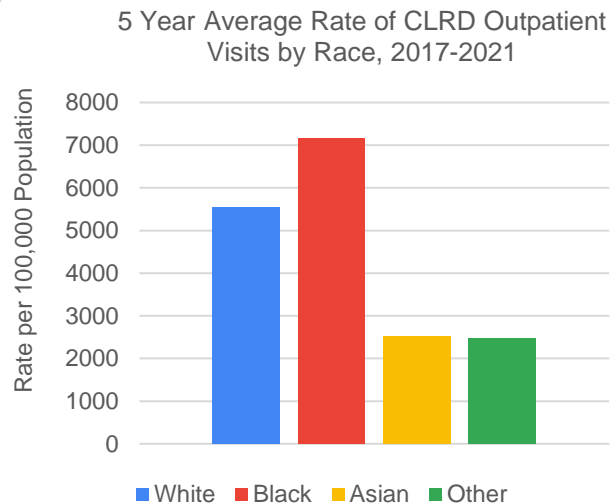
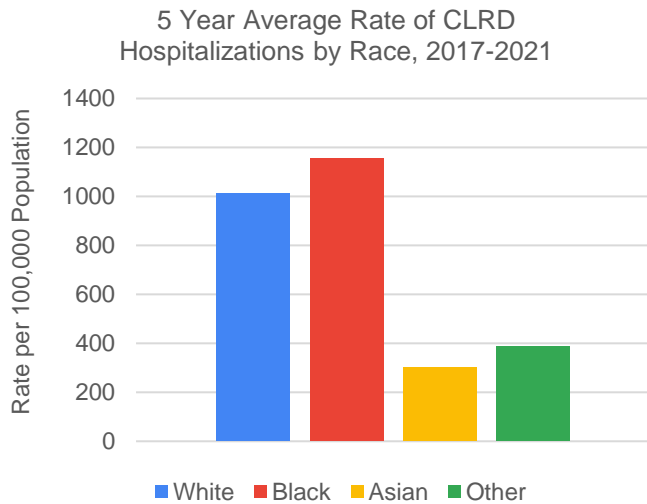
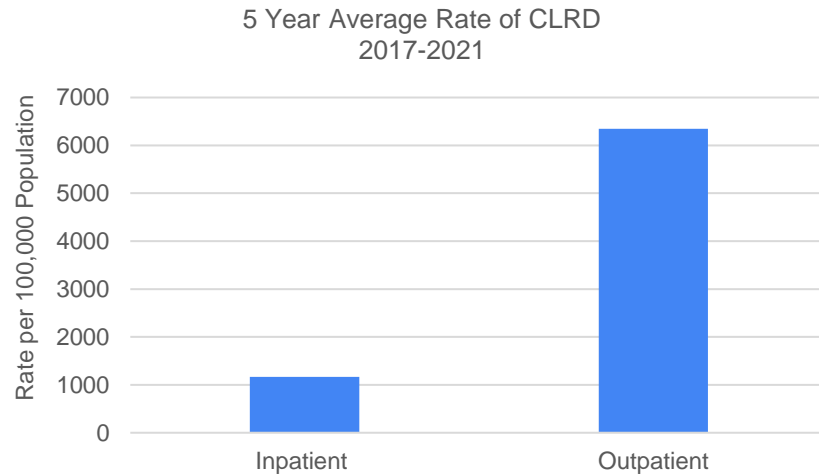
Community Health Indicators (CHIRS), 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Rate (or) Percent	Rate (or) Percent	Significant Difference	Rate (or) Percent	Significant Difference
Age-adjusted chronic lower respiratory disease mortality rate per 100,000	1,283	21.4	34.7	Yes	28.3	Yes
Age-adjusted chronic lower respiratory disease hospitalization rate per 10,000	10,336	20.8	23.2	Yes	25.8	Yes
Age-adjusted asthma hospitalization rate per 10,000	3,393	8.4	6.6	Yes	10.3	Yes
Asthma hospitalization rate per 10,000 - Aged 0-4 years	728	32.6	24.9	Yes	35.6	Yes
Asthma hospitalization rate per 10,000 – Aged 5-64 years	1,983	6.3	5.1	Yes	8.0	Yes
Asthma hospitalization rate per 10,000 – Aged 15-24 years	179	3.5	3.0	No	5.1	Yes
Asthma hospitalization rate per 10,000 – Aged 25-44 years	416	4.3	4.2	No	5.0	Yes
Asthma hospitalization rate per 10,000 – Aged 45-64 years	834	7.2	5.2	Yes	8.8	Yes
Asthma hospitalization rate per 10,000 – Aged 65 years or older	682	9.5	4.9	Yes	9.3	No
Asthma mortality rate per 100,000	39	1.0	1.1	No	1.5	Yes
Age-adjusted asthma mortality rate per 100,000	33	0.6	0.7	No	1.2	Yes
Age-adjusted percentage of adults with current asthma, 2018	N/A	8.1	10.8	No	10.1	No

Nassau County Health Indicators by Race/Ethnicity, 2017-2019					
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Asthma hospitalizations per 10,000 population, age-adjusted	4.6	19.1	6.2	11.6	8.4
Asthma hospitalizations per 10,000 population, aged 0-17 years	7.2	26.9	15.4	22.8	15.3
Chronic lower respiratory disease mortality per 100,000 population, age-adjusted	24.5	12.0	4.9	10.5	21.4
Chronic lower respiratory disease hospitalizations per 10,000 population, age-adjusted	16.7	35.0	11.1	20.6	20.8

Prevention Agenda (PA) Indicator, 2019	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Rate/Percent	Rate/Percent	Rate/Percent	Rate/Percent
Asthma emergency department visits, rate per 10,000, aged 0-17 years	45.8	47.8	57.5	131.1
Percentage of Medicaid managed care members who were identified as having persistent asthma and were dispensed appropriate asthma controller medications for at least 50% of the treatment period, aged 5-18 years	57	57	61	59

Red – Does not meet PA objective Green- Meets PA objective

RHIO/Healthix Data 2017-2021



Injury

Nassau County injury rates are generally lower than NYS. However, Nassau County rates for unintentional injury and hospitalizations due to falls significantly exceed NYS in both categories. In Nassau County, Whites have higher rates of injury compared to other groups, except in the case of motor vehicle accidents and where Blacks and Hispanics reflect higher mortality rates. The RHIO data show higher rates of all injuries, in Blacks verses other races, except for falls. Hispanics have higher rates of injury related outpatient visits than non-Hispanics in falls, motor vehicle collisions, assault and intentional self-harm Nassau County is not meeting the prevention agenda goals for hospitalizations due to falls and crash related pedestrian fatalities but is meeting the objectives for assault and firearm hospitalizations and suicide mortality.

Community Health Indicators (CHIRS), 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Rate	Rate	Significantly Different	Rate	Significantly Different
Age-adjusted suicide mortality rate per 100,000	249	6.1	10.4	Yes	8.7	Yes
Age-adjusted self-inflicted injury hospitalization rate per 10,000	1,136	2.8	4.6	Yes	3.8	Yes
Self-inflicted injury hospitalization rate per 10,000 - Aged 15-19 years	184	7.1	10.3	Yes	9.0	Yes
Age-adjusted homicide mortality rate per 100,000	61	1.6	2.8	Yes	3.1	Yes
Age-adjusted assault hospitalization rate per 10,000	769	2.0	2.2	Yes	3.1	Yes
Age-adjusted unintentional injury mortality rate per 100,000	1,388	30.9	41.4	Yes	34.4	Yes
Age-adjusted unintentional injury hospitalization rate per 10,000	34,778	66.5	65.5	Yes	61.5	Yes
Unintentional injury hospitalization rate per 10,000 - Aged <10 years	834	18.0	17.7	No	18.4	No
Unintentional injury hospitalization rate per 10,000 - Aged 10-14 years	325	12.8	12.7	No	13.2	No
Unintentional injury hospitalization rate per 10,000 - Aged 15-24 years	1,229	23.7	23.1	No	22.6	No
Unintentional injury hospitalization rate per 10,000 - Aged 25-64 years	9,906	46.8	51.1	Yes	48.1	Yes
Unintentional injury hospitalization rate per 10,000 - Aged 65 years and older	22,484	312.5	275.1	Yes	249.9	Yes
Age-adjusted falls hospitalization rate per 10,000	22,588	40.4	36.0	Yes	34.2	Yes
Falls hospitalization rate per 10,000 - Aged <10 years	456	9.8	6.2	Yes	6.8	Yes
Falls hospitalization rate per 10,000 - Aged 10-14 years	124	4.9	3.4	Yes	4.0	Yes
Falls hospitalization rate per 10,000 - Aged 15-24 years	284	5.5	4.0	Yes	4.4	Yes
Falls hospitalization rate per 10,000 - Aged 25-64 years	4,280	20.2	19.7	No	18.8	Yes
Falls hospitalization rate per 10,000 - Aged 65-74 years	3,441	86.8	84.6	No	80.3	Yes
Falls hospitalization rate per 10,000 - Aged 75-84 years	5,454	262.5	235.3	Yes	215.9	Yes
Falls hospitalization rate per 10,000 - Aged 85 years and older	8,549	740.6	619.4	Yes	553.5	Yes
Age-adjusted poisoning hospitalization rate per 10,000	2,658	6.3	7.5	Yes	7.6	Yes
Age-adjusted motor vehicle mortality rate per 100,000	235	5.2	6.8	Yes	5.1	No
Age-adjusted non-motor vehicle mortality rate per 100,000	1,153	25.7	34.6	Yes	29.3	Yes
Age-adjusted traumatic brain injury hospitalization rate per 10,000	4,772	9.7	7.6	Yes	7.5	Yes
Alcohol related motor vehicle injuries and death rates per 100,000	1,180	29.0	34.7	Yes	28.9	No

Nassau County Health Indicators by Race/Ethnicity, 2017-2019					
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Motor vehicle-related mortality per 100,000 population, age-adjusted	3.9	7.8	4.1	6.2	5.2
Unintentional injury mortality per 100,000 population, age-adjusted	37.0	24.1	13.1	22.4	30.9

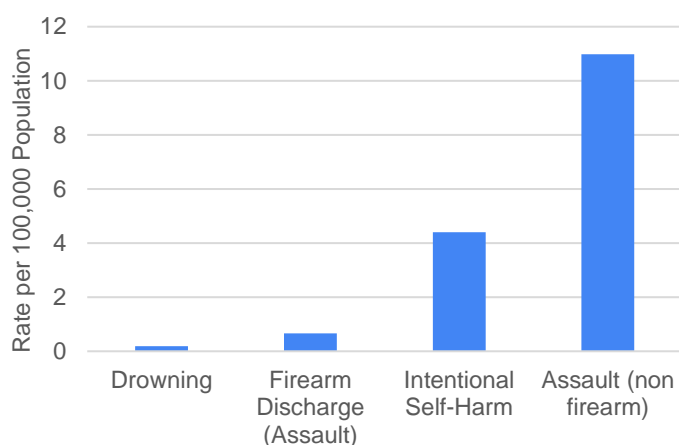
Unintentional injury hospitalizations per 10,000 population, age-adjusted	64.6	51.9	34.2	52.1	66.5
Poisoning hospitalizations per 10,000 population, age-adjusted	5.8	8.5	2.6	4.3	6.3
Fall hospitalizations per 10,000 population, aged 65+ years	262.1	107.8	105.0	124.2	242.5
Suicide mortality per 100,000 population, age-adjusted	6.6	4.1	5.8	3.5	5.7

Prevention Agenda (PA) Indicator, 2019	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Rate	Rate	Rate	Rate
Hospitalizations due to falls among adults, rate per 10,000 population, aged 65+ years	236.9	259.5	210.4	173.7
Assault-related hospitalizations, rate per 10,000 population	2.1	2.3	2.2	3.0
Firearm assault-related hospitalizations, rate per 10,000 population	0.09	0.14	0.22	0.38
Crash-related pedestrian fatalities, rate per 100,000 population	2.51	2.54	1.71	1.43
Suicide mortality, age-adjusted rate per 100,000 population (2017-2019)	5.7	7.1	9.9	7.0

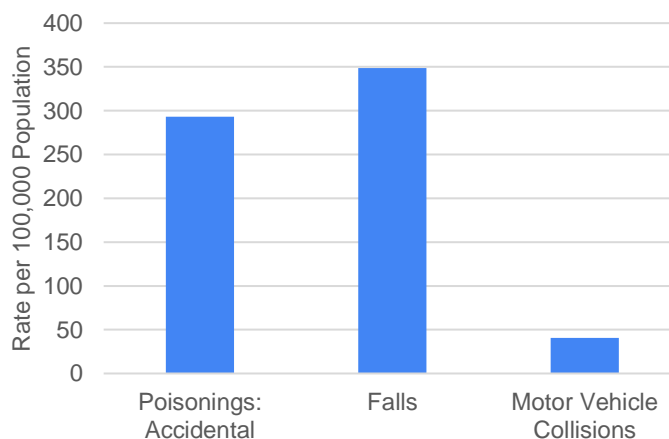
Red – Does not meet PA objective Green – Meets PA objective

RHIO/Healthix Data 2017-2021

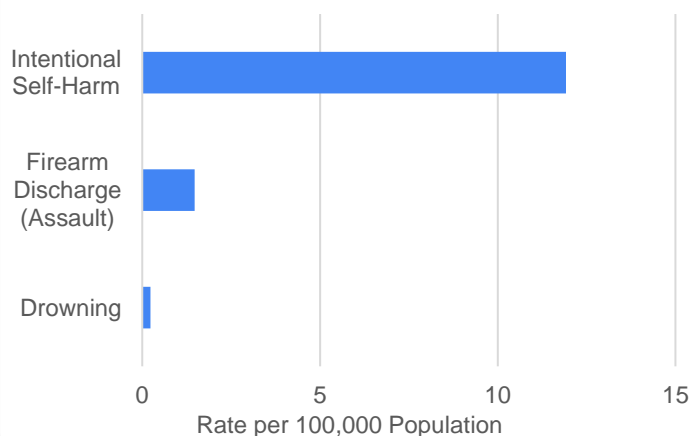
5 Year Average Hospitalization Rates
Select Injuries, 2017-2021



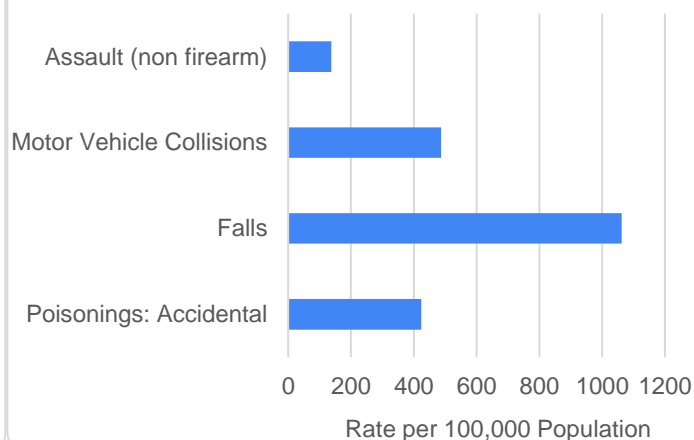
5 Year Average Hospitalization Rates
Select Injuries, 2017-2021



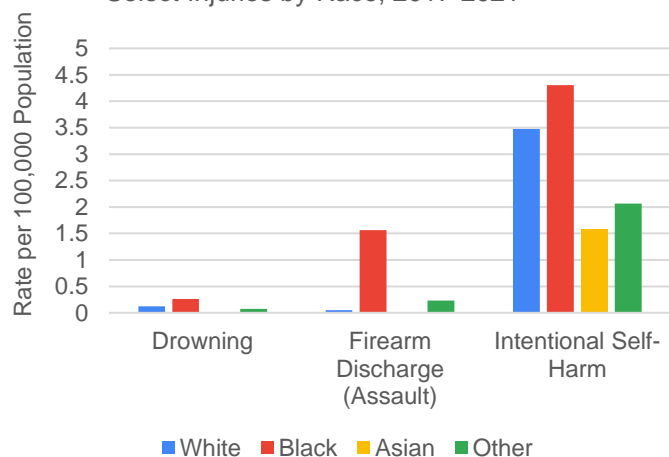
5 Year Average Outpatient Visit Rates
Select Injuries, 2017-2021



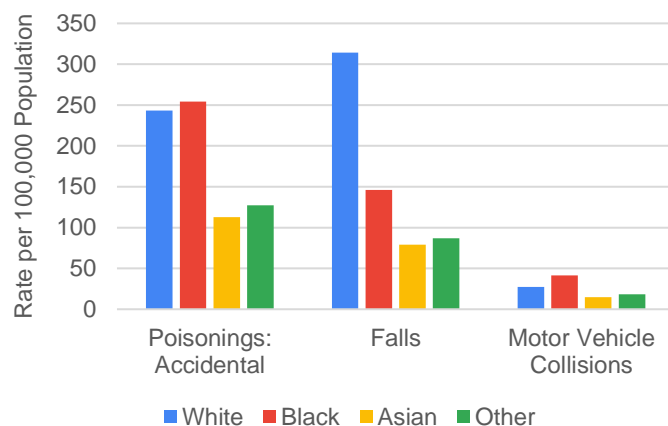
5 Year Average Outpatient Visit Rates
Select Injuries, 2017-2021



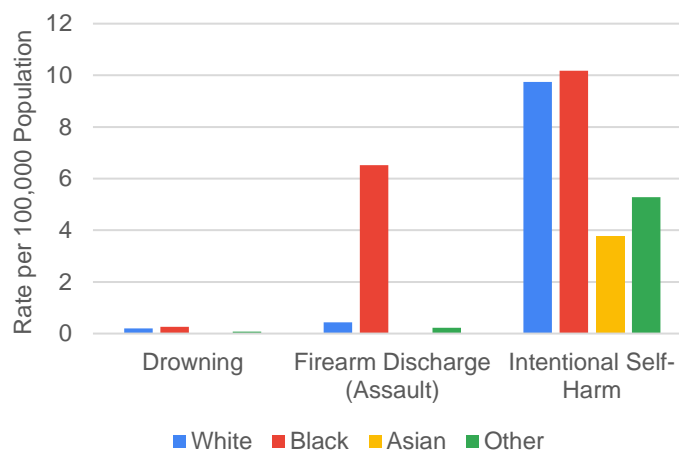
5 Year Average Hospitalization Rates
Select Injuries by Race, 2017-2021



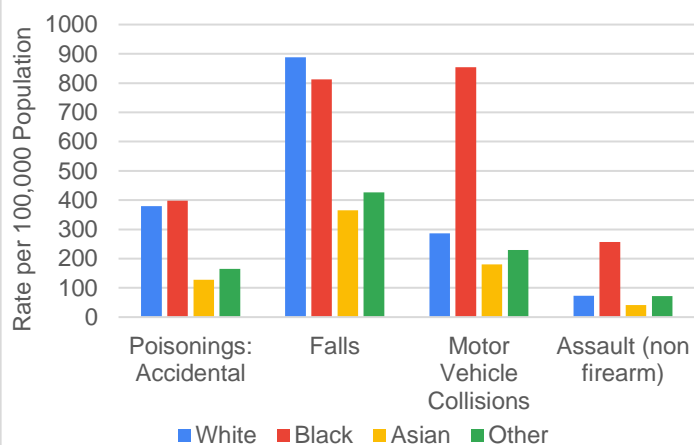
5 Year Average Hospitalization Rates
Select Injuries by Race, 2017-2021



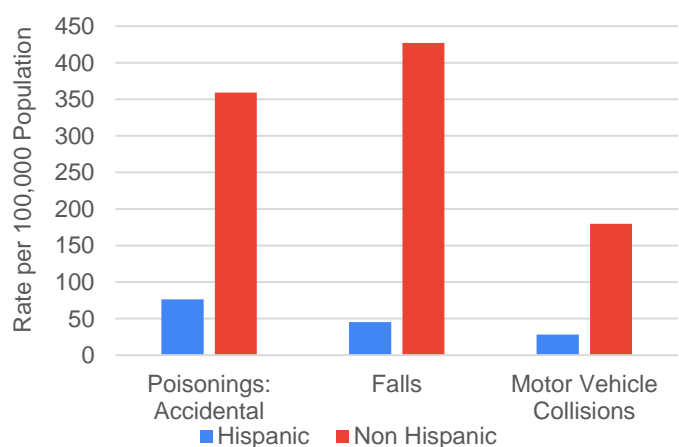
5 Year Average Outpatient Rates
Select Injuries by Race, 2017-2021



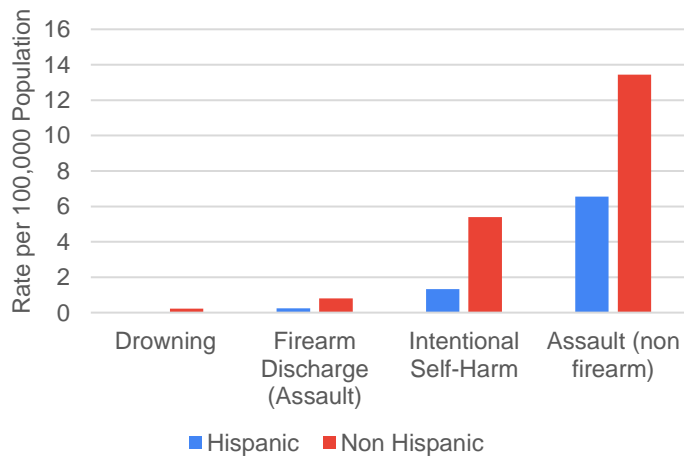
5 Year Average Outpatient Rates
Select Injuries by Race, 2017-2021

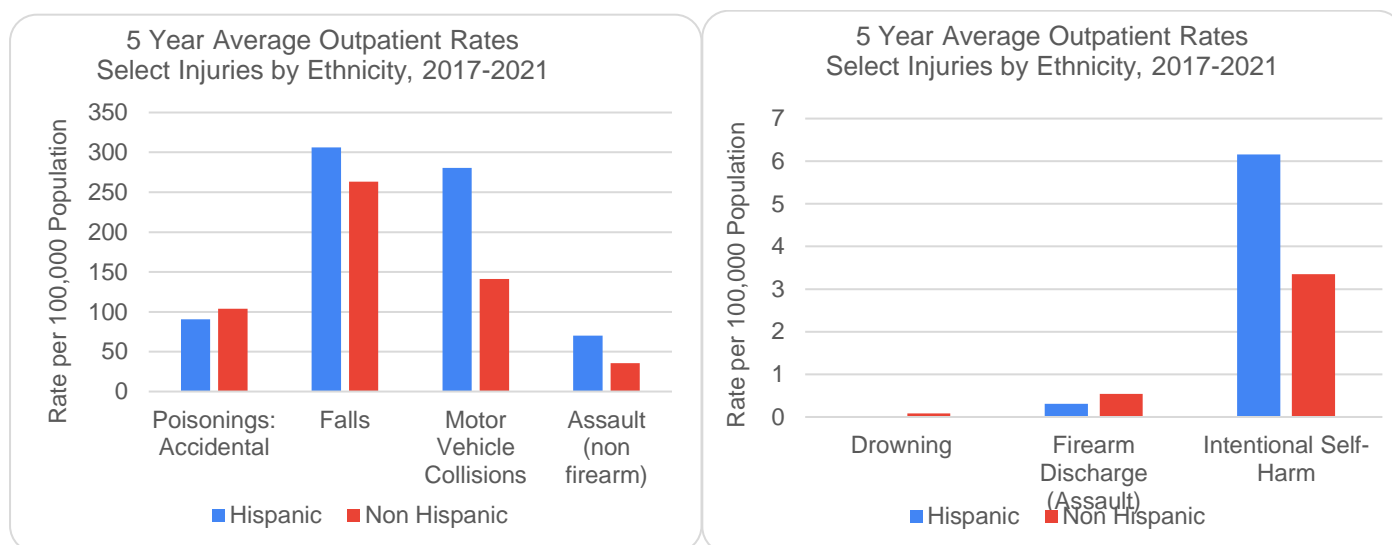


5 Year Average Hospitalization Rates
Select Injuries by Ethnicity, 2017-2021



5 Year Average Hospitalization Rates
Select Injuries by Ethnicity, 2017-2021





Child and Adolescent Health

Childhood health indicators reflect that Nassau County children are generally healthy as demonstrated by mortality rates. Both blood-lead screening and well visits indicate that Nassau County children visit their doctors regularly. However, in Nassau County, Black, Hispanic, and Asian children have higher rates of asthma hospitalizations compared to Whites. Nassau County does not meet the Prevention Agenda objectives for WIC children in terms of obesity and youth suicide, but does for asthma ER visits, child and adolescent obesity, and reports of maltreatment and abuse.

