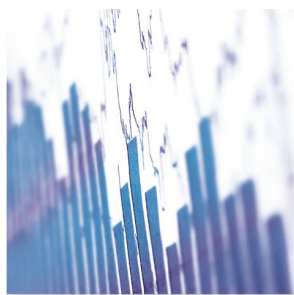


2016—2020

CANCER IN MONTANA

FEATURING OBESITY-ASSOCIATED CANCERS IN MONTANA



MONTANA CENTRAL TUMOR REGISTRY ANNUAL REPORT

March 2023
Helena, Montana



This publication is funded in part by the Montana State General Fund and in part by Cooperative Agreement DP22-2202 from the Centers for Disease Control and Prevention-National Program of Cancer Registries of the U.S. Department of Health and Human Services. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

Full citation for national data:

United States Cancer Statistics: U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2019): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; www.cdc.gov/cancer/dataviz, released in June 2022.

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All-site Cancer in Montana
Quick Stats

6,470
MONTANANS

DIAGNOSED WITH CANCER EACH YEAR BETWEEN 2016—2020

2 IN 5 PEOPLE

WILL BE DIAGNOSED WITH CANCER IN THEIR LIFETIME

2,090
MONTANANS

DIED FROM CANCER EACH YEAR BETWEEN 2016—2020

SECOND
LEADING

CAUSE OF DEATH AMONG MONTANANS FROM 2016—2020

All-site Cancer in Montana

Cancer is a common disease; 2 in 5 (40%) people will be diagnosed with cancer in their lifetime.¹ This report describes the burden of cancer among Montanans and includes a special feature on obesity-associated cancers in Montana.

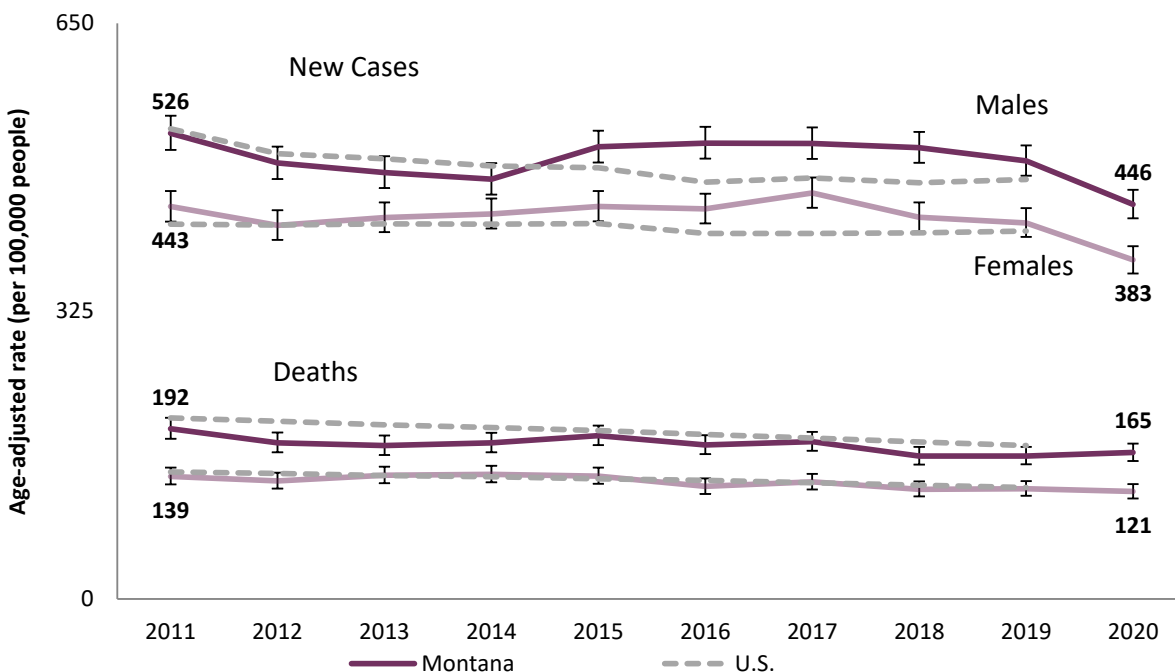
A total of 38,087 incident cancer cases were reported to the Montana Central Tumor Registry (MCTR) between 2016—2020, including invasive and in-situ cancers, benign tumors, and tumors of uncertain behavior. Invasive cancers accounted for 31,391 cases (82%); carcinoma in-situ accounted for 5,579 cases (15%). An average of 6,470 invasive cancers were diagnosed each year among Montana residents between 2016 and 2020.

