

# Colorectal Cancer Risk Factors and Disparities in New Jersey

Cancer Health Equity Center of Excellence, Rutgers Cancer Institute

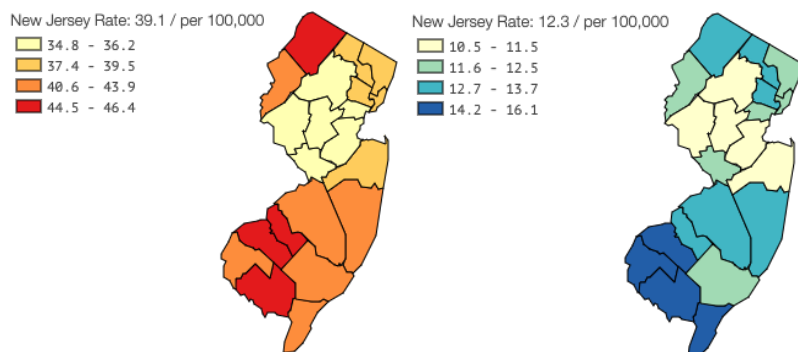
Colorectal cancer is defined as a cancer that starts in either the colon or the rectum. This cancer is one of the most common cancers in the United States (US), with a rate of 36.4 new cancer diagnoses (incidence rate) for every 100,000 people from 2017-2021 [1]. It is the fourth highest incidence rate in the US after breast, prostate, and lung cancers and has the fourth highest death rate at 12.8 deaths for every 100,000 people from 2018-2022 [1].

## Colorectal Cancer in New Jersey

In New Jersey, the rate of new colorectal cancer diagnoses and the rate of deaths across all populations was 39.1 and 12.3 for every 100,000 people from 2017-2021, respectively [2-3].

### Incidence

### Mortality



**Figure 1.** Age-Adjusted Colorectal Cancer Incidence (L) and Mortality (R) Rates in New Jersey, 2017-2021 [2-3].

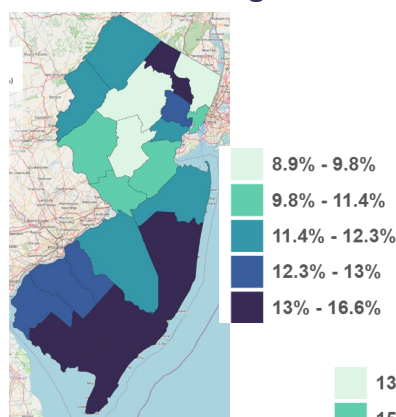
## Lifestyle-Related Risk Factors

According to the American Cancer Society (ACS), “more than half of all colorectal cancers are linked to [lifestyle-related factors] that can be changed” [4]. Therefore, while factors such as age, family and personal history, and sex at birth can influence the development of colorectal cancer in individuals, the most impactful risk factors can be changed; thereby providing opportunities to improve these rates for both New Jersey and the nation as a whole. Some of the biggest lifestyle-related risk factors that can be changed include:

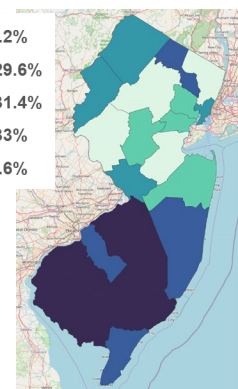
**Overweight/Obesity:** Individuals who are overweight or obese have higher risk of both “developing and dying from colorectal cancer” [4]. This link, however, seems to be more prominent in overweight and obese individuals assigned as male at birth in America as compared to individuals assigned as female at birth. **Smoking:** Individuals who have smoked tobacco for a long time have a higher risk of both developing and dying from colorectal cancer as compared to those who do not smoke, or who have never smoked. **Alcohol Use:** Moderate to heavy alcohol use is associated with the development of colorectal cancer, even “light-to-moderate alcohol intake [is] associated with some risk” [4]. The ACS advises to lessen alcohol use to two drinks a day for males and one drink a day for females if you choose to drink alcohol, to avoid the development of cancers such as colorectal cancer [4].