Community Health Indicators (CHIRS), 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Percent (or) Rate	Percent (or) Rate	Significant Difference	Percent (or) Rate	Significant Difference
Mortality rate per 100,000 - Aged 1-4 years	23	12.7	18.9	No	17.7	No
Mortality rate per 100,000 - Aged 5-9 years	20	8.3	10.1	No	10.3	No
Mortality rate per 100,000 - Aged 10-14 years	20	7.9	12.1	No	12.4	No
Mortality rate per 100,000 - Aged 5-14 years	40	8.1	11.1	No	11.3	No
Mortality rate per 100,000 - Aged 15-19 years	70	27.0	31.3	No	30.1	No
Asthma hospitalization rate per 10,000 - Aged 0-4 years	728	32.6	24.9	Yes	35.6	Yes
Asthma hospitalization rate per 10,000 - Aged 5-14 years	554	11.2	9.4	Yes	16.6	Yes
Asthma hospitalization rate per 10,000 - Aged 0-17 years	1,343	15.3	12.4	Yes	20.3	Yes
Gastroenteritis hospitalization rate per 10,000 - Aged 0-4 years	283	12.7	7.5	Yes	10.4	Yes
Otitis media hospitalization rate per 10,000 - Aged 0-4 years	50	2.2	1.5	No	1.8	No
Pneumonia hospitalization rate per 10,000 - Aged 0-4 years	401	18.0	20.3	Yes	25.2	Yes
Percentage of children born in 2016 with a lead screening aged 0-8 months	230	1.6	1.2	Yes	1.7	No
Percentage of children born in 2016 with a lead screening - aged 9-17 months	10,809	75.7	73.0	Yes	75.6	No
Percentage of children born in 2016 with a lead screening - aged 18-35 months	10,571	74.0	72.9	No	76.1	Yes
Percentage of children born in 2016 with at least two lead screenings by 36 months	8,147	57.1	57.8	No	63.3	Yes
Incidence of confirmed high blood lead level (10 micrograms or higher per deciliter) - rate per 1,000 tested children aged <72 months	123	1.3	6.6	Yes	3.8	Yes

Percentage of children with recommended number of well child visits in government sponsored insurance programs (2019)	44,655	79.7	73.9	Yes	75.2	Yes
Percentage of children (aged 0-15 months) with recommended number of well child visits in government sponsored insurance programs (2019)	2,866	89.2	84.5	Yes	83.4	Yes
Percentage of children (aged 3-6 years) with recommended number of well child visits in government sponsored insurance programs (2019)	13,805	88.3	84.6	Yes	85.9	Yes
Percentage of children (aged 12-21 years) with recommended number of well child visits in government sponsored insurance programs (2019)	27,984	75.2	67.5	Yes	69.3	Yes
Percentage overweight but not obese (85th-<95th percentile) - Students (with weight status information in SWSCRS) in elementary, middle, and high school	10,130	16.1	16.5	NA	NA	NA
Percentage obese (95th percentile or higher) - Students (with weight status information in SWSCRS) in elementary, middle, and high school	9,209	14.7	17.3	NA	NA	NA
Percentage overweight or obese (85th percentile or higher) - Students (with weight status information in SWSCRS) in elementary, middle, and high school	19,339	30.8	33.8	NA	NA	NA
Percentage overweight but not obese (85th-<95th percentile) - Students (with weight status information in SWSCRS) in elementary school	5,874	15.2	15.8	NA	NA	NA
Percentage obese (95th percentile or higher) - Students (with weight status information in SWSCRS) in elementary school,	5,646	14.6	16.2	NA	NA	NA
Percentage overweight or obese (85th percentile or higher) - Students (with weight status information in SWSCRS) in elementary school	11,520	29.8	31.9	NA	NA	NA
Percentage overweight but not obese (85th-<95th percentile) - Students (with weight status information in SWSCRS) in middle and high school	4,279	17.7	17.5	NA	NA	NA
Percentage obese (95th percentile or higher) - Students (with weight status information in SWSCRS) in middle and high school	3,553	14.7	19.1	NA	NA	NA
Percentage overweight or obese (85th percentile or higher) - Students (with weight status information in SWSCRS) in middle and high school	7,832	32.4	36.6	NA	NA	NA
Percentage of children (aged 2-4 years) enrolled in WIC watching TV 2 hours or less per day, (2015-2017)	NA	87.6	85.6	NA	86.6	NA

Nassau County Health Indicators by Race/Ethnicity, 2017-2019

Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Asthma hospitalizations per 10,000 population, aged 0-17 years	7.2	26.9	15.4	22.8	15.3

Prevention Agenda (PA) Indicator, 2017-2019	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Rate/Percent	Rate/Percent	Rate/Percent	Rate/Percent
Percentage of children with obesity, among children aged 2-4 years participating in the WIC program (2017)	20.2	20.7	15.2	13.0
Percentage of children and adolescents with obesity	14.7	16.9	17.3	16.4
Asthma emergency department visits, rate per 10,000, aged 0-17 years (2019)	45.8	47.8	57.5	131.1
Suicide mortality among youth, rate per 100,000, aged 15-19 years	6.9	5.3	7.3	4.7
Indicated reports of abuse/maltreatment, rate per 1,000 children - aged 0-17 years (2020)	5.7	7.1	9.9	7.0

Red – Does not meet PA objective Green- Meets PA objective

Family Planning, Natality, Maternal, and Infant Health

Indicators surrounding birth and infant health are favorable for Nassau County. Although the County has good rates of prenatal care, early and adequate prenatal care among Blacks, Hispanics and Asians is lower compared to Whites. In addition, Blacks, Hispanics, and Asians have higher rates of premature and low birthweight births compared to Whites. Pregnancies in general are higher in the Black and Hispanic population as well as teen pregnancy. Infant mortality among Blacks is higher than all other race/ethnicities. Nassau County does not meet the Prevention Agenda objectives for premature births and breast feeding. Additional perinatal data by zip code is available in Appendix H.

Community Health Indicators (CHIRS) 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Percent, Ratio (or) Rate	Percent, Ratio (or) Rate	Significant Difference	Percent, Ratio (or) Rate	Significant Difference
Percentage of live births conceived within 18 months of a previous live birth	5,514	27.7	32.6	Yes	30.4	Yes
Percentage of births to teens - Aged 15-17 years	206	0.5	0.8	Yes	0.7	Yes
Percentage of births to teens - Aged 15-19 years	738	1.7	3.5	Yes	3.1	Yes
Percentage of births to women aged 35 years and older	13,086	31.0	22.3	Yes	24.5	Yes
Fertility rate per 1,000 females - Aged 15-44 years	42,234	57.5	57.1	No	57.5	No
Teen fertility rate per 1,000 (births to mothers aged 15-17 years/female population aged 15-17 years)	206	2.6	4.7	Yes	4.9	Yes
Teen fertility rate per 1,000 (births to mothers aged 15-19 years/female population aged 15-19 years)	738	5.9	11.3	Yes	11.9	Yes
Teen fertility rate per 1,000 (births to mothers aged 18-19 years/female population aged 18-19 years)	532	11.1	20.1	Yes	21.5	Yes
Pregnancy rate per 1,000 (all pregnancies/female population aged 15-44 years)	54,340	74.0	72.3	Yes	79.7	Yes
Teen pregnancy rate per 1,000 females aged <18 years	525	2.6	3.7	Yes	4.7	Yes
Teen pregnancy rate per 1,000 females aged 15-19 years	1,668	13.3	19.2	Yes	23.9	Yes
Teen pregnancy rate per 1,000 females aged 18-19 years	1,167	24.3	32.8	Yes	41.1	Yes
Abortion ratio (induced abortions per 1,000 live births) - All ages	219.6	226.1	Yes	333.1	Yes	219.6
Percentage of births to women aged 25 years and older without a high school education	2,992	7.9	9.7	Yes	11.6	Yes
Percentage of births to out-of-wedlock mothers	11,017	26.1	38.2	Yes	37.9	Yes
Percentage of births that were first births	16,656	39.4	38.8	Yes	40.6	Yes
Percentage of births that were multiple births	1,667	3.9	3.7	Yes	3.5	Yes
Percentage of births with early (1st trimester) prenatal care	35,545	85.8	78.4	Yes	76.3	Yes
Percentage of births with late (3rd trimester) or no prenatal care	1,174	2.8	4.3	Yes	5.4	Yes
Percentage of births with adequate prenatal care	33,921	85.3	77.3	Yes	75.5	Yes
Percentage of pregnant women in WIC with early (1st trimester) prenatal care, (2015-2017)	10,880	90.3	91.4	NA	90.7	NA
Percentage of pregnant women in WIC who were pre-pregnancy underweight (BMI less than 18.5), (2015-2017)	329	2.6	3.9	NA	4.6	NA
Percentage of pregnant women in WIC who were pre-pregnancy overweight but not obese (BMI 25 to less than 30), (2015-2017)	4,109	32.2	27.1	NA	27.6	NA
Percentage of pregnant women in WIC who were pre-pregnancy obese (BMI 30 or higher), (2015-2017)	3,325	26.0	31.1	NA	26.6	NA
Percentage of pregnant women in WIC with anemia in 3rd trimester, (2015-2017)	412	33.9	36.5	NA	37.7	NA
Percentage of pregnant women in WIC with gestational weight gain greater than ideal (2015-2017)	5,333	44.7	45.7	NA	41.0	NA

Percentage of pregnant women in WIC with gestational diabetes (2015-2017)	948	7.9	6.6	NA	6.6	NA
Percentage of pregnant women in WIC with hypertension during pregnancy (2015-2017)	995	8.3	9.0	NA	7.5	NA
Percentage of WIC infants breastfeeding at least 6 months	NA	37.3	31.5	NA	41.0	NA
Percentage of infants fed any breast milk in delivery hospital	31,832	87.8	84.2	Yes	88.5	No
Percentage of infants fed exclusively breast milk in delivery hospital	14,053	38.8	50.7	Yes	47.1	Yes
Percentage of births delivered by cesarean section	15,969	37.8	34.2	Yes	33.6	Yes
Mortality rate per 1,000 live births - Infant (<1 year)	124	2.9	4.8	Yes	4.4	Yes
Mortality rate per 1,000 live births - Neonatal (<28 days)	90	2.1	3.2	Yes	2.9	Yes
Mortality rate per 1,000 live births - Post-neonatal (1 month to 1 year)	34	0.8	1.6	Yes	1.5	Yes
Mortality rate per 1,000 live births - Fetal death (20 weeks gestation or more)	210	4.9	5.0	No	6.4	Yes
Mortality rate per 1,000 live births - Perinatal (20 weeks gestation - <28 days of life)	300	7.1	8.2	Yes	9.3	Yes
Mortality rate per 1,000 live births - Perinatal (28 weeks gestation - <7 days of life)	167	3.9	5.1	Yes	5.1	Yes
Percentage very low birthweight (<1.5 kg) births	511	1.2	1.3	Yes	1.4	Yes
Percentage very low birthweight (<1.5kg) singleton births	339	0.8	1.0	Yes	1.0	Yes
Percentage low birthweight (<2.5 kg) births	3,314	7.8	7.7	No	8.1	No
Percentage low birthweight (<2.5kg) singleton births	2,411	5.9	6.0	No	6.3	Yes
Percentage of premature births with <32 weeks gestation	544	1.3	1.5	Yes	1.5	Yes
Percentage of premature births with 32 - <37 weeks gestation	3,318	7.9	7.6	No	7.6	Yes
Percentage of premature births with <37 weeks gestation	3,862	9.1	9.1	No	9.0	No
Percentage of births with a 5-minute APGAR <6	173	0.4	0.8	Yes	0.7	Yes

Nassau County Health Indicators by Race/Ethnicity, 2017-2019					
Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Number of births per year (3-year average)	6,570	1,535	1,921	3,794	14,078
Percentage of births with early (1st trimester) prenatal care	93.0%	77.4%	84.9%	77.4%	85.8%
Percentage of births with adequate prenatal care (Adequacy of Prenatal Care Utilization Index)	88.9%	79.7%	83.9%	82.3%	85.3%
Percentage of premature births (< 37 weeks gestation - clinical estimate)	7.7%	12.7%	8.3%	10.6%	9.1%
Percentage of low birthweight births (< 2.5 kg)	6.2%	11.9%	9.1%	8.3%	7.8%
Teen pregnancies per 1,000 females aged 15-17 years	0.3	5.2	NA	8.3	2.6
Pregnancies per 1,000 females aged 15-44 years	59.0	80.7	67.5	96.8	74.0
Fertility per 1,000 females aged 15-44 years	50.5	44.4	62.9	77.0	57.5
Infant mortality per 1,000 live births	1.7	9.3	NA	2.9	2.9

Prevention Agenda (PA) Indicator, 2019	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Rate/Percent	Rate/Percent	Rate/Percent	Rate/Percent
Percentage of preterm births	9.5	9.7	9.3	8.3
Percentage of infants who are exclusively breastfed in the hospital among all infants	39.2	41.9	49.6	51.7
Percentage of infants who are exclusively breastfed in the hospital among Hispanic infants	29.7	30.5	35.4	37.4
Percentage of infants who are exclusively breastfed in the hospital among Black non-Hispanic infants	37.8	35.3	33.2	38.4
Percentage of infants supplemented with formula in the hospital among breastfed infants	55.5	52.6	41.4	41.9
Percentage of infants enrolled in WIC who are breastfed at 6 months among all WIC infants (2017)	37.0	NA	NA	45.5
Newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges	3.0	7.1	12.7	9.1

Percentage of women with a preventive medical visit in the past year, aged 18-44 years (2018)	80.1	79.6	79.2	80.6
Percentage of women with a preventive medical visit in the past year, aged 45+ years (2018)	85.6	86.9	88.9	85.0
Infant mortality, rate per 1,000 live births	3.0	3.4	4.7	4.0

Red – Does not meet PA objective Green- Meets PA objective

Maternal Mortality

Maternal mortality rate is defined as the number of deaths per 100,000 live births to women from any causes related to or aggravated by pregnancy or its management that occurred while pregnant or within 42 days of termination of pregnancy. NYSDOH has updated the definition to be consistent with the definition used by the World Health Organization. The mortality rates in Nassau County have decreased substantially from 25.7/100,000 live births in 2015-2017 to 11.8/100,000 live births between 2017-2019.⁵ As there are approximately 14,000 births per year in Nassau, this rate translates to 5 deaths over the course of three years in Nassau County, resulting in an unstable or unreliable rate. Data from the NYS Report on Pregnancy-Associated Deaths in 2018 indicate that disparities exist statewide whereby maternal deaths among Blacks exceed Whites in NYS (16.6/100,000 and 12.6/100,000, respectively) consistent with the United States as a whole.⁶ Detailed information about maternal deaths, including by race and ethnicity in Nassau County are not available.

Adult Obesity

Nassau County's obesity burden is lower than NYS and significantly lower than NYS excluding NYC. Also, Nassau residents participate in leisure time activities and consume more fruits and vegetables than NYS and NYS excluding NYC. Nassau County meets the Prevention Agenda Objective for obesity.

Community Health Indicators (CHIRS), 2018	Nassau	NYS excluding NYC		New York State	
	Percent	Percent	Significant Difference	Percent	Significant Difference
Age-adjusted percentage of adults overweight or obese (BMI 25 or higher)	58.1	64.4	Yes	62.5	No
Age-adjusted percentage of adults with obesity (BMI 30 or higher)	24.4	29.7	Yes	27.9	No
Age-adjusted percentage of adults who participated in leisure time physical activity in the past 30 days	82.2	78.3	Yes	76.4	Yes
Age-adjusted percentage of adults who report consuming less than one fruit or vegetable daily (no fruits and vegetables)	22.8	26.1	No	28.1	Yes

Prevention Agenda (PA) Indicator, 2018	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Percent	Percent	Percent	Percent
Percentage of adults with obesity	23.6	25.2	29.1	24.2

Red – Does not meet PA objective Green- Meets PA objective

⁵ https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/chir_dashboard/chir_dashboard&p=ct&cos=28

⁶ https://www.health.ny.gov/community/adults/women/docs/maternal_mortality_review_2018.pdf

Communicable Diseases, including STDs and HIV

The prevention and control of communicable or infectious disease is essential to public health. In Nassau County, an effective and efficient surveillance system has largely decreased the prevalence of most of these diseases for the County. Also, Nassau County does not meet the Prevention Agenda objectives related to childhood immunizations and the rate of newly diagnosed HIV.

Community Health Indicators (CHIRS), 2017-2019	Nassau		NYS excluding NYC		New York State	
	Number	Percent	Percent	Significant Difference	Percent	Significant Difference
Pneumonia/flu hospitalization rate per 10,000 - Aged 65 years and older	6,335	88.1	95.2	Yes	85.5	Yes
Pertussis incidence per 100,000	135	3.3	5.0	Yes	3.8	No
Mumps incidence per 100,000	48	1.2	1.3	No	1.7	Yes
Haemophilus influenza incidence per 100,000	101	2.5	2.3	No	2.0	No
Hepatitis A incidence per 100,000	40	1.0	1.4	No	1.3	No
Acute hepatitis B incidence per 100,000	12	0.3	0.4	No	0.4	No
Tuberculosis incidence per 100,000	134	3.3	1.7	Yes	3.9	Yes
E. coli Shiga Toxin incidence per 100,000	126	3.1	3.1	No	4.1	Yes
Salmonella incidence per 100,000	551	13.5	12.9	No	14.0	No
134-Shigella incidence per 100,000	251	6.2	3.4	Yes	6.3	No
Lyme disease incidence per 100,000	401	9.8	70.7	Yes	44.7	Yes
Percentage of adults 65 years and older with flu immunization in the past year (2018)	N/A	40.7	43.4	No	44.8	No
Percentage of adults aged 65 years and older with pneumococcal immunization (2018)	N/A	61.0	69.4	No	64.0	No
Age-adjusted newly diagnosed HIV case rate per 100,000	252	6.6	6.1	No	13.2	Yes
Age-adjusted AIDS mortality rate per 100,000	33	0.7	0.7	No	1.9	Yes
Early syphilis case rate per 100,000	533	13.1	11.7	Yes	34.5	Yes
Gonorrhea case rate per 100,000 males - Aged 15-44 years	1,441	193.4	267.8	Yes	614.9	Yes
Gonorrhea case rate per 100,000 females - Aged 15-44 years	626	85.2	218.3	Yes	252.5	Yes
Gonorrhea case rate per 100,000 - Aged 15-19 years	289	111.3	246.4	Yes	401.5	Yes
Chlamydia case rate per 100,000 males - Aged 15-44 years	4,891	656.5	721.7	Yes	1,175.1	Yes
Chlamydia case rate per 100,000 males - Aged 15-19 years	756	564.9	766.4	Yes	1,142.6	Yes
Chlamydia case rate per 100,000 males - Aged 20-24 years	1,933	1,471.7	1,513.3	No	2,107.1	Yes
Chlamydia case rate per 100,000 females - Aged 15-44 years	8,782	1,195.2	1,455.2	Yes	1,741.1	Yes
Chlamydia case rate per 100,000 females - Aged 15-19 years	2,490	1,978.2	2,623.6	Yes	3,535.7	Yes
Chlamydia case rate per 100,000 females - Aged 20-24 years	3,629	2,845.8	3,203.9	Yes	3,912.5	Yes
Percentage of sexually active young women (aged 16-24) with at least one chlamydia test in Medicaid program (2019)	6,035	78.9	68.6	Yes	75.8	Yes
Pelvic inflammatory disease (PID) hospitalization rate per 10,000 females - Aged 15-44 years	123	1.7	1.9	No	2.5	Yes

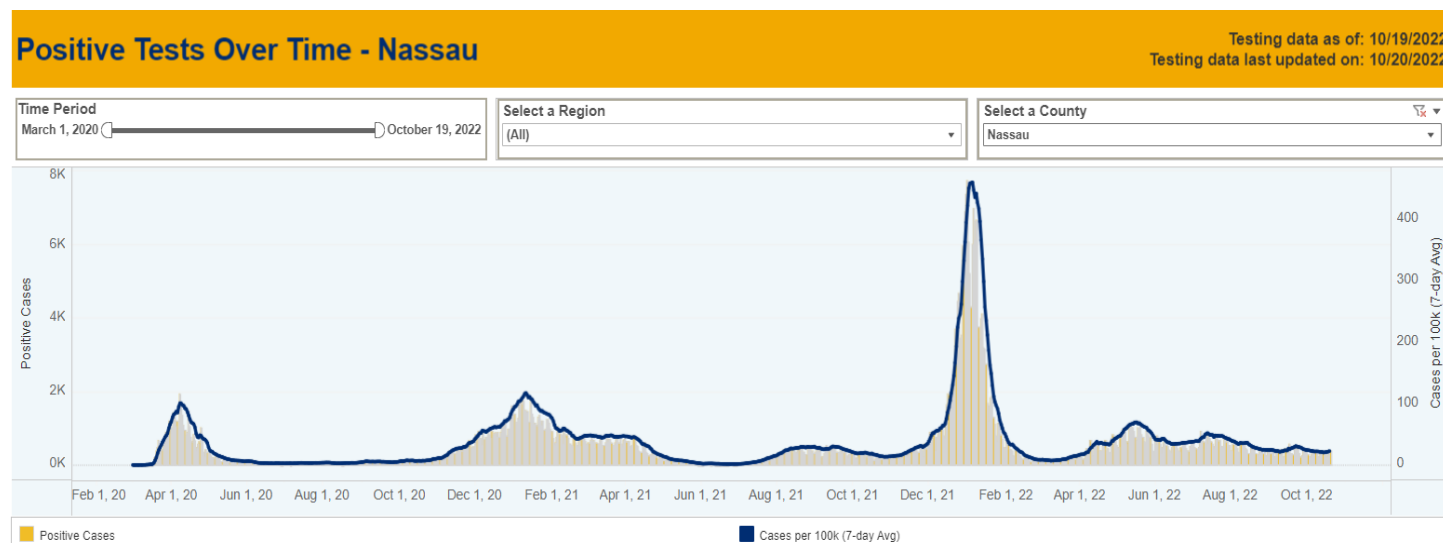
Prevention Agenda (PA) Indicator, 2019	Nassau County	Long Island	NYS (excl NYC)	PA 2018 Objective
	Rate /Percent	Rate /Percent	Rate /Percent	Rate /Percent
Percentage of 24-35-month-old children with the 4:3:1: 3:3:1:4 immunization series	59.6	60.9	66.3	70.5
Percentage of 13-year-old adolescents with a complete HPV vaccine series	27.8	28.6	32.8	37.4
Newly diagnosed HIV cases, rate per 100,000 population	6.2	6.4	5.7	5.2
Gonorrhea diagnoses, age-adjusted rate per 100,000 population	67.0	63.1	114.9	242.6
Chlamydia diagnoses, age-adjusted rate per 100,000 population	404.9	397.6	457.5	676.9
Early syphilis diagnoses, age-adjusted rate per 100,000 population	15.3	13.7	15.3	79.6

Red – Does not meet PA objective Green- Meets PA objective

COVID-19 in Nassau County

COVID-19 data has been monitored regularly and is available on the NYS Tracker Dashboard.⁷ The pandemic has consisted of numerous variants with varying levels of severity, been affected by multiple disease-mitigation strategies, emerging diagnostic testing technologies, ever-changing reporting requirements, improved treatment protocols and innovative vaccine research and protocols. Therefore, available data is presented over time and otherwise annually. In some cases, Long Island regional information is exclusively available. Additional vaccination data is available in Appendix I.