Over half (54%) of cancers diagnosed in Montana occurred among men. The cancer incidence rate was higher among males compared to females in Montana and the U.S. from 2011—2020 (Figure 1).

Cancer incidence stayed about the same over the past 10 years until 2020 when there was a significant decrease in cancer diagnoses among both men and women (Figure 1). This decrease is likely due to the disruption to healthcare services caused by the COVID-19 pandemic. Routine screening and regular preventive care was drastically reduced from March to June 2020 and cancer diagnoses also decreased drastically during these months compared to the previous 5 year average.

Cancer was the second leading cause of death in Montana from 2016—2020, following heart disease. There were a total

Figure 1. Trends in age-adjusted cancer incidence (new cases) and mortality (deaths) in Montana and the U.S. by sex, 2011—2020.



Data Source: Montana Central Tumor Registry, 2011—2020; Montana Death Records, 2011—2020; United States Cancer Statistics, 2011—2019

¹ American Cancer Society. Lifetime Probability of Developing and Dying from Cancer, 2017-2019 (Cancer Facts & Figures 2023 Supplemental Data). 2023. Accessed at <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-andstatistics/annual-cancer-facts-and-figures/2023/sd4-lifetime-probability-2023-cff.pdf> on January 12, 2023.

of 10,450 cancer deaths from 2016—2020; for an average of 2,090 cancer deaths each year over this time period. Cancer mortality did not decrease in Montana during 2020 (Figure 1).

Four types of cancer accounted for about half of all new cancers diagnosed in Montana from 2016—2020. These cancers were prostate (16%), female breast (14%), lung (11%), and colorectal (8%) (Table 1).

About one in four cancer-related deaths in Montana were due to lung cancer (22%), followed by colorectal (8%), pancreatic (7%), female breast (7%), and prostate (7%) cancer.

The decrease in cancer diagnoses during 2020 was not the same across all types of

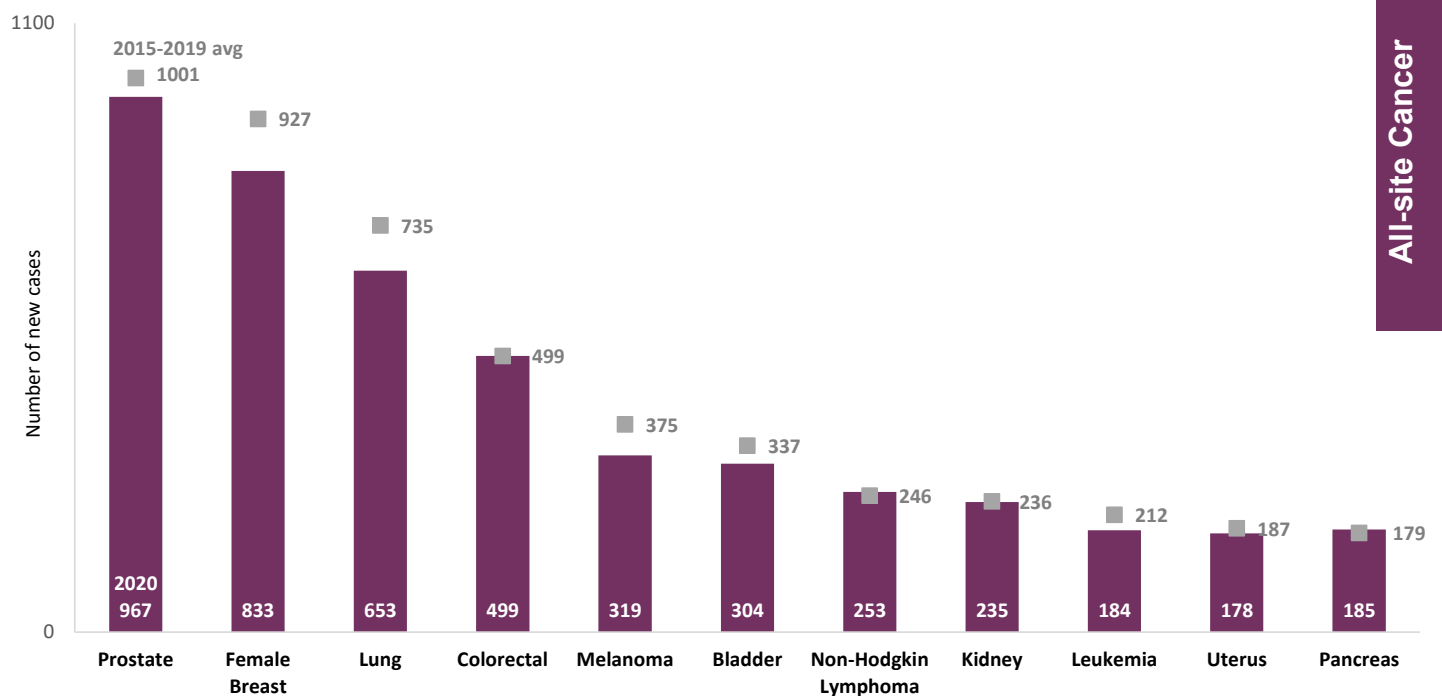
cancer. Prostate cancer, female breast cancer, lung cancer, and melanoma had the largest decreases in 2020 compared to previous years (Figure 2). Colorectal cancer, non-Hodgkin Lymphoma, kidney cancer, leukemia, and pancreatic cancer all had about the same number of cases diagnosed in 2020 as previous years (Figure 2).

