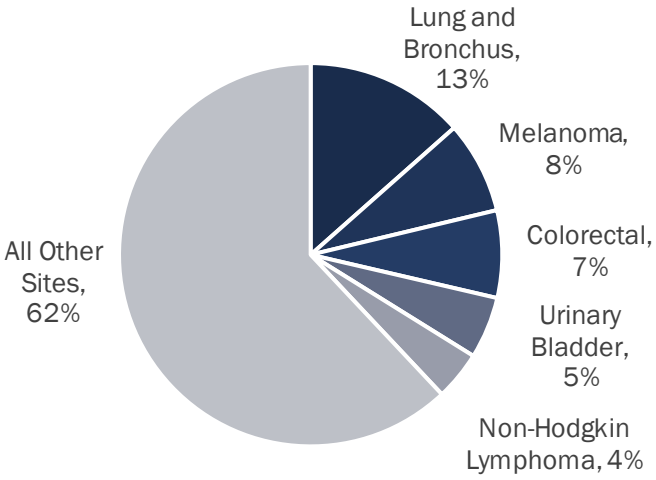
VERMONT DEPARTMENT OF HEALTH

Colorectal Cancer in Vermont

September 2023

Colorectal Cancers (CRC) is the third most diagnosed cancer and the second leading cause of cancer related death among Vermont men and women. From 2015-2019, only lung cancer and melanomas of the skin were diagnosed more frequently than CRC (**Figure 1**). While incredibly common, CRC is also a preventable and highly treatable form of cancer. Regular screening allows for the detection of CRC at an early stage when prognosis is good. In fact, it is possible to prevent CRC with screening by removing abnormal growths before they can develop into cancer.

Figure 1, Percent of Cancer Cases in Vermont, Male and Female, 2015-2019



Data Source: Vermont Cancer Registry

The widespread adoption of screening methods and the increase in options for screening has led to an overall derease in the rate of CRC in the United States. The latest numbers show cases are down 46% from the peak of CRC cases in 1985. Despite these advances, recent trends indicate the decrease in CRC incidence has slowed from the annual decrease of 3-4% per year that was seen in the early 2000s to a 1% annual decrease during 2011 to 2019.[1] This slowing is partly been caused by an of new CRC cases ocurring among adults under the age of 55.[1] With the emergence of these trends, in 2021 the United States Preventative Services Task Force lowered the recommended age of CRC screening to 45 years-old.[2]

Key Points:

- Colorectal cancer is a common form of cancer. While most common among older adults, recent trends show the rate of CRC increasing among younger adults under the age of 50.
- Screening for colorectal cancer and following up on abnormal results is very important. It is recommended that all adults between the ages of 45 and 75, who are considered at *average risk,* get screened for CRC either by a stool-based test, such as a FIT test, or direct visualization, such as through a colonoscopy. Early detection can lead to better outcomes.
- When diagnosed at an early (localized) stage, the five-year survival for CRC is 84% in Vermont.

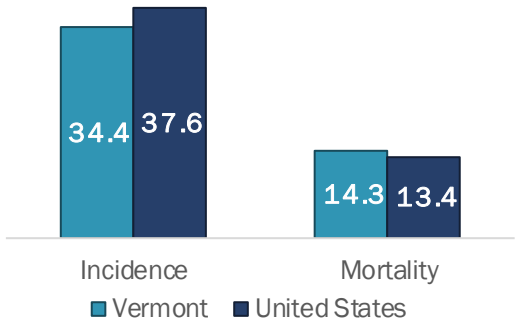
- When diagnosed at a late (distant) stage, the five-year survival for CRC is 11% in Vermont.

Average Risk refers to the of developing cancer for people who do not have signs or symptoms of the cancer being screened and no prior precancer, cancer or condition that may put one at an increased risk for that cancer.

Colorectal Cancer Incidence and Mortality

In the most recent measured time period (2015-2019), 289 new cases of CRC were diagnosed, and 122 deaths CRC-related deaths were recorded. From those findings, the incidence rate of CRC (34.4 per 100,000) is significantly lower than the national rate (37.6 per 100,000), while Vermont's CRC mortality rate (14.3 per 100,000) is similar to the rest of the nation (13.4 per 100,000).† All Vermont counties have similar rates of CRC incidents and mortality when compared at the state level.

