



### Key Facts

- American Indian Montanans have significantly higher rates of late stage cancer than white Montanans.
- Montanans living in the north east and south east regions of the state have significantly higher rates of late stage colorectal cancer than the incidence statewide.
- Colorectal cancer screening is lower among Montanans with a higher rate of late stage disease.
- Increasing colorectal cancer screening among American Indian adults, men, and people living in eastern Montana is an important way to reduce late stage colorectal cancer.

## Incidence of Late Stage Female Breast, Cervical, and Colorectal Cancer in Montana

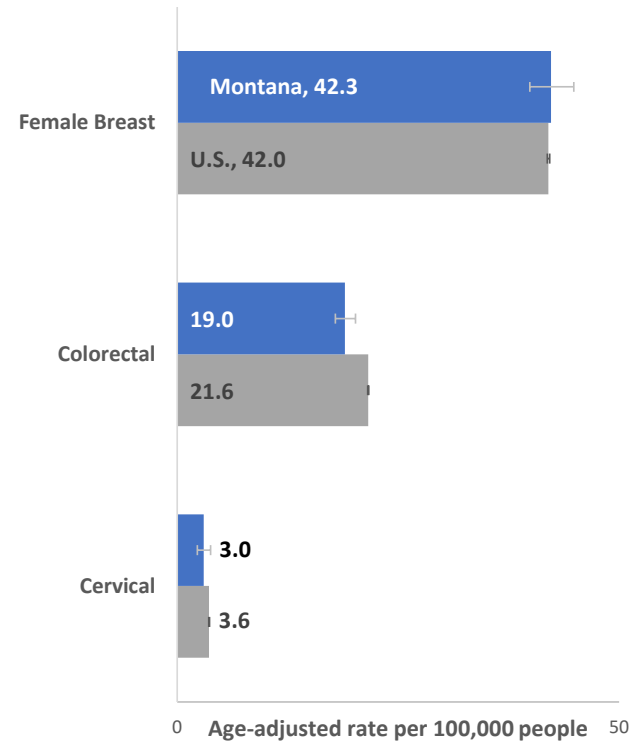
Late stage cancer includes cancers that have spread to the tissue or lymph nodes outside of the primary site of the tumor at the time of diagnosis. Cancer screening programs are designed to find cancers early and thus decrease the incidence of late stage disease. Tracking the incidence of late-stage breast, cervical, and colorectal cancer can identify communities that could benefit from increased screening for these cancers.

### Late Stage Cancer in Montana

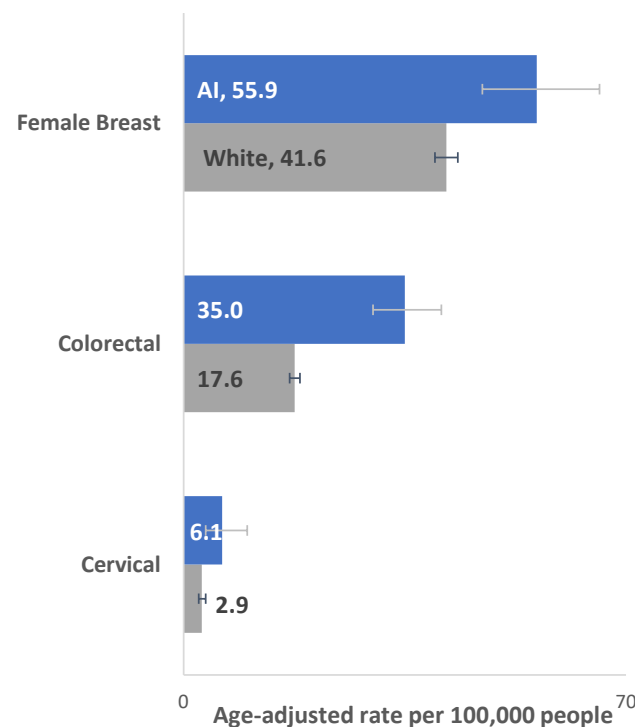
From 2014 to 2018 a total of 1,264 women were diagnosed with late-stage breast cancer, 1,125 people were diagnosed with late stage colorectal cancer, and 81 women were diagnosed with late stage cervical cancer in Montana. The rate of late stage breast and cervical cancer was about the same in Montana as in the U.S. overall but the rate of late stage colorectal cancer was significantly lower in Montana (Figure 1).