Table 1. Number and percent of new cancer cases (incidence) and cancer-related deaths (mortality) among the 15 most common cancers in Montana over the 5-year period 2016—2020.

| New Cancers | | | | Deaths | | | |
|-------------|----------------------|-----------------|---------|--------|---------------------------|-----------------|---------|
| Rank | Site | Avg. # per year | Percent | Rank | Site | Avg. # per year | Percent |
| 1 | Prostate | 1,024 | 16% | 1 | Lung | 450 | 22% |
| 2 | Female Breast | 924 | 14% | 2 | Colorectal | 171 | 8% |
| 3 | Lung | 716 | 11% | 3 | Pancreas | 150 | 7% |
| 4 | Colorectal | 495 | 8% | 4 | Prostate | 142 | 7% |
| 5 | Melanoma | 373 | 6% | 5 | Female Breast | 139 | 7% |
| 6 | Bladder | 333 | 5% | 6 | Liver | 89 | 4% |
| 7 | Non-Hodgkin Lymphoma | 250 | 4% | 7 | Leukemias | 81 | 4% |
| 8 | Kidney | 238 | 4% | 8 | Non-Hodgkin Lymphoma | 71 | 3% |
| 9 | Leukemias | 207 | 3% | 9 | Brain & other CNS | 66 | 3% |
| 10 | Uterus | 188 | 3% | 10 | Esophagus | 63 | 3% |
| 11 | Pancreas | 180 | 3% | 11 | Bladder | 59 | 3% |
| 12 | Thyroid | 155 | 2% | 12 | Kidney | 57 | 3% |
| 13 | Myeloma | 104 | 2% | 13 | Myeloma | 48 | 2% |
| 14 | Liver | 103 | 2% | 14 | Ovary | 47 | 2% |
| 15 | Brain & other CNS | 90 | 1% | 15 | Melanoma | 35 | 2% |
| | All new cancers | 6,466 | 100% | | All cancer-related deaths | 2,090 | 100% |

Data Source: Montana Central Tumor Registry, 2016—2020; Montana Death Records, 2016—2020

Figure 2. Count of new cancers diagnosed in 2020 compared to the annual average count from 2015–2019 for the most common cancer sites, Montana.



Obesity-associated Cancers in Montana Quick Stats

**18
PERCENT**

OF ALL CANCERS DIAGNOSED IN THE US ARE ASSOCIATED WITH OBESITY,
PHYSICAL INACTIVITY, OR POOR NUTRITION.

