The “Colorectal Cancer in Wyoming” data brief is published by the
Public Health Division

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Colorectal cancer is the third most diagnosed cancer in Wyoming (230 cases in 2012) behind prostate and breast cancer. However, it is the second leading cause of cancer deaths (95 deaths in 2012) topped only by lung cancer. The good news is that there are reliable and effective screenings for colorectal cancer including colonoscopy, sigmoidoscopy, and the fecal occult blood test (FOBT). Essentially these tests look for polyps or markers related to polyp formation in the colon. If a polyp is found it is removed and, in many cases, the risk for developing colorectal cancer is as well.

Research has identified several risk factors that increase a person's chances of developing colorectal cancer. Possessing one or more of these factors does not mean a person is sure to develop colorectal cancer, but that he/she is at a higher risk to develop it than otherwise.

- Age: the older a person is, the higher the risk for colorectal cancer.
- Race: African-Americans have a higher risk for colorectal cancer than people of other races.
- Family/Personal History: a personal or family history of colon cancer or such genetic traits as familial adenomatous polyposis or Lynch syndrome (hereditary cancer syndromes) will increase the risk of developing colorectal cancer.
- Diet: The risk of colorectal cancer increases in people who eat a low-fiber, high-fat diet. Additionally, heavy alcohol use may also increase your risk.
- Lifestyle: Smoking, being sedentary (no physical activity), or being obese can also increase a person’s risk for colorectal cancer.

The signs and symptoms for colorectal cancer can be varied and sometimes can be caused by other conditions (e.g., inflammatory bowel disease). Worrisome symptoms should be discussed with a healthcare provider.

- A change in bowel habits.
- Blood (either bright red or very dark) in the stool.
- Diarrhea, constipation, or feeling that the bowel does not empty all the way.
- Stools that are narrower than usual.
- Frequent gas pains, bloating, fullness, cramps, or vomiting.
- Weight loss for no known reason.
- Feeling very tired.
As stated above, there are several screening tests available for colorectal cancer. Each type of test has its own advantages and risks. You should discuss with your physician which options are best for you.

**Digital rectal exam** : An exam of the rectum.
The doctor or nurse inserts a lubricated, gloved finger into the rectum to feel for lumps or anything else that seems unusual.

**Fecal occult blood test**  *Sometimes called FIT or Fecal Immunochemical Test*: A test to check stool (solid waste) for blood that can only be seen with a microscope.
Small samples of stool are placed on special cards and returned to the doctor or laboratory for testing.

**Barium enema** : A series of x-rays of the lower gastrointestinal tract.
A liquid that contains barium (a silver-white metallic compound) is put into the rectum. The barium coats the lower gastrointestinal tract and x-rays are taken. This procedure is also called a lower GI series.

**Sigmoidoscopy** : A procedure to look inside the rectum and sigmoid (lower) colon for polyps (small areas of bulging tissue), other abnormal areas, or cancer.
A sigmoidoscope is inserted through the rectum into the sigmoid colon. A sigmoidoscope is a thin, tube-like instrument with a light and a lens for viewing. It may also have a tool to remove polyps or tissue samples, which are checked under a microscope for signs of cancer.

**Colonoscopy** : A procedure to look inside the rectum and colon for polyps, abnormal areas, or cancer.
A colonoscope is inserted through the rectum into the colon. A colonoscope is a thin, tube-like instrument with a light and a lens for viewing. It may also have a tool to remove polyps or tissue samples, which are checked under a microscope for signs of cancer.

The Wyoming Comprehensive Cancer Control Consortium (WCCCC) supports the U.S. Preventive Services Task Force (USPTF) Screening Guidelines as follows:

- Screening for colorectal cancer using high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy beginning at age 50 years and continuing until age 75 years.
- People at higher risk of developing colorectal cancer should begin screening at a younger age, and may need to be tested more frequently.
- Those over 75 should ask their doctor if they should be screened.
The rates of colorectal cancer increase dramatically with age for both men and women with the highest rates coming between 75 and 84 years of age (see graph below). Relatively few cases of colorectal cancer are diagnosed in persons younger than age of 50; however, there are a few cases diagnosed each year in men and women between the ages of 25 and 49. In 2012, there were a total of 230 cases of colorectal cancer diagnosed in Wyoming and a total of 95 deaths due to the disease.

