

Colorectal Cancer Incidence and Mortality in Delaware, 2016-2020

Key Highlights

- Colorectal cancer was the fourth most commonly diagnosed cancer in the U.S. and Delaware.^{1,2}
- Delaware ranked 30th in the U.S. for its age-adjusted colorectal cancer incidence rate.
- Colorectal cancer was the fourth leading cause of cancer death in the U.S. and in Delaware.^{3,4}
- Delaware's age-adjusted colorectal cancer incidence rate was 34.6 cases per 100,000 population from 2016-2020.
- Delaware ranked 28th in the U.S. for its age-adjusted colon* cancer mortality rate.
- Delaware's age-adjusted colorectal cancer mortality rate was 12.7 deaths per 100,000 population from 2016-2020.

* National ranking is based on causes of death from colon cancer only (excluding rectum) due to colon and rectum combined not being available from the rankings source, CI*Rank.

Incidence (New Cases)^{1,2}

Colorectal cancer was the fourth most commonly diagnosed cancer in the U.S. and Delaware.

Between 2006 and 2019*, colorectal cancer incidence rates decreased an average of 3.6% per year in Delaware. When examining specific subgroups, incidence rates decreased an average of:

- 3.8% among male
- 2.6% among female
- 3.1% among non-Hispanic White
- 5.1% among non-Hispanic Black Delawareans per year.

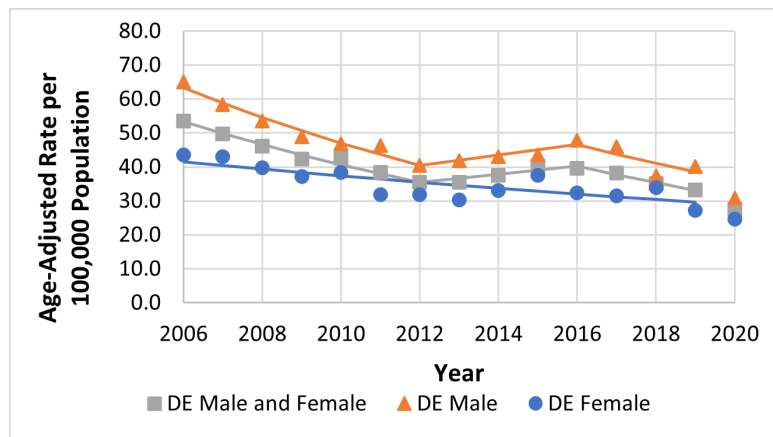
Incidence rates remained stable among Hispanic Delawareans.

Between 2006 and 2019* in the U.S., incidence rates decreased an average of 2.1% per year overall and an average of 2.2% among males and 2.1% among females.

* The Coronavirus 2019 (COVID-19) pandemic resulted in delays and reductions in cancer screening and diagnosis, which subsequently lead to a decline in 2020 incidence counts and rates that was considered an anomaly. Since including the 2020 rates would bias the estimates of trends over time, 2020 rates were not included in trend analysis.

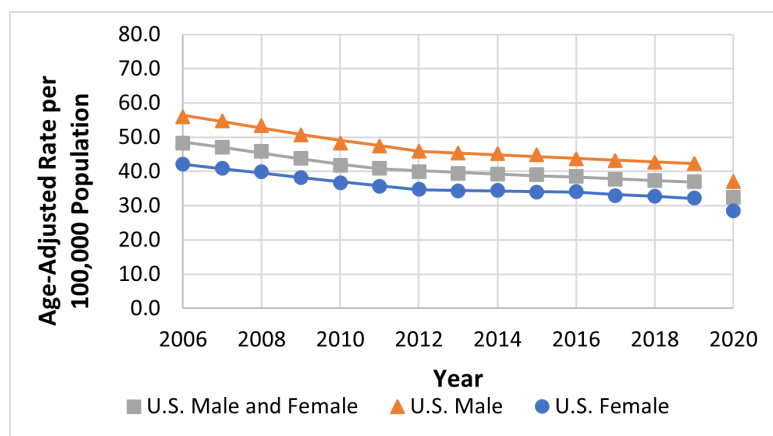
^ The lines are modeled trend lines calculated using Joinpoint Regression Program Version 5.0.2, whereas the points are the actual observed rates. The trend lines in the charts include joinpoints (i.e., changes in the trend), but the average annual percent change across the whole period is reported above.