**2,400
NEW CASES**

OF OBESITY-ASSOCIATED CANCER WERE DIAGNOSED EACH YEAR

**50
PERCENT**

HIGHER RATE OF OBESITY-ASSOCIATED CANCERS AMONG AMERICAN INDIANS

**SOUTHEAST
MONTANA**

HAD A SIGNIFICANTLY HIGHER RATE OF OBESITY-ASSOCIATED CANCER
THAN THE STATE OVERALL

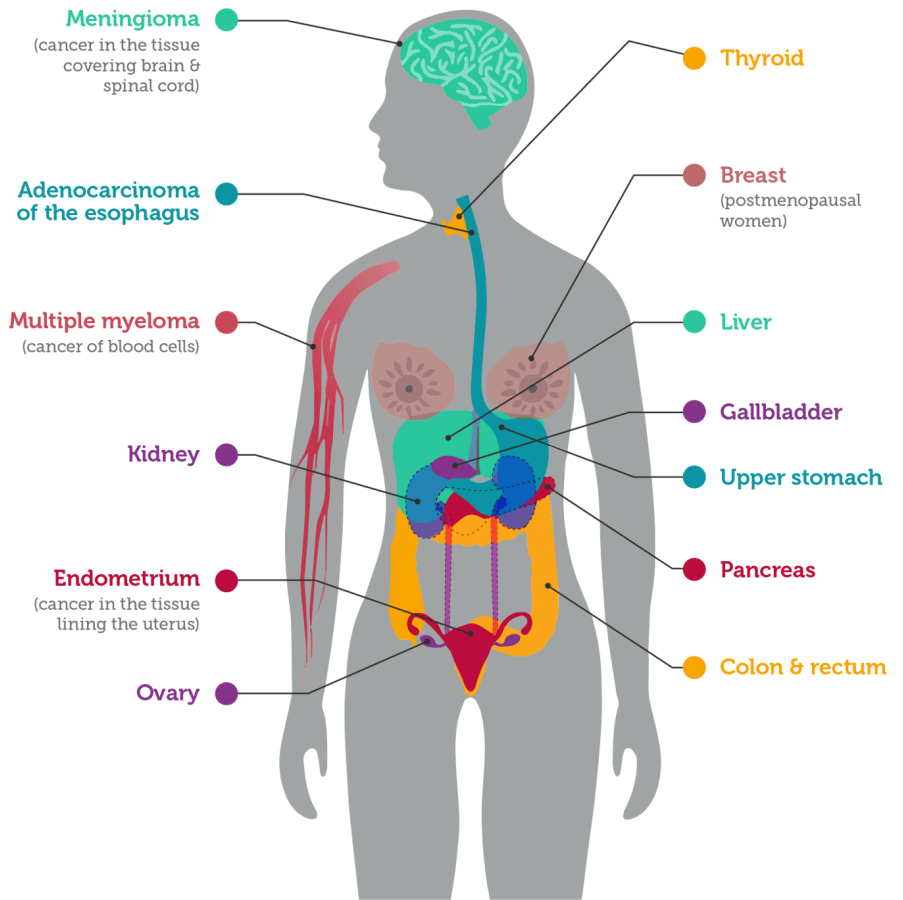
Special Feature: Obesity-associated Cancers

Obesity increases the risk of 13 types of cancer. In fact, it is the second most important modifiable risk factor for cancer with about 18% of all cancers diagnosed in the US being associated with obesity, physical inactivity, or poor nutrition.² Maintaining a healthy weight reduces the risk of cancer throughout the body.

- 11,897 Montanans were diagnosed with obesity-associated cancers between 2016—2020 for an average of 2,400 cases each year.
- In 2020 the age-adjusted incidence rate of obesity-associated cancers among Montanans was 154.1 cases per 100,000 people (Figure 4).
- Obesity-associated cancer incidence in Montana is about the same as in the United States overall (Figure 4).
- Over the past 20-years the incidence rates of obesity-associated cancers among Montanans has stayed about the same (Figure 4).
- Postmenopausal breast cancer is the most common obesity-associated cancer among women with about 780 new cases each year (Figure 5).

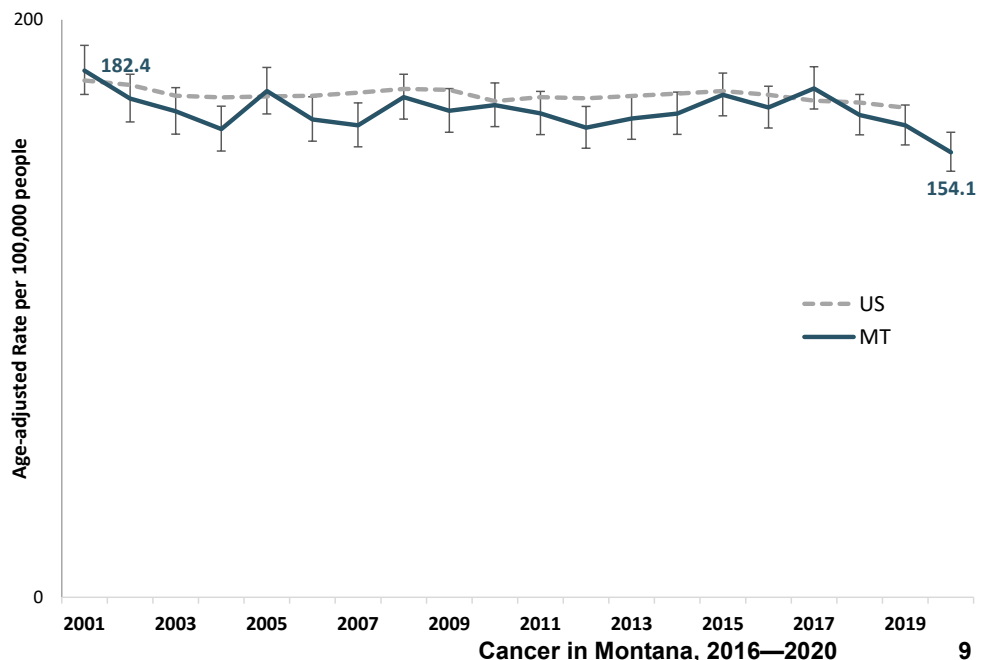
2 Farhad Islami, MD, PHD, Ann Goding Sauer, MSPH, Kimberly D. Miller, MPH, et al. *Proportion and Number of Cancer Cases and Deaths Attributable to Potentially Modifiable Risk Factors In the United States*. CA CANCER J CLIN 2018;68:31–54

