COLORECTAL CANCER is the third most commonly diagnosed cancer and cause of cancer-related death among both males and females in Indiana. In 2016, the American Cancer Society estimates that 2,980 Hoosiers will be diagnosed with colorectal cancer, and 1,070 will die because of the disease. During 2009-2013, Indiana’s colorectal cancer incidence rate was 44 per 100,000 people, and the mortality rate was 16.1 per 100,000 people. In Indiana, African-Americans have higher colorectal cancer incidence and mortality than whites, and men have higher rates than women.

Figure 1. Colorectal Cancer Incidence Rates by Sex and Race—Indiana, 2009–2013

![Incidence Rates Chart]

<table>
<thead>
<tr>
<th>Sex and Race</th>
<th>Both Sexes</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Races:</td>
<td>44.0</td>
<td>49.5</td>
<td>39.4</td>
</tr>
<tr>
<td>Whites:</td>
<td>43.5*</td>
<td>49.1†</td>
<td>38.9</td>
</tr>
<tr>
<td>African-Americans:</td>
<td>46.6†</td>
<td>55.2‡</td>
<td>45.5†</td>
</tr>
</tbody>
</table>

*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

SEX AND AGE are the two greatest risk factors. During 2009-2013, colorectal cancer incidence rates were 26 percent higher among Indiana men than women [Figure 1]. In addition, 91 percent of colorectal cases diagnosed in Indiana were among residents age 50 and older during this same time period.

Figure 2. Colorectal Cancer Mortality Rates by Sex and Race—Indiana, 2009–2013

![Mortality Rates Chart]

<table>
<thead>
<tr>
<th>Sex and Race</th>
<th>Both Sexes</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Races:</td>
<td>16.1</td>
<td>19.6†</td>
<td>13.3</td>
</tr>
<tr>
<td>Whites:</td>
<td>15.6</td>
<td>19.1†</td>
<td>12.8</td>
</tr>
<tr>
<td>African-Americans:</td>
<td>21.8†</td>
<td>26.3‡</td>
<td>18.7†</td>
</tr>
</tbody>
</table>

*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

Who Gets Colorectal Cancer?
Sex and age are the two greatest risk factors for developing colorectal cancer. Additional risk factors include:

- **Race.** In Indiana, during 2009–2013, African-Americans had a 14 percent higher incidence rate [Figure 1] and a 39 percent higher mortality rate [Figure 2] when compared with whites.
- **Smoking.** According to The Health Consequences of Smoking – 50 Years of Progress, smoking is a known cause of colorectal cancer. In addition, smoking increases the failure rate of treatment for all cancers.
- **Diabetes.** Studies have found that individuals with Type 2 diabetes are at higher risk. Although diabetes and colorectal cancer share similar risk factors, this increased risk remains even after those are taken into consideration. Studies also suggest that the relationship may be stronger in men than in women.
- **Personal or family history.** Although a majority of colorectal cancer cases occur when there is no family history, risk may be increased by having a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, or certain inherited genetic conditions – for example, Lynch syndrome (also known as hereditary nonpolyposis colorectal cancer) and familial adenomatous polyposis.
- **Modifiable risk factors.** Obesity, physical inactivity, a diet high in red or processed meat, and alcohol consumption may increase colorectal cancer 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

For additional information on the impact of cancer in Indiana, please visit: www.chronicdisease.isdh.in.gov
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.

- When detected at the local stage, the five-year survival rate is 90 percent. In Indiana, during 2009-2013, 43.3 percent of colorectal cancers were identified in either the in situ or the local stage. If the cancer has spread regionally, the five-year survival rate drops to 70 percent. If the cancer has spread distantly, the five-year survival rate drops to only 13 percent.

- According to the Indiana Behavioral Risk Factor Surveillance System, in Indiana, during 2014, only 65 percent of adults age 50 or older reported ever having a colonoscopy or sigmoidoscopy. Indiana ranks 43rd in the nation for colorectal cancer screening.

- The U.S. Preventive Services Task Force recommends colorectal cancer screening for adults aged 50–75 using high-sensitivity fecal occult blood testing (FOBT) once a year, flexible sigmoidoscopy every five years (When done in combination with a high-sensitivity FOBT, the FOBT should be done every three years, ), or colonoscopy every 10 years. Colonoscopy also is used as a follow-up test if anything unusual is found during one of the other screening tests. Talk to your doctor about which test or tests are right for you. Most health insurance plans cover lifesaving preventive tests.

- In recent years, an increase in colorectal cancer incidence among younger adults has been identified in the United States. Therefore, timely evaluation of symptoms in adults under age 50 is especially important.

TAKE ACTION: Help prevent colorectal cancer

- Get screened regularly
- Avoid tobacco products
- 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 at least 2 ½ cups of a variety of vegetables and fruit each day
  - Includes whole grains in preference to processed grains
  - Has minimal processed and red meats
- Support initiatives, such as the National Colorectal Cancer Roundtable’s (NCCRT’s) 80% by 2018 campaign, which aim to increase colorectal cancer screening. Visit the NCCRT website to take the 80% by 2018 pledge today!
- Take advantage of free public service announcement materials, such as the Centers for Disease Control and Prevention’s Screen for Life campaign, to help educate your community about the benefits of colorectal cancer screening.

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.
- The 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.

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 2015 report at www.indianacancer.org.
- Visit www.QuitNowIndiana.com or call 1-800-QUITNOW for help quitting smoking.
- To learn more about how to support healthy eating and physical activity throughout Indiana visit the Indiana Healthy Weight Initiative at www.inhealthyweight.org.

Reference: