



**COLORECTAL CANCER** is the third most commonly diagnosed cancer and cause of cancer-related death among both males and females in Indiana. In 2011, The American Cancer Society estimated that 3,290 Hoosiers were diagnosed with colorectal cancer, and 1,090 died because of the disease. The chances of developing colorectal cancer at some point in one's life are 1 in 19 for females and 1 in 20 for males. In Indiana, African Americans have higher colorectal cancer incidence and mortality than whites, and males have higher rates than females.

Figure 1. Colorectal Cancer Incidence Rates by Sex and Race\* —Indiana, 2004–2008

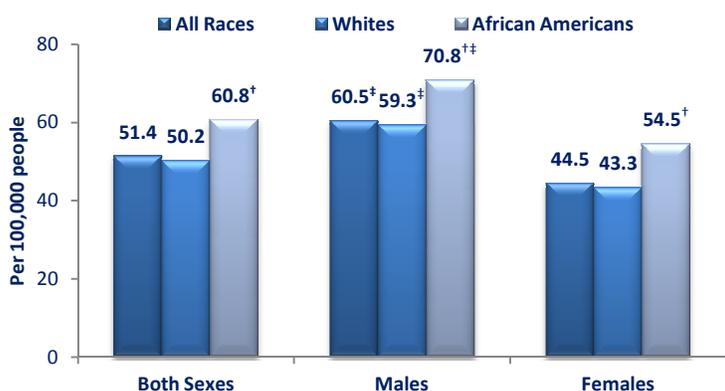
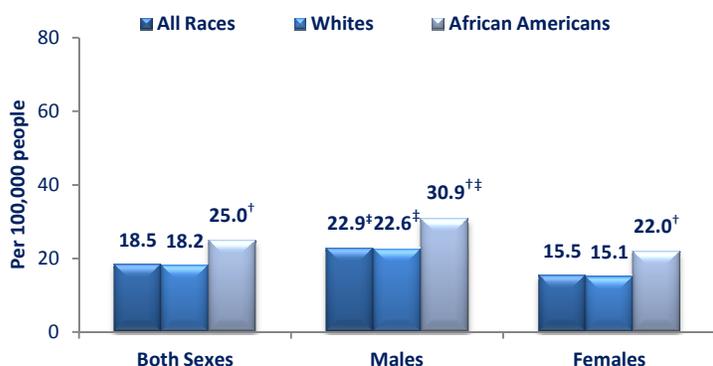


Figure 2. Colorectal Cancer Mortality Rates by Sex and Race\* — Indiana, 2004-2008



\*Age-adjusted

†Rate among African Americans is significantly higher ( $P < .05$ ) than rate among whites

#Rate among males is significantly higher ( $P < .05$ ) than rate among females

Source: Indiana State Cancer Registry

## Additional Risk Factors

Sex and age are the two greatest risk factors. During 2004-2008, colorectal cancer incidence rates were 36% higher among Indiana males than females. Additionally, during 2008, 92% of cases were diagnosed among Indiana residents ages 50 and older. Additional risk factors include:

- Personal or family history. Risk is increased by having certain inherited genetic conditions (e.g. Lynch syndrome, also known as hereditary nonpolyposis colorectal cancer, and familial adenomatous polyposis), a personal or family history of colorectal cancer or polyps, or a personal history of chronic inflammatory bowel disease.
- Race. In Indiana, during 2004–2008, African Americans, compared to whites, had a 21% higher incidence rate (60.8 versus 50.2 cases per 100,000 people) and a 37% higher mortality rate (25.0 versus 18.2 deaths per 100,000 people).
- Diabetes. Studies have also found that individuals with type 2 diabetes are at higher risk.
- Modifiable risk factors. Obesity, physical inactivity, a diet high in red or processed meat, alcohol consumption, long-term smoking, and possibly inadequate intake of fruits and vegetables increases a person's risk.