Just over 40% of the colorectal cancer cases in Wyoming in 2012 were diagnosed at the local or *in situ* stage (a Latin phrase, meaning "on site" or "in position"). These are the earliest stages of cancer and generally have the best prognosis for cure and recovery. Around 56% were diagnosed at the regional or distant stage which is considered a “late” stage diagnosis and means that the cancer has started to spread (metastasized) to other tissues or organs in the body.

The incidence rate of colorectal cancer in Wyoming over time is very similar to the United States incidence rate (see graph on next page). As shown, both rates have steadily decreased over time, due to better treatment and screening processes, along with people taking control of their health and cancer risk by getting involved, getting informed, and making healthier lifestyle choices.
Wyoming Colorectal Cancer Screening Program

The Wyoming Cancer Control Act, passed in 2007, mandated a comprehensive cancer control plan for Wyoming. As part of this act, a statewide colorectal cancer screening program was established and the Wyoming Colorectal Cancer Screening Program (WCCSP) was born. This program eliminates the cost barrier to screening by providing free colonoscopies to eligible Wyoming residents. Eligibility requirements include:

- Having been a Wyoming resident for at least one year immediately prior to screening
- Being at least 50 years old and not eligible for Medicare
- Having an income at or below 250% of the federal poverty level

One colonoscopy is allowed every 10 years; however as of July 1, 2011, re-screens at intervals of less than 10 years may be approved on a case-by-case basis as medically indicated and based on client risks.

As of September 30, 2014, there were 4,449 Wyoming residents who had applied for a free colonoscopy.

- 76.4% (3,398) qualified for the screening. Of the qualified applicants:
  - 65% are female
  - 24% have a family history of colorectal cancer (increased risk)
  - 6.3% are Hispanic
  - 4.9% are Native American

Of those who applied and qualified for the screening, 2,958 scheduled and were screened.

- 46% had polyps removed
- 26% had adenomatous polyps (pre-cancerous)
- **60 instances of colorectal cancer were detected**
- 10 non-colorectal cancers were also detected (prostate, liver, lung)

During the same timeframe, 489 people applied for a re-screening colonoscopy at an interval less than 10 years. There were 308 applicants who were approved and rescreened based on risk factors and evidence-based guidelines. Of those who were rescreened:

- 59% had polyps removed
- 34% had adenomatous polyps (pre-cancerous)
- **5 colorectal cancers were detected**
Because screening resulted in detection of these cancers at early stages when treatment is less costly there is a projected cost avoidance of $50,000 per cancer detected. This means the current projected cost avoidance for Wyoming residents of $3,000,000.

WCCSP has provided colon screenings (colonoscopies) to eligible Wyoming residents from across the state and has made more than 20,700 patient navigation calls to assist patients through the screening process. During its seven years, only 12 Wyoming residents who applied, qualified, and scheduled a screening through the program did not appear for the screening; an amazingly low 0.4% no-show rate.

The program sent out a satisfaction survey to applicants of the program of which 66% responded. Of the 66% who responded, there was an overall 98% satisfaction rating.

WCCSP contracts with 363 Wyoming providers across the state, allowing patient access to providers of their choosing. Providers include gastroenterologists, surgeons, internal medicine physicians, family practice physicians, anesthesiologists, and pathologists. All Wyoming hospitals are contracted with the WCCSP and providers are available in all Wyoming counties with the exception of Crook, Niobrara, Sublette, and Weston.
Nationally the colorectal cancer screening goal is to achieve screening rates of 80% by 2018. Wyoming is well below 80% (at 56.2% in 2012). Due to the rural nature of the state and a lack of resources for current screening options in many communities, we need to implement new strategies to increase screening rates. One such strategy is to include stool testing in WCCSP’s arsenal of screening options. The program is in the process of implementing a stool test project to provide this screening option as a less expensive, non-invasive first-line screening. Approximately 5% of stool tests are positive and require a follow-up colonoscopy. Not all stool tests are created equal, and it is important to follow evidence-based guidelines and provide a high quality test. Studies have shown that when provided annually to average risk patients with appropriate colonoscopy follow up, high sensitivity guaiac fecal occult blood tests (HSgFOBT) or fecal immunochemical tests (FIT) can provide the same number of life-years gained as colonoscopy-only strategies.