COVID-19 Data NYS Tracker for Nassau County	2020 Number	2020 Rate/100,000	2021 Number	2021 Rate/100,000
Total Positives	89,460	6409.35	212,906	15253.62
Patients Newly Hospitalized	6474	463.83	9078	650.39
Fatalities	2401	172.02	1011	72.43
			As of 12/9/2022	2022 Rate/100,000
Vaccinations Complete Series to Date			1,147,048	84.4%

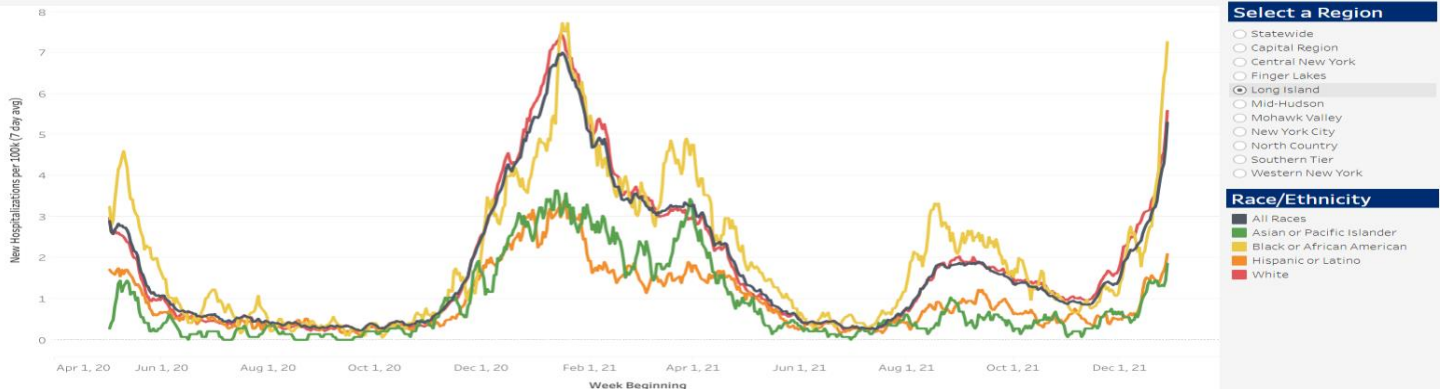


⁷ <https://coronavirus.health.ny.gov/covid-19-data-new-york>

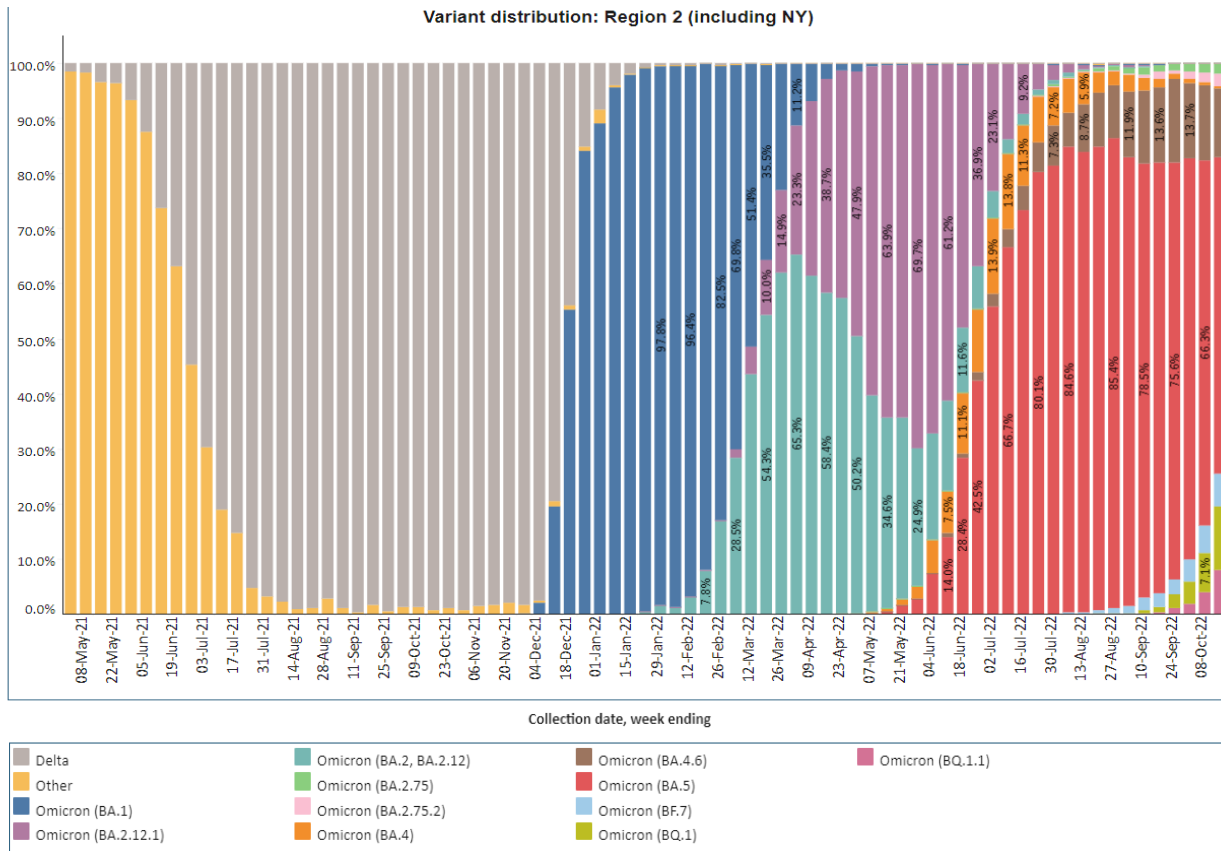
Hospital Admissions by Race/Ethnicity Over Time

Data as of: 10/18/2022
Last updated on: 10/19/2022

Long Island



Variant distribution: Region 2 (including NY)

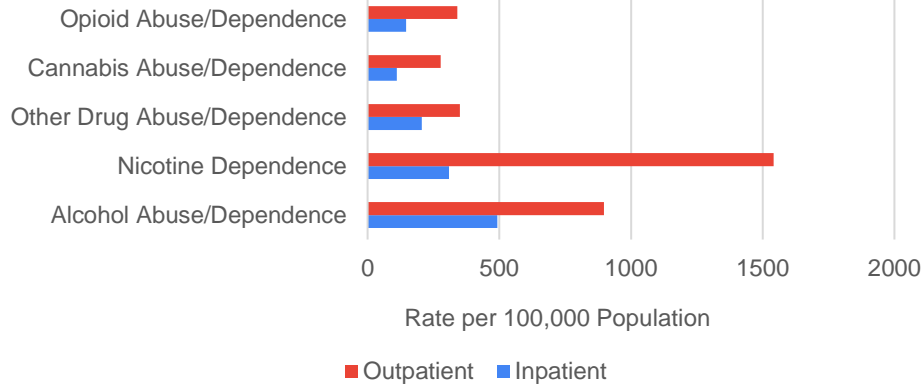


Substance Use

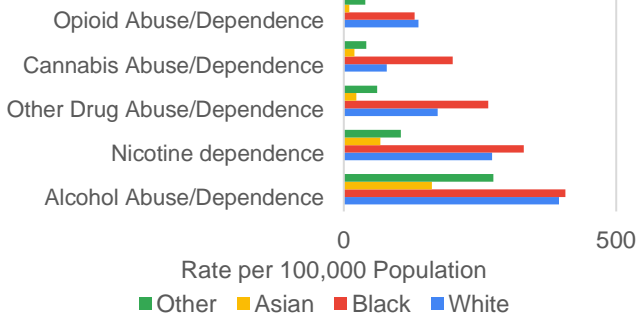
The RHIO data shows that nicotine is the most widely used substance, followed by alcohol. It also shows that Blacks have higher rates of substance use than other races except for opioid use. Non-Hispanics have higher rates of substance use than Hispanics except from outpatient visits related to alcohol and cannabis.

RHIO/Healthix Data 2017-2021

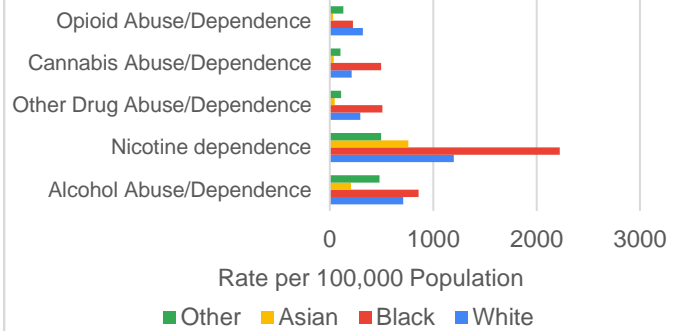
5 Year Average Rates of Substance Use
2017-2021



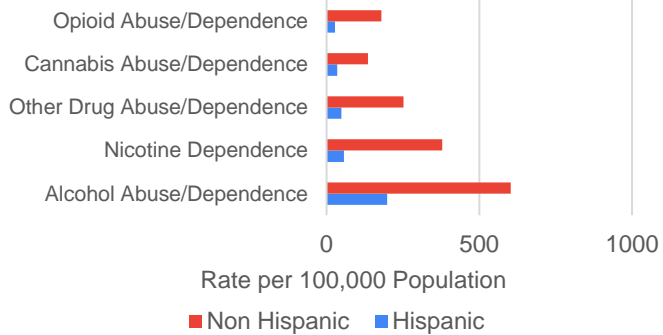
5 Year Average Hospitalization Rates
Substance Use by Race, 2017-2021



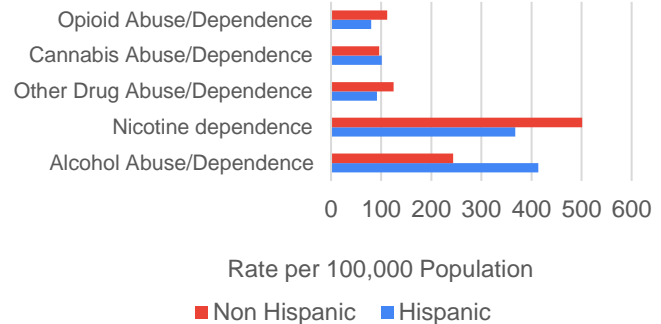
5 Year Average Outpatient Rates
Substance Use by Race, 2017-2021



5 Year Average Hospitalization Rates
Substance Use by Ethnicity, 2017-2021



5 Year Average Outpatient Rates
Substance Use by Ethnicity, 2017-2021



Tobacco use is less in Nassau County compared to the rest of New York State. Binge drinking in Nassau County is less than the State excluding NYC, but similar to NYS as a whole. Nassau does not meet the prevention agenda indicator for binge drinking.

Community Health Indicators (CHIRS), 2018	Nassau		NYS (excl NYC)		New York State	
	Number	Percent (or) Rate	Percent (or) Rate	Significant Difference	Percent (or) Rate	Significant Difference
Alcohol related motor vehicle injuries and deaths per 100,000 (2017-2019)	1,180	29	34.7	Yes	28.9	No
Age-adjusted percentage of adults who are current smokers	NA	7.2	14.7	Yes	13.2	Yes
Age-adjusted percentage of adults binge drinking during the past month	NA	17.6	18.4	No	17.5	No

Prevention Agenda (PA) Indicator, 2018	Nassau County	Long Island	NYS (excl NYC)	PA 2024 Objective
	Rate/Percent	Rate /Percent	Rate/Percent	Rate/Percent
Prevalence of cigarette smoking among adults	7.2	9.7	13.9	11.0
Percentage of cigarette smoking among adults with income less than \$2500	14.9	19.5	24.8	15.3
Binge drinking during the past month among adults, age-adjusted percentage	17.6	17.8	18.4	16.4

Red – Does not meets PA objective Green- Meets PA objective

Opioids

Recent data available from NYS indicate that for the most part, Nassau County opioid rates are below NYS excluding NYC, and most meet the Prevention Agenda objectives. Race and ethnicity data are limited by county. As per NYS race and ethnicity tables, the opioid burden between 2017-2019 in Nassau County was 217.7/100,000 among Whites compared to 141.2/100,000 among Blacks. The Asian population rate was 19.5/100,000 and among Hispanics was 171.3/100,000.

New York State Opioid Data, 2019		Nassau		Long Island		NYS excluding NYC	
Opioid Indicator		Number	Rate	Number	Rate	Number	Rate
Overdose deaths involving any opioid, crude rate per 100,000 population		182	13.4	472	16.6	1,793	16.1
Overdose deaths involving synthetic opioids other than methadone, crude rate per 100,000 population		129	9.5	350	12.3	1,421	12.7
Unique naloxone administrations by EMS agencies, crude rate per 1,000 unique 911 EMS dispatches		681	5	929	n/a	7,311	5.4
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population		511	37.6	1,685	59.3	6,922	62.1
All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population		269	19.8	968	34.1	4,213	37.8
Hospital discharges involving opioid use (including abuse, poisoning, dependence, and unspecified use), crude rate per 100,000 population		1,066	78.5	2,886	101.6	11,214	100.6
Opioid burden (including outpatient ED visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose deaths), crude rate per 100,000 population		2,140	157.7	6,320	222.6	25,821	231.6
ED visits (outpatients) and hospital discharges involving opioid abuse, dependence and unspecified use, crude rate per 100,000 population		1,399	103.1	4,128	145.4	17,037	152.8
Admissions to OASAS-certified substance use disorder treatment programs for any opioid (incl. heroin), crude rate per 100,000 population - Aged 12+ years (2020)		3,022	258.3	9,757	397.5	52,209	541.5

Opioid analgesics prescription, crude rate per 1,000 population (2020)	406,135	299	1,009,746	355.6	4,576,688	410.7
Opioid analgesics prescription, age-adjusted rate per 1,000 population (2020)	406,135	247.2	1,009,746	295.7	4,576,688	342.6
Percentage of incidents when patients were opioid naïve and received an opioid prescription of more than seven days (2020)	23,578	17.6	54,006	18.3	199,632	16.8
Percentage of patients prescribed one or more opioid analgesics with a total daily dose of 90 MME or more on at least one day (2020)	13,853	10.7	33,893	11.7	130,867	10.9
Percentage of patients with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions (2020)	17,422	8.3	41,113	9	160,287	9.2
Percentage of patients with two or more calendar days of overlapping opioid analgesic prescriptions (2020)	19,546	15.1	48,348	16.7	201,564	16.8
Benzodiazepine prescription, crude rate per 1,000 population (2020)	440,847	324.5	984,400	346.7	3,545,346	318.2
Benzodiazepine prescription, age-adjusted rate per 1,000 population (2020)	440,847	279.8	984,400	300.5	3,545,346	282
Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population (2020)	3,725	274.2	12,526	441.1	63,622	570.9
Patients who received at least one buprenorphine prescription for opioid use disorder, age-adjusted rate per 100,000 population (2020)	3,725	294.1	12,526	480	63,622	638.7
Overdose deaths involving any drug, crude rate per 100,000 population - Aged 18-44 years	115	26.1	324	35.1	1,289	34.4
Overdose deaths involving any drug, crude rate per 100,000 population - Aged 45-64 years	87	22.7	200	24.4	797	25.8
Overdose deaths involving any drug, age-adjusted rate per 100,000 population	212	16.2	555	20.3	2,201	20.7
Overdose deaths involving any opioid, crude rate per 100,000 population - Aged 18-44 years	100	22.7	297	32.2	1,126	30
Overdose deaths involving any opioid, crude rate per 100,000 population - Aged 45-64 years	74	19.3	155	18.9	601	19.4
Overdose deaths involving any opioid, age-adjusted rate per 100,000 population	182	13.9	472	17.6	1,793	17.3
Overdose deaths involving heroin, crude rate per 100,000 population - Aged 18-44 years	27	6.1	73	7.9	364	9.7
Overdose deaths involving heroin, crude rate per 100,000 population - Aged 45-64 years	22	5.7	41	5	168	5.4
Overdose deaths involving heroin, age-adjusted rate per 100,000 population	49	3.8	115	4.2	541	5.2
Overdose deaths involving opioid pain relievers (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 18-44 years	91	20.7	278	30.1	1,065	28.4
Overdose deaths involving opioid pain relievers (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 45-64 years	72	18.8	145	17.7	569	18.4
Overdose deaths involving opioid pain relievers (incl. illicitly produced opioids such as fentanyl), age-adjusted rate per 100,000 population	171	13	442	16.4	1,693	16.2
Overdose deaths involving methadone, age-adjusted rate per 100,000 population	23	1.8	36	1.3	115	0.9
Overdose deaths involving synthetic opioids other than methadone, age-adjusted rate per 100,000 population	129	10	350	13.3	1,421	13.9
Emergency Department Visits Related to Opioids						
All emergency department visits (including outpatients and admitted patients) involving any drug overdose, crude rate per 100,000 population - Aged 18-24 years	207	174.4	586	231.8	2,824	259.5
All emergency department visits (including outpatients and admitted patients) involving any drug overdose, crude rate per 100,000 population - Aged 25-44 years	509	158.3	1,810	269.8	8,608	323.2
All emergency department visits (including outpatients and admitted patients) involving any drug overdose, crude rate per 100,000 population - Aged 45-64 years	334	87.1	1,014	123.9	4,871	157.6

All emergency department visits (including outpatients and admitted patients) involving any drug overdose, age-adjusted rate per 100,000 population	1,535	116.1	4,586	168.8	21,762	204.3
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population - Aged 18-24 years	64	53.9	216	85.4	762	70
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population - Aged 25-44 years	282	87.7	1,002	149.3	4,027	151.2
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population - Aged 45-64 years	116	30.2	346	42.3	1,624	52.5
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, age-adjusted rate per 100,000 population	511	39.6	1,685	64	6,922	66.1
All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population - Aged 18-24 years	36	30.3	132	52.2	514	47.2
All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population - Aged 25-44 years	191	59.4	688	102.5	2,839	106.6
All emergency department visits (including outpatients and admitted patients) involving heroin overdose, age-adjusted rate per 100,000 population	269	22.5	968	38.7	4,213	41.8
All emergency department visits (including outpatients and admitted patients) involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 18-44 years	119	27	398	43.1	1,436	38.3
All emergency department visits (including outpatients and admitted patients) involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), age-adjusted rate per 100,000 population	242	17.2	717	25.3	2,709	24.4
Hospital Discharges Related to Opioids						
Hospital discharges involving any drug overdose, crude rate per 100,000 population - Aged 18-44 years	335	76.1	787	85.2	3,462	92.3
Hospital discharges involving any drug overdose, crude rate per 100,000 population - Aged 45-64 years	288	75.1	598	73.1	2,434	78.7
Hospital discharges involving any drug overdose, age-adjusted rate per 100,000 population	862	60.5	1,876	64.1	7,855	69.8
Hospital discharges involving any opioid overdose, crude rate per 100,000 population - Aged 18-44 years	71	16.1	202	21.9	729	19.4
Hospital discharges involving any opioid overdose, crude rate per 100,000 population - Aged 45-64 years	66	17.2	142	17.4	536	17.3
Hospital discharges involving any opioid overdose, age-adjusted rate per 100,000 population	178	12	430	14.4	1,557	13.4
Hospital discharges involving heroin overdose, crude rate per 100,000 population - Aged 18-64 years	53	6.4	143	8.2	549	8
Hospital discharges involving heroin overdose, age-adjusted rate per 100,000 population	54	4.4	145	5.6	572	5.5
Hospital discharges involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population	124	9.1	285	10	985	8.8
Hospital discharges involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 18-44 years	30	6.8	92	10	324	8.6
Hospital discharges involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 45-64 years	54	14.1	109	13.3	392	12.7

Hospital discharges involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), age-adjusted rate per 100,000 population	124	7.8	285	8.7	985	7.8
Newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges	39	3	195	7.1	1,328	12.7
Office of Addiction Services and Supports						
Admissions to OASAS-certified substance use disorder treatment programs for heroin, crude rate per 100,000 population - Aged 12+ years	2,263	193.5	7,576	308.6	40,695	422.1
Admissions to OASAS-certified substance use disorder treatment programs for any opioid (incl. heroin), crude rate per 100,000 population - Aged 12+ years	3,022	258.3	9,757	397.5	52,209	541.5
Behavioral Risk Factor Surveillance System						
Percentage of adults who have self-reported prescription pain medication misuse in the past 12 months (2018)	32,941	3.7	47,063	2.6	191,480	2.7
Age-adjusted percentage of adults who have self-reported prescription pain medication misuse in the past 12 months (2018)	32,941	3.6	47,063	2.8	191,480	2.7

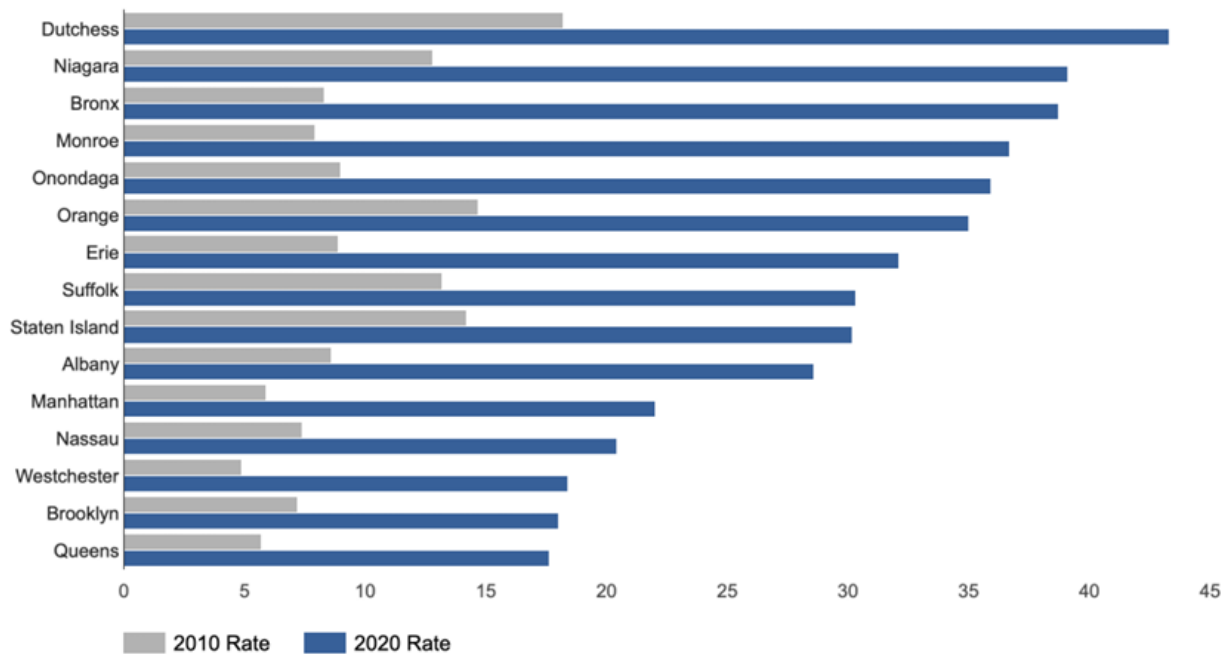
Prevention Agenda (PA) Indicator, 2020	Nassau County	Long Island	NYS excluding NYC	PA 2024 Objective
	Rate/Percent	Rate/Percent	Rate/Percent	Rate/Percent
Frequent mental distress during the past month among adults, age-adjusted percentage (2018)	10.6	11.3	11.8	10.7
Overdose deaths involving any opioids, age-adjusted rate per 100,000 population (2019)	13.9	17.6	17.3	14.3
Patients who received at least one buprenorphine prescription for opioid use disorder, age-adjusted rate per 100,000 population	294.1	480	638.7	415.6
Opioid analgesic prescription, age-adjusted rate per 1,000 population	247.2	295.7	342.6	350
Emergency department visits (including outpatients and admitted patients) involving any opioid overdose, age-adjusted rate per 100,000 population (2019)	39.6	64	66.1	53.3
Percentage of adults who have experienced two or more adverse childhood experiences (ACEs) (2016)	25.4	34.6	36.1	33.8
Indicated reports of abuse/maltreatment, rate per 1,000 children - aged 0-17 years	4.6	NA	16.1	15.6

Red – Does not meet PA objective Green – Meets PA objective

A recent report authored by the NYS Comptroller, excerpted in the graph below, highlights the crisis in NYS and indicates the sharp increase in deaths due to drug overdose across many counties in the State, including Nassau.⁸

⁸ <https://www.osc.state.ny.us/files/reports/pdf/drug-overdose-deaths.pdf>

County Drug Overdose Death Rates, 2010 and 2020



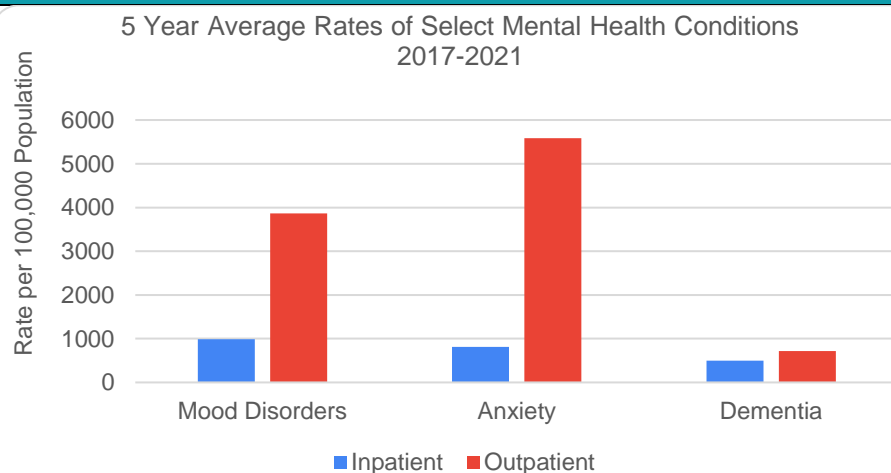
Note: Rates are age-adjusted per 100,000 population.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics.

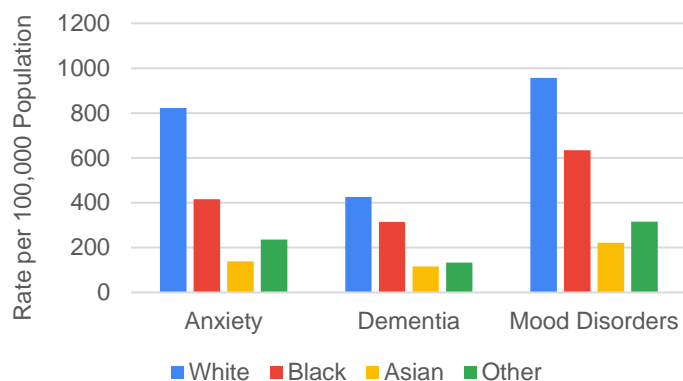
Mental Health

The RHIO data indicates that anxiety is the most prevalent mental health condition. The rates of mental health conditions among Whites are highest compared to other races except for mood disorder in the outpatient setting. Non-Hispanics have the highest rates in outpatient dementia visits and Hispanics have the highest rates in outpatient mood disorder visits. The rates for outpatient anxiety visits are approximately the same for Hispanics and non-Hispanics.