## Common Signs and Symptoms of Colorectal Cancer

- Early Stage: No Symptoms
- Late Stage:
  - Rectal bleeding
  - Blood in stool
  - Change in bowel habits
  - Cramping pain in lower abdomen
  - Weakness
  - Extreme fatigue



## Can Colorectal Cancer Be Detected Early?

- ❑ Colorectal cancer incidence rates have been decreasing for most of the past two decades in the United States. The decline accelerated from 1998 to 2007, which has largely been attributed to increases in the use of colorectal cancer screening tests that allow the detection and removal of symptomless colorectal polyps before they progress to cancer. A similar trend has been seen in Indiana.
- ❑ Advanced disease might cause rectal bleeding, blood in the stool, a change in bowel habits, and cramping pain in the lower abdomen. In some cases, blood loss from the cancer leads to anemia (low red blood cells), causing symptoms such as weakness and excessive fatigue.
- ❑ Beginning at age 50, both men and women with average risk for colorectal cancer should follow one of these testing schedules:
  - **Tests that find polyps and cancer**
    - Colonoscopy every ten years\*; or a
    - Flexible sigmoidoscopy, double-contrast barium enema, or CT colonography every five years\*.
  - **Tests that primarily find cancer**
    - Yearly fecal occult blood test or fecal immunochemical test (FIT) or a stool DNA test (undetermined interval)\*.
  - Individuals who have an increased risk of developing the disease should talk to their health care provider about whether earlier or more intensive screening is needed.
- ❑ In recent years, an increase in colorectal cancer incidence among younger adults has been identified in the United States. Therefore, timely evaluation of symptoms consistent with colorectal cancer in adults under age 50 is especially important.

*\*If any of these tests are positive, a colonoscopy should be done.*

## TAKE ACTION: Steps you can take to help prevent colorectal cancer

- ❑ Get screened regularly
- ❑ Maintain a healthy weight throughout life
- ❑ Adopt a physically active lifestyle
- ❑ Limit consumption of alcohol
- ❑ Consume a healthy diet that:
  - Emphasizes plant sources
  - Supports a healthy weight
  - Includes five or more servings of a variety of vegetables and fruit each day
  - Includes whole grains in preference to processed grains
  - Has minimal processed and red meats

## EARLY DETECTION: It's Critical!

- ❑ When detected at the local stage, the five-year survival rate is 90%. In Indiana, during 2004-2008, 39% of colorectal cancers were identified in the local stage.
- ❑ If the cancer has spread regionally, the five-year survival rate drops to 70%.
- ❑ If the cancer has spread distantly, the five-year survival rate is 12%.

## GET INVOLVED: Join the Indiana Cancer Consortium (ICC)

- ❑ The ICC is a statewide network of over 100 agencies including the Indiana State Department of Health.
- ❑ ICC seeks to reduce the cancer burden in Indiana through the development, implementation and evaluation of a comprehensive plan that addresses cancer across the continuum from prevention through palliation.
- ❑ Become a member at [www.indianacancer.org](http://www.indianacancer.org).

## Community resources

- ❑ For a colorectal cancer toolkit with resources and information, visit <http://indianacancer.org/colorectal-cancer-toolkit/>.
- ❑ To learn more about the colorectal cancer burden in Indiana, refer to the [Indiana Cancer Facts and Figures 2012](http://www.indianacancer.org) report at [www.indianacancer.org](http://www.indianacancer.org).
- ❑ For information, statistics, and to view public service announcements, visit the [Centers for Disease Control and Prevention](http://www.cdc.gov/cancer/colorectal/index.htm) website at [www.cdc.gov/cancer/colorectal/index.htm](http://www.cdc.gov/cancer/colorectal/index.htm).
- ❑ To learn more about how to support healthy eating and physical activity throughout Indiana visit the Indiana Healthy Weight Initiative at [www.inhealthyweight.org](http://www.inhealthyweight.org).

## References

1. 1. Indiana Cancer Consortium, Indiana State Department of Health and the American Cancer Society Great Lakes Division; *Indiana Cancer Facts and Figures 2012*. March, 2012. Available at <http://indianacancer.org/resources-for-indiana-cancer-consortium-members/indianacancerfactsandfigures2012/>. Updated cancer statistics are available online from the Indiana State Cancer Registry Statistics Report Generator at <http://www.in.gov/isdh/24360.htm>.