Late stage breast, cervical, and colorectal cancer occurred among American Indian (AI) Montanans at a significantly higher rate than among

**Figure 1.** Incidence (new cases) of Late Stage cancer in Montana and the U.S., 2014–2018

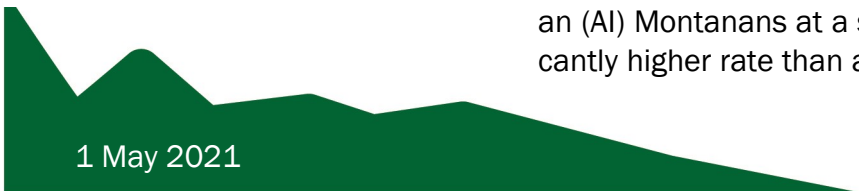


**Figure 2.** Incidence of Late Stage Cancer in Montana by Race, 2009–2018



### Montana Cancer Control Programs

1400 E Broadway  
 Helena, Montana 59601  
 (406) 444-2732  
<http://www.dphhs.mt.gov/publichealth/cancer>





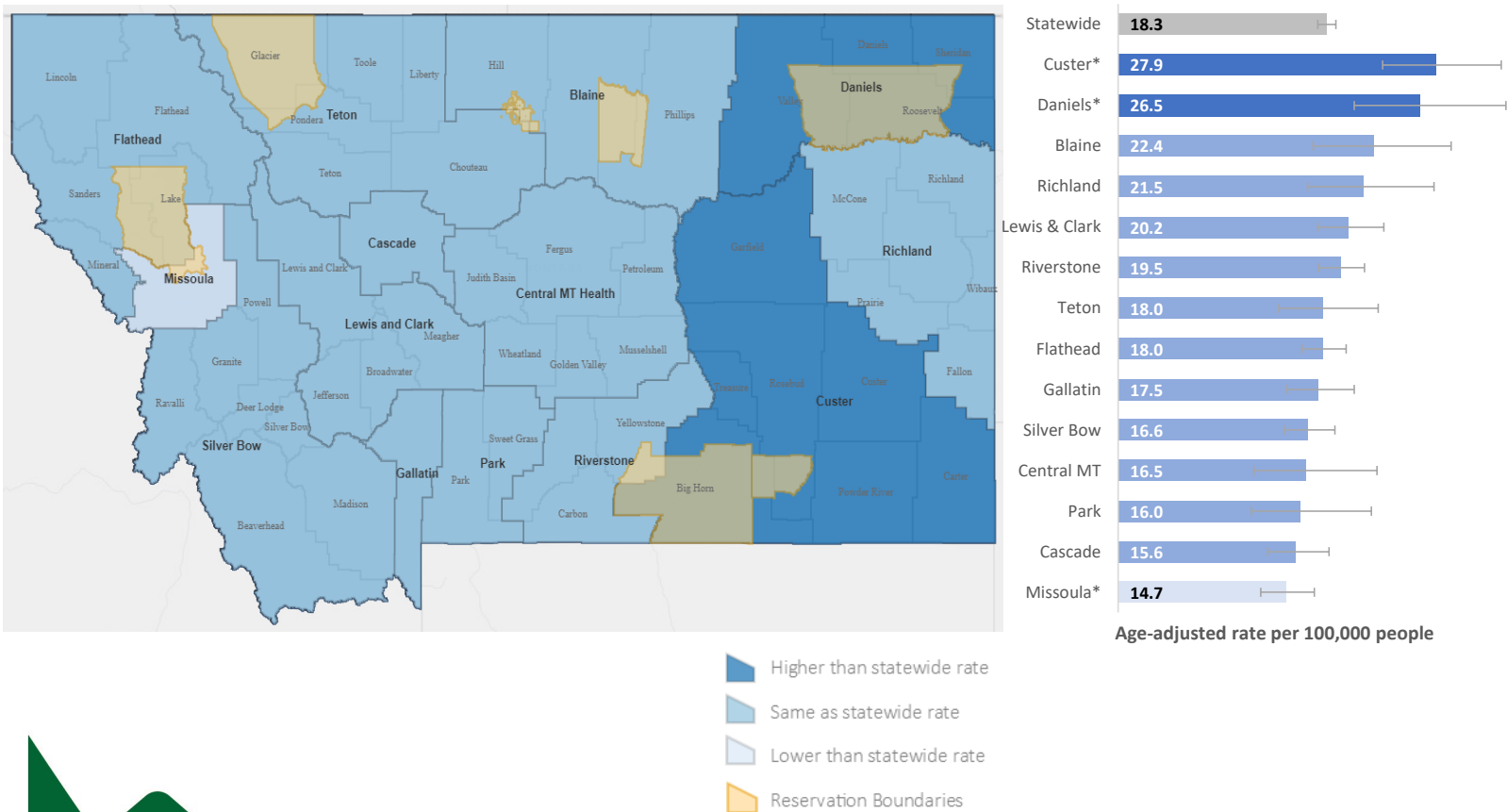
white Montanans from 2009 to 2018 (Figure 2). Late stage breast cancer incidence was 34% higher among AI women in Montana compared to white women even though there is no significant difference in the incidence of all stages of breast cancer combined (143 per 100,000 AI women vs. 130 per 100,000 white women). Late stage cervical and colorectal cancer incidence among AI Montanans were each about two times that among white Montanans (Figure 2).