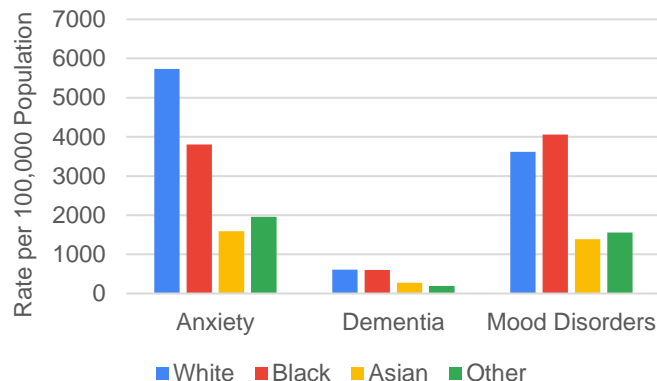
RHIO/Healthix Data 2017-2021



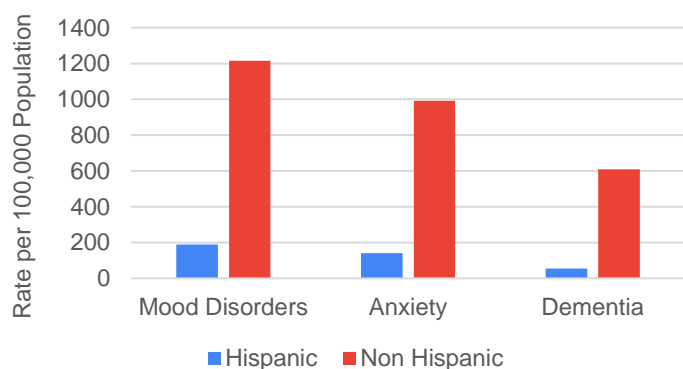
5 Year Average Rates of Select Mental Health Hospitalizations by Race, 2017-2021



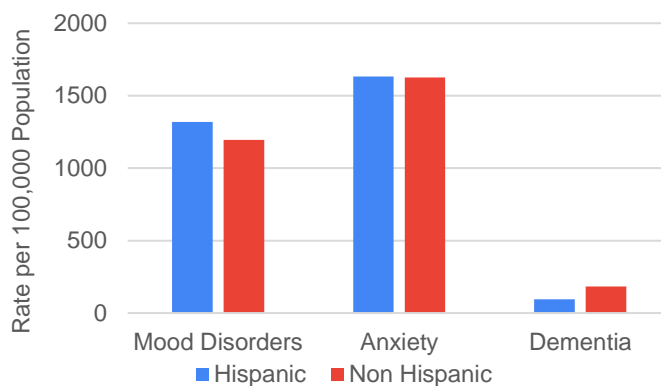
5 Year Average Rates of Select Mental Health Outpatient Visits by Race, 2017-2021



5 Year Average Rates of Select Mental Health Hospitalizations by Ethnicity, 2017-2021



5 Year Average Rates of Select Mental Health Outpatient Visits by Ethnicity, 2017-2021



Prevention Agenda (PA) Indicator	Nassau County	Long Island	NYS excluding NYC	PA 2024 Objective
	Rate/Percent	Rate/Percent	Rate/Percent	Rate/Percent
Frequent mental distress during the past month among adults, age-adjusted percentage (2018)	10.6	11.3	11.8	10.7
Percentage of adults who have experienced two or more adverse childhood experiences (ACEs) (2016)	25.4	34.6	36.1	33.8

Red – Does not meet PA objective Green – Meets PA objective

According to the prevention agenda, above, mental health indicators in Nassau County meet the objective.⁹

Leading Causes of Death

In 2019, the leading cause of death in Nassau County was heart disease followed by cancer. Nassau County mortality data is not available for 2020. However, in 2020, the number of fatalities due to COVID-19 (rate of

⁹ Data on suicide is located in Injury and Child and Adolescent Health, in this document.

172/100,000) was higher than the 2019 cancer rate (120.5/100,000). According to the National Center for Health Statistics 2020 data, NYS heart disease mortality rate remained the highest followed by COVID-19 and then cancer, accidents, CLRD and stroke.¹⁰

Number of deaths and age-adjusted death rate						
	Total Deaths	#1 Cause of Death	#2 Cause of Death	#3 Cause of Death	#4 Cause of Death	#5 Cause of Death
Nassau						
2019	Total Deaths 10,968 559.3 per 100,000	Heart Disease 3,732 180.0 per 100,000	Cancer 2,297 120.5 per 100,000	Cerebrovascular Disease 476 23.4 per 100,000	Unintentional Injury 471 31.3 per 100,000	CLRD 414 20.9 per 100,000
2018	Total Deaths 11,120 566.8 per 100,000	Heart Disease 3,848 186.3 per 100,000	Cancer 2,423 127.1 per 100,000	Unintentional Injury 451 30.1 per 100,000	CLRD 434 21.4 per 100,000	Cerebrovascular Disease 431 21.5 per 100,000
2017	Total Deaths 11,017 563.5 per 100,000	Heart Disease 3,841 186.5 per 100,000	Cancer 2,373 125.3 per 100,000	Cerebrovascular Disease 472 23.1 per 100,000	Unintentional Injury 466 31.2 per 100,000	CLRD 435 21.8 per 100,000
2016	Total Deaths 10,979 570.0 per 100,000	Heart Disease 3,756 182.7 per 100,000	Cancer 2,457 132.9 per 100,000	Cerebrovascular Disease 484 23.8 per 100,000	Unintentional Injury 451 31.1 per 100,000	CLRD 406 21.0 per 100,000
2015	Total Deaths 11,031 575.3 per 100,000	Heart Disease 3,956 194.3 per 100,000	Cancer 2,470 134.8 per 100,000	Cerebrovascular Disease 472 23.4 per 100,000	Unintentional Injury 443 29.3 per 100,000	CLRD 380 19.7 per 100,000
2014	Total Deaths 10,578 559.6 per 100,000	Heart Disease 3,854 191.9 per 100,000	Cancer 2,430 134.8 per 100,000	Unintentional Injury 431 29.0 per 100,000	Cerebrovascular Disease 430 22.0 per 100,000	CLRD 408 21.2 per 100,000
2013	Total Deaths 10,586 567.0 per 100,000	Heart Disease 3,852 195.2 per 100,000	Cancer 2,537 142.1 per 100,000	Unintentional Injury 422 27.6 per 100,000	CLRD 403 21.7 per 100,000	Cerebrovascular Disease 403 20.8 per 100,000
2012	Total Deaths 10,967 593.4 per 100,000	Heart Disease 3,985 202.0 per 100,000	Cancer 2,596 147.1 per 100,000	Cerebrovascular Disease 454 24.0 per 100,000	CLRD 447 24.4 per 100,000	Unintentional Injury 409 27.6 per 100,000
2011	Total Deaths 10,688 588.3 per 100,000	Heart Disease 4,112 213.7 per 100,000	Cancer 2,466 142.3 per 100,000	CLRD 437 24.2 per 100,000	Cerebrovascular Disease 427 22.9 per 100,000	Unintentional Injury 379 25.3 per 100,000
2010	Total Deaths 10,598 591.0 per 100,000	Heart Disease 4,135 218.1 per 100,000	Cancer 2,539 146.7 per 100,000	CLRD 417 23.2 per 100,000	Cerebrovascular Disease 398 21.5 per 100,000	Unintentional Injury 350 23.3 per 100,000

CLRD: Chronic Lower Respiratory Diseases

*Rates based on fewer than 10 events in the numerator are unstable.

Note: Ranks are based on numbers of deaths, then on mortality rates. Where county's death counts and rates are tied, '(tie)' appears at the bottom of the corresponding cells, and causes are further ranked alphabetically.

If a cell is blank, then there were no deaths from any of the 25 causes used in our tables. These causes are listed in the technical notes.

Source: Vital Statistics Data as of January 2022

¹⁰ <https://www.cdc.gov/nchs/pressroom/states/newyork/ny.htm>

Chapter 3: Social Determinants of Health

The health status of a population is the result of multiple, dynamically integrated factors that carry different weights at different times. In identifying the main health challenges facing the community, input was sought through community engagement. Community-based research including community-wide surveys, community-based organization surveys, key informant interviews, community research around library programs, and on-going conversations with membership from the Long Island Health Collaborative (LIHC) provided the qualitative data used in this assessment (See Appendix A, B, C, D). Community engagement yielded insight into the perception of barriers to and determinants of health at the community level. Social determinants of health are defined as the conditions in which people are born, live, grow, work, and age. These conditions can affect a wide range of health risks and outcomes. The five key domains of social determinants of health include: economic stability, education access and quality, social and community context, health and health care access and quality, and neighborhood and built environment. It is important to note that these categories are not mutually exclusive; factors and outcomes overlap. Social determinants of health may be positive or supportive of individual's health or they may be negative and exhibit a pattern of social risk factors that increase morbidity and mortality.¹¹

Health equity, as defined by Healthy People 2030, is “The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with a focused and ongoing societal effort to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.”¹² In other words, health equity is achieved when underlying issues, such as those social determinants of health that prevent people from being healthy, are addressed. Achieving health equity not only improves individual's health, but also improves population health.¹³, including economic growth and healthier environments.

Economic Stability

As described in the demographics section of this document (Chapter 1), Nassau County's median income ranks as one of the highest in the country. These riches are counterbalanced by the County's high property taxes. While the overall median income in Nassau County is higher than compared to NYS, Blacks and Hispanics had incomes less than Whites

¹¹ <https://www.ncbi.nlm.nih.gov/books/NBK573923/>

¹² <https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030>

¹³ <https://www.ncbi.nlm.nih.gov/books/NBK573923/>

(\$96,652; \$90,681 and \$123,545, respectively).¹⁴ In addition, 7.0% of the Black population and 9.3% of the Hispanic population live below the poverty line compared to 2.1% of White population.¹⁵ Concomitant with national unemployment rates, Nassau County's unemployment rate has decreased, and is considered as among the lowest in the state at 3.3% as of August 2022.¹⁶ However, also during this time period, many communities have unemployment rates that exceed Nassau County and the State indicating a consistent disparity (Hempstead Village, 4.4%; Freeport, 4.4%).¹⁷ Home ownership also provides a similar profile where the value of owner-occupied houses was high for the County, \$524,400 from 2016-2020. Yet, ownership was much lower for some communities within the County such as Uniondale's value of \$386,200 and Roosevelt's value of \$326,900.¹⁸ Income differences are severe within the County and as a social determinant of health often translate to poorer health outcomes.

The qualitative analyses supported the importance of economic stability is central to health. 2021 and 2022 surveys from the community indicated that fear of inability to pay for health insurance, concern over job opportunities and affordable housing were among the top 5 ranked issues related to either healthcare for oneself or for the community at large (Appendix A, B). According to the Key Informant Interviews (Appendix C), health insurance was tied to employment status or poor health insurance options. Important insights were gleaned from the Long Island's Libraries: Caretakers of the Region's Social Support and Health Needs, Results of a Two-Year Study (The Library Study, Appendix D). The researchers sought to understand community needs across Long Island using public libraries as important to entities to the fabrics of communities by addressing health programs and understanding patron needs. Results indicated that libraries in lower income areas sought programs around basic social needs like unemployment and economic stability support systems.

Education Access and Quality

Educational attainment is the strongest predictor of health in a community. Education rates within the Nassau County are higher than that of NYS, and Nassau County's public-school system has graduation rates that exceed the State as a whole (see graph below).¹⁹ Over the course of the last three years, the data continue to show improvement. In 2019,

¹⁴ <https://www.health.ny.gov/statistics/community/minority/county/nassau.htm>

¹⁵ Ibid.

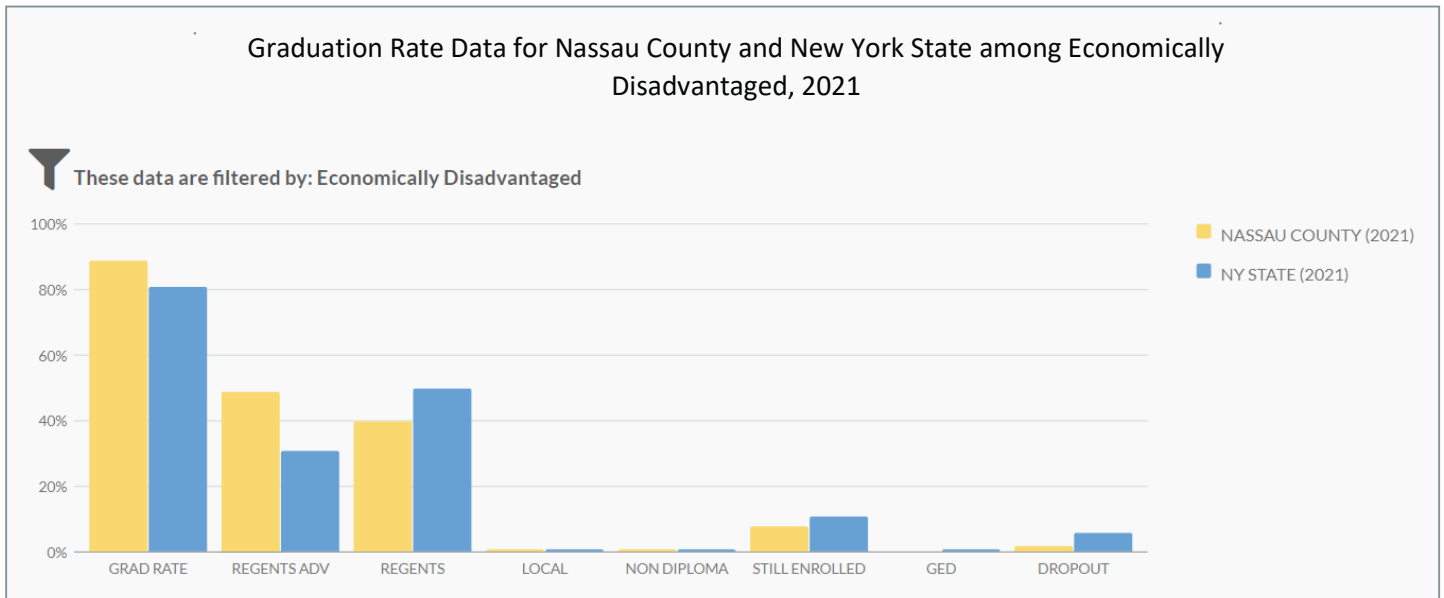
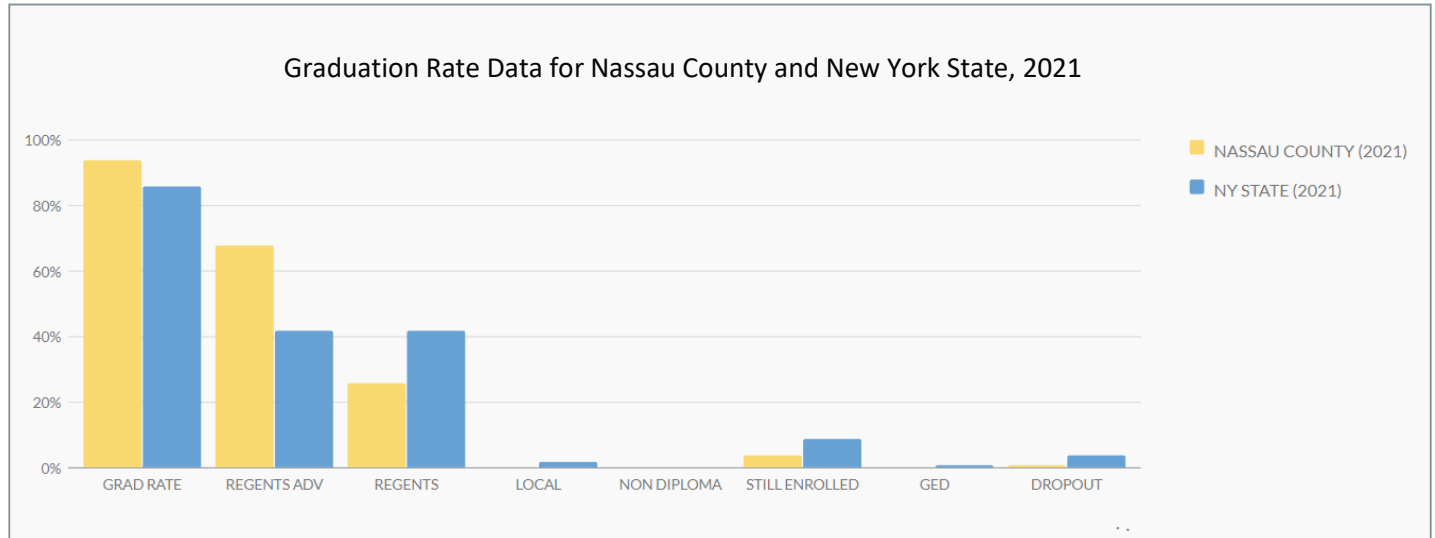
¹⁶ [State Labor Department Releases Preliminary August 2022 Area Unemployment Rates | Department of Labor \(ny.gov\)](#)

¹⁷ [Local Area Unemployment Statistics | Department of Labor \(ny.gov\)](#)

¹⁸ [U.S. Census Bureau QuickFacts: United States](#)

¹⁹ [NYSED Data Site](#)

the County graduation rate was 92% and in 2021 it was 94%. When the 2021 data is sorted by the economically disadvantaged category, the graduation rate is lower, but still higher than NYS. However, those who receive Regents diplomas are fewer among those who are economically disadvantaged compared to NYS (40% vs 50%) in 2021.



In addition, Black students have a lower graduation rate compared to White students (87% vs 90%, 2021). Two of the most troubled school districts in New State are in Nassau County and had improved graduation rates of 71% (Hempstead, USFD) and 87% (Roosevelt, USFD) in 2021. This is up from 42% and 70% in 2017.²⁰

²⁰ Ibid

Education, in terms of language fluency, is an important determinant of health as well. As found from the community surveys (see Appendix A, B), language barriers were a top concern when discussing access to health care. According to the Nassau County data,²¹ those who are English language learners have a graduation rate of 65% (NYS, 61%) in 2021. In 2019, that number was 37% (NYS, 39%); it is significantly improved.

Social and Community Context

Social and community context include factors such as social integration, support systems, community engagement, discrimination, and stress. Community resources that include community engagement are available to residents. According to the Key Informant Interviews (Appendix C), stress from financial insecurity can yield physical health consequences and was recognized by the CBOs. The Library Study (Appendix D) was undertaken in part because libraries provide community support services to their patrons. Results demonstrated that social support programs in high-need communities are consistent with health disparities and inequities individuals face and confirms the key role of social determinants of health in health outcomes. Programs delivered by libraries tend to be exercise, health insurance information, diet and nutrition, and mental health. The Library Study identified homelessness, technology literacy, English as a second language (immigration) unemployment, and food as the top 5 social needs. The community looks to libraries as an important stakeholder in its health.

In 2021, the Community Survey (Appendix A) ranked fear related to immigration as a barrier to health care. In 2022, NYC completed a study on the social determinants of health for immigrants in their community.²² Among the findings, immigrants found that lack of health insurance, inability to afford care, and inability to take off time from work were the top barriers to access of care. In addition, discrimination continues to be an on-going issue, which inhibits some from seeking healthcare. Discrimination based on race was the most common response reported by immigrants, followed by nationality or citizenship.

All forms of overt or covert bigotry, including racism, xenophobia, sexism, and LGBTQ discrimination have been and continue to plague national and local populations. Therefore, all forms of bias and prejudice towards any one group

²¹ Ibid

²² <https://cmsny.org/wp-content/uploads/2022/06/Social-Determinants-of-Immigrants-Health-in-New-York-City-A-Study-of-Six-Neighborhoods-in-Brooklyn-and-Queens-June-15-2022-FINAL.pdf>

will continue to hurt these populations and the population as a whole, and continue to impact access to healthcare, social services, and safety.

Health and Healthcare Access and Quality

Nassau County has 11 hospital locations within the County. The County hospitals offer community services, such as perinatal services, child safety, health screening, healthy aging and wellness programs and smoking cessation efforts. In addition, nine Federally Qualified Health Centers are located in the County, eight of them in underserved communities which include three that are co-located in high schools.

The linkage of uninsured patients to managed care programs, including Medicaid and Medicare services, is supported by the Nassau County Department of Social Services. Consistent with New York State as a whole and as a function of the Marketplace which opened in 2013,²³ the uninsured population in Nassau County continues to drop and is estimated to be 5.0% of the total population employed, 8% of the unemployed and 6% not in the labor force (see Demographics section). The Affordable Care Act is currently not accessible to undocumented individuals. However, they can receive Emergency Medicaid when eligible. Without the support of insurance, this population imposes an additional burden on hospital and healthcare services who provide emergency care.

According to the qualitative analyses conducted in Nassau County, access, financial and insurance barriers to care continue to be challenges. (See Appendix A, B, C, D). According to the community, lack of insurance or being unable to afford co-pays and deductibles prevents residents from accessing medical treatment. A key informant interviewee expressed that financial insecurity can be a permanent stressor and stress itself can yield physical health consequences in line with chronic disease (Appendix C). Transportation was also a concern and participants discussed it as a major barrier to healthcare (Appendix B).

Neighborhood and Built Environment

The community infrastructure includes several aspects such as housing, parks and recreation, safety, and walkability. Affordable housing is necessary for a community to thrive. While the median home prices in Nassau County have increased over the last three years: 2019-2021 (\$541,000, \$585,000, \$620,000) and are higher than NYS as a whole,

²³ [Medicaid Managed Care | Nassau County, NY - Official Website \(nassaucountyny.gov\)](https://www.nassaucountyny.gov/medicaid-managed-care)

(\$250,000 and \$280,000 for 2019 and 2020, respectively²⁴), it can put a strain on the homeowner. Furthermore, Nassau County as well as Long Island as a region has had a history of residential segregation,²⁵ which exacerbates the racial wealth gap. Discriminatory real estate practices were also evident by recent reporting²⁶ and further addressed by the NYS Attorney General.²⁷

Parks and recreational facilities are plentiful around Nassau County. According to its website,²⁸ Nassau County manages more than 70 parks, preserves, museums, historic properties, and athletic facilities comprising 6,000 acres throughout the County. These range from the 930-acre Eisenhower Park (pictured on cover) in East Meadow to the renovated 2-acre Centennial Park in Roosevelt to the Garvies Point Museum and Preserve in Glen Cove. The Library Study (Appendix D) emphasizes the importance of public libraries especially in socioeconomically distressed neighborhoods.

According to the community-wide survey and community-based organization survey, transportation, affordable housing, and access to healthier food choices continue to be ranked as key determinants of health by the respondents (Appendix A, B). The table below provides general health status statistics and social determinants of health indicators.

CHIRS Indicators	Data years	Nassau		NYS excluding NYC		New York State	
		Number	Percentage (or) Rate	Percentage (or) Rate	Significant Difference	Percentage (or) Rate	Significant Difference
Percentage of population aged 65 years and older	2018	241,248	17.8	17.7	Yes	16.5	Yes
Birth rate per 1,000 population	2017-2019	42,234	10.4	10.5	Yes	11.5	Yes
Total mortality rate per 100,000	2017-2019	33,105	813	916.2	Yes	798.8	Yes
Age-adjusted total mortality rate per 100,000	2017-2019	33,105	563.2	675.3	Yes	624.7	Yes
Percentage premature deaths (aged less than 75 years)	2017-2019	10,696	32.3	39	Yes	40.8	Yes
Years of potential life lost per 100,000	2017-2019	168,568	4,496.40	6,226.00	Yes	5,781.90	Yes
Percentage of population with disability	2015-2019	113,083	8.4	NA	NA	11.5	NA
Percentage of children under 18 years old with disability	2015-2019	6,880	2.3	NA	NA	3.9	NA
Percentage of labor force unemployed	2020	58,907	8.4	8.3	Yes	10	Yes

²⁴ [Residential median sale price information by county \(ny.gov\)](https://www.nassaucountyny.gov/1768/About-Parks)

²⁵ <https://scholarship.law.stjohns.edu/lawreview/vol95/iss4/9/>

²⁶ <https://projects.newsday.com/long-island/real-estate-agents-investigation/#open-paywall-message>

²⁷ <https://ag.ny.gov/press-release/2022/attorney-general-james-and-governor-hochul-tackle-discriminatory-practices-long>

²⁸ <https://www.nassaucountyny.gov/1768/About-Parks>

Percentage of population in poverty	2019	NA	5.6 (4.9-6.3)	NA	NA	13.1	Yes
Percentage of children aged <18 years below poverty	2019	NA	6.5 (5.3-7.7)	NA	NA	18.2	Yes
Annual median household income in US dollars	2019	NA	\$117,767	NA	NA	72,038.00	NA
Percentage of children aged <19 years with health insurance	2019	NA	97.4 (96.9-97.9)	NA	NA	97.7	No
Percentage of adults aged 18-64 years with health insurance	2019	NA	94.4 (93.9-94.9)	NA	NA	92.5	Yes
Percentage of population with Medicaid/means-tested public coverage	2015-2019	174,484	13	NA	NA	25.7	NA
Age-adjusted percentage of adults who did not receive medical care because of cost	2018	NA	11.3 (8.9-13.7)	9.8	No	11.3	No
Age-adjusted percentage of adults who have a regular health care provider	2018	NA	82.8 (79.9-85.7)	82	No	79.1	No
Number of primary care physicians per 100,000 population	2018	1,940	143	NA	NA	84	NA
Number of mental health providers per 100,000 population	2020	4,259	314	NA	NA	304	NA
Number of dentists per 100,000 population	2019	1,689	124	NA	NA	85	NA
Percentage of enrolled students eligible for free/reduced priced lunch	2019	58,600	29.4	NA	NA	55.2	Yes
Percentage of population who did not have access to a reliable source of food during the past year (Food insecurity)	2019	NA	4.9	NA	NA	10.7	NA
Percentage of households receiving Food Stamp/SNAP benefits in the past 12 months	2015-2019	19,111	4.3	NA	NA	14.7	NA
Percentage of renter occupied units in which gross rent is 30% or more of household income	2015-2019	44,121	55.2	NA	NA	52.2	NA
Monthly median gross rent	2015-2019	NA	\$1,772	NA	NA	1,280.00	NA
Percentage of population who lived in a different residence one year ago	2015-2019	90,953	6.8	NA	NA	10.5	NA
Percentage of children aged 3 to 4 years old who enrolled in schools among population aged 3 to 4 years old	2015-2019	20,023	63.2	NA	NA	58.9	NA
Percentage of disconnected youths	2015-2019	3,241	4.6	NA	NA	6	NA
Percentage of high school students who dropped out	2020	423	2.5	NA	NA	5.1	Yes
Percentage of high school students who graduated	2020	15,581	92.9	NA	NA	84.8	Yes
Percentage of population aged 25 years and older with less than a high school degree	2015-2019	81,146	8.6	NA	NA	13.2	NA
Percentage of population aged 25 years and older with at least some college	2015-2019	647,958	68.7	NA	NA	60.8	NA

Percentage of population aged 5 years and older who speak English very well or English only	2015-2019	1,136,453	88.6	NA	NA	86.7	NA
Index crime rate per 100,000	2019	13,385	986.1	1,495.10	Yes	1,723.20	Yes
Violent crime rate per 100,000	2019	1,644	121.1	197.7	Yes	357.5	Yes
Mean travel time in minutes to work	2015-2019	NA	36.6	NA	NA	33.6	NA
Percentage of work population who drove alone (car, truck, and van)	2015-2019	461,053	68.2	NA	NA	53	NA
Percentage of work population who used public transportation (excluding taxicab)	2015-2019	115,788	17.1	NA	NA	28	NA
Age-adjusted percentage of adults with poor mental health for 14 or more days in the past month	2018	NA	10.6 (8.3-12.9)	11.8	No	11.2	No
Total emergency department visit rate per 10,000	2017-2019	1,272,218	3,124.20	3,824.90	Yes	4,041.20	Yes
Age-adjusted total emergency department visit rate per 10,000	2017-2019	1,272,218	3,018.20	3,759.90	Yes	3,959.50	Yes
Total hospitalization rate per 10,000	2017-2019	502,765	1,234.70	1,144.20	Yes	1,154.80	Yes
Age-adjusted total hospitalization rate per 10,000	2017-2019	502,765	1,111.20	1,040.90	Yes	1,059.90	Yes

Chapter 4: Assets and Resources

The public health system addresses health issues in Nassau County through the combined efforts of community-based organizations and academic partnerships, as it is only through collaboration that the County will be able to improve the health of its citizens.



NASSAU COUNTY DEPARTMENT OF HEALTH:

Administration

The Health Commissioner and Administrative staff are responsible for the overall direction of the Nassau County Department of Health. The Fiscal and Human Resources Divisions are important units within administration and are responsible for budget and workplace support.

Community and Maternal Child Health Services

The Division of Community and Maternal Child Health Services provides a combination of direct services and administrative support to community-based programs and facilitates the coordination and integration of services for children and families. The Division includes the Office of Children with Special Needs, which encompasses four programs: Early Intervention, Preschool Special Education, the Physically Handicapped Children's Program (PHCP), and Child Find. The Division is also comprised of the Child Fatality Review Team (NCCFRT), 1 in 9: Hewlett House, the Childhood Lead Poisoning Prevention Program and the Women, Infants, and Children (WIC) Program. The latter is a federal program that provides food and formula vouchers to qualifying mothers and children, with the County Health Department acting as contractor for these services.

Communicable Disease

The Division of Communicable Disease Control protects the public from the spread of communicable diseases through education, surveillance, investigation, and intervention. Some of the actions taken to prevent outbreaks include education, post-exposure prophylaxis, immunization, recommendations, isolation, and quarantine. The Division commanded the County COVID-19 vaccine strategy and administration. Communicable Disease Control also maintains a 24-hour public health consultation service for the reporting of reportable communicable diseases and physician consultation.

Communication and Health Information

The Office of Communications and Health Information is responsible for educating Nassau County residents about health issues to support a safe and healthy community and is dedicated to answering the public's questions and providing clear and accurate information. Over five dozen communicable diseases are reported to the Health Department by physicians, nurses, and laboratories. The Department also receives after-hour calls and inquiries about designated

reportable diseases. The Department of Health's website provides health information for its residents regarding many of these diseases, including COVID-19.

Environmental Health

The Environmental Health Division promotes safe food, drinking water, air quality, and safe recreational, commercial, and residential environments through the regulation, inspection and enforcement of the New York State Public Health Law, State Sanitary Code, and the Nassau County Public Health Ordinance. It protects the community from the adverse effects of environmental pollution, unsanitary conditions, and unsafe practices. It regulates the safe and sanitary conditions of public water systems, food service establishments, residential environments, temporary residences, hotels, motels, and recreational spaces, such as children's camps, public pools and beaches that provide quality environments for community members of all ages to exercise and maintain a healthy lifestyle. The Division provides education to food handlers and investigates foodborne disease outbreaks. It certifies tattoo and body piercing artists and prevents the sale of tobacco products to minors. The Division also investigates complaints of rodent and insect infestations and conducts mosquito and rabies surveillance. The County's water is derived from the sole source aquifer, making the protection of the County's water especially vital. The Division monitors the drinking-water quality, investigates soil and groundwater contamination, and regulates the storage of toxic and hazardous materials; lead abatement also falls within the Division's purview. The Division reviews and approves engineering plans for water systems, public pools, residential developments of five lots or more, and commercial development in non-sewer areas. As a participant in the New York Metropolitan Air Quality Initiative, Nassau has actively worked to improve air quality through the reduction of automobile emissions.

Environmental Laboratory Services

The Division of Environmental Laboratory assesses the status of community health in Nassau County through analytic and diagnostic laboratory services. Equipped with the necessary instruments and the expertise to use them, this Division tests for the presence of bacterial and chemical contaminants in the environment. The Laboratory is available to respond to public health emergencies 24 hours a day, 7 days a week.

Epidemiology and Planning

This Division of Epidemiology and Planning is comprised of the Bureaus of Analytics, STD and HIV Control,

and Tuberculosis Control. The Bureau of Analytics analyzes hospitalization data and vital statistics for Nassau County. This Bureau is responsible for the Community Health Assessment and the Community Health Improvement Plan. Nassau County's Bureau of Tuberculosis Control successfully monitors and mitigates the spread of tuberculosis, one of the world's deadliest diseases, through case management, Directly Observed Therapy (DOT), contact investigation, the immigrant program, education, isolation and quarantine, and consultation. The Bureau of STD and HIV Control focuses on a comprehensive approach to STD and HIV intervention, including risk reduction, counseling and education, early identification, and partner notification. These activities are conducted in partnership with healthcare providers, community organizations, schools, and other County agencies. The STD and HIV Control staff have extensive experience in field work, case interviews, confirmation of treatment, partner elicitation and notification, counseling and referral services, and have the capacity to use innovative approaches to case and partner investigations.

Health Equity

The Office of Health Equity, established in November 2019, works to eliminate health inequities within Nassau County by providing leadership and guidance on best practices to reduce health inequities in vulnerable, underserved communities of Nassau County. The office envisions a data-driven and community-focused learning culture that creates and promotes sustainable opportunities for health equity.

In July of 2023, the Office of Health Equity established the Health Equity Resource Center, located in Hempstead. This Center is a place where the community can come to receive educational resources on various health-related issues. In addition, they provide educational workshops and there is also a food pantry on site.

Public Health Emergency Preparedness

The Health Department is invested in developing and maintaining individual and community preparedness for public health hazards and events. The Public Health Emergency Preparedness Division leads and coordinates the Department in emergency preparedness and response and was central to the County's efforts to address COVID-19. The Division coordinates and staffs the Medical Reserve Corps, a volunteer organization through which medical professionals can volunteer their time and expertise in preparing for and responding to public health emergencies.

Hospitals Systems in Nassau County

Nassau County maintains a robust hospital system and a high density of physicians. Nassau County has 11 hospitals with 4,112 beds. These hospitals include those within the Northwell Health System, Catholic Health Services of

Long Island, NYU Langone and Mount Sinai affiliates. As designated by the New York State Department of Health²⁹, Northwell-Manhasset, NYU Langone Winthrop University Hospital and Nassau University Medical Center (NUMC) are level 1 Adult Trauma Centers. Mount Sinai South Nassau Communities Hospital is a level 2 Adult Trauma Center.

The County's perinatal centers are specialized, depending on the complexity of pregnancy. Regional Perinatal Centers, like Northwell-Manhasset and NYU Langone Winthrop-University Hospital, are equipped to treat the most complex obstetric and neonatal cases. Level 3 Perinatal Centers treat increasing complex cases. In Nassau County, they include Catholic Health Mercy Medical Center and Nassau University Medical Center. Level 2 Perinatal Centers, like Mount Sinai South Nassau Communities Hospital treat mothers and neonates who require a moderate level of care. Level 1 Perinatal Centers treat relatively typical obstetric cases; all centers, except those with a Level 1 designation, have Neonatal Intensive Care Units.

Both Nassau University Medical Center and Northwell-Manhasset serve as AIDS Centers, which provide out-patient and in-patient care to those infected with HIV and AIDS. Comprehensive Stroke Centers like NYU Langone Winthrop-University Hospital and Northwell-Manhasset, provide neurosurgical services to the most complex stroke patients, including subarachnoid and intracerebral hemorrhage. Eight of the hospitals located throughout the county are considered Primary Stroke Centers. These are located throughout Nassau County and include: Northwell Health (Glen Cove Hospital, LIJ Valley Stream Hospital, Plainview Hospital, Syosset Hospital) located in Glen Cove; Catholic Health System (Mercy Medical Center and St. Joseph Hospital); Mount Sinai South Nassau Hospital; and Nassau University Medical Center. North Shore University Hospital and NYU Langone Winthrop Hospital are comprehensive Stroke Centers. Catholic Health St Francis Hospital is a designated Thrombectomy Capable Stroke Center. Nassau University Medical Center is the County's only burn center. Nassau County Health Care Corporation operates Nassau University Medical Center and operates in conjunction with community health centers, known as Long Island Federally Qualified Health Centers. Nassau County Department of Health relies on these partnerships to provide direct care to the community. In particular, the Nassau County Department of Health works closely with Nassau University Medical Center and the community health centers to provide care to the underserved and uninsured population within the County.

The Nassau-Suffolk Hospital Council helps support island wide hospitals and is an important collaborative team

²⁹ ([New York State Trauma Centers \(ny.gov\)](https://www.ny.gov/new-york-state-trauma-centers))

member of the Nassau County Health Department and the public health system. It enhances healthcare for all Long Islanders by representing the interests of its member hospitals before lawmakers, regulatory agencies, the media, and the public. The Council's objectives include serving as an expert voice on all healthcare issues pertaining to members and the region, providing application assistance to Medicaid, Child Health Plus and Family Health Plus, participating in regional emergency preparedness efforts, and maintaining relationships with allied associations, business partners, and community groups. As part of the efforts of the Community Health Improvement Plan, the hospitals and Health Departments of both Nassau and neighboring Suffolk County have entered a collaboration to provide resources to the region, known as the Long Island Health Collaborative. This collaboration was funded by NYS and is now also known as the Population Health Improvement Program.

Nursing Homes and Adult Care Facilities

For people who need round-the-clock care, nursing homes provide supervision and care outside of a hospital setting. Some facilities provide specialized services beyond the basic level of care—there are homes that cater to those who are living with AIDS or require a ventilator. In Nassau County, there are 37 nursing homes; for those adults who require long-term, non-medical residential services who are substantially unable to live independently due to physical, mental, or other limitations associated with age or other factors, there are 44 adult care facilities in Nassau County.

Private Physicians and other Healthcare Providers

While there is no single source that tracks the number of physicians and other healthcare providers practicing in the Nassau County, the New York State Education Department maintains a list for licensing purposes. As of January 1, 2022, there were 9,926 registered licensed physicians and 2,255 physician's assistants;³⁰ 3,077 nurse practitioners;³¹ and 2,114 licensed dentists in Nassau County.³²

Academic Partnerships

With several colleges and universities in and around the County, Nassau is a region characterized by higher learning. The Nassau County Health Department works closely with many of these universities and colleges. In fact, legal agreements, such as Memoranda of Understandings (MOUs), have been formed with many of the schools to be sites for

³⁰ <http://www.op.nysed.gov/prof/med/medcounts.htm>

³¹ <http://www.op.nysed.gov/prof/nurse/nursecounts.htm>

³² <http://www.op.nysed.gov/prof/dent/dentcounts.htm>

Points of Dispensing (PODs) for emergency events, or academic learning and internship sites. Beyond the County's borders, additional university systems support the Health Department and community in terms of outreach, research, and trainings.

Community-Based Organizations and Associations

Nassau County has an active faith-based, health issue-driven, grassroots effort to address multiple health disparities and needs throughout the community. There are several community-based organizations (CBOs) located within the County. Nassau County Department of Health has engaged many of these agencies to participate in this assessment, as well as in the continued effort to move forward with plans to address poor health outcomes. These are located in the Collaborative's membership list in the Appendix E and F.

Chapter 5: Process and Methods to Conduct Community Health Assessment

The Collaborative Process

In 2013, hospitals and both Nassau and Suffolk County Departments of Health on Long Island convened to work collaboratively on the Community Health Assessment. Over time, this syndicate grew into an expansive membership of academic partners, community-based organizations, physicians, and other community leaders who hold a vested interest in improving community health and supporting the NYS Department of Health Prevention Agenda. Designated as the Long Island Health Collaborative, this multi-disciplinary entity has been meeting monthly to work collectively toward improving health outcomes for Long Islanders. In 2015, the LIHC was awarded the Population Health Improvement Program grant by the New York State Department of Health (PHIP). The PHIP pledged to pursue the New York State of Health's Prevention Agenda, making the program a natural driver for the Community Health Assessment cycle. In 2018, members of the LIHC met and selected Prevention Agenda priorities for the 2019-2021 Community Health Assessment cycle. This last cycle proved to be more challenging due to the Pandemic. Nevertheless, meetings were still maintained, although virtually, and once again, the priorities for the now 2022-2024 CHA cycle were chosen.

Quantitative Data

Unlike previous cycles, this CHA is not framed by comparing aggregated selected community data to the rest of Nassau County. The data were not available to the Nassau County Department of Health to make this analysis. Rather, this version contains publicly available data from NYSDOH website. Data tables are derived from the NYSDOH Community Health Indicators: <https://www.health.ny.gov/statistics/chac/indicators/>. Where possible, race and ethnicity

data were used, NYS Community Health Indicators by Race/Ethnicity:

<https://www.health.ny.gov/statistics/community/minority/county/>. Data deemed significant was determined by significance testing by NYSDOH.

In order of availability, demographic data came from either the 2020 Census or the 5-Year Estimate of the 2020 American Community Survey (ACS). Morbidity and mortality data were from the Community Health Indicators and Community Health Indicators by Race/Ethnicity tables on the NYSDOH website. The Prevention Agenda Objectives were used to track progress, and the NYSDOH Prevention Agenda is found at:

https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/index.htm. COVID-19 data was sourced and extracted from the NYS COVID-19 Tracker website <https://coronavirus.health.ny.gov/covid-19-testing-tracker>.

Additional data was derived from a 5-year historical data (2017-2021) from the Regional Health Information Organization in this County, known as Healthix ([Healthix | Public health information exchange \(HIE\)](#)). This data included the population of patients who were registered in Healthix and who live in zip codes listed in Nassau County. Selected, primary diagnostic codes (ICD-10) codes were included in the report. Not all diagnostic codes were included, and this data does not include all potential providers in the area, as all providers do not participate. Data includes both inpatient and outpatient data.

Qualitative Data

To collect input from community members and measure the community-perspective as to the biggest health issues in Nassau County, the LIHC distributed the Long Island Community Health Assessment Survey. This survey was distributed via an online survey tool, and hard copy formats. The survey was written with adherence to Culturally and Linguistically Appropriate Standards (CLAS). It was translated into several languages and large print copies were available to those living with vision impairment. In addition, in-depth interviews of CBO representatives were conducted to understand the perspectives of Nassau residents, as Key Informant Interviews. All these reports can be found in the Appendix. Finally, in collaboration with the LIHC, Stony Brook and Adelphi University Programs in Public Health spearheaded a study of libraries on the island and their contribution to understanding the social determinants of health (Appendix D).

Chapter 6: Distribution of the Community Health Assessment to the Community

Preliminary results, presentations, and reports of components from this Community Health Assessment were presented to the hospitals, community-based organizations, academic institutions, and Nassau and Suffolk Health Department staff by the LIHC. The assessment will be available on the Nassau County Department of Health website following its submission to New York State Department of Health. Continued feedback from the public and interested agencies will contribute to the ongoing efforts.

II. The Community Health Improvement Plan

Chapter 7: Priorities and the Strategy

In 2021-2022, members of the Long Island Health Collaborative (LIHC), identified Prevention Agenda priorities for the 2022-2024 Community Health Assessment cycle. Community partners selected:

- 1. Prevent Chronic Disease**

Focus Area 4: Chronic Disease Preventive Care and Management

- 2. Promote Well-Being and Prevent Mental and Substance Use Disorders**

Focus Area 2: Mental and Substance Use Disorders Prevention

The health disparity in which community partners are focusing their efforts rests on the inequities experienced by those in underserved communities. These communities often remain disproportionately burdened with health conditions which are often the result and compounded by social determinants of health.

Chapter 8: Workplan: Goals, Objectives, Interventions, Strategies and Activities

Nassau County Department of Health along with the LIHC have continued to promote chronic disease and mental health improvements. The Long Island Health Collaborative has been supported in leading initiatives focused on decreasing rates of chronic disease, specifically those diseases related to obesity and preventive care and management. Initiatives geared to address health disparities and barriers to care are vital to improving health outcomes in Nassau County. Selected initiatives are currently supported and implemented by way of the LIHC network and discussed at monthly Long Island Health Collaborative meetings. LIHC workgroups provide focused expertise and strategizing efforts surrounding the development of specific interventions, strategies, and activities. LIHC workgroup areas include: Public Education, Outreach and Community Engagement, Academia, Data, Nutrition and Wellness, and Cultural Competency/Health Literacy. Workgroup membership is continually growing, which supports partnerships and diversity of project efforts. Selection of initiatives is data-driven, supported by research and data in alignment with the commitment

to utilizing evidence-based strategies. Nassau County and LIHC initiatives support the NYS Prevention Agenda areas and include:

- Awareness Campaign (Live Better) about chronic disease via social media and traditional media platforms (this campaign captures any mentions about chronic diseases and relevant programs/education efforts)
- Awareness Campaign about mental health prevention and treatment programs/education, as well as relevant treatment and prevention programming relative to substance misuse via social media and traditional media platforms (this campaign captures any mentions about mental health/substance misuse programs/events/workshops, etc.)
- Walk Safe with a Doc are community walking events that combine pedestrian safety education with chronic disease education all while walking. The LIHC maintains an active [Walk with a Doc](#) chapter for the region.
- Talk with a Doc are Zoom-delivered educational programs led by physicians from the region's hospitals covering a variety of chronic diseases.
- Educational E-Letter regarding chronic disease and wellness, provided by the NCDOH Office of Health Equity
- Food pantry, located at the Health Equity Resource Center, maintained by the NCDOH Office of Health Equity
- Educational workshops, such as Healthy Eating Seminars, located at the Health Equity Resource Center and organized and hosted by the NCDOH Office of Health Equity.
- Adolescent Tobacco Use Prevention and Clean Air Act Program Compliance Checks to ensure no underage selling of tobacco products.
- Education for Cancer Screening: Program at Hewlett House to improve early cancer detection, with an emphasis on breast cancer.
- Mental Health First Aid USA™ Training, Evidence-based Program: course which teaches people how to understand and help someone who may be experiencing mental health issues.
- NARCAN trainings: NARCAN® Nasal Spray was developed to be used at home without the need for any

formal medical training. Training efforts are in place so that individuals feel comfortable safely administering care If an opioid overdose is suspected.

- Opioid Treatment Programs regularly operated by the Department of Mental Health, Chemical Dependency and Developmental Disabilities

These evidence-based initiatives are further described in the CHIP Workplan. The references for these interventions are found in Appendix G. Additional programs and plans are found at partner agencies:

Mercy Medical Center:

https://www.chsli.org/sites/default/files/202002/Mercy%20Medical%20Center%202019.2021%20CHNA%20and%20Attachments%20A_E.pdf

St. Francis Hospital:

https://www.chsli.org/sites/default/files/2021-07/st.-francis-hospital-2019.2021-chna-and-attachments-a_e.pdf

St. Joseph's Hospital:

http://www.chsli.org/sites/default/files/2020-02/St.%20Joseph%20Hospital%202019.2021%20CHNA%20and%20Attachments%20A_E.pdf

NYU Langone Winthrop:

<https://nyulangone.org/our-story/community-health-needs-assessment-service-plan>

Mount Sinai South Nassau Communities Hospital:

<https://www.southnassau.org/sn/community-service-plan>

Northwell Health:

<https://www.northwell.edu/education-and-resources/community-engagement/community-health-investment/needs-assessment-community-health-implementation-plan>

Chapter 9: Sustainability and Partner Engagement

The Long Island Collaborative is committed to maintaining its relationship for programmatic efforts and community engagement. The Long Island Health Collaborative first convened in 2013, with membership and partner-engagement gaining exponentially over time. LIHC partners have demonstrated their commitment to maintaining engagement with community-partners by advocating on behalf of the LIHC, promoting LIHC initiatives and bringing

counterpart organizations to the table during monthly meetings, even during the Pandemic. As strategies are implemented, progress will be measured on an ongoing basis.

The Nassau County Department of Health, in concert and aligned with the LIHC, will continue to subscribe to the following principles:

Principle #1: Development of true partnerships, means creating relationships of mutual cooperation, benefits, and responsibility to ensure that results are achieved

This principle, while providing the foundation for creating partnerships, is also important to the maintenance of relationships and the expansion of the number of engaged stakeholders; formulating group consensus and committee decision are standard to the process.

Principle #2: Attention to community diversity and its role in engagement

Partners should represent a cross-section of the health community and the partnership will expand to continue to include other sectors that are not currently represented. Diversity of perspectives and experiences are necessary for the collaboration to remain strong. Even with diversity in perspectives, it is still necessary to maintain common ground and goals; the prevention agenda provides those shared priorities.

Principle #3: Identification and mobilization of community and stakeholder assets

Each stakeholder has different tools and resources that can be used collectively to address the Prevention Agenda Priorities. Therefore, each stakeholder must be acknowledged for its role and the unique perspective that it brings to the process.

Principle #4: Evaluation of leaders' roles over time

The collaboration process is a long-term effort that requires each stakeholder and representative to remain flexible to the needs of the effort, as they may change during this process.

Principle #5: Participation is a long-term commitment to the collaboration

To maintain participation, in addition to other principles, each member needs opportunities to learn from its counterparts. Designating meetings to facilitate learning and information exchange will encourage each member's continuous engagement.

Principle #6: Participation in review and evaluation

To ensure that goals and objectives are being met, the collaborative group will schedule meetings during which such metrics and strategies will be discussed, and improvements based on lessons learned will be implemented.

Principle #7: Coordination and schedule of meetings

The collaboration has decided that monthly meetings will be held and organized by the Nassau-Suffolk Hospital Council. In some cases, smaller workgroups will be established, *ad hoc*. Examples of workgroups include the metric workgroup, the walking initiative workgroup, etc. These meetings will be prescheduled. The agenda will vary but will cover a plan that includes defining strategies for the Prevention Agenda, evaluating metrics, adjusting methods or programs, increasing resources for the network and the residents and identifying grants that will further support the collaboration.

Chapter 10: Dissemination of the Plan to the Community

The Nassau County Department of Health and The Long Island Health Collaborative websites are designed to engage the community and provide transparency in population health initiatives and data analysis efforts. Therefore, the CHA and CHIP are available, on both websites (<http://www.nassaucountyny.gov/agencies/Health/>; <https://www.lihealthcollab.org/>). Opportunities for further dissemination of the plan will include the incorporation of key aspects at Health Department events, presentation to the Board of Health, announcement to Health Department staff and key partners through email, after it is submitted to New York State.

Long Island Health Collaborative Community Member Survey Summary of Findings

Methodology:

Surveys were distributed by paper and electronically, through Survey Monkey, to community members. The electronic version placed rules on certain questions; for questions 1-5 an individual could select three choices, and each question was mandatory. For question 6, individuals could choose as many responses as they'd like. Although the rules were written on the paper survey, people often did not follow them. On January 25, 2022, we downloaded the surveys from Survey Monkey. Data collected includes January - December 2021. We needed to add weights to the surveys which did not follow the rules - for each of the questions that had more than three responses. The weight for each response was $3/x$, where x is the count of responses. No weight was applied to questions with less than three responses because they had the option to select more and chose not to do so. With the weight determined, we applied the formula to the data and then added the remaining surveys to the spreadsheet.