Cancers Associated with Overweight & Obesity



cancer.gov/obesity-fact-sheet
Adapted from Centers for Disease Control & Prevention

Figure 4. Trends in age-adjusted obesity-associated cancer incidence in Montana and the U.S., 2001—2020.

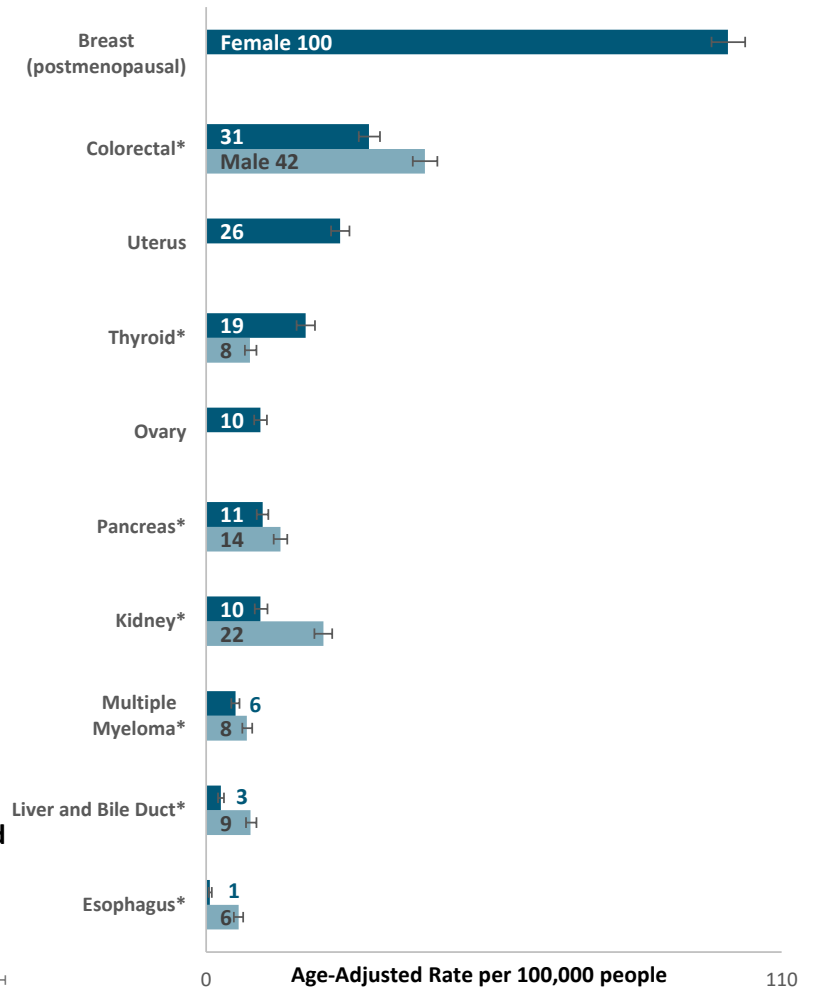


Data Source: Montana Central Tumor Registry, 2001—2020; United States Cancer Statistics, 2001—2019

Special Feature

- Colorectal cancer is the most common obesity-associated cancer among men and the second most common among women with about 500 new cases each year (Figure 5).
- Men had significantly higher rates of colorectal, pancreatic, kidney, multiple myeloma, liver, and esophageal cancers than women (Figure 5).
- Women had a significantly higher rate of thyroid cancer than men (Figure 5).
- American Indian (AI) Montanans had 50% higher incidence of obesity-associated cancers compared to White Montanans (Figure 6).
- Higher incidence of colorectal, kidney, and liver cancer among AI Montanans caused the higher rates of obesity-associated cancers (Figure 6). There was not a significant difference in the incidence of other obesity-associated cancer sites by race.