Late stage colorectal cancer incidence was significantly higher in the Custer region (including Garfield, Rosebud, Treasure, Big Horn, Powder River, Carter, and Custer counties) and the Daniels region (including Valley, Daniels, Roosevelt, and Sheridan counties) than in Montana overall (Figure 3). Both of these regions are frontier areas on the east side of the state without any

major hospitals and may not have sufficient access to screening. Both regions also contain American Indian reservations and may have higher rates as a reflection of the higher rates seen among American Indian people statewide. However, reservations are also in Blaine, Teton, and Flathead regions where rates are not significantly different than the rate statewide. Late stage colorectal cancer incidence was significantly lower in Missoula county than statewide (Figure 3). There were no significant differences in the rate of late stage female breast cancer by region (data not shown). There were too few cases of late stage cervical cancer to calculate a stable rate in most regions.

Late stage colorectal cancer incidence was significantly higher among men in Montana than among women (Figure 4). However the difference in late-stage colo-

**Figure 3.** Incidence of Late Stage Colorectal Cancer in Montana by Local Public Health Regions, 2009 to 2018.



rectal cancer incidence by sex is about the same as the difference in all-stage colorectal cancer incidence by sex (44 per 100,000 men vs 32 per 100,000 women). Men have about 36% higher colorectal cancer incidence than women regardless of stage at diagnosis.

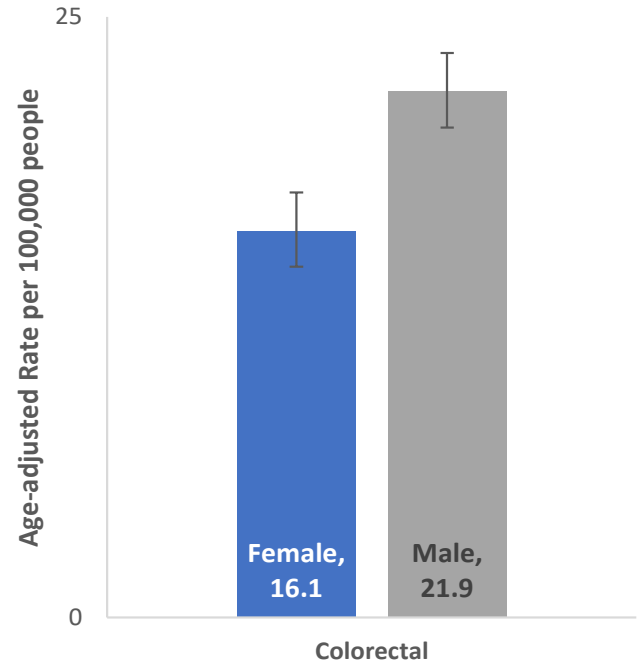
### Preventing Late Stage Cancer

Late stage breast, cervical, and colorectal cancer can be prevented through appropriate screening. Cancer screening is designed to diagnose cancer at the earliest possible stage, before symptoms are noticed, to improve survival and make treatment easier. The U.S. Preventive Services Task Force (USPSTF) makes recommendations for the type of screening tests and who should be screened based on evidence of improved survival and balancing the risks and benefits of the tests.

