Obesity Related Hospital Visits in Nassau County, 2018-2022

The prevalence of obesity in New York State and Nassau County signifies a pressing public health challenge. In New York State, over one in three adults (approximately 29.1%) are classified as obese, reflecting a significant health burden (New York State Department of Health, 2023; Centers for Disease Control and Prevention [CDC], 2024). This prevalence exhibits notable variation across different counties, with some regions experiencing markedly higher rates. Nassau County reports an obesity prevalence of 24.9%, which, while lower than in several other counties, remains a substantial public health concern (New York State Department of Health, 2023).

The objective of this analysis is to present obesity rates among the Nassau County population visiting local hospitals. The data utilized for this analysis were retrieved from the Statewide Planning and Research Cooperative System (SPARCS) database. The ICD-10 (International Classification of Diseases, 10th Revision) codes employed range from 'Z6830' to 'Z6856', which encompass a Body Mass Index (BMI) of 30 kg/m² and above for adults, and BMI values above the 95th percentile for children, indicative of childhood obesity. The analysis covers hospital visit data spanning from 2018 to 2022.

Figure 1Obesity Related Hospital Visits, Age-Adjusted Rate Per 100,000 Population by Discharge Year, Nassau County, 2018 -2022

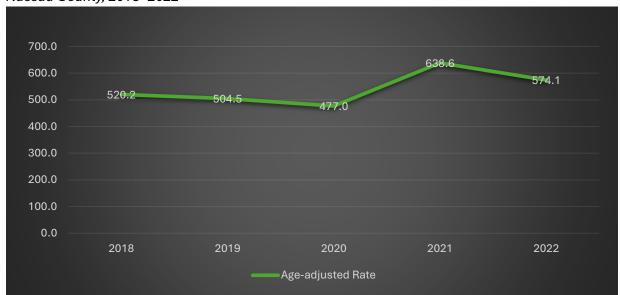


Figure 1 illustrates a trend in age-adjusted obesity related hospital visit rates in Nassau County from 2018 to 2022. Initially, there was a slight decline observed from 2018 to 2020. However, this period of decline was followed by an uptrend in 2021, reaching a peak of 639 individuals per 100,000 population, marking the year with the highest recorded obesity rate. Subsequently, there was a decline noted in 2022. Over the five-year span, the age-adjusted average obesity rate in Nassau County was computed to be 543 individuals per 100,000 population.





Figure 2Obesity Related Hospital Visits, Age Specific Crude Rate Per 100,000 Population, (5-Yr. Avg)
Nassau County, 2018 -2022

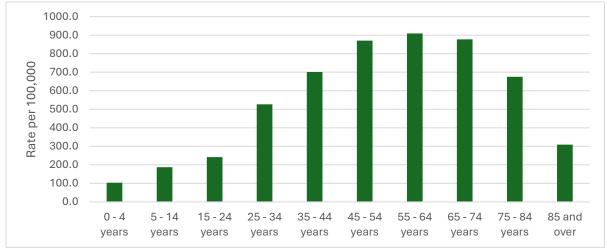


Figure 2 highlights the elevated obesity hospital visit rates among different age groups in Nassau County. The data reveals that the obesity rate is particularly high in the population aged 45 to 74 years. Notably, the highest obesity rate, at 909 individuals per 100,000 population, was observed within the 55-64 age group.

Figure 3

Obesity Related Hospital Visit Crude Rate Per 100,000 Population (5-Yr. Avg) by Race, Nassau County, 2018 -2022

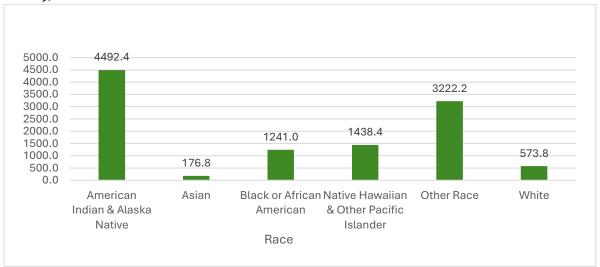


Figure 3 reveals differences in obesity related hospital visit rates among different racial groups in Nassau County. American Indian and Alaska Natives are reported to have the highest obesity related hospital visit rate, with 4492 individuals per 100,000 population, followed by Other race (3222 per 100,000). In contrast, the Asian population exhibits the lowest obesity rate at 176.8 persons per 100,000 population. Furthermore, the data highlights a difference in obesity rates





between Black and White populations, with the rate among Black individuals being more than double that of White individuals (1241 per 100,000 vs. 573.8 per 100,000).