Figure 5. Age-adjusted incidence of obesity-associated cancers among men and women in Montana by site, 2016—2020.

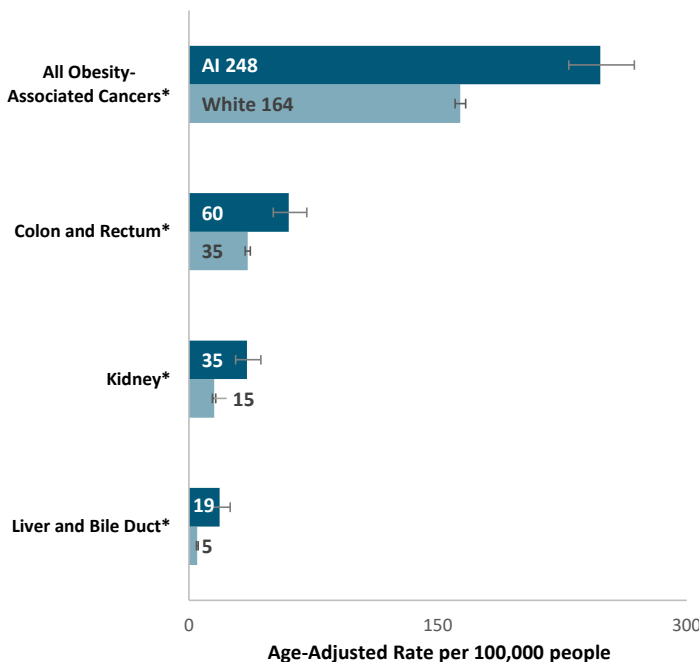


Data Sources: Montana Central Tumor Registry, 2016—2020

*Rates are significantly different between men and women

- The southeast regions of Montana, including the Billings area and the Crow and Northern Cheyenne Reservations had significantly higher incidence of obesity-associated cancers than the Montana rate overall (Figure 7).
- The southwest region of Montana, including the Missoula, Butte, and Bozeman areas had significantly lower incidence of obesity-associated cancers than the Montana rate overall (Figure 7).

Figure 6. Age-adjusted incidence of obesity-associated cancers among American Indian (AI) and White Montanans by site, 2016—2020.



Data Sources: Montana Central Tumor Registry, 2016—2020

*Rates are significantly different between AI and White Montanans

Preventing Obesity-associated Cancers

A person's lifetime risk of developing or dying from cancer is greatly reduced by:

- Staying at a healthy weight
- Staying physically active throughout life
- Eating a healthy diet
- Limiting alcohol use

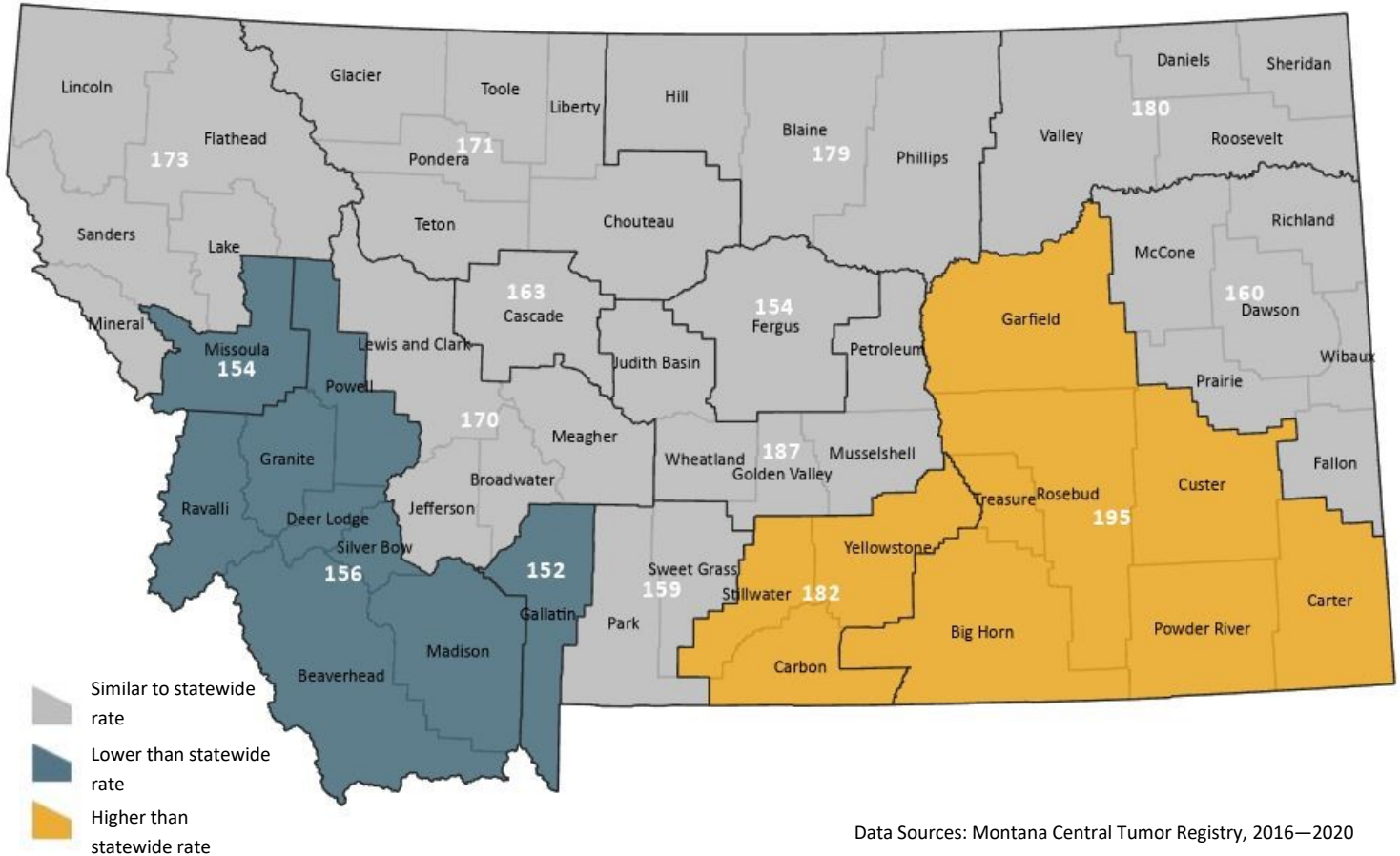
These same behaviors also lower the risk of developing heart disease and diabetes.