Figure 1. Age-Adjusted Colorectal Cancer Incidence Rate Trend, Delaware, 2006-2019*[^]



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2006-2020
Rates are per 100,000 of population age-adjusted to the 2000 U.S. standard population.

Figure 2. Age-Adjusted Colorectal Cancer Incidence Rate Trend, U.S., 2006-2019*



Source: National Program of Cancer Registries and Surveillance, Epidemiology, and End Results Program SEER*Stat Database: U.S. Cancer Statistics 2001–2020 Public Use Research Database, 2022 submission
Rates are per 100,000 of population age-adjusted to the 2000 U.S. standard population.

Mortality (Deaths)^{3,4}

Colorectal cancer was the fourth most common cause of cancer death in the U.S. and in Delaware.

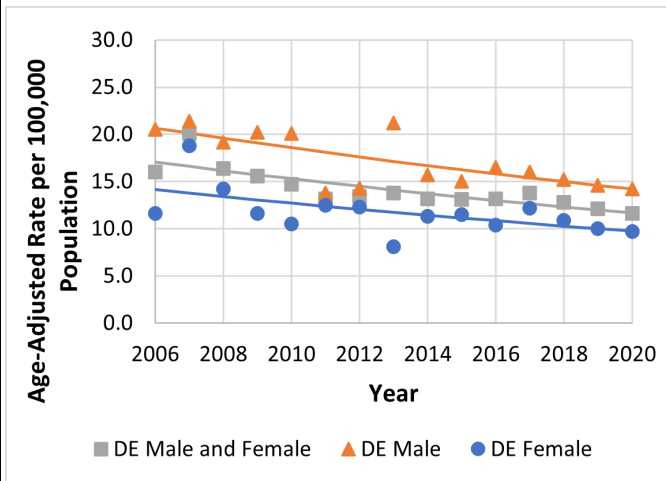
Between 2006 and 2020, colorectal cancer mortality rates decreased an average of 2.7% per year in Delaware. When examining specific subgroups, mortality rates decreased an average of:

- 2.6% among male
- 2.6% among female
- 2.7% among Non-Hispanic White Delawareans per year.

Mortality rates remained stable among Non-Hispanic Black and Hispanic Delawareans.

Between 2006 and 2020, mortality rates decreased an average of 2.2% per year in the U.S. overall and an average of 2.2% among U.S. males and 2.4% among U.S. females.

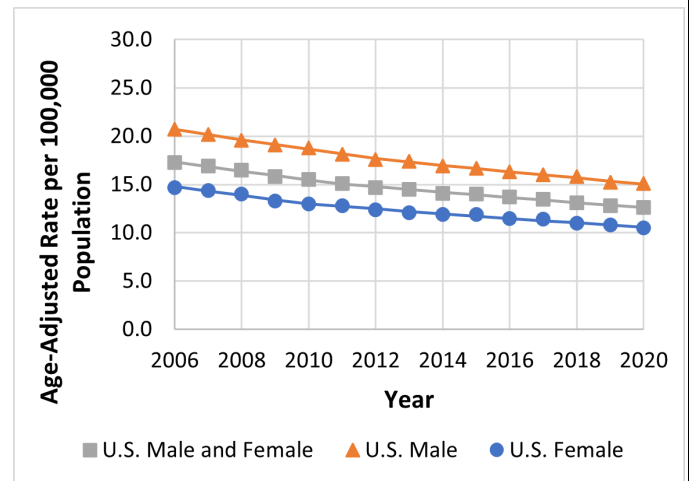
Figure 3. Age-Adjusted Colorectal Cancer Mortality Rate Trend, Delaware, 2006-2020



Source (DE): Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center, 2006-2020

Notes: The lines are modeled trend lines calculated using Joinpoint Regression Program Version 5.0.2, whereas the points are the actual observed rates. The trend lines in the charts include joinpoints (i.e., changes in the trend), but the average annual percent change across the whole period is reported above. Rates are per 100,000 of population age-adjusted to the 2000 U.S. standard population.

