

Colorectal Cancer

What are the colon and rectum?

The colon is part of the digestive system where waste material is stored. The rectum is the end of the colon next to the anus. Together, they form the large intestine or large bowel.

What is colorectal cancer?

Tumors of the colon and rectum are growths arising from the inner wall of the large intestine. Benign tumors of the large intestines are called polyps and malignant tumors of the large intestines are called cancers. Cancer of the colon and rectum can invade adjacent tissues and organs.

What are the risk factors?

Risk factors include a personal or family history of colorectal cancer or polyps, age, smoking, physical inactivity, high-fat and/or low fiber diet, alcohol consumption, and low intake of fruits and vegetables.

What are the signs and symptoms?

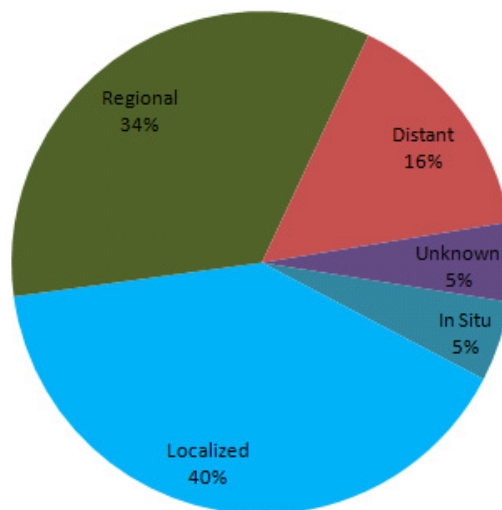
A change in bowel habits that lasts for more than a few days, rectal bleeding, diarrhea, constipation, pain or abdominal discomfort, unexplained weight loss, vomiting, or blood in the stool are the signs and symptoms for colorectal cancer.

How is it diagnosed?

Diagnosis of colorectal cancer may be made through a fecal occult blood test, flexible sigmoidoscopy, colon exam with a contrast barium enema, colonoscopy, digital rectal examination and/or biopsy.

Diagnosis

In the 2003-2007 time period, 5 percent of the colorectal cancers were diagnosed at the in situ stage, 40 percent were diagnosed at the localized stage, 34 percent at regional stage, 16 percent at distant stage and 5 percent were of unknown stage of progression.



What are the common treatments?

Treatment options include: surgery, radiation therapy, chemotherapy and clinical trials.

What are the survival outcomes?

Using 1999-2007 SEER data, the national 5-year relative survival rate estimate is 64 percent. When diagnosed at localized stage, the 5-year relative survival rate is 90 percent. For regional and distant stages, the 5-year relative survival rates are 69 percent and 11 percent respectively. The survival rate when the stage of diagnosis could not be determined was estimated at 34 percent.

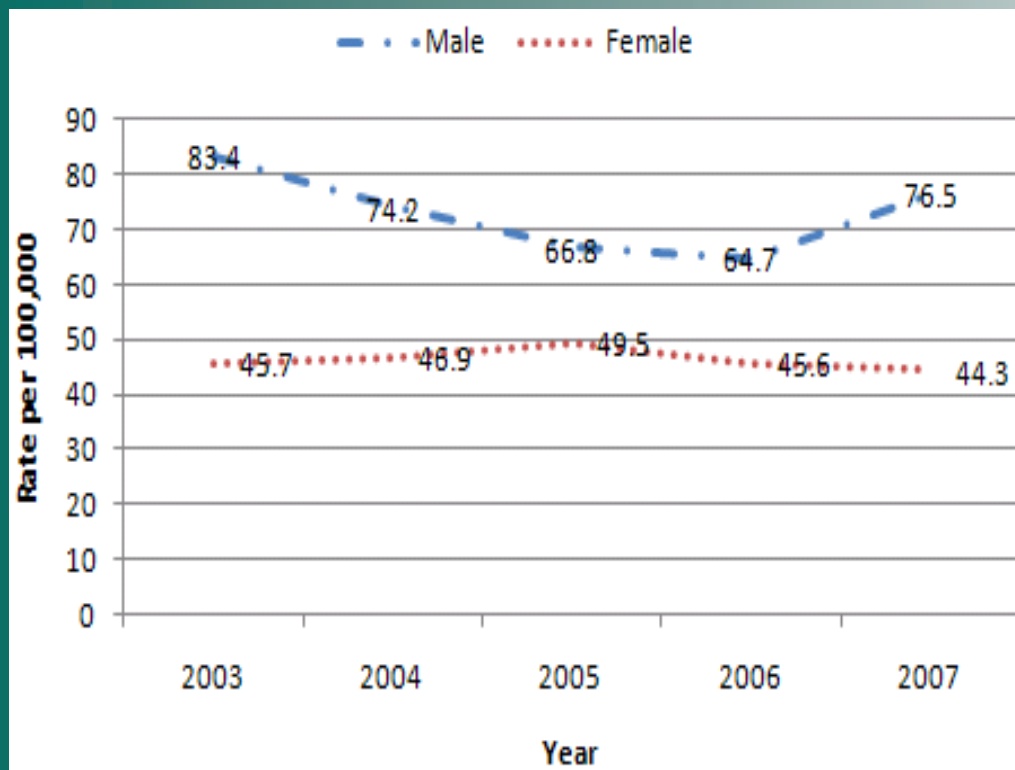
What can you tell me about this cancer in North Dakota?

Summary Statistics 2003-2007	ND	WNC	US
INCIDENCE			
Annual age-adjusted incidence rates*	54.7	51.3	48.9
Average number of new cases	405	10,961	149,049
Percent of all new cancers	12.09	10.95	10.34
MORTALITY			
Annual age-adjusted mortality rates*	17.6	17.8	17.6
Average number of deaths each year	139	3,904	53,757
Percent of all cancer deaths	10.61	9.87	9.62
* Rates per 100,000 and standardized to U.S. year 2000 population.	WNC and US data source: http://apps.nccd.cdc.gov/uscs		

☞ The West North Central (WNC) regions include the following states: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota.

INCIDENCE:

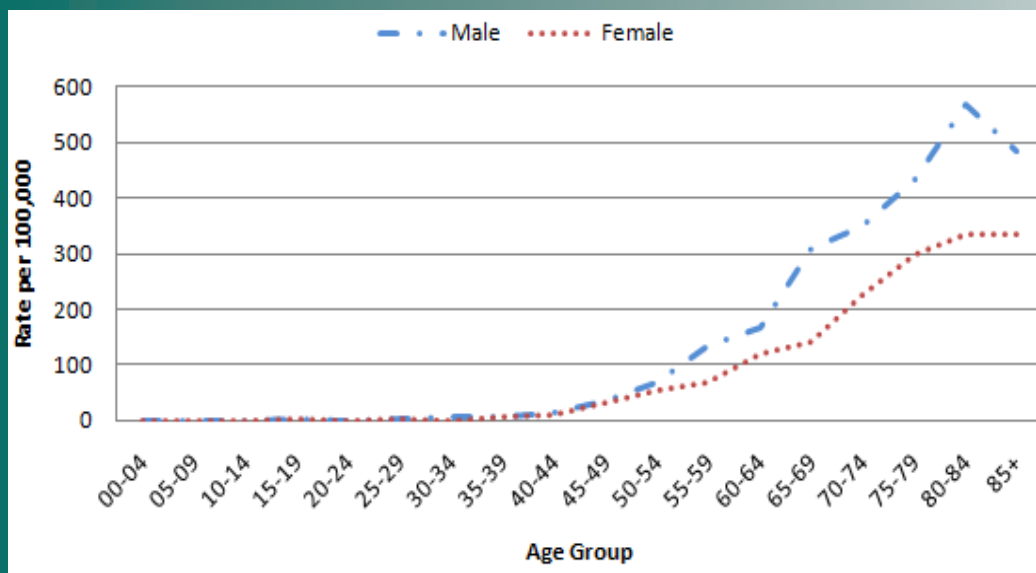
Incidence Rates by Gender, North Dakota 2003-2007



☞ An average of 405 new cases of colorectal cancer are diagnosed each year in North Dakota, which is about 12 percent of all cancers diagnosed in the state.