Find information on where to find fresh food, exercise and outdoor activities, and many types of wellness programs available in Montana at the [Joy in Health Living](#) Story Map.

Limitations

The weights and BMI history of cancer patients were not known and this report does not measure what proportion of cancer cases are attributable to obesity. Many different risk factors might contribute to the development of obesity-associated cancers such as genetic mutations; chronic infections; and tobacco, hormone, and alcohol use. Differences in the incidence of obesity-associated cancers are affected by all of these risk factors combined and this report cannot determine how much of the difference is due to obesity.

Figure 7. Map of age-adjusted obesity-associated cancer incidence by chronic disease region in Montana, 2016—2020.



Cancer Among Montana American Indians
Quick Stats

320
NEW CASES

OF CANCER DIAGNOSED EACH YEAR

CANCER INCIDENCE RATE AMONG MT AI WAS

24 PERCENT
HIGHER

THAN AMONG MONTANA WHITES

100
DEATHS

DUE TO CANCER EACH YEAR AMONG MONTANA
AMERICAN INDIANS

5
CANCER SITES

ACCOUNT FOR THE HIGHER CANCER INCIDENCE AND MORTALITY
AMONG MONTANA AMERICAN INDIANS.

Cancer among American Indians in Montana

Cancer presents a significant burden to American Indian communities throughout Montana.

From 2016—2020, there were a total of 1,622 Montana American Indians (MT AI) diagnosed with cancer for an average of 320 new cases each year.

Lung cancer was the most commonly diagnosed cancer among MT AI followed by female breast, prostate, colorectal, and kidney cancers (Table 2). These five types of cancer accounted for 53% of all cancers diagnosed among MT AI.

MT AI men and women had about the same cancer incidence and mortality from 2016—2020 (Figure 8). The average age at diagnosis was 62 years old among MT AI men and 61 years old among MT AI women.

From 2016—2020, cancer was the second leading cause of death with 512 cancer related deaths among MT AI. On average, there were 100 cancer deaths each year. Lung cancer accounted for 26% of cancer related deaths among MT AI (Table 2).

Figure 8. Age-adjusted incidence (new cases) and mortality (deaths) among AI men and women, 2016—2020.