Figure 4. Age-Adjusted Colorectal Cancer Mortality Rate Trend, U.S., 2006-2020



Source (US): Surveillance, Epidemiology, and End Results (SEER) Program, SEER*Stat Database: Mortality - All COD, Aggregated Total U.S. (1990-2020)

Stage at Diagnosis¹

Cancer is categorized as either local, regional, or distant stage according to the Surveillance, Epidemiology, and End Results summary staging. The local stage is when the cancer has not spread. The regional stage is when the cancer is large and may have spread to surrounding tissues. The distant stage is when the cancer has spread to another body organ. Finding cancer at local stage can allow for treatment to prevent a cancer to spread to other tissue. This may lead to reduced risk of death from colorectal cancer.

Colorectal cancer cases diagnosed at the local stage decreased from 39% in 2006-2010 to 34% in 2016-2020 in Delaware. During this same time period, cases diagnosed at the regional stage increased from 35% to 38% and cases diagnosed at the distant stage slightly increased from 20% to 21%. The number of colorectal cancer cases reported at an unknown stage slightly increased from 6% to 7%. In 2016-2020, 29% of colorectal cancer cases in Hispanic Delawareans were diagnosed in the distant stage, compared to 20% of cases in non-Hispanic White Delawareans and 23% in non-Hispanic Black Delawareans. Among both Delaware males and females, about 21% of colorectal cancer cases were diagnosed at the distant stage.

Comparisons by Race/Ethnicity and Sex (Delaware, 2016-2020):

- The non-Hispanic White colorectal cancer incidence rate was 34.9 cases per 100,000 population, compared to the non-Hispanic Black rate of 35.7 cases per 100,000 population and the Hispanic rate of 32.9 cases per 100,000 in Delaware. These rates were not significantly different between the race/ethnicity groups.
- Delaware males had a significantly higher age-adjusted colorectal cancer incidence rate (40.2 cases per 100,000 population), compared to Delaware females (29.8 cases per 100,000 population).
- 29% of Hispanic colorectal cancer cases were diagnosed in the distant stage, compared to 20% of non-Hispanic White cases and 23% of Non-Hispanic Black cases in Delaware.
- The non-Hispanic White colorectal cancer mortality rate was 12.7 deaths per 100,000 population, compared to the non-Hispanic Black rate of 14.9 deaths per 100,000 population and the Hispanic rate of 8.1 deaths per 100,000 population in Delaware. These rates were not significantly different between the race/ethnicity groups.
- Delaware males had a significantly higher age-adjusted colorectal cancer mortality rate (15.3 deaths per 100,000 population) compared to Delaware females (10.6 deaths per 100,000 population).
- According to the 2022 Behavioral Risk Factor Survey, 71% of Delaware adult males and 69.2% of Delaware adult females had fully met the United States Preventive Services Task Force (USPSTF) colorectal cancer screening recommendation. This difference was not statistically significant.
- According to the 2022 Behavioral Risk Factor Survey, 71.8% of non-Hispanic White adults, 67.9% of non-Hispanic Black adults, and 55.3% of Hispanic adults had fully met the USPSTF colorectal cancer screening recommendation. This difference was not statistically significant between these race/ethnicity groups.

Early Detection⁵

The United States Preventive Services Task Force (USPSTF) updated the recommendations for colorectal cancer screening in May of 2021. This update expanded the eligibility age from 50-75 to 45-75 and included additional tests with appropriate time intervals.

There are two main categories of appropriate tests to screen for colorectal cancer: 1) stool-based tests and 2) direct visualization tests. While any of these tests performed within the recommended screening timeframe will qualify as meeting screening recommendations, colonoscopy is still the preferred method in Delaware.

According to the 2022 Behavioral Risk Factor Survey (BRFS), 70.1% of Delaware adults ages 45-75 fully met the USPSTF recommendation for colorectal cancer screening. By sociodemographic groups:

- 56.3% of those with a high school diploma or a GED and 73.6% of college graduates
- 47.2% of those ages 45-54, 76.4% of those ages 55-64, and 81.5% of those 65-75
- 57.7% of those with an annual household income of less than \$15,000 and 72.8% with an annual income of over \$200,000 fully met the USPSTF colorectal cancer screening recommendation.

Citations

1. Delaware Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2006-2020.
2. National Program of Cancer Registries and Surveillance, Epidemiology, and End Results Program SEER*Stat Database: U.S. Cancer Statistics 2001–2020, Public Use Research Database, 2022 submission
3. Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center, 2006-2020
4. Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Mortality - All COD, Aggregated Total U.S. (1990-2020) <Katrina/Rita Population Adjustment>, National Cancer Institute, DCCPS, Surveillance Research Program, released June 2022.
5. Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2022.