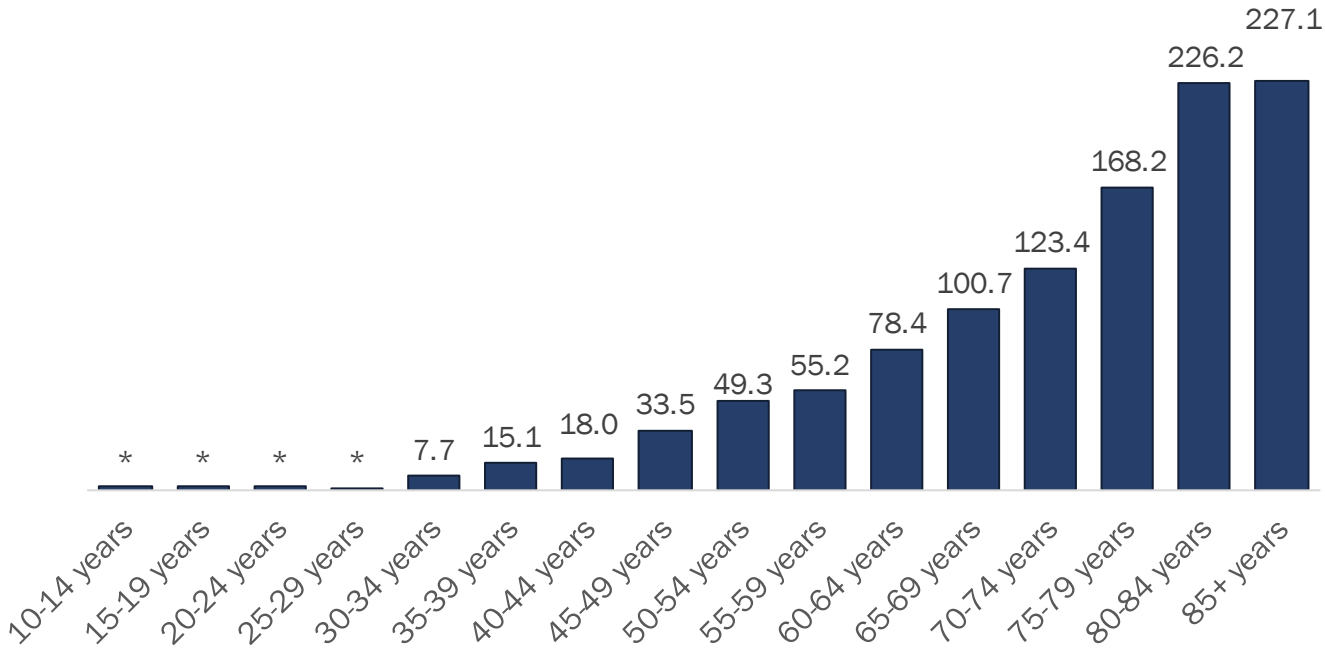
Figure 2, Age-Adjusted Colorectal Cancer Rates, VT and US, 2015-2019



Data Source: Vermont Cancer Registry, Vermont Vital Statistics

Similar to the U.S., CRC is more common among men in Vermont than women (39.1 per 100,000 and 33.0 per 100,000 respectively).[1] Additionally, the incidence rate of CRC increases along with age (**Figure 3**).

Figure 3, Age-Stratified Colorectal Cancer Incidence Rates, Vermont, 2015-2019



Data Source: Vermont Cancer Registry

† Throughout this report, data comparisons presented as "higher," "lower," "larger," "smaller," "better," "worse," or as "significantly different" are all considered statistically significant differences. Statistical significance is assessed by comparing the confidence intervals of different groups.

CRC trends both across the U.S. and in Vermont have pointed to a slowing in incidence rate. Health behaviors like reduced smoking, increased use of nonsteroidal anti-inflammatory drugs (NSAIDS) and the uptake of screenings among individuals 50 years of age and older are all considered beneficial in reducing the incidence rate.[1]

Adults over 65 years old have experienced the greatest decrease in CRC incidence rates, falling from 350.5 per 100,000 in 1994 to 141.0 per 100,000 in 2019 (Figure 7). In contrast, the incidence rate for adults under 50 increased from a rate of 7.3 per 100,000 in 1994 to 15.2 per 100,000 in 2019 (Figure 5). The cause of increasing rates is unknown, but some risk factors like obesity and poor diet are believed to contribute.[1]

Figure 4, Incidence Rates of Colorectal Cancer in Vermont, All Ages, 1994-2019

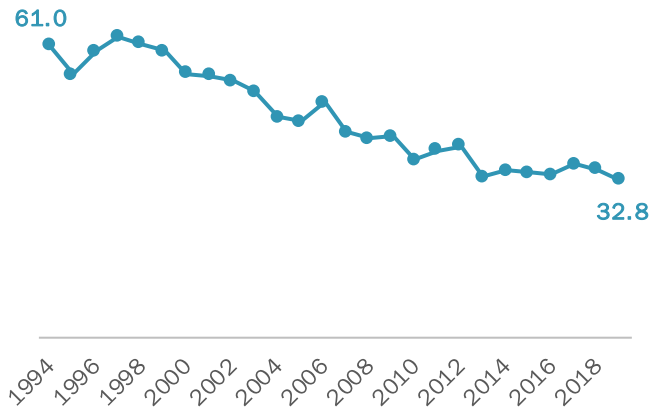


Figure 5, Incidence Rates of Colorectal Cancer in Vermont, Age 20-49, 1994-2019

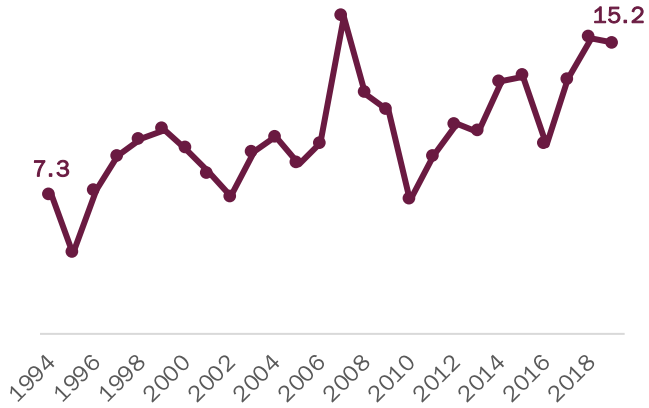


Figure 6, Incidence Rates of Colorectal Cancer in Vermont, Age 50-64, 1994-2019

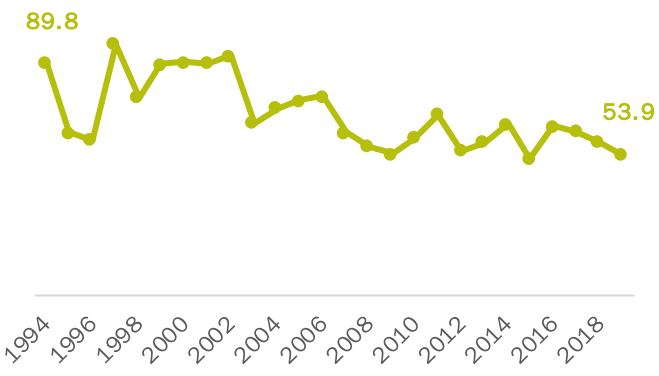
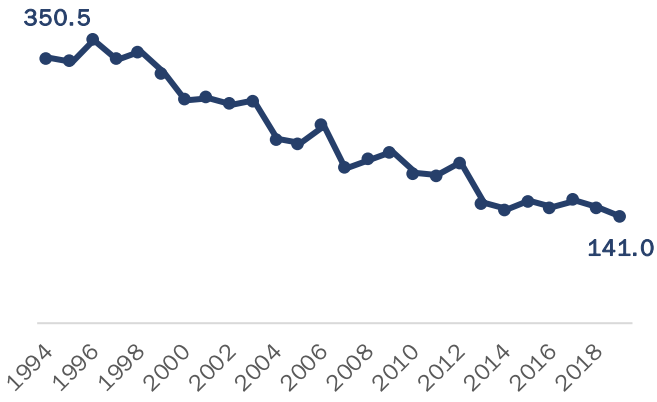


Figure 7, Incidence Rates of Colorectal Cancer in Vermont, Ages 65+, 1994-2019



All estimates are adjusted to the 2000 U.S. standard population.
Data Source: Vermont Cancer Registry

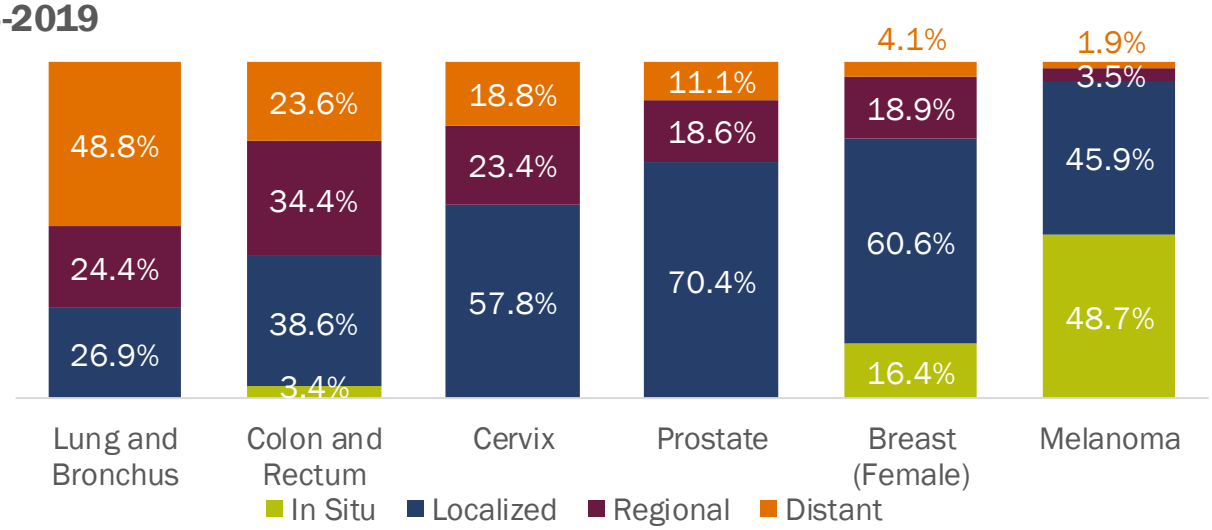
Colorectal Cancer by Stage at Diagnosis

CRC screening provides an opportunity to find and treat cancers at an early stage, improving the opportunities for better outcomes. Cancer Registries often describe the stage at diangosis as either in situ, localized, regional or distant.

- In situ: Abnormal cells are present, but have not spread to nearby tissue.
- Localized: Cancer cells present in the body, however, the cells have not spread to other parts of the body.
- Regional: Cancer has spread to nearby lymph nodes, tissues or organs.
- Distant: Cancer has spread beyond local lymph nodes, tissues or organs to distant parts of the body.

Roughly 39% of newly diagnosed CRC cases between 2015-2019 were diagnosed at a localized stage. However, CRC is the cancer most likely to be screened at a regional stage and the second most likely to be diagnosed at a distant stage (**Figure 8**).

Figure 8, Screenable Cancers by Stage at Diagnosis, Vermont, 2015-2019



Note: Cervical cancers diagnosed as in situ are not reported to the Cancer Registry and are therefore not included in this chart. Stage of disease at diagnosis is SEER Summary Stage.
Data Source: Vermont Cancer Registry.

Cancer survival rates are the percentage of individuals who survive a certain type of cancer for a specific amount of time, often five-years. Stage at diagnosis can be an important predictor of survival for CRC. When diagnosed at a localized stage, Vermonters have an 84% relative survival rate for CRC. The relative survival rate for CRC diagnosed at a distant stage is 11%. Relative survival among all age groups was impacted by the stage of diangosis in similar ways, with five-year relative survival rates decreasing the later cancer was diagnosed (**Figures 9-12**).

Figure 9, Colorectal 5-Year Relative Surival Rate in Vermont, All Ages, 2012-2018

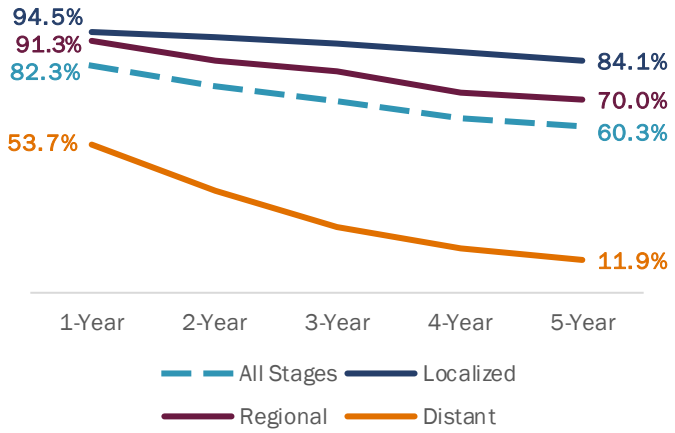


Figure 10, Colorectal 5-Year Relative Surival Rate in Vermont, Ages 0-49, 2012-2018