Figure 4

Obesity Related Hospital Visit Crude Rate Per 100,000 Population (5-Yr. Avg) by Ethnicity,

Nassau County, 2018 -2022

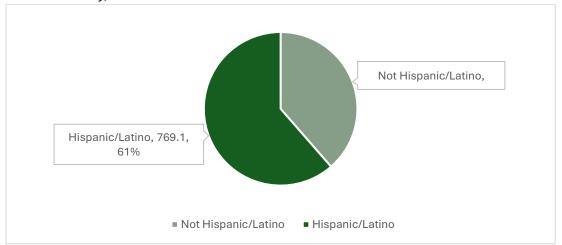


Figure 4 illustrates the difference in obesity rates between Hispanic/Latino and Non-Hispanic/Latino populations in Nassau County. The data shows that the obesity related hospital visit rate among Hispanics/Latinos is 1.6 times higher than that of the Non-Hispanic/Latino population.

Figure 5Obesity Related Hospital Visit Crude Rate by Gender and Age Group Per 100,000 Population (5-Yr. Avg), Nassau County, 2018 -2022

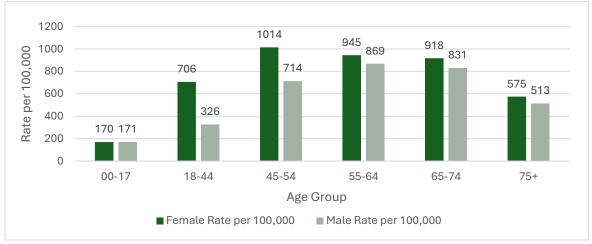


Figure 5 presents the distribution pattern of obesity related hospital visit rates by gender and age in Nassau County. It is observed that the rate by gender mirrors the distribution across age groups, with females aged 45 to 64 being the most affected demographic. Females exhibit higher obesity related hospital visit rates across all age categories, peaking at 1014 individuals per 100,000





population among 45-54 age group. In contrast, childhood obesity (ages 0-17) demonstrates nearly equal rates between genders, with 170 per 100,000 females and 171 per 100,000 males.

Figure 6

Age-Adjusted Obesity Rate Per 100,000 Population Hospital Visits by Zip Codes Places in Nassau County (5-Yr. Avg.), 2018 - 2022

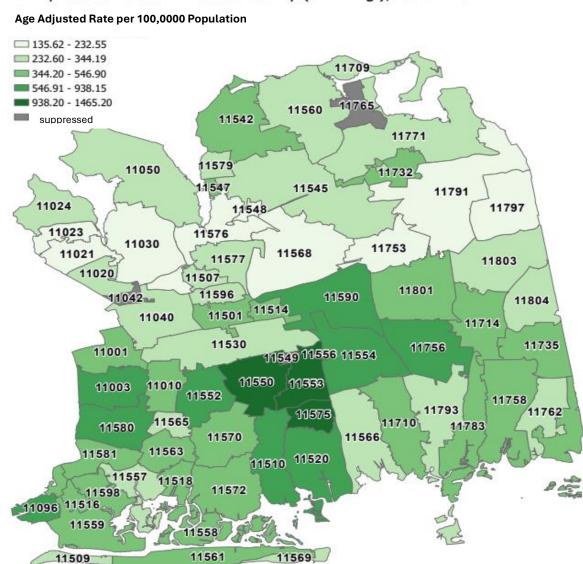


Figure 6 provides a detailed overview of the age-adjusted obesity related hospital visit rates across zip codes in Nassau County. The analysis highlights the following zip codes as having the highest obesity related hospital visit rates:

- **11575** (**Roosevelt**): 1465 persons per 100,000 population
- **11550** (**Hempstead**): 1333 persons per 100,000 population





• **11553** (Uniondale): 1331 persons per 100,000 population

• **11520** (**Freeport**): 938 persons per 100,000 population

• **11590** (Westbury): 878 persons per 100,000 population

Data Source: NYS SPARCS Data

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References

Centers for Disease Control and Prevention. (2024). Obesity Data and Statistics. Retrieved from https://www.cdc.gov/obesity/data-and-statistics/adult-obesity-prevalence-maps.html

New York State Department of Health. (2023). Prevalence of Obesity among New York State Adults by County, BRFSS 2021. Retrieved from

https://www.health.ny.gov/statistics/prevention/injury_prevention/information_for_action/docs/20 23-03_ifa_report.pdf

Trust for America's Health. (2023). The State of Obesity 2023: Better Policies for a Healthier America. <u>TFAH-state-one-pager-New-York.pdf</u>

NYSDOH. SPARCS. Statewide Planning and Research Cooperative System

CDC. Adult Obesity Map. Adult Obesity Prevalence Maps | Obesity | CDC

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