

Lifetime risk of being diagnosed with colorectal cancer



*Estimates for 2016

1 in 21



Colorectal Cancer in Wisconsin

Overview

Colon and rectal cancers have many features in common and are referred to as colorectal cancer. Cancer can develop in any part of the colon or rectum. Colorectal cancer typically develops slowly over a period of several years. Before cancer develops there are usually precancerous growths called polyps.

Screening tests offer a powerful opportunity for the prevention, early detection, and successful treatment of colorectal cancers. While people cannot change their genetic makeup or family health history, most people can help reduce their risk of colorectal cancer by following screening guidelines, maintaining a healthy weight, increasing their level of physical activity, and limiting the intake of processed or red meats.

Cancer Burden

Colorectal cancer incidence rates have been decreasing for the past two decades, which has largely been attributed to the increased use of colorectal screening tests that allow for the detection and removal of colorectal polyps before they progress to cancer. Mortality rates for colorectal cancer continue to decrease, due in part to the decline in colorectal cancer incidence and to improved cancer treatments. From 2009-2013, an annual average of 2,570 Wisconsin residents were diagnosed with colorectal cancer. The incidence rate for both sexes combined was 39.1 per 100,000 population. Males had a higher incidence rate than females, 44.6 compared with 34.3, per 100,000, respectively.

Colorectal cancer is the second leading cause of cancerrelated deaths in Wisconsin for males and females combined. From 2009-2013, an annual average of 950 residents died of the disease. The colorectal cancer mortality rate for that period was 14.2 per 100,000, with a rate of 16.8 per 100,000 for males and 12.1 per 100,000 for females.

The overall colorectal cancer incidence rate dropped from 60.3 in 1995 to 36.4 in 2013. The colorectal cancer mortality rate dropped from 22.3 per 100,000 in 1995 to 14.0 per 100,000 in 2013. Figure 1 shows both declining trends by sex for years 1995-2013.

The burden of colorectal cancer incidence and mortality varies considerably by race and ethnicity as shown in Figure 2. African Americans and American Indians/ Alaska Natives have the highest incidence and mortality rates of all racial/ethnic groups.



Rates are per 100,000 and age-adjusted to the 2000 US standard population.

Source: Wisconsin Cancer Reporting System, Office of Health Informatics, Division of Public Health, Department of Health Services and the National Center for Health Statistics.





Risk Factors

Center for Health Statistics.

Several risk factors may contribute to the development of colorectal cancer. They include:

 Age (90% of colorectal cancer cases are diagnosed in individuals ages 50 and older)

Hereditary and Medical Factors

- · Personal or family history of colorectal cancer and/or polyps
- · Inherited genetic conditions (familial adenomatous polyposis [FAP] and hereditary non-polyposis colorectal cancer [HNPCC], also known as Lynch syndrome)
- · Personal history of chronic inflammatory bowel disease (ulcerative colitis or Crohn disease)
- Type 2 diabetes

Modifiable Risk Factors

- · Lack of physical activity
- A diet that is high in red or processed meat
- Obesity
- Long-term smoking
- Alcohol consumption
- · Very low intake of fruits and vegetables

Risk Reduction

Screening tests that detect and remove adenomatous polyps are the most reliable method of preventing colorectal cancer.

Modifiable factors for reducing the risk of the disease include healthy eating, being physically active, maintaining suggested body weight, and avoiding smoking.

Screening/Early Detection

Early stage colorectal cancer does not typically have symptoms, so screening is usually necessary to detect this cancer at its earliest stage.

Figure 3 represents the trend in colorectal cancer screening rates in Wisconsin between 1997 and 2012.

The American Cancer Society recommends screening beginning at age 50 for women and men who are at average risk for developing colorectal cancer. Screening can result in the detection and removal of colorectal polyps before they become cancerous. Screening can also find the disease early, when treatment can be most effective.

Individuals at increased risk of colorectal cancer should begin screening before age 50 and should discuss their screening options with their health care provider.

Stage at Diagnosis

Five-year relative survival from colorectal cancer is more than 89% when the cancer is diagnosed at the early localized stage before it has extended beyond the intestinal wall. During 2009-2013, about 40% of invasive colorectal cancers were diagnosed at an early localized stage in Wisconsin. Survival is around 72% when the disease is diagnosed at the regional stage; 35% were diagnosed at the regional stage during that five-year period. Survival drops to 14% when diagnosis occurs at a later distant stage of disease; 20% were diagnosed at that distant stage.



Source: Wisconsin Behavior Risk Factor Surveillance System, 1997-2012, Office of Health Informatics, Division of Public Health, Department of Health Services, 2016. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online].

URL: http://www.cdc.gov/brfss/brfssprevalence/.

American Cancer Society Screening Recommendations for Colorectal Cancer

Beginning at age 50, men and women at average risk should follow one of the examination schedules below:

Tests that find polyps and cancer:	When to get screening test:
Colonoscopy, or	Every 10 years
Flexible sigmoidoscopy (FSIG), or	Every 5 years alone, or consideration can be given to combining FSIG performed every 5 years with a highly sensitive gFOBT* or FIT* performed annually. Colonoscopy should be done if test results are positive.
Double-contrast barium enema (DCBE), or	Every 5 years. Colonoscopy should be done if test results are positive.
CT colonography (virtual colonoscopy)	Every 5 years. Colonoscopy should be done if test results are positive.
Tests that mainly find cancer:	
Guaiac-based fecal occult blood test (gFOBT)* with at least 50% sensitivity, or	Annually. Colonoscopy should be done if test results are positive.
Fecal immunochemical test (FIT)* with at least 50% sensitivity, or	Annually. Colonoscopy should be done if test results are positive.
Stool DNA test (sDNA)	Every 3 years. Colonoscopy should be done if test results are positive.

*For gFOBT or FIT used as a screening test, the take-home multiple sample method should be used. A gFOBT or FIT done during a digital rectal exam in the doctor's office is not adequate for screening and is not recommended, nor are "throw in the toilet bowl" tests. In comparison with guaiac-based tests for the detection of occult blood, immunochemical tests are more patient-friendly, and are likely to be equal or better in sensitivity and specificity.





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