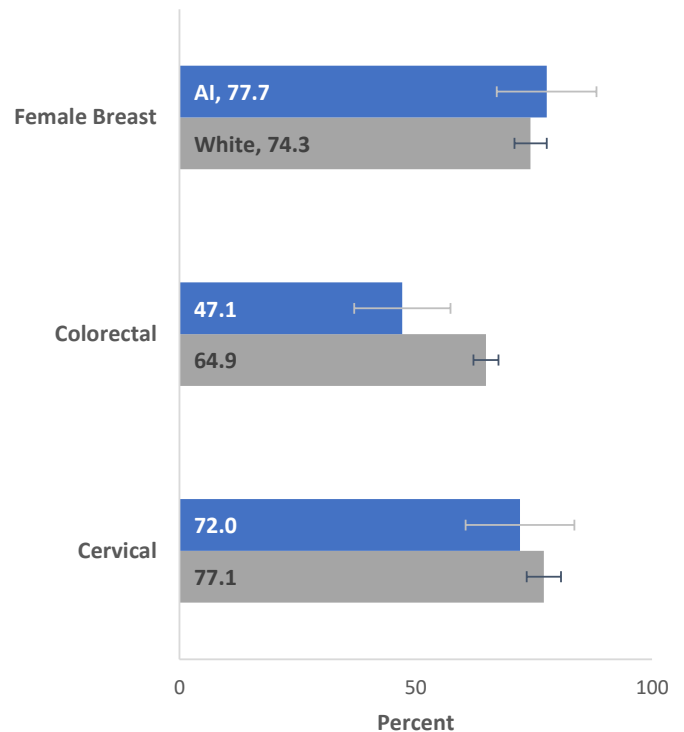
- USPSTF recommends screening for breast cancer in all average risk women aged 50 to 74 years by mammogram every 2 years.<sup>1</sup>
- USPSTF recommends screening for cervical cancer in all average risk women aged 21 to 29 by Pap test every 3 years and in all average risk women aged 30 to 65 by Pap test combined with HPV test every 5 years.<sup>2</sup>
- USPSTF recommends screening for colorectal cancer in all average risk adults aged 50 to 75 years. There are several testing options that are all recommended: colonoscopy every 10 years, sigmoidoscopy or CT colonography every 5 years, or fecal based tests (gFOBT, FIT, or FIT-DNA) every year.<sup>3</sup>

Many of the groups with higher rates of late stage colorectal cancer in Montana also have a lower proportion of people who reported having recommended screenings. A significantly lower proportion of American Indian adults reported having at least one of the recommended colorectal cancer screening tests compared to white adults (Figure 5). Montana men reported having recommended colorectal cancer screening tests significantly less than Montana women (Figure 6). A significantly low-

**Figure 4.** Incidence Rate of Late Stage Colorectal Cancer in Montana by Sex, 2014 to 2018.



**Figure 5.** Percent of Montana Adults Meeting USPSTF Cancer Screening Recommendations by Race, 2018.



er proportion of adults living in the eastern part of the state, Richland, Blaine, and Custer regions, reported having recommended colorectal cancer screening compared to the proportion statewide (Figure 7). Increasing colorectal cancer screening among these groups could reduce the disparity in late stage colorectal cancer incidence. Intervention to promote colorectal cancer screening should be targeted at these groups.

There were no significant differences in breast and cervical cancer screening rates between American Indian women and white women in Montana (Figure 5). Increased screening may still help reduce the disparity in late stage breast and cervical cancer seen among American Indian women but it is also important to explore what other factors may be contributing to the disparity.