Challenges/Barriers to Colorectal Cancer Screening

The Affordable Care Act (ACA) sought to address low rates in the use of recommended preventive services—including colonoscopy—by partially eliminating costs to the patient for Medicare recipients. However, recipients continue to be exposed to high costs: If polyps are found and removed, if those polyps are sent for biopsy; or if the colonoscopy is administered following a positive stool test, it is considered to be diagnostic rather than a screening and is billed at a different rate to the patient. This cost to the patient can be a barrier to screening.

Colonoscopy is considered the gold standard for colorectal cancer screening; however it is very costly and some people are not willing to undergo screenings due to the invasiveness of the test, the required preparation, or the necessary time off work. Additionally there are communities in Wyoming without the necessary equipment or resources to offer colonoscopies, requiring patients to travel in order to obtain a screening.

Under current Medicare rules, a colonoscopy performed after a positive stool test is considered a separate diagnostic procedure, rather than an integral and necessary part of the comprehensive colorectal cancer screening process because the patient is considered to be “benefiting” from a diagnostic procedure rather than a screening procedure. Medicare recipients who receive a colonoscopy following a positive stool test are responsible for both the Medicare Part B deductible and the 20 percent coinsurance cost associated with the colonoscopy, regardless of the results of the follow-up colonoscopy. Subsequently some Wyoming physicians have expressed reluctance to promote stool testing in their patients.
In contrast, federal agency interpretation of ACA provisions related to private sector insurance coverage clarified that polyp removal and tissue biopsy are an “integral part of a colonoscopy” and therefore not subject to patient cost sharing in the private insurance market. This administrative ruling has created a disparity in patient cost associated with follow-up colonoscopy (colonoscopy following stool testing, or screening colonoscopy with polyp removal and tissue biopsy) between Medicare and private sector insurance companies. This disparity creates confusion, uncertainty, and frustration for healthcare consumers and providers alike. Wyoming colorectal cancer screening advocates and programs must work diligently to provide effective options and continuing education in order to successfully increase screening rates while promoting low cost to patients wishing to be screened.

It is important to understand that while colorectal cancer has a relatively low mortality rate in Wyoming compared to lung cancer or heart disease, it is still a deadly disease for both men and women making screening and early detection critical to reducing the cancer burden in Wyoming.

**Program Information**

**Wyoming Comprehensive Cancer Control Consortium**

The Wyoming Comprehensive Cancer Control Consortium, through the Wyoming Cancer Control Plan 2011-2015, addresses cancer prevention goals focused on reducing the cancer burden in Wyoming. The Consortium’s website centralizes a multitude of state and national resources and links to support this goal. Please visit [www.fightcancerwy.com](http://www.fightcancerwy.com) for more information.

**Wyoming Colorectal Cancer Screening Program**

The Wyoming Colorectal Cancer Screening Program was established in 2007 as part of the Wyoming Cancer Control Act. This program’s goal is to eliminate cost barriers to screening by providing free screenings to eligible Wyoming residents. [http://www.health.wyo.gov/phsd/ccp/index.html](http://www.health.wyo.gov/phsd/ccp/index.html)

**Wyoming Cancer Surveillance Program**

The Wyoming Cancer Surveillance Program (WCSP) is a statewide population-based cancer registry. The WCSP’s mission is to maintain a nationally comparable population-based cancer incidence, follow-up, treatment and mortality monitoring system that collects, analyzes and disseminates information on all new cancer cases in Wyoming. The program’s ultimate goal is to provide high quality cancer data that will contribute to the improvement of diagnoses, treatment, and survival of all cancer patients. [http://www.health.wyo.gov/PHSD/wcsp/index.html](http://www.health.wyo.gov/PHSD/wcsp/index.html)