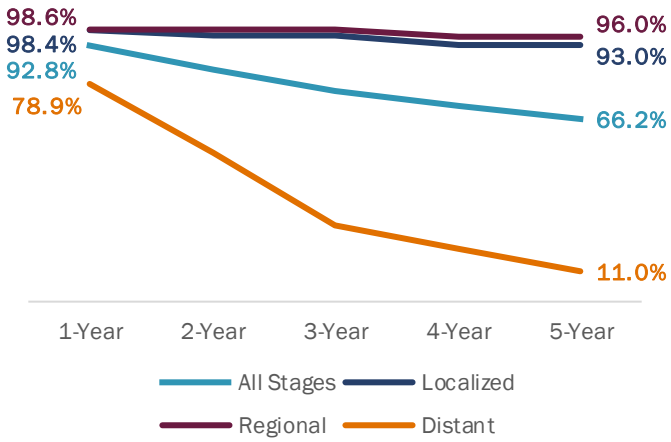


Figure 11, Colorectal 5-Year Relative Surival Rate in Vermont, Ages 50-64, 2012-2018

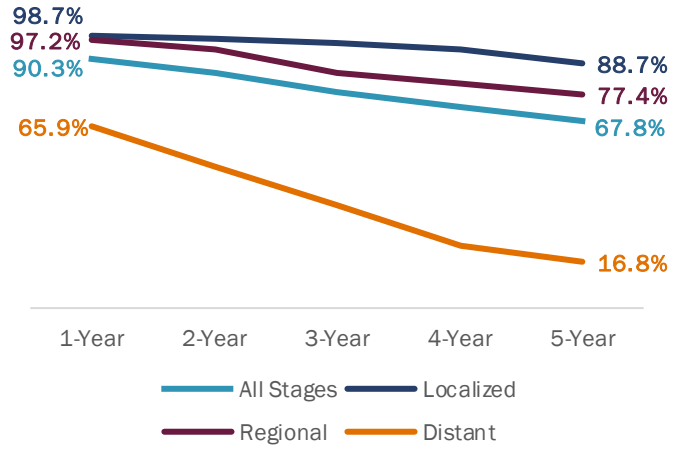
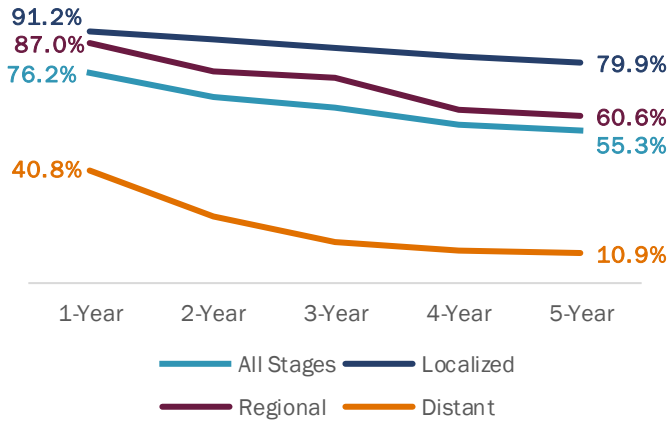


Figure 12, Colorectal 5-Year Relative Surival Rate in Vermont, Ages 65+, 2012-2018



Data Source: Vermont Cancer Registry

Key Takeaways

Colorectal cancer is an incredibly common disease that affects hundreds of Vermonters every year. Despite the progress that has been made to reduce the burden of disease and the overall decline in the number of new CRC diagnoses occurring each year, recent trends indicate that the demographic profile of who is affected may be shifting as more adults under the age of 50 are diagnosed. It is critical to continue to raise awareness about the importance of regular CRC screening and educate populations that may be unaware of the potential risk.

For more information please visit:

- Vermont Colorectal Cancer Screening Program
- Vermonters Taking Action Against Cancer (VTAAC)
- 2025 Vermont Cancer Plan
- United States Preventive Services Task Force: Color Rectal Cancer Screening Recommendations

References:

1. Siegel RL, Wagle NS, Cercek A, Smith RA, Jemal A. Colorectal cancer statistics, 2023. CA Cancer JClin. 2023;73(3):233-254. doi: 10.3322/caac.21772
2. US Preventive Services Task Force (USPTF). Screening for Colorectal Cancer, 2021. JAMA. 2021;325(19):1965-1977. doi: 10.1001/jama.2021.6238

Technical Notes:

Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population (19 age groups – Census P25–1130) and exclude basal cell and squamous cell skin cancers. Incidence rates exclude in situ carcinomas except urinary bladder. Incidence data were coded using the International Classification of Disease for Oncology (ICD-O) coding system. Vermont cases include Vermont residents only. The Vermont incidence rates are based on the Vermont Cancer Registry, Vermont Department of Health (1994-2019). A reporting delay by Department of Veterans Affairs (VA) has resulted in incomplete reporting of VA hospital cases in 2011-2014, 2016-2019.

Acknowledgement:

This publication was supported by the Grant or Cooperative Agreement CDC-RFA-DP22-2202, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.