Analysis Results:

- When asked: ***What are the biggest ongoing health concerns in THE COMMUNITY WHERE YOU LIVE?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Cancer	35.07%	Cancer	37.14%
2	Drugs & Alcohol Abuse	31.15%	Heart Disease & Stroke	34.41%
3	Mental Health Depression/Suicide	30.40%	Drugs & Alcohol Abuse	25.68%
4	Obesity/Weight Loss Issues	19.49%	Mental Health Depression/Suicide	24.70%
5	Vaccine Preventable Diseases	17.67%	Diabetes	24.02%
Sum of Column Percentages		133.78%		145.96%

- When asked: ***What are the biggest ongoing health concerns for YOURSELF?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Cancer	27.70%	Heart Disease & Stroke	34.81%
2	Mental Health Depression/Suicide	25.53%	Women's Health & Wellness	34.01%
3	Heart Disease & Stroke	22.98%	Cancer	23.54%
4	Women's Health & Wellness	22.80%	Obesity/Weight Loss Issues	22.23%
5	Obesity/Weight Loss Issues	22.55%	Diabetes	20.05%
Sum of Column Percentages		121.55%		134.65%

Jan-Dec 2021				
Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Fear (e.g. not ready to face/discuss health problem; immigration status)	30.76%	There are no Barriers	27.70%
2	Unable to Pay Co-pays/Deductibles	30.36%	No Insurance	26.94%
3	No Insurance	28.85%	Fear (e.g. not ready to face/discuss health problem; immigration status)	26.00%
4	Don't Understand Need to See a Doctor	25.03%	Unable to Pay Co-pays/Deductibles	23.42%
5	There are no Barriers	16.81%	Transportation	13.32%
Sum of Column Percentages		131.81%		117.37%

3. When asked: ***What prevents you and your family from getting medical treatment?***

4. When asked: ***Which is MOST needed to improve the health of your community?***

Jan-Dec 2021				
Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health Services	33.58%	Mental Health Services	32.78%
2	Healthier Food Choices	28.67%	Clean Air & Water	30.53%
3	Clean Air & Water	23.37%	Healthier Food Choices	29.64%
4	Drug & Alcohol Rehabilitation Services	22.32%	Drug & Alcohol Rehabilitation Services	22.03%
5	Job Opportunities	17.30%	Job Opportunities	18.38%
Sum of Column Percentages		125.24%		133.36%

5. When asked: ***What health screenings or education/information services are needed in your community?***

Jan-Dec 2021				
Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health/Depression	23.83%	Blood Pressure	24.31%
2	Cancer	21.01%	Mental Health/Depression	22.81%
3	Drug & Alcohol	17.42%	Cholesterol	20.62%
4	Importance of Routine Well Check Ups	16.58%	Cancer	17.66%
5	Blood Pressure	15.07%	Importance of Routine Well Check Ups	16.12%
Sum of Column Percentages		93.90%		101.52%

6. Finally, when asked: ***Where do you and your family get most of your health information?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Doctor/Health Professional	84.71%	Doctor/Health Professional	80.75%
2	Family or Friends	35.90%	Internet	40.85%
3	Internet	32.39%	Family or Friends	30.52%
4	Social Media (Facebook, Twitter, etc.)	20.72%	Television	20.66%
5	Television	18.35%	Newspaper/Magazines	19.72%
Sum of Column Percentages		192.07%		192.49%

1143 surveys were collected between January 1st and December 31st, 2021. There were 213 respondents for Nassau, 883 for Suffolk.

For a full version of the spreadsheet that includes interactive tables to analyze results based on demographic factors you can visit: <https://www.lihealthcollab.org/data-resources.aspx>

About the Long Island Health Collaborative

The Long Island Health Collaborative is a partnership of Long Island's hospitals, county health departments, physicians, health providers, community-based health and social service organizations, human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. The initiatives of the LIHC are overseen by the Nassau-Suffolk Hospital Council.

Long Island Health Collaborative | 1383 Veterans Memorial Highway, Suite 26, Hauppauge, NY 11788

www.lihealthcollab.org | info@lihealthcollab.org | (631) 257 - 6964

LONG ISLAND COMMUNITY HEALTH ASSESSMENT SURVEY

Your opinion is important to us!

The purpose of this survey is to get your opinion about health issues that are important in your community. Together, the County Departments of Health and hospitals throughout Long Island will use the results of this survey and other information to help target health programs in your community. Please complete only one survey per adult 18 years or older. Your survey responses are anonymous. Thank you for your participation.

1. What are the biggest ongoing health concerns in THE COMMUNITY WHERE YOU LIVE? (Please check up to 3)

- | | | |
|--|--|---|
| <input type="checkbox"/> Asthma/lung disease | <input type="checkbox"/> Heart disease & stroke | <input type="checkbox"/> Safety |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> HIV/AIDS & Sexually Transmitted Diseases (STDs) | <input type="checkbox"/> Vaccine preventable diseases |
| <input type="checkbox"/> Child health & wellness | <input type="checkbox"/> Mental health | <input type="checkbox"/> Women's health & wellness |
| <input type="checkbox"/> Diabetes | depression/suicide | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Drugs & alcohol abuse | | |
| <input type="checkbox"/> Environmental hazards | <input type="checkbox"/> Obesity/weight loss issues | |

2. What are the biggest ongoing health concerns for YOURSELF? (Please check up to 3)

- | | | |
|--|--|---|
| <input type="checkbox"/> Asthma/lung disease | <input type="checkbox"/> Heart disease & stroke | <input type="checkbox"/> Safety |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> HIV/AIDS & Sexually Transmitted Diseases (STDs) | <input type="checkbox"/> Vaccine preventable diseases |
| <input type="checkbox"/> Child health & wellness | <input type="checkbox"/> Mental health | <input type="checkbox"/> Women's health & wellness |
| <input type="checkbox"/> Diabetes | depression/suicide | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Drugs & alcohol abuse | | |
| <input type="checkbox"/> Environmental hazards | <input type="checkbox"/> Obesity/weight loss issues | |

3. What prevents you and your family from getting medical treatment? (Please check up to 3)

- | | | |
|---|--|--|
| <input type="checkbox"/> Cultural/religious beliefs | <input type="checkbox"/> Lack of availability of doctors | <input type="checkbox"/> Unable to pay co-pays/deductibles |
| <input type="checkbox"/> Don't know how to find doctors | <input type="checkbox"/> Language barriers | <input type="checkbox"/> There are no barriers |
| <input type="checkbox"/> Don't understand need to see a doctor | <input type="checkbox"/> No insurance | <input type="checkbox"/> Other (please specify) _____ |
| | <input type="checkbox"/> Transportation | |
| <input type="checkbox"/> Fear (e.g. not ready to face/discuss health problem; immigration status) | | |

4. Which of the following is MOST needed to improve the health of your community? (Please check up to 3)

- | | | |
|---|---|---|
| <input type="checkbox"/> Clean air & water | <input type="checkbox"/> Mental health services | <input type="checkbox"/> Smoking cessation programs |
| <input type="checkbox"/> Drug & alcohol rehabilitation services | <input type="checkbox"/> Recreation facilities | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Healthier food choices | <input type="checkbox"/> Safe childcare options | <input type="checkbox"/> Weight loss programs |
| <input type="checkbox"/> Job opportunities | <input type="checkbox"/> Safe places to walk/play | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Safe worksites | | |

5. What health screenings or education/information services are needed in your community? (Please check up to 3)

- | | | |
|---|--|---|
| <input type="checkbox"/> Blood pressure | <input type="checkbox"/> Eating disorders | <input type="checkbox"/> Mental health/depression |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Emergency preparedness | <input type="checkbox"/> Nutrition |
| <input type="checkbox"/> Cholesterol | <input type="checkbox"/> Exercise/physical activity | <input type="checkbox"/> Prenatal care |
| <input type="checkbox"/> Dental screenings | <input type="checkbox"/> Heart disease | <input type="checkbox"/> Suicide prevention |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> HIV/AIDS & Sexually Transmitted Diseases (STDs) | <input type="checkbox"/> Vaccination/immunizations |
| <input type="checkbox"/> Disease outbreak information | <input type="checkbox"/> Importance of routine well checkups | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Drug and alcohol | | |

6. Where do you and your family get most of your health information? (Check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Doctor/health professional | <input type="checkbox"/> Library | <input type="checkbox"/> Social Media (Facebook, Twitter, etc.) |
| <input type="checkbox"/> Family or friends | <input type="checkbox"/> Newspaper/magazines | <input type="checkbox"/> Television |
| <input type="checkbox"/> Health Department | <input type="checkbox"/> Radio | <input type="checkbox"/> Worksite |
| <input type="checkbox"/> Hospital | <input type="checkbox"/> Religious organization | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Internet | <input type="checkbox"/> School/college | _____ |

For statistical purposes only, please complete the following:

I identify as: ☐ Male ☐ Female ☐ Other

What is your age? _____

ZIP code where you live: _____ **Town where you live:** _____

What race do you consider yourself?

- | | | |
|---|---|---|
| <input type="checkbox"/> White/Caucasian | <input type="checkbox"/> Native American | <input type="checkbox"/> Multi-racial |
| <input type="checkbox"/> Black/African American | <input type="checkbox"/> Asian/Pacific Islander | <input type="checkbox"/> Other (please specify) |
- _____

Are you Hispanic or Latino? ☐ Yes ☐ No

What language do you speak when you are at home (select all that apply)

- | | | | | | |
|----------------------------------|-------------------------------------|----------------------------------|---|--|---------------------------------|
| <input type="checkbox"/> English | <input type="checkbox"/> Portuguese | <input type="checkbox"/> Spanish | <input type="checkbox"/> Italian | <input type="checkbox"/> Farsi | <input type="checkbox"/> Polish |
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Korean | <input type="checkbox"/> Hindi | <input type="checkbox"/> Haitian Creole | <input type="checkbox"/> French Creole | <input type="checkbox"/> Other |

What is your annual household income from all sources?

- | | | |
|---|--|---|
| <input type="checkbox"/> \$0-\$19,999 | <input type="checkbox"/> \$20,000 to \$34,999 | <input type="checkbox"/> \$35,000 to \$49,999 |
| <input type="checkbox"/> \$50,000 to \$74,999 | <input type="checkbox"/> \$75,000 to \$125,000 | <input type="checkbox"/> Over \$125,000 |

What is your highest level of education?

- | | | |
|---|---|---|
| <input type="checkbox"/> K-8 grade | <input type="checkbox"/> Technical school | <input type="checkbox"/> Graduate school |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Some college | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> High school graduate | <input type="checkbox"/> College graduate | <input type="checkbox"/> Other (please specify) |
- _____

What is your current employment status?

- | | | |
|---|--|---|
| <input type="checkbox"/> Employed for wages | <input type="checkbox"/> Self-employed | <input type="checkbox"/> Out of work and looking for work |
| <input type="checkbox"/> Student | <input type="checkbox"/> Retired | <input type="checkbox"/> Out of work, but not currently looking |
| <input type="checkbox"/> Military | | |

Do you currently have health insurance? ☐ Yes ☐ No ☐ No, but I did in the past

What type of insurance do you have? (select all that apply)

- | | | | |
|-----------------------------------|-----------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Medicaid | <input type="checkbox"/> Medicare | <input type="checkbox"/> Private/Commercial | <input type="checkbox"/> No Insurance |
|-----------------------------------|-----------------------------------|---|---------------------------------------|

Do you have access to reliable internet in your home? ☐ Yes ☐ No

If you have health concerns or difficulty accessing care, please call the Long Island Health Collaborative for available resources at:
631-963-4767.

Please return this completed survey to:
LIHC
Nassau-Suffolk Hospital Council
1383 Veterans Memorial Highway, Suite 26
Hauppauge, NY 11788
Or you may fax completed survey to
631-716-6920

All non-profit hospitals on Long Island offer financial assistance for emergency and medically necessary care to individuals who are unable to pay for all or a portion of their care. To obtain information on financial assistance offered at each Long Island hospital, please visit the individual hospital's website.

Long Island Health Collaborative CBO Survey Summary of Findings

Methodology:

Surveys were distributed electronically via Survey Monkey to community-based organization leaders. Data was collected December 1st 2021 - January 15th 2022. Survey responses were downloaded from Survey Monkey on March 12th, 2022. For questions prompting a maximum of five choices, the first five selected are included in the analysis. For the open-ended question “6”, key words/codes were selected, entered in the Excel search function and resulted in a tally for number of times they appeared in the responses. This method revealed top three key themes. 44 surveys were collected; 25 for Suffolk County, 10 for Nassau County and 9 with no location specified.

Analysis Results:

- When asked “***What are the biggest health problems for the people/community you serve?***” (Maximum of 5 choices):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health	16/25	Drugs and Alcohol Abuse	6/10
2	Drugs and Alcohol Abuse	14/25	Obesity and Weight Loss	5/10
3	Cancer	11/25	Nutrition/Eating Habits	5/10
4	Women’s Health/Wellness	8/25	Mental Health	4/10
5	Care for the Elderly	8/25	Women’s Health/Wellness	4/10

- When asked “***What would be most helpful to improve the health problems of the people/community you serve?***” (Maximum of 5 choices):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health Services	18/25	Access to Healthier Food Choices	7/10
2	Drug and Alcohol Services	14/25	Mental Health Services	6/10
3	Health Education Programs	14/25	Affordable Housing	6/10
4	Affordable Housing	11/25	Transportation	5/10
5	Access to Healthier Food	8/25	Health Education Programs	5/10

3. When asked **“Do any people/communities you serve in Suffolk have problems getting needed health care? If yes, what do you think the reasons are?”** For Suffolk, 14 out of 25 answered **“Yes”** and the remainder answered **“No”**. For Nassau, 7 out of 10 answered **“Yes”** and the remainder answered **“No”** (Maximum of 5 choices).:

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	No Insurance/Unable to Pay for Healthcare	13/14	Misinformation/Health Illiteracy	6/7
2	Misinformation/Health Illiteracy	10/14	Transportation	5/7
3	Language Barriers	8/14	No Insurance/Unable to Pay for Healthcare	5/7
4	Transportation	7/14	Language Barriers	5/7
5	Unable to Pay Copays/Deductibles	7/14	Fear/Hesitancy	4/7

4. When asked **“What health issues do the people/community you serve need education about?”** (Maximum of 5):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health/Depression	15/25	Chronic Disease Management	7/10
2	Substance Misuse	11/25	Blood Pressure	6/10
3	Blood Pressure	11/25	Mental Health/Depression	5/10
4	Chronic Disease Management	9/25	Food Security	4/10
5	Suicide Prevention	7/25	Exercise/Physical Activity	3/10

5. When asked **“Where do the people/community you serve get most of their health information?”**

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Family or Friends	22/25	Family or Friends	9/10
2	Internet	20/25	Internet	8/10
3	Facebook/Twitter	16/25	Church Group	8/10
4	Doctor/Healthcare Provider	16/25	Doctor/Healthcare Provider	5/10
5	Television	15/25	Facebook/Twitter	4/10

6. When asked ***“What do you think makes a community healthy?”*** (Open ended; summarized below).

“Access”, “Communication” and “Education” were the three most common themes for both the Nassau and Suffolk respondents. Access to healthcare (such as health insurance and transportation), communication (such as doctor-patient relationships and more community programs) and more available online resources to educate oneself and improve health literacy were the most pressing matters to responders.

7. When asked ***“How would you rate the health of the people/community you serve?”***:

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Somewhat Healthy	12/25	Somewhat Healthy	8/10
2	Healthy	7/25	Unhealthy	2/10
3	Unhealthy	3/25	Healthy	0/10
4	Very Unhealthy	3/25	Very Unhealthy	0/10

8. When asked ***“What types of health screenings and/or services are needed to keep people healthy in the community you serve?”*** (Maximum of 5 choices):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health/Depression	12/25	Blood Pressure	8/10
2	Substance Misuse	9/25	Chronic Disease Management	8/10
3	Eating Disorders	8/25	Mental Health/Depression	6/10
4	Chronic Disease Management	7/25	Exercise/Physical Activity	5/10
5	Suicide Prevention	7/25	Heart Disease	4/10

About the Long Island Health Collaborative

The Long Island Health Collaborative is a partnership of Long Island's hospitals, county health departments, physicians, health providers, community-based health and social service organizations, human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. The initiatives of the LIHC are overseen by the Nassau-Suffolk Hospital Council.

Long Island Health Collaborative | 1383 Veterans Memorial Highway, Suite 26, Hauppauge, NY 11788

www.lihealthcollab.org | info@lihealthcollab.org | (631) 257 - 6964

HEALTH SURVEY FOR ORGANIZATIONS AND AGENCIES

The county health departments (Nassau and Suffolk), local hospitals, and other community partners are in the process of deciding what health problems we will focus on for the next few years. We would like to find out **what problems are vital to the persons and community you provide care/services to**. We will use these results, along with other information, to plan to improve the health of persons in Nassau and Suffolk counties. Please give us your input by filling this out and sending it back by mail or email. **Or, complete the survey online (preferred method) through this link (insert link)**. The return information is listed at the end of this survey. Thank you.

1. What are the biggest health problems for the people/community you serve? (Please check up to 5)

- | | | |
|---|--|--|
| <input type="checkbox"/> Access to vaccinations | <input type="checkbox"/> HIV/AIDS & Sexually Transmitted Diseases (STDs) | <input type="checkbox"/> Smoking/Tobacco use |
| <input type="checkbox"/> Asthma/lung disease | <input type="checkbox"/> Infections | <input type="checkbox"/> Teen pregnancy |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Preventable Injuries | <input type="checkbox"/> Violence |
| <input type="checkbox"/> Care for the elderly | <input type="checkbox"/> Car crashes | <input type="checkbox"/> In the home or between partners |
| <input type="checkbox"/> Child health & wellness | <input type="checkbox"/> Pedestrian injuries | <input type="checkbox"/> Guns |
| <input type="checkbox"/> Memory loss | <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Murders |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Mental health (including depression & suicide) | <input type="checkbox"/> Rape |
| <input type="checkbox"/> Drugs & alcohol abuse | <input type="checkbox"/> Nutrition / eating habits | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Environmental problems (water, pollution, air, etc.) | <input type="checkbox"/> Obesity/weight loss issues | <input type="checkbox"/> Women's health & wellness |
| <input type="checkbox"/> Falls in the elderly | <input type="checkbox"/> Premature births | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Heart disease & stroke | | |

2. What would be most helpful to improve the health problems of the people/community you serve? (Please check up to 5)

- | | | |
|---|--|---|
| <input type="checkbox"/> Access to healthier food | <input type="checkbox"/> Health education programs | <input type="checkbox"/> Safer places to walk/play |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Health screenings | <input type="checkbox"/> Safer work place |
| <input type="checkbox"/> Better schools | <input type="checkbox"/> Home care options | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Breastfeeding | <input type="checkbox"/> Insurance enrollment programs | <input type="checkbox"/> Weight loss programs |
| <input type="checkbox"/> Clean air & water | <input type="checkbox"/> Job opportunities | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Drug & alcohol services | <input type="checkbox"/> Mental health services | |
| <input type="checkbox"/> More grocery stores | <input type="checkbox"/> Parks and recreation | |
| <input type="checkbox"/> Farmers markets | <input type="checkbox"/> Safer childcare options | |

3. Do any people/communities you serve have problems getting needed health care?

- ☐ Yes (if 'yes', please answer question #4) ☐ No

4. If you answered 'yes' to question #3, what do you think the reasons are? (Please check up to 5)

- | | | |
|---|--|--|
| <input type="checkbox"/> Cultural/religious beliefs | <input type="checkbox"/> Lack of availability of doctors | <input type="checkbox"/> Unable to pay co-pays/deductibles |
| <input type="checkbox"/> Don't know how to find doctors | <input type="checkbox"/> Language barriers | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Don't understand need to see a doctor | <input type="checkbox"/> No insurance and unable to pay for the care | |
| <input type="checkbox"/> Fear (e.g. not ready to face/discuss health problem) | <input type="checkbox"/> Transportation | |

5. What types of health screenings and/or services are needed to keep people healthy in the community you provide care to? (Check up to 5)

- | | | |
|--|--|---|
| <input type="checkbox"/> Blood pressure | <input type="checkbox"/> Emergency preparedness | <input type="checkbox"/> Nutrition |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Exercise/physical activity | <input type="checkbox"/> Prenatal care |
| <input type="checkbox"/> Cholesterol (fats in the blood) | <input type="checkbox"/> Falls prevention in the elderly | <input type="checkbox"/> Quitting smoking |
| <input type="checkbox"/> Dental screenings | <input type="checkbox"/> Heart disease | <input type="checkbox"/> Suicide prevention |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> HIV/AIDS & STDs | <input type="checkbox"/> Vaccination/immunizations |
| <input type="checkbox"/> Disease outbreak prevention | <input type="checkbox"/> Routine well checkups | <input type="checkbox"/> Weight loss help |
| <input type="checkbox"/> Drug and alcohol | <input type="checkbox"/> Memory loss | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Eating disorders | <input type="checkbox"/> Mental health/depression | |

6. What health issues do the people/community you provide care need education about? (Please check up to 5)

- | | | |
|--|--|--|
| <input type="checkbox"/> Blood pressure | <input type="checkbox"/> Eating disorders | <input type="checkbox"/> Mental health/depression |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Emergency preparedness | <input type="checkbox"/> Nutrition |
| <input type="checkbox"/> Cholesterol | <input type="checkbox"/> Exercise/physical activity | <input type="checkbox"/> Prenatal care |
| <input type="checkbox"/> Dental screenings | <input type="checkbox"/> Falls prevention in the elderly | <input type="checkbox"/> Suicide prevention |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Heart disease | <input type="checkbox"/> Vaccination/immunizations |
| <input type="checkbox"/> Disease outbreak prevention | <input type="checkbox"/> HIV/AIDS & STDs | <input type="checkbox"/> Quit smoking |
| <input type="checkbox"/> Drug and alcohol | <input type="checkbox"/> Routine well checkups | <input type="checkbox"/> Other (please specify) |

7. Where do the people/community you provide care to get most of their health information? (Check all that apply)

- | | | |
|--|--|---|
| <input type="checkbox"/> Doctor/health care provider | <input type="checkbox"/> Library | <input type="checkbox"/> TV |
| <input type="checkbox"/> Facebook or twitter | <input type="checkbox"/> Newspaper/magazines | <input type="checkbox"/> Worksite |
| <input type="checkbox"/> Family or friends | <input type="checkbox"/> Other social media | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Health Department | <input type="checkbox"/> Radio | _____ |
| <input type="checkbox"/> Hospital | <input type="checkbox"/> Church group | |
| <input type="checkbox"/> Internet | <input type="checkbox"/> School or college | |

8. What do you think makes a community healthy? _____

9. How would you rate the health of the people/community you provide care to?

- ☐ Very healthy ☐ Healthy ☐ Somewhat healthy ☐ Unhealthy ☐ Very unhealthy

If you are able, please complete the following:

Your organization: _____
Where did you receive this survey: _____
What is your sex: ☐ Male ☐ Female

How old are you? : _____
ZIP code or Town where you work: _____

Are you Hispanic or Latino? ☐ Yes ☐ No

What race do you consider yourself?

- | | | |
|---|--|---|
| <input type="checkbox"/> White | <input type="checkbox"/> Asian/Pacific | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Black/African American | <input type="checkbox"/> Islander | <input type="checkbox"/> Other (please specify) _____ |

What is the highest grade you finished?

- | | | |
|--|---|---|
| <input type="checkbox"/> 8 th grade or less | <input type="checkbox"/> Technical school | <input type="checkbox"/> Graduate school |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Some college | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> High school graduate | <input type="checkbox"/> College graduate | <input type="checkbox"/> Other (please specify) _____ |

Your name: _____

Phone #: _____ Your email address: _____

Can we contact you so you can tell us more of your ideas regarding health problems in Nassau and Suffolk counties and what should be done about them?

- ☐ Yes ☐ No

Email to info@lihc.org or mail to:

Brooke Oliveri, LIHC, 1383 Veterans Memorial Highway, Suite 26, Hauppauge, NY 11788
PREFERRED METHOD OF RETURN IS TO COMPLETE THE SURVEY VIA THIS LINK:
surveymonkey.com/r/CBO2022. Questions: Please call 631-255-5678.



**Qualitative Research Analysis of Key Informant
Interviews Conducted Among Community-Based
Organizations on Long Island**

Presented May 3, 2022

EXECUTIVE SUMMARY

The Long Island Health Collaborative (LIHC) is a partnership of Long Island's hospitals, county health departments, health providers, community-based social and human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. Collaborative members are committed to improving the health of people living with chronic disease, obesity, and behavioral health conditions in Nassau and Suffolk counties.

The LIHC assists its members with their Community Health Needs Assessment by providing data for members to use in their final CHNA reports. Members are charged with this task by both the federal and state government, and they are required to obtain feedback from community-based organizations (CBOs) during the CHNA process. The LIHC performed the following to gain feedback from CBOs.

METHODOLOGY

A purposeful sampling procedure was initiated: a form of non-probability sampling in which the researcher relies on their own discretion to choose variables for the sample population, deliberately selecting participants who have information in the phenomena being studied. As a first step, surveys were sent to 400+ community-based organization leaders, which yielded quantitative results about their observed health needs and barriers among the populations they serve. One question on this survey asked the CBO leaders if they would be interested in further discussion. 23 informants expressed interest in being interviewed and were contacted for further discussion. Consistent outreach (first two email correspondences,

then one phone call) and follow-through yielded 12 informants who were able to fully proceed to the interview stage. The interviews were conducted between February 23rd, 2022 and March 4th, 2022.