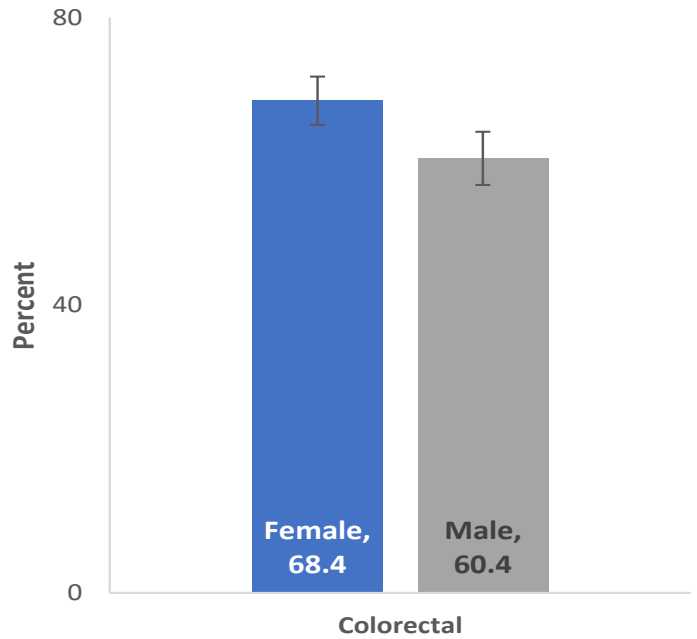
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1 USPSTF Recommendations for Breast Cancer Screening, January 2016, <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening>

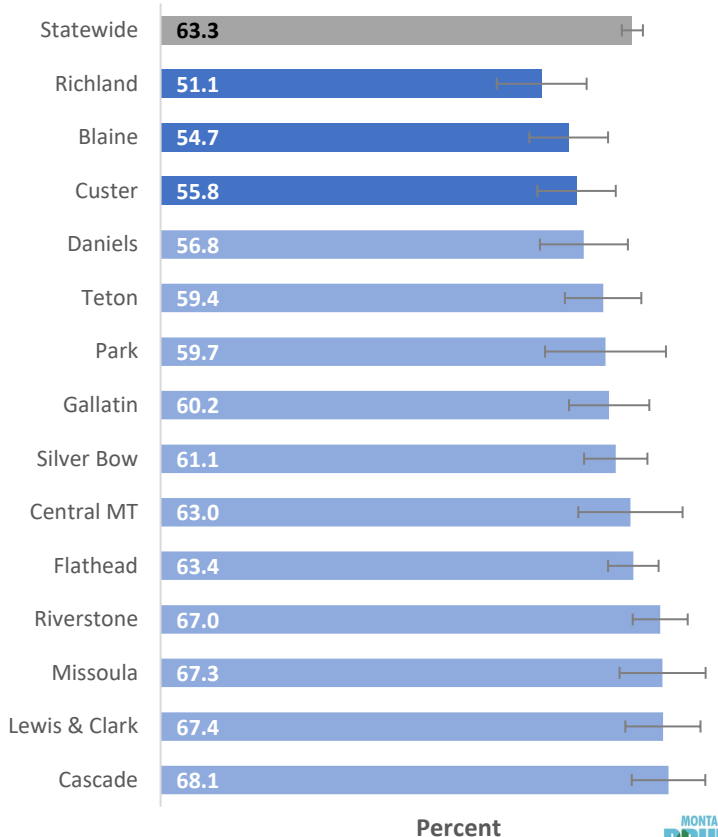
2 USPSTF Recommendations for Cervical Cancer Screening, August 2018, <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/cervical-cancer-screening>

3 USPSTF Recommendations for Colorectal Cancer Screening, June 2016, <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening>

**Figure 6.** Percent of Adults Meeting USPSTF Colorectal Cancer Screening Recommendations in Montana by Sex, 2018.



**Figure 7.** Percent of Adults Meeting USPSTF Colorectal Cancer Screening Recommendations in Montana by Local Public Health Regions, 2014 to 2018.



■ Less than statewide  
 ■ Same as statewide