## CRC-Related Risk Factors in NJ

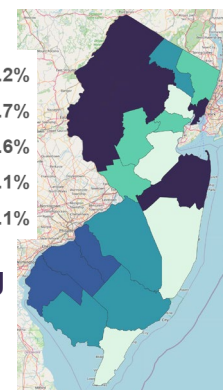
### Current Smoking in NJ



### Obesity in NJ

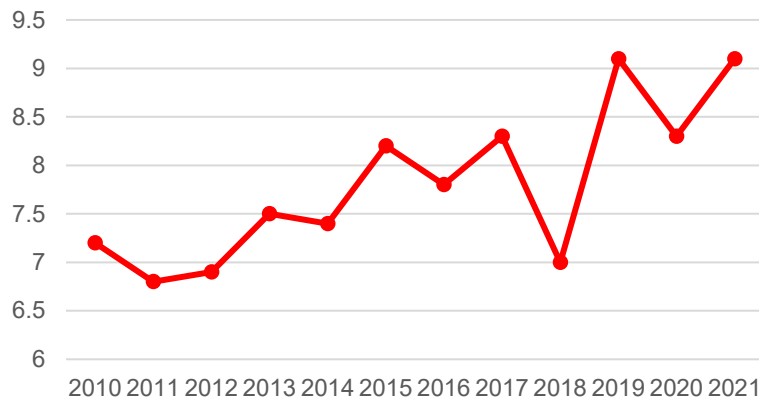


### Binge Drinking in NJ

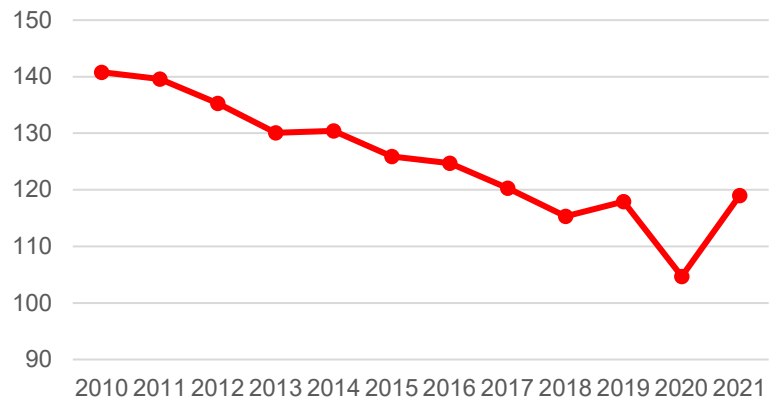


**Figure 2.** New Jersey rates of adults who report obese BMI (top/far right), current smoking (middle/far left), and binge-drinking (bottom).

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**Figure 3a.** Age-Adjusted Colorectal Cancer Incidence Rates in New Jersey, Age <50 Source: Incidence – SEER Research Plus Data, 17 Registries, Nov 2023 Sub (2000-2021). Rates per 100,000.



**Figure 3b.** Age-Adjusted Colorectal Cancer Incidence Rates in New Jersey, Age 50+ Source: Incidence – SEER Research Plus Data, 17 Registries, Nov 2023 Sub (2000-2021). Rates per 100,000.

**Figure 2** describes the New Jersey rates of adults 18+ years who reported obese BMI, current smoking, and binge-drinking according to the Rutgers Cancer Institute’s Cancer InFocus platform [5]. If we compare these three maps with the **Figure 1** maps, we can see common patterns in the distribution of cancer and their associated risk factors. The highest rates of both obesity and current smoking are in the Southern counties of New Jersey, which aligns with the incidence and mortality rates of colorectal cancer. Whereas the highest rates of reported binge drinking lie in both the Southernmost and Northernmost counties in the state; and aligns with the incidence map in **Figure 2**. According to the National Institute on Minority Health and Health Disparities from the US Department of Health & Human Services, a majority of these Southern counties are subject to higher poverty rates, lower education levels, and lower income levels [6]. These factors can equate to poorer health and cancer outcomes.

### Racial and Ethnic Disparities

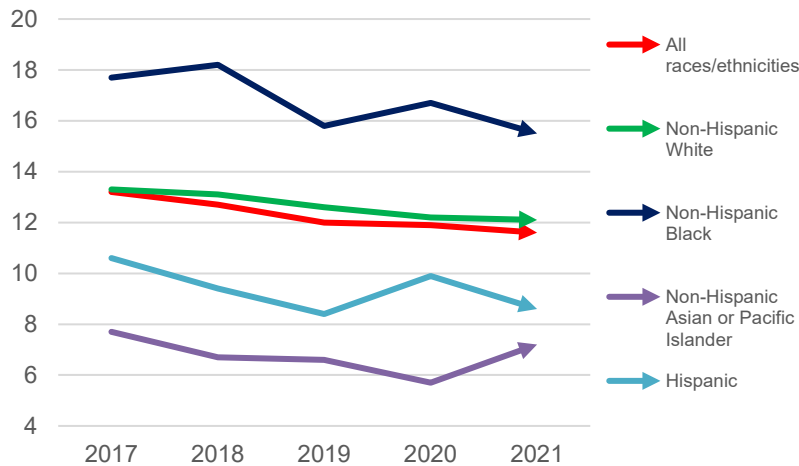
Black individuals in New Jersey have the highest rate of both new colorectal cancer diagnoses (43.8 for every 100,000 people) and colorectal cancer deaths (16.8 for every 100,000 people) [2-3]. However, these rates are not significantly higher than that of the other racial and ethnic groups, which are between 27.41 and 40.1 per 100,000 people for new diagnoses and 6.8 and 12.7 per 100,000 for deaths [2-3].

### Increase in Incidence in Younger Populations

The younger population has seen an increase in the rate of new diagnoses of colorectal cancer while the older population has seen a decrease; although the rate in the older population (50+) is much higher overall (**Figures 3a and 3b**).

### Recent Trends and Outlook

As mentioned, recent colorectal cancer trends in New Jersey show an increase in incidence in younger populations (<50), while older populations (50+) are experiencing declining rates, due to early detection and screening interventions.



**Figure 4.** Age-Adjusted Colorectal Cancer Mortality Trends in New Jersey, 2017-2021. Male and Female. [2-3]. Rates per 100,000.

In **Figure 4**, the decrease in colorectal cancer deaths in recent years is shown across all racial and ethnic groups in New Jersey (apart from the Non-Hispanic Asian and Pacific Islander population who have seen a slight increase from 2020 to 2021). Much of this progress can be attributed to the increase in colorectal cancer screening. In New Jersey in 2022, 71.3% of adults aged 50-75 years reported being up-to-date with colorectal cancer screening [1]. More information regarding colorectal screening can be found at <https://screennj.org/colon-screening/>.

For more information about Rutgers Cancer Institute Cancer Health Equity Center of Excellence, [click here](#) or visit <https://www.cinj.org/outreach/cancer-health-equity-center-excellence>.

For more information regarding screening guidelines, recommendations, and other resources, refer to the following links:

[Cancer Screening Recommendations](#) from the United States Preventive Services Task Force (USPSTF):

[https://www.uspreventiveservicestaskforce.org/uspstf/topic\\_search\\_results?topic\\_status=P&category%5B%5D=15&searchterm=](https://www.uspreventiveservicestaskforce.org/uspstf/topic_search_results?topic_status=P&category%5B%5D=15&searchterm=)

[Cancer Screening Guidelines](#) from the American Cancer Society (ACS): <https://www.cancer.org/cancer/screening/american-cancer-society-guidelines-for-the-early-detection-of-cancer.html>.

[ScreenNJ](#) for prevention, education, and detection information: <https://screennj.org/>.

For information regarding Rutgers Cancer Institute clinical trials (what is open, at which sites, general clinical trials page, interest in diversity in clinical trials, etc.) [click here](#) or visit <https://www.cinj.org/clinical-trials/find-clinical-trial>.

Link to Fact Sheet References: [https://go.rutgers.edu/cancerfacts\\_reference](https://go.rutgers.edu/cancerfacts_reference)