The interviews were conducted and recorded via Zoom with two different interviewers, reading from an interview instrument with five questions (Appendix A). Two of the five questions were closed-ended, and prior to the qualitative analysis, these two questions were analyzed separately. One asked about New York State Prevention Agenda topics, and the other asked about the most pressing social determinant of health needs (Appendix B). Audio recordings were transcribed and uploaded to Atlas TI Web software for analysis with interviewee permission. Participation in the interview was voluntary, with both interviewee identity and responses kept confidential.

The first necessary step of the data analysis was becoming informed on the history and goals of the Long Island Health Collaborative and the purpose of the Community Health Needs Assessment: to determine the health needs and barriers affecting Long Islanders at the individual and community level.

The interviews were revisited, reread and open-coded with a wide net. Atlast TI version 22 web-based software was used for the qualitative analysis. The variety in backgrounds and expertise of the key informants permitted an expansive open-coding format such as social interactions, personal accounts of the key informant's healthcare experiences on Long Island, the essential tasks and services their organizations provide, their thoughts on what are the most pressing health issues affecting Long Island's populace, and more were coded. The

interview instrument invited open-ended responses yet still kept the topic of discussion narrowly focused on Long Island's systemic health needs. These codes were then parsed through and related back to the interview transcripts, and several concepts reappeared frequently under these wide-ranging codes. These included economics, healthcare service infrastructure, burden of disease and systemic inequality. These frequent concepts shared a near identical level of abstraction yet remained exclusive enough in identity to be categorized separately and were then drafted as some of the initial focused codes. Open codes were read again alongside the interview transcripts to see if additional categories could be drafted, rearing a total of 15 categories to be established as the focused codes. The interviews were reread and aptly recoded with these 15 focused codes.

Borrowing classification schemes wholesale from external sources risks funneling the data through a biased filter, muddying levels of abstraction and running risk of trivializing crucial data points. The researcher defined the focused coding list and their meanings but still respected the Kaiser Family Foundation Social Determinants of Health (Merriam & Tisdell, 212). This was also the case for the five priorities identified in the [New York State Prevention Agenda](#). The focused codes aimed to encompass the entirety of the interview data featured, defined with apt exclusivity so several codes handled similar but not identical data points (Merriam & Tisdell, 213).

Across all 12 transcripts, the interviewees shared their professional background, organizational goals, social determinants and health issues most affecting Long Island and the communities they serve, along with personal stories on healthcare issues affecting their constituents. The process of establishing the focused codes was a gradient of transition from

inductive to deductive analysis, best defined as “grounded theory.” The process opened inductively, reading the transcripts and deriving tentative codes, then continuing to read additional transcripts and noting whether these early codes remained applicable. Proceeding through the data revealed some earlier codes to be of low value while others were only strengthened, and the latter half of the analysis process transitioned to a deductive stance of seeking data that supported the finalized set of codes. Viewing the transcripts through this complete set of parameters yielded several critical themes.

KEY FINDINGS

Despite the key informants hailing from a variety of different yet highly specialized education, expertise, and management experience, several common themes were drawn between all 12 transcripts (with the interviewees remaining anonymous).

Barriers to healthcare

Acknowledging and tackling barriers to healthcare was the strongest sentiment presented between the 12 transcripts. Health insurance tied to employment status or poor insurance options was the most outstanding healthcare access issue: many without insurance do not approach medical health services due to fear of extensive burden of costs, and many programs are trying to alleviate or outright eliminate this issue:

“A lot of people end up in emergency rooms because they don’t have primary care; they don’t have access so they end up with a bill that they can’t pay so we work with them to negotiate with the hospitals and advocate for them to expunge bills.”

Consistent marketing and outreach by healthcare services was also highlighted as being vital:

“I think that is the best strategy that I have is just keep on connecting and reaching out to everyone letting them know that we’re here. Let’s work it out. Let’s find out what we can do what people would like to see, what people need to see.”

Financial Insecurity

Rising costs of living put enormous pressure on Long Island’s residents. Several informants have lamented the United States healthcare system and that many of the systemic issues start at the very top:

“A fragmentation of funding for public health [...] and the barriers it creates to accessing whole care for individuals beyond demographics and beyond disease conditions, all of that is coming from our healthcare system that is broken. It is a barrier written, it is money driven exclusively if people are willing to admit it or not, that’s the underlying realities.”

There is still both respect and a need for local, smaller-scale community programs and services, but many of these are seen as effectively Band-Aid fixes that are not tackling the issue of a healthcare system that is driven to maintain a reasonable profit margin at the absolute top level. In addition, wages are not keeping up with the costs of living:

“It’s not true that people can live on \$15 an hour, I mean let’s just get right down to the basics [...] but if we look at the poverty uptick in Nassau County you know that the percentage of poverty in Nassau County is through the roof.”

An informant expressed that financial insecurity can be a permanent stressor and stress itself can yield physical health consequences in line with chronic disease. Stress can also cause mental health issues, demonstrating how several of these shared themes throughout the interviews can be interconnected:

“And in order to prevent cancer, you have to de-stress because yes stress is cancer causing, and it is a silent killer. So, and stress, little break you down mentally, so I think if you address those issues and find ways to, guess, alleviate. [...] Here in Suffolk County, most people have to work two to three jobs.”

Education

Education was a critical discussion point, with virtually all key informants cementing it as an absolute necessity. Multiple facets of education were strongly emphasized, including completion of K through 12, college education, vocational training and increased health and healthcare literacy:

“I think that on all levels, both adult education and traditional K through 12 education is the key to both a community’s survival and personal success.”

Creation of free and affordable programs that facilitate active learning and personal growth beyond a classroom was also emphasized, such as a six-week cooking and nutritional education program:

“Being able to consistently have healthy food, cook it and compare it. Vegetables and fruits are foreign to them. Touch base on all these components and additional nutrition education.”

Education leads to self-empowerment, which leads to making more informed choices and then proceeds to greater stability and income:

“...she’s able to get a job or to go for training, education or some skill to become more independent and more stable. That would be one prong of the fork.”

Mental Health

Multiple key informants expressed large concern with tackling the stigma of mental health and providing better access to mental health services. Despite the difficulty the COVID-19 pandemic caused every individual, it did provide greater clairvoyance on the societal issues of mental health stigma and perhaps provided a cultural shift towards lessening it:

“And it’s just that stigma that you need mental health care. However, when we move from that stigma and just say, you know, any small problem that you think you need to express your thoughts about and that we can listen, and perhaps together we can find a pathway to clear that.”

“People’s mental health needs to be supported and they need a helping hand. Tearing away at the stigma of mental health.”

The link between mental health issues and substance abuse and how they cyclically fuel each other was also a discussion point:

“And, you know, mental health, obviously substance use goes hand in hand, many times obviously people are using substances to mask the symptoms and the pain of the mental health issues.”

CONCLUSION

The key informants shared their expertise, personal histories and what social determinants of health are currently most important on Long Island’s healthcare landscape. The categorized codes were analyzed both on an individual level and across all collective interviews and yielded a narrative of rising economic pressure, infrastructure barriers to healthcare, a necessity in funding mental health awareness and a need to increase education endeavors at all levels. This analysis provided strong evidence that the themes of mental

health, education, economics, and barriers to healthcare most affect CBO leaders and the populations they serve. The primary domains and sub-domains uncovered through this inductive and deductive reasoning process provide a deeper understanding of the healthcare issues and barriers faced. The findings primarily align with results from the CBO quantitative assessment that asked closed-ended questions, and the [Community Health Assessment Survey](#) distributed to individuals. That survey sought to uncover individuals' perceptions about barriers to care and health concerns for themselves and their communities.

AUTHORS AND RESEARCHERS

Michael Pape, Masters in Public Health Student, Stony Brook University Program in Public Health performed the qualitative analysis and wrote this report to fulfill his degree's practicum requirement.

Janine Logan, MS, APR, Vice President, Communications and Population Health; and Brooke Oliveri, Manager of Communications, Health Outreach, and Research—both principals of the Long Island Health Collaborative— conducted the interviews and designed the study.

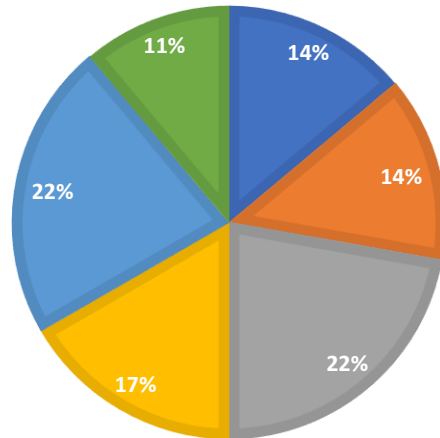
APPENDIX A - INTERVIEW INSTRUMENT

1. Please describe your organization?
 - a. Describe your role in the organization
 - b. What specific services does your organization provide?
 - c. Who is the target population?
 - d. Describe services your organization provides to minority populations
 - e. ...to low-income
 - f. ...to uninsured
 - g. ...to other specific populations?
2. Many factors affect the health care community members receive. Of the Kaiser Family Foundation Social Determinants of Health, which 3 most affect the healthcare of the community members you serve?
3. Please elaborate on why you chose those three determinants, and elaborate on how they affect the community you serve.
4. Of the three social determinants you identified, which are essentially barriers to care, what strategies do you recommend for overcoming these barriers?
5. The current New York State Department of Health Prevention Agenda has identified 5 health issues to address. Please choose your top 2 priorities for the community you serve.

APPENDIX B

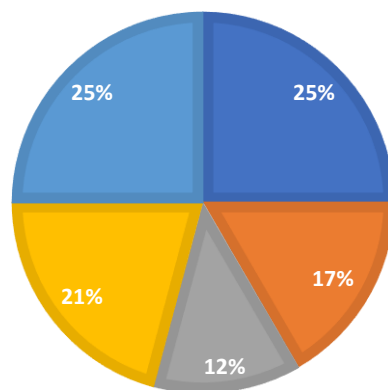
SOCIAL DETERMINANTS

- Community and Social Context
- Economic Stability
- Education
- Food
- Healthcare System
- Neighborhood and Physical Environment



PRIORITIES

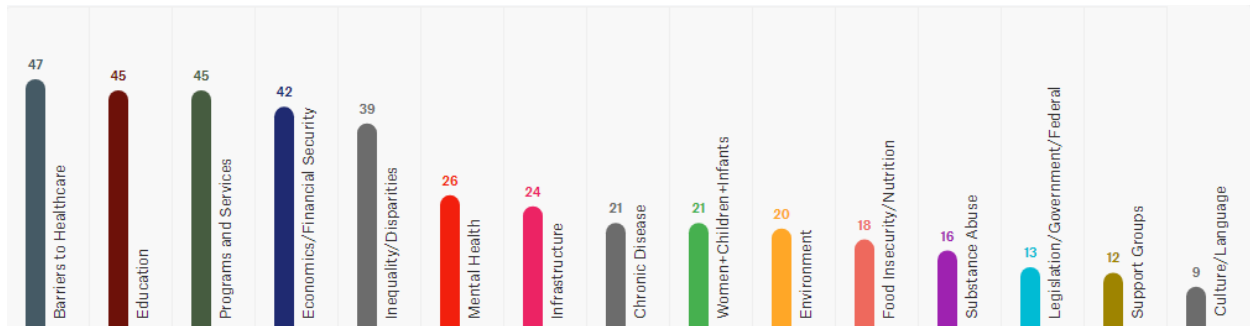
- Prevent Chronic Disease
- Prevent Communicable Diseases
- Promote a Healthy and Safe Environment
- Promote Healthy Women, Infants and Children
- Promote Well-Being and Prevent Mental and Substance Use Disorders



CODES

Primary Domain	Sub-domain
Access/Barriers	Location, Quality, Transportation
Chronic/Communicable Disease	Cancer, Cardiovascular, HIV, HPV, Hypertension, Obesity, Oral Health, Immunization, Physical Activity, Vaccination
Culture/Language	Culture, Ethnicity, Language, Minority, Race, Similarity
Economics/Financial Security	Cost of living, Inflation, Economics, Expenditures, Expenses, Money, Unaffordable
Education	College, High School, Knowledge, Literacy, Vocational School
Environment	Air Quality, Biking, Injury, Physical Environment, Road Quality, Traffic, Safety, Walk
Food Insecurity/Nutrition	Cooking, Food Desert, Nutrition
Inequality/Disparities	Elderly, Homeless, Racism, Red-Lining, Unemployed, Veteran
Infrastructure	Healthcare, Hospital, Insurance, System, Tax, Technology
Legislation/Government/Federal	Federal, Government, Lobbying, Medicaid, Medicare
Mental Health	Depression, Hopeless, Mental illness, Psychiatric, Psychotic, Stigma, Stress
Programs and Services	Application, Initiative, Partnership, Program, Project, Service, Solution, Volunteer
Substance Abuse	Addiction, Alcohol, Heroin, Opioids, Treatment
Support Groups	Empowerment, Outreach, Support
Women+Infants+Children	Baby, Child, Childcare, Maternal Mortality, Mother, Women, Reproductive Health

CODE DISTRIBUTION



SOURCE INDEX

Merriam, S. B. & Tisdell, E. J. (2016). Qualitative Research: A Guide to Design and Implementation [4th Edition]. Jossey-Bass.



Long Island's Libraries: Caretakers of the Region's Social Support and Health Needs

Results of a two-year study

*Conducted by researchers at
Stony Brook University, Program in Public Health
Adelphi University, Master in Public Health program
In partnership with the Long Island Health Collaborative (LIHC).*

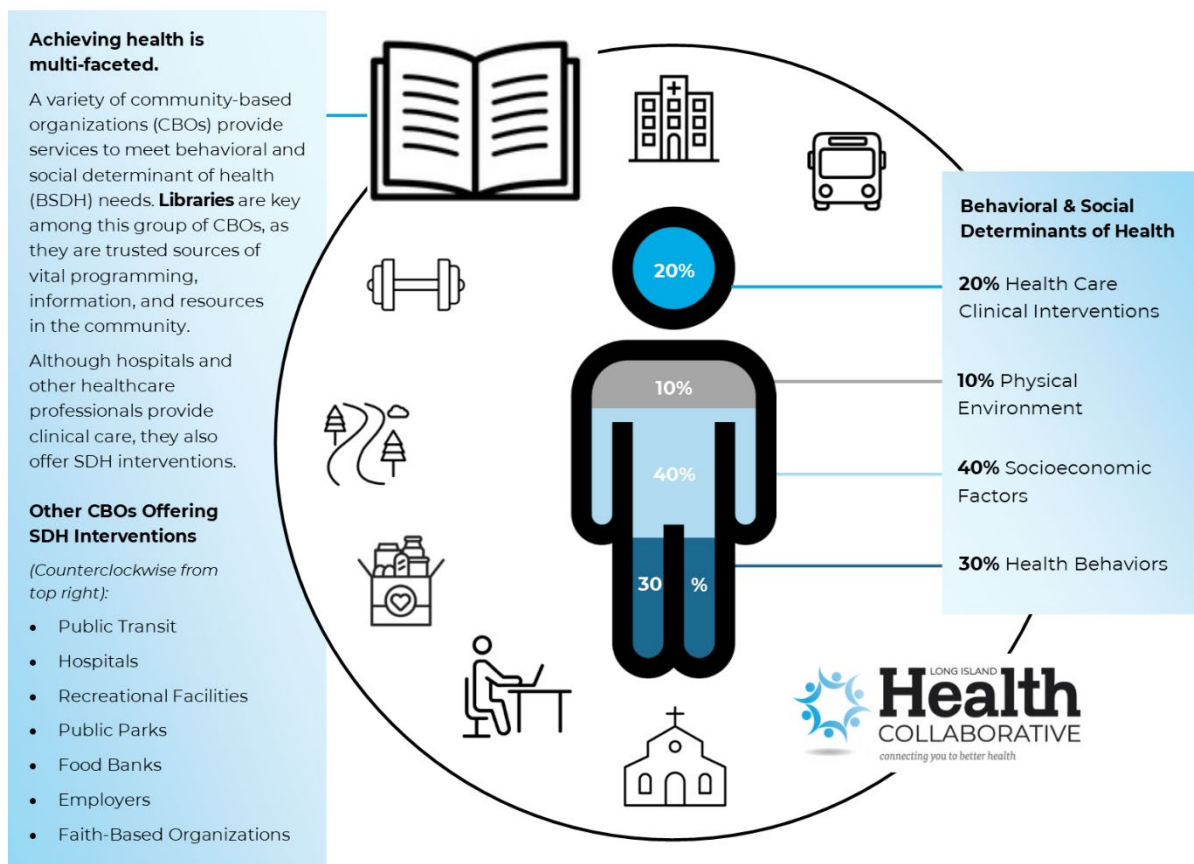
July 2021

Introduction

During a two-year period, from December 2017 to February 2020, researchers from Stony Brook University and Adelphi University interviewed library staff at randomly-selected public libraries throughout Long Island to gather information about the breadth and scope of the health and social support needs of library patrons. They also sought to learn about library staff members' ability to address these needs and their level of preparedness to do so, how staff make decisions about types of programming offered, and what additional resources libraries need to improve the health of their communities. Increasingly, empirical evidence points to the key role that public libraries play in delivering some of the health and social support services an individual requires to live his/her best life. Public libraries are invaluable community health partners, especially in socioeconomically-distressed neighborhoods.

Social determinants of health – those factors outside of medicine that influence an individual's health – account for nearly 80 percent of health outcomes, according to a growing body of public health and medical research.^{1 2 3 4} These factors include education, poverty, access to

transportation, safe and affordable housing, health insurance coverage, and access to nutritious and affordable foods, among others. Increasingly, it is these needs that public libraries often address in their community programming. In higher need communities, some libraries retain a full-time social worker. Others opt for part-time or per diem social workers to assist with meeting community health and social service needs.



Graphic: **Factors Influencing Health.** ©Nassau-Suffolk Hospital Council/Long Island Health Collaborative

Researchers found that there was a difference between the needs and program offerings based on the socioeconomic status of the neighborhood in which the library is located. Higher need communities (generally located in lower-income areas) sought programs assisting with more basic social service needs (such as unemployment, food scarcity, tech literacy, etc.) while in lower need communities (generally located in higher-income neighborhoods) patrons sought more enrichment assistance (such as cooking classes, art programs, etc.). But overall, when it

came to health needs, concerns related to **mental health/substance misuse, heart disease/diabetes, and cancer were consistent themes in most libraries.**

The research began when the New York State 2013 – 2018 [Prevention Agenda](#) and its priorities were in effect and so coding reflected themes embedded in that version of the state's Prevention Agenda, as well as the Kaiser Family Foundation social determinants of health [rubric](#).

The research occurred prior to the start of the coronavirus pandemic, which was declared a national emergency on March 13, 2020. Library programming came to a halt as libraries were ordered to close before re-opening some months later for virtual programming only. The pandemic exacerbated the inequities in our social and health systems, and libraries, which had been an accessible resource for many communities, were shutdown perhaps at a time when they were needed the most. On June 24, 2021, New York State's declaration of emergency was halted and many pandemic restrictions were lifted. As of this writing (July 2021), the federal public health emergency declaration remains in effect. Many of the region's libraries have re-opened but with limited in-person services.

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

There are 113 public libraries on Long Island. Of these, 18 libraries in Suffolk County (from 26 randomly selected) and 14 libraries in Nassau County (from 27 randomly selected) consented to participate in the qualitative research study.

The Long Island Libraries Qualitative Research project grew out of a similar project that occurred among the public library system of Philadelphia known as the Free Library of Philadelphia. Investigators at the University of Pennsylvania published results of their research in [Health Affairs](#)⁵ and this caught the attention of the Long Island Health Collaborative and its academic partners. After reading the article *“Beyond Books: Public Libraries as Partners for Public Health,”* Long Island researchers reached out to investigators at the University of Pennsylvania to learn more about the Philadelphia project. After sharing ideas, the Long Island researchers collaborated with the team at University of Pennsylvania, approved by the University of Pennsylvania’s Institutional Review Board (IRB), to conduct interviews among Long Island public librarians and staff.

Selection and Recruitment Methods

The Long Island Health Collaborative staff worked with the researchers to develop a recruitment strategy that began with ensuring that a representative sample of public libraries was achieved. After a complete list of libraries was verified by the Nassau Library System and the Suffolk County Cooperative Library System each public library was sorted by zip code/location. Several towns had more than one zip code but only one library, and several different library locations were located within the same zip code. Researchers accommodated this by developing a selection process that (1) eliminated zip codes without library locations, and (2) included all libraries in the selection process, despite having multiple branches or more than one library in a single zip code.

Using the demographic factors pulled from 2014 American Community Survey, libraries were then sorted by county and categorized into need levels from “low-need” to “high-need” by the following demographic factors:

- **Education** – percentage of high school graduates or higher in the population that are 25 years and over and percentage of bachelor's degree or higher in the population that are 25 years and over.
- **Language** – percentage who speak only English
- **Unemployment** – unemployment rate for population 16 years and over
- **Poverty status** – percentage below poverty level (estimate) and population for whom poverty status is determined
- **Public assistance** – percentage of households with cash public assistance or food stamps/snap for the past 12 months
- **Income** – median household income (dollars)

- **Foreign born residents** – percentage of foreign born

Each demographic factor received a county score by using an inverse average formula used for: unemployment, poverty assistance, public assistance and foreign born and an average score determined for each zip code using the average of all demographic scores. Libraries were then sorted into need categories from highest need to lowest need. The top 20 percent of libraries were determined to be located in a “high need” area (quintile 5) and the bottom 20 percent of libraries were determined to be located in a “low need” area (Quintile 1). All other library locations were categorized as either “moderate high need,” “moderate need,” or “moderate low need” communities. (Appendix A) As a reference, there were 11 locations in Suffolk and 9 locations in Nassau that were categorized as high-need communities.

After the list of public libraries in each county was organized into “need” categories, the team used a simple block randomization strategy to select 50 percent of those in each category for an invitation to participate in the study. Using this method, on average there were five libraries from each quintile that were randomly selected to be recruited for participation in this study. The randomly selected list of libraries was sent to the outreach directors at the Suffolk Cooperative Library System and the Nassau Library System who then sent an email notification to each of the library directors from the selected list to inform them of the research project and encourage them to participate. Library directors were then contacted by the Long Island Health Collaborative for a more in-depth explanation of the research project, invite their participation, and to schedule the interview. Three attempts to connect (one email and two phone follow-ups) were made.

Interview Process

Total interview time lasted from 1.5 to 2 hours, including time for further project explanation and signing informed consent documents. Interviews were audio recorded. The goal was to interview three staffers at each library – always the library director and then such staff members as front desk clerk, reference librarian, security officer, and custodian. Directors chose the staff members. Interviewees were given a participant number to ensure anonymity and confidentiality. Letters were assigned to each of the libraries to ensure facility anonymity. The interviewers used a standardized set of questions and prompts so that there was consistency in the themes explored across each site. Interview recordings were uploaded to a secure HIPAA-compliant website approved by the University of Pennsylvania’s IRB and an IRB-approved transcription service transcribed each interview into a separate word file for each interview. A total of 96 interviews were completed.

Coding and Data Analysis

The transcribed interviews were reviewed by researchers at Stony Brook, and they trained and supervised a team of four research assistants to create a coding scheme for all of the interview files for both counties. The transcribed interviews were coded based on themes that emerged from the interviews across sites using a qualitative analyses software (DeDoose) licensed to Stony Brook's Program in Public Health. The analyses resulted in a robust coding schema with 11 categories and many subthemes within each category. A summary of primary findings is summarized below, and a peer-reviewed publication of more in-depth findings is expected to be available within the year (currently under review by a scholarly journal with LIHC included as a co-author). Once the journal publication of the more in-depth analyses is available for release, we will share it with all LIHC partners.

The overarching questions that were used to motivate the data analyses were:

- (1) What is the knowledge of library staff about the social support and health needs of their patrons?
 - What do the staff think are the most pressing health needs of the community they serve?
 - What do the staff think are the most pressing social support needs of the community they serve?
- (2) What do library staff feel about addressing the health/social support needs of their patrons?
- (3) How do libraries address the social determinants of health, if at all?
 - What do staff at libraries think is lacking in terms of addressing the social determinants of health in their library?
 - What do library staff wish they could do to address the social support and behavioral health needs of their community?
- (4) How do libraries make decisions about how to invest in their services?
- (5) How do libraries define and prevent/address/manage/respond to/resolve disturbances in the libraries?

Summary of Findings

Top 5 identified health needs	Top 5 identified social needs
Mental Health	Homelessness
Exercise	Technology Literacy
Diet	ESL/LOTE
Opioid Use	Unemployment
Personal Health	Food

Differences in types of programming were identified and there were some trends that higher need communities tended to have programs focused on social service needs, such as assistance with unemployment, access to economic stability support services, hunger solutions, homelessness, ESL/LOTE classes, health insurance assistance and technology literacy. Programs in lower need communities tended to have programs focused on enrichment, such as cooking classes, adult art, yoga, and other wellness opportunities to address loneliness. The moderate-need communities tended to have a mix of programs. The emphasis on social support programs in high-need communities is consistent with the health disparities and inequities individuals in these communities face. This finding, in particular, confirms the key role behavioral and social determinants of health play in health outcomes.