☞ The average annual incidence rate for men is 73.1 per 100,000 men, and the average annual incidence rate for women is 46.4 per 100,000 women.

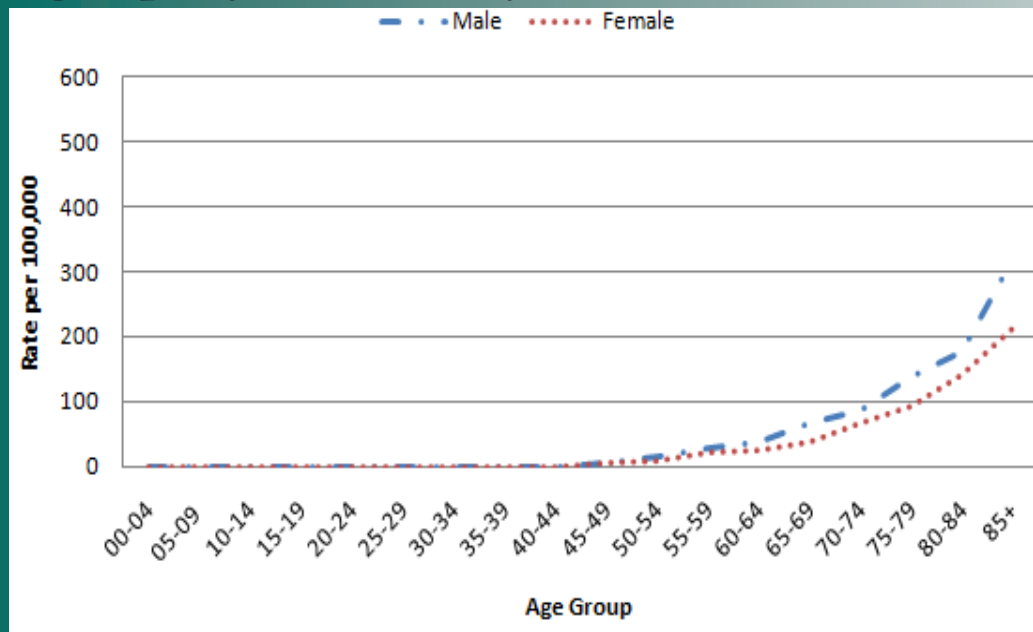
Age-Specific Incidence Rates, North Dakota 2003-2007



☞ The annual incidence rate increases with age.

☞ As screening of colorectal cancer increases, we can expect to see an overall increase in the incidence of colorectal cancers overall numbers, and increase in earlier stage of diagnosis cancers, which has a much higher survival rate.

Age-Specific Mortality Rates, North Dakota 2003-2007



☞ An average of 139 deaths due to colorectal cancer occur each year in North Dakota, which is about 10.6 percent of all cancer deaths in the state.

☞ The average annual death rate for men is 21.3 per 100,000 men, and for women it is 14.8 per 100,000 women.

☞ Death rate increases with age.

Glossary of Cancer Terminology

- ☞ **Age-adjusted rate:** Since cancer rates tend to vary with age, and since populations vary with respect to their age-distribution, incidence and mortality rates are age-adjusted to allow comparison of rates between different populations (i.e. county or regional boundaries).
- ☞ **Age-specific rate:** The number of new cases diagnosed per 100,000 individuals over a specified time period for a specified age-group.
- ☞ **Incidence:** The number of new cases of a given type of cancer diagnosed during the year.
- ☞ **Mortality:** The number of deaths attributed to the particular type of cancer that occurred during the year. Includes deaths of patients diagnosed in earlier years, individuals newly diagnosed during the year, and patients for whom a diagnosis of cancer is made only after death.
- ☞ **Risk factor:** Anything that increases a person's chance of getting a disease.
- ☞ **Stage at diagnosis:** How far a cancer has spread from its site of origin when it is diagnosed. There are several different systems for the staging of cancers. This report uses the general summary stage system. The stages, in order of increasing spread, are in situ, localized, regional and distant. Cancers diagnosed at the localized, regional or distant stage are referred to as invasive.



For more information, visit
www.ndhealth.gov/cancerregistry/
 or call 701.328.2306