The health topics most likely to be the focus of library programs included exercise, access to health insurance (which is also a social support need), information about diet/nutrition, mental health, and Alzheimer's Disease/Dementia.

Usefulness of Research

Decisions about programs in libraries are largely based on community interests, access to content experts to deliver the programs at low or no cost to patrons, and scheduling. Interviewees' responses reflect the needs of the communities served by the libraries. The findings from the Long Island Libraries Qualitative Research project can be used to inform future health and social support service programming offered by libraries, including resource and staff allocation. This is also true of the partnering organizations with which many libraries work, such as the local hospital and health department, and the many community-based organizations that bring health and social support service programming to libraries.

In conjunction with the Long Island Qualitative Research project, graduate students from the Stony Brook University Program in Public Health and undergraduate students from the Hofstra University Community Health Degree program mapped the health and social support service programming at all of Long Island's libraries. Their efforts produced two interactive layered maps – one for use by [researchers](#) and one for the [public's](#) use. The latter map includes convenient links to library websites. The students reviewed data from 2016-2018 by analyzing publicly accessible newsletters, calendars, pamphlets, flyers, and websites. Content analysis was conducted for every program and coded by social determinants of health and Prevention Agenda (2013-2018) Priority Health topics and results were entered into an Excel spreadsheet.

Further Study

As this research was conducted prior to the COVID-19 pandemic, it would be helpful to conduct a limited follow-up study asking specific questions related to how libraries responded to

community needs during the pandemic. Libraries pivoted to virtual programming. It is likely this new mode of delivery had an effect (positive or negative) on the scope and breadth of programs and community members' access to such programming. Results from such a follow-up could also be compared to the current study results to determine the change in volume and type of programming offered before, during, and after the pandemic.

Acknowledgements

The Long Island Libraries Qualitative Research project is a good example of collaboration at its best. A public and a private university joined forces with local public libraries located in diverse communities under the organizational leadership of a multi-sector coalition – the Long Island Health Collaborative. The voluntary efforts of the academic researchers, public health students, and support staff who worked on this project are very much appreciated. Most importantly, we thank the individual library directors and each member of their staff for their time and graciousness in hosting the researchers and for participating in the study. Special acknowledgement goes to Valerie Lewis, the Administrator of Outreach Services for the Suffolk Cooperative Library System and Nicole Scherer, Assistant Director of the Nassau Library System. Without their assistance, this study never would have occurred.



Long Island's public libraries are led by exceptionally caring individuals with dedicated and compassionate staff. They are centers of community life and provide a place where patrons can go to learn, to be safe, and to be part of their community.

The LIHC acknowledges its partners in this research project.

About the Long Island Health Collaborative

The [Long Island Health Collaborative](#) is a partnership of Long Island's hospitals, county health departments, physicians, health providers, social service and health-related community-based organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. The LIHC is overseen by the [Nassau Suffolk Hospital Council](#) (NSHC), the association that advocates for reasonable and rational healthcare legislation and regulation on behalf of Long Island's hospitals.

¹ <https://www.kff.org/racial-equity-and-health-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>

² Hacker KA, Alleyne EO, Plescia M. Public Health Approaches to Social Determinants of Health: Getting Further Faster. *J Public Health Manag Pract*. 2021 Sep-Oct 01;27(5):526-528. doi: 10.1097/PHH.0000000000001410. PMID: 34292912.

³ Henize AW, Beck AF, Klein MD, Adams M, Kahn RS. A Road Map to Address the Social Determinants of Health Through Community Collaboration. *Pediatrics*. 2015 Oct;136(4):e993-1001. doi: 10.1542/peds.2015-0549. Epub 2015 Sep 21. PMID: 26391941.

⁴ Bhattacharya D, Bhatt J. Seven Foundational Principles of Population Health Policy. *Population Health Management* vol. 20,5 (2017): 383-388. doi:10.1089/pop.2016.0148

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Hospitals, Hospital Association and Hospital Systems	Website	Appendix E
Catholic Health	https://www.chsli.org/	
Cohen Children’s Medical Center	https://childrenshospital.northwell.edu/	
Stony Brook Eastern Long Island Hospital	https://elih.stonybrookmedicine.edu/	
Glen Cove Hospital Northwell Health	https://glencove.northwell.edu/	
Catholic Health Good Samaritan Hospital Medical Center	https://www.chsli.org/good-samaritan-hospital	
Huntington Hospital Northwell Health	https://huntington.northwell.edu/	
Long Island Community Hospital (Formerly Brookhaven Memorial Hospital Medical Center)	https://licommunityhospital.org/	
Long Island Jewish Valley Stream Northwell Health	https://valleystream.northwell.edu/	
Mather Hospital Northwell Health	https://www.matherhospital.org/	
Catholic Health Mercy Hospital	https://www.chsli.org/mercy-hospital	
Mount Sinai South Nassau	https://www.southnassau.org/sn	
Nassau-Suffolk Hospital Council	https://suburbanhospitalalliance.org/nshc/	
Nassau University Medical Center	https://www.numc.edu/	
North Shore University Hospital Northwell Health	https://nsuh.northwell.edu/	
Northern Metropolitan Hospital Association	http://suburbanhospitalalliance.org/normet/	
Northwell Health System	https://www.northwell.edu/	
NYU Langone Hospital – Long Island	https://nyulangone.org/locations/nyu-langone-hospital-long-island	
Peconic Bay Medical Center Northwell Health	https://www.pbmchealth.org/	
Plainview Hospital Northwell Health	https://plainview.northwell.edu/	
Catholic Health St. Catherine of Siena Medical Center	https://www.chsli.org/st-catherine-siena-hospital	
Catholic Health St. Charles Hospital	https://www.chsli.org/st-charles-hospital	

Catholic Health St. Francis Hospital & Heart Center	https://www.chsli.org/st-francis-hospital
Catholic Health St. Joseph Hospital	https://www.chsli.org/st-joseph-hospital
St. Mary’s Healthcare System for Children	https://www.stmaryskids.org/
Stony Brook Southampton Hospital	https://southampton.stonybrookmedicine.edu/
South Oaks Hospital Northwell Health	https://southoaks.northwell.edu/
South Shore University Hospital Northwell Health	https://ssuh.northwell.edu/
Stony Brook University Hospital	https://www.stonybrookmedicine.edu/
Syosset Hospital Northwell Health	https://syosset.northwell.edu/
Veterans Affairs Medical Center	https://www.va.gov/northport-health-care/
Health Departments	Website
Nassau County Department of Health*	https://www.nassaucountyny.gov/1652/Health-Department
Suffolk County Department of Health Services*	https://www.suffolkcountyny.gov/health
New York State Department of Health	https://health.ny.gov/
Federally Qualified Health Centers	
Advantage Care Health Centers	https://advantagecaredtc.org/
Long Island FQHC, Inc.	https://www.lifqhc.com/
Long Island Select Healthcare, Inc.	https://www.lishcare.org/
Hudson River Healthcare *	https://www.sunriver.org/?referer=hrhcare.org
Medical Societies and Associations	Website
Long Island Dietetic Association	www.eatrightli.org
Nassau County Medical Society	www.nassaucountymedicalsociety.org
New York State Nurses Association	www.nysna.org
New York State Podiatric Medical Association	www.nyspma.org
Suffolk County Medical Society *	www.scms-sam.org

Community-Based Organizations	Website
AARP Long Island / NY	https://states.aarp.org/new-york/
Adelphi New York Statewide Breast Cancer Hotline and Support Program	www.breast-cancer.adelphi.edu
All Ability Wellness	www.allabilitywellness.com
Alzheimer's Association, Long Island Chapter	www.alz.org
American Cancer Society	www.cancer.org
American Diabetes Association	www.diabetes.org
American Foundation for Suicide Prevention	www.afsp.org
American Heart Association *	www.heart.org
American Lung Association of the Northeast	www.lung.org
Arbors Assisted Living	www.thearborsassistedliving.com
Association for Mental Health and Wellness *	www.mentalhealthandwellness.org
Asthma Coalition of Long Island	www.asthmacommunitynetwork.org
Attentive Care Services	www.attentivecareservices.com
Caring People	www.caringpeopleinc.com
Catholic Charities, Diocese of Rockville Centre	www.catholiccharities.cc
Community Growth Center	www.communitygrowthcenter.org
Cornell Cooperative Extension - Suffolk County *	www.ccesuffolk.org
EPIC Long Island	www.epicli.org
Epilepsy Foundation of Long Island	www.efli.org
Evolve Wellness	www.evolvewellness.net
Family & Children's Association	www.familyandchildrens.org
Family First Home Companions	www.familyfirsthomecompanions.com

Federation of Organizations	www.fedoforg.org
Girls Inc, LI	www.girlsincli.org
Health and Welfare Council of Long Island	www.hwcli.com
Health Education Project / 1199 SEIU *	www.healthcareeducationproject.org
Helping Hands Across Long Island	https://hali.tccm.tv/#:-:text=Hands%20Across%20Long%20Island%20(HALI.capacity%20of%20others%20to%20exCEL
Hispanic Counseling Center	www.hispaniccounseling.org
Hudson River Healthcare *	www.hrhcare.org
Island Harvest	www.islandharvest.org
JDRF	www.jdrf.org
Life Trusts	www.lifetrusts.org
Long Island Association *	www.longislandassociation.org
Long Island Association of AIDS Care *	www.liaac.org
Long Island Council of Churches	www.licny.org
Long Island Community Foundation	www.licf.org
Make the Road NY	www.maketheroad.org
Maria Regina Skilled Nursing Facility	www.mariareginaresidence.org
Maurer Foundation	www.maurerfoundation.org
Mental Health Association of Nassau County *	www.mhanc.org
Music and Memory	www.musicandmemory.org
NADAP	www.nadap.org
Nassau Region PTA	www.nassaupta.com
National Aging in Place Council	www.ageinplace.org

National Eating Disorder Association	www.nationaleatingdisorder.org
National Health Care Associates	www.nathealthcare.com
New Horizon Counseling Center	www.nhcc.us
New York City Poison Control	www.nyc.gov
New York Coalition for Transportation Safety	nycts.org
NutriSense	www.nutri-sense.com
Options for Community Living	www.optionscl.org
People Care Inc	www.peoplecare.com
The Pulse Center for Patient Safety Education & Advocacy *	www.pulsecenterforpatientsafety.org
Retired Senior Volunteer Program *	www.rsvpsuffolk.org
RotaCare	www.rotacareny.org
SDC Nutrition PC	www.call4nutrition.com
Smithtown Youth Bureau	www.smithtownny.gov
Society of St. Vincent de Paul Long Island	www.svdpli.org
State Parks LI Regional Office	www.nysparks.com
Sustainable Long Island	www.sustainableli.org
The Crisis Center	www.thecrisisplanner.com
Thursday's Child	www.thursdayschildofli.org
Town of Smithtown Horizons Counseling and Education Center	www.smithtownny.gov
TriCare Systems	www.tricaresystems.org
United Way of Long Island *	www.unitedwayli.org
Utopia Home Care	www.utopiahomecare.com

Visiting Nurse Services & Hospice of Suffolk	www.visitingnurseservice.org
Walk with a Doc	https://walkwithadoc.org/
YMCA of LI *	www.ymcali.org
School and Colleges	Website
Adelphi University *	www.adelphi.edu
Farmingdale State College	www.farmingdale.edu
Hofstra University *	www.hofstra.edu
Molloy College	www.molloy.edu
St. Joseph's College	www.sicny.edu/long-island
Stony Brook University *	www.stonybrook.edu
Western Suffolk BOCES	www.wsboces.org
Healthy Schools NY *	www.wsboces.org
Insurers	Website
1199SEIU/Health Education Project	www.1199seiu.org
Emblem Health	www.emblemhealth.com
Fidelis Care	https://www.fideliscare.org/
United Healthcare *	www.unitedhealthcare.com
VSNY CHOICE Health Plans	www.vnsnychoice.org
Regional Health Information Organizations	Website
Healthix Inc.	www.healthix.org
Businesses and Chambers	Website
Air Quality Solutions	www.iaqguy.com
Custom Computer Specialists	www.customtech.com

Feldman, Kramer & Monaco, P.C.	www.fkmlaw.com
Greater Westhampton Chamber of Commerce	www.westhamptonchamber.org
Honeywell Smart GRID Solutions	www.honeywellsmartgrid.com
LIFE, Inc. Pooled Trusts	www.lifetrusts.org
Marcum	www.marcumllp.com
PSEG of Long Island	www.psegliny.com
TeK Systems	www.teksystems.com
Temp Positions	www.tempositions.com
Time to Play Foundation	www.timetoplay.com
Wisselman & Associates	www.lawjaw.com
WSHU Public Radio (NPR News & Classical Radio)	www.wshu.org

Municipal Partners	Website
Nassau Library System	https://www.nassaulibrary.org/
New York State Association of County Health Officials	www.nysacho.org
New York State Department of Parks and Recreation	www.nyparks.com
NYC Poison Control Center	www1.nyc.gov
Suffolk County Legislature	www.legis.suffolkcountyny.gov
Suffolk Cooperative Library System	https://portal.suffolklibrarysystem.org/

*** Denotes a founding member of the Long Island Health Collaborative**

Appendix F

CHNA 2022 Prep Work Group Participants

Organization	Individual
Catholic Health	Tish Gilroy
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Long Island Health Collaborative / NSHC	Janine Logan
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Nassau County Department of Health	Tavora Buchman
Nassau County Department of Health	Lawrence Eisenstein
Nassau-Suffolk Hospital Council	Stacy Villagran
Northwell Health Mather Hospital	Stuart Vincent
Northwell Health	Jerald Chandy
Northwell Health	Taylor Klavans
Northwell Health	Stephanie Kubow
Northwell Health	Sabrina Lutchman
Northwell Health	Jack Tocco
Northwell Health	Erica Peralta
Northwell Health	Mitchell Corney
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Suffolk County Department of Health	Gregson Pigott
Suffolk County Department of Health	Sarah Hennis
Suffolk County Department of Health	Christine Yeh
Stony Brook University Hospital	Yvonne Spreckels
Stony Brook University Hospital	Jennifer Jamilkowski
Suffolk County Legislature	Charvon Davis-Pierce
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Appendix G - Research and Supporting Evidence

Social Media

Jane, Monica et al. Social media for health promotion and weight management: a critical debate. *BMC Public Health* 18 (2018): s12889-018-5837.

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Opioid Treatment Programs (General)

<https://www.nassaucountyny.gov/1697/Nassau-County-Opioid-Treatment-Program>

The Nassau County Opioid Treatment Program treats over 600 clients diagnosed with Opioid Substance Use Disorder. Medication Assisted Treatment has proven to be an effective medical treatment for opioid addiction. It improves clients' health, education, family relationships, and self-esteem while increasing clients' prospects for gainful employment.

Services:

- Counseling
- Nursing services
- Psychiatric Services
- Medical assessment
- Acupuncture Services
- HIV/AIDS testing and education
- Tapering program
- Medical Maintenance program
- Women's groups
- Men's groups
- Coordinate care with Court Systems, DSS, and Case Management, and Community Based Organizations

Methadone Maintenance Track

Suboxone Track

Naltrexone for Extended-Release Track

Medical Maintenance Track

Health Resource Centers in the Community

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Appendix H

Perinatal Data <https://www.health.ny.gov/statistics/chac/perinatal/county/2017-2019/nassau.htm>

County/ZIP Code Perinatal Data Profile - 2017-2019												
Source: 2017-2019 New York State Vital Statistics Data as of January, 2022												
ZIP	Total	Percent of Births					Infant and Neonatal Deaths, Rate per 1,000 Live Births					
Code	Births	Premature	Low	Unmarried	Medicaid	Late or No	Infant	Infant	Neonatal	Neonatal	Teen	Teen
	2017-2019	Birth	Birth	Parent	or Self-pay	Prenatal	Deaths	Deaths	Deaths	Deaths	Birth	Pregnancy
		Weight				Care	2017-2019	Rate	2017-2019	Rate	Rate	Rate
11001	859	11.8	8	15	25.3	2.4	0	0	0	0	1.2	6
11003	1,405	13	9.7	36.5	53.1	5.1	5	3.6	2	1.4	6	22.1
11010	657	8.8	5.6	15.4	17.2	1.4	0	0	0	0	2.4	7.2
11020	127	11.8	7.9	25.2	36.2	4.9	0	0	0	0	0	4.8
11021	597	10.7	8.9	6.7	13.1	2.1	2	3.4	2	3.4	0.7	1.3
11023	378	6.9	5	8.2	18.8	2.8	0	0	0	0	2.2	4.3
11024	273	7.3	5.9	9.2	23.8	2.6	0	0	0	0	1.1	2.2
11030	328	7.9	5.2	6.1	8.8	4.1	0	0	0	0	0.5	1.5
11040	994	10.1	9	13.6	24.2	2.4	7	7	7	7	1.6	4.3
11050	900	8.9	6.7	17.9	23.3	2.5	0	0	0	0	3.6	7.8
11096	479	10.9	7.5	49.5	68.3	4.3	3	6.3	3	6.3	32.7	40
11501	747	10.6	7.1	19.9	25.5	1.1	0	0	0	0	7.1	11.4
11507	157	7	4.5	7	12.1	0.6	0	0	0	0	2.7	5.4
11509	36	13.9	11.1	11.1	13.9	0	0	0	0	0	0	0
11510	1,006	12.3	10.4	34.1	36.8	3.3	5	5	3	3	6.6	16.2
11514	142	9.9	7.7	16.9	16.2	3.6	0	0	0	0	5.2	13.1
11516	374	7.2	5.1	16.6	28.1	1.9	2	5.3	2	5.3	5	11.2
11518	303	8.6	6.3	16.9	14.9	1	0	0	0	0	0	4.2
11520	1,668	14.4	10.1	53.3	62.8	4.1	9	5.4	6	3.6	22.3	43.2
11530	722	7.3	5.3	5.6	5.7	1.1	1	1.4	0	0	0.5	1.1
11542	872	11.6	8.9	45.7	46.8	2.5	5	5.7	4	4.6	12.2	22.6
11545	275	10.5	6.2	9.5	9.8	1.8	0	0	0	0	0	0.4
11548	27	18.5	14.8	14.8	18.5	3.8	0	0	0	0	0	12.8
11550	2,933	15.9	9.4	67.1	78.7	5.5	13	4.4	9	3.1	34.3	62.1
11552	839	12.8	8.6	26.1	29.5	3.5	4	4.8	4	4.8	4.2	14.3
11553	1,088	17.4	10.2	57.6	72.2	4.3	7	6.4	4	3.7	22.5	43.7
11554	1,113	11	7.6	15.7	22.8	2.1	2	1.8	2	1.8	1.9	6.8
11557	185	16.2	8.6	12.4	21.9	3.3	0	0	0	0	0	3.5
11558	236	14.4	11.4	30.1	30.9	4.7	0	0	0	0	6.3	12.6
11559	383	6	5.5	15.9	27.9	3.2	1	2.6	0	0	3.8	7.6
11560	163	9.8	4.9	18.4	19.6	3.2	0	0	0	0	2.7	4.1
11561	1,122	11.2	7.3	23.1	20.3	2.3	3	2.7	2	1.8	4.8	13.4
11563	658	12.5	8.1	14.6	17	0.9	1	1.5	0	0	2.1	7.4
11565	291	8.9	4.8	10.7	9.6	1.7	1	3.4	1	3.4	2.6	10.5
11566	1,049	10	6.6	8.5	7.9	1.2	2	1.9	0	0	1.6	3.4
11568	56	8.9	8.9	14.3	17.9	5.5	0	0	0	0	0	2.5
11570	813	9.6	6.3	16.4	13.9	2.6	3	3.7	3	3.7	2.9	8.4
11572	875	10.4	7.4	13.8	13.6	1.2	1	1.1	1	1.1	1.8	6.4
11575	884	15.2	10.5	62.3	77.2	5.8	1	1.1	1	1.1	32.5	59.4
11576	275	6.9	6.9	8.7	16.4	2.3	0	0	0	0	0	0
11577	330	6.7	9.4	16.1	20.6	1.9	1	3	1	3	0	1.5
11579	112	10.7	7.1	16.1	18	1.8	0	0	0	0	0	0
11580	1,221	14	10.5	26.5	40.5	4.2	9	7.4	5	4.1	2.1	15.3
11581	789	10.9	9.6	17.2	25.2	3	6	7.6	5	6.3	2.8	8.8
11590	1,896	13.5	7.9	46.6	61.8	3.7	5	2.6	3	1.6	12.6	23.9
11596	266	9	7.9	10.9	13.6	2.6	2	7.5	2	7.5	0.9	3.8
11598	570	7.2	5.8	6.3	17.5	1.6	0	0	0	0	1.3	2.7
11709	139	8.6	3.6	24.5	15.8	2.2	0	0	0	0	1.6	4.8
11710	1,043	8.9	6.2	11.6	13.9	0.7	0	0	0	0	2.1	5.6
11714	619	10.2	6.6	14.1	17.8	2.1	0	0	0	0	0.9	4.2
11732	78	6.4	7.7	6.4	7.7	0	0	0	0	0	0	0
11735	973	11	7.8	23.4	26.1	2.2	2	2.1	2	2.1	3	9.1
11753	221	11.4	9.5	10.9	21.3	4.2	0	0	0	0	0.8	0.8
11756	1,164	10.3	7.5	19.5	22.5	1.8	7	6	6	5.2	2.8	9.2
11758	1,606	10.1	8.1	15.2	12.9	1.5	5	3.1	5	3.1	1	5.3
11762	698	8.7	4.6	8	5.7	0.9	1	1.4	1	1.4	0.4	4
11765	14	0	0	21.4	14.3	0	0	0	0	0	*	*
11771	251	8	5.2	21.5	23.9	4.1	1	4	1	4	1.8	2.6
11783	628	10.5	4.5	14.2	9.6	1.1	0	0	0	0	0	1.9
11791	453	7.9	4.2	7.3	11.7	2.1	2	4.4	0	0	1.4	1.8
11793	912	10.1	6.8	12	9.8	1.5	1	1.1	1	1.1	0.3	2.1
11797	160	10	8.8	8.8	13.1	1.9	0	0	0	0	0	0
11801	1,283	11.3	8.7	23.3	42.4	4.3	2	1.6	1	0.8	4.9	12.5
11803	699	11.7	7.9	7.6	12	1.2	2	2.9	1	1.4	0.3	1.4
11804	103	2.9	0	7.8	5.8	0	0	0	0	0	0	1.8
Total	42,551	11.3	7.9	26.1	32.5	2.8	128	3	94	2.2	5.6	12.8

Nassau County Residents Completing Two-Dose Covid-19 Vaccine Series, by Zip Code

Zip Code	Town/City	Vaccination Rate %
11001	Floral Park	83.8%
11003	Elmont	78.3%
11010	Franklin Square	76.9%
11020	Great Neck	100.0%
11021	Great Neck	87.3%
11023	Great Neck	80.9%
11024	Great Neck	76.3%
11030	Manhasset	85.1%
11040	New Hyde Park	92.9%
11042	New Hyde Park	20.8%
11050	Port Washington	90.9%
11096	Inwood	75.3%
11501	Mineola	92.2%
11507	Albertson	93.1%
11509	Atlantic Beach	87.4%
11510	Baldwin	81.9%
11514	Carle Place	83.0%
11516	Cedarhurst	72.2%
11518	East Rockaway	81.9%
11520	Freeport	77.2%
11530	Garden City	85.1%
11542	Glen Cove	79.2%
11545	Glen Head	79.2%
11547	Glenwood Landing	100.0%
11548	Greenvale	42.8%
11549	Hempstead	22.7%
11550	Hempstead	75.6%
11552	West Hempstead	81.6%
11553	Uniondale	83.1%
11554	East Meadow	83.4%
11557	Hewlett	86.2%
11558	Island Park	77.0%
11559	Lawrence	71.5%
11560	Locust Valley	79.5%
11561	Long Beach	72.7%
11563	Lynbrook	81.1%
11565	Malverne	85.6%
11566	Merrick	87.2%
11568	Old Westbury	67.4%
11569	Point Lookout	100.0%

11570	Rockville Centre	83.6%
11572	Oceanside	83.6%
11575	Roosevelt	73.3%
11576	Roslyn	95.1%
11577	Roslyn Heights	88.8%
11579	Sea Cliff	82.5%
11580	Valley Stream	81.6%
11581	Valley Stream	80.1%
11590	Westbury	86.3%
11596	Williston Park	92.4%
11598	Woodmere	75.1%
11709	Bayville	74.7%
11710	Bellmore	78.9%
11714	Bethpage	81.5%
11732	East Norwich	75.5%
11735	Farmingdale	73.0%
11753	Jericho	94.4%
11756	Levittown	80.0%
11758	Massapequa	77.2%
11762	Massapequa Park	74.5%
11765	Mill Neck	68.9%
11771	Oyster Bay	88.4%
11783	Seaford	75.8%
11791	Syosset	88.9%
11793	Wantagh	81.8%
11797	Woodbury	92.0%
11801	Hicksville	89.7%
11803	Plainview	94.3%
11804	Old Bethpage	94.3%

<https://coronavirus.health.ny.gov/zip-code-vaccination-data> (Data as of October 2022)