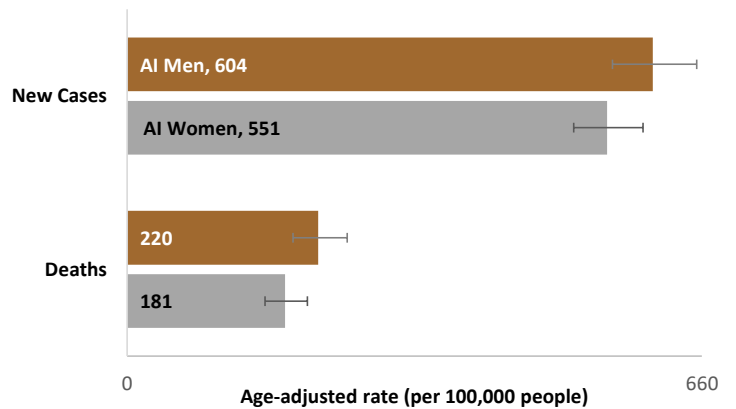


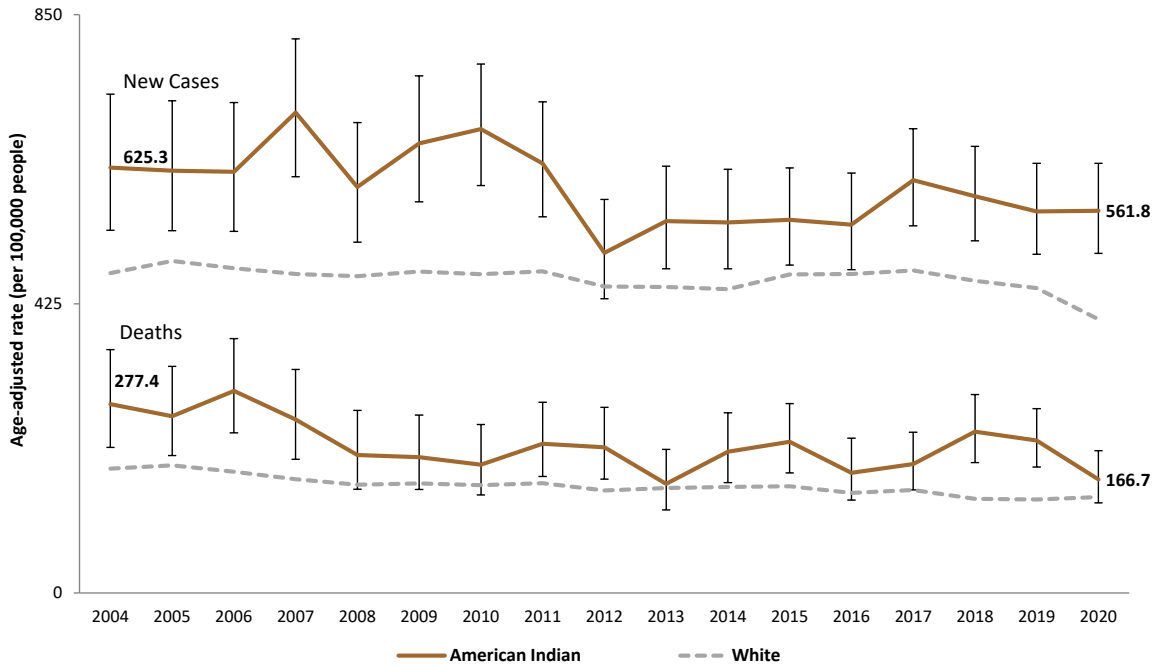
Table 2. Number and percent of new cancer cases and cancer-related deaths among American Indians for the 10 most common cancers in Montana from 2016—2020.

| New Cancers | | | |
|-------------|-------------------------|----------------|---------|
| Rank | Site | Avg # per year | Percent |
| 1 | Lung | 47 | 14% |
| 2 | Female Breast | 43 | 13% |
| 3 | Colorectal | 32 | 10% |
| 4 | Prostate | 31 | 10% |
| 5 | Kidney | 19 | 6% |
| 6 | Liver | 10 | 3% |
| 7 | Uterus | 9 | 3% |
| 8 | Thyroid | 9 | 3% |
| 9 | Non-Hodgkin Lymphoma | 9 | 3% |
| 10 | Pancreas | 8 | 2% |
| | All new cancers (total) | 324 | 100% |

| Deaths | | | |
|--------|-----------------------------------|----------------|---------|
| Rank | Site | Avg # per year | Percent |
| 1 | Lung | 26 | 26% |
| 2 | Colorectal | 11 | 11% |
| 3 | Liver | 9 | 9% |
| 4 | Female Breast | 8 | 8% |
| 5 | Pancreas | 6 | 6% |
| 6 | Prostate | 5 | 5% |
| 7 | Kidney | 3 | 3% |
| 8 | Esophagus Leukemia | 3 | 3% |
| 9 | Non-Hodgkin Lymphoma | 3 | 3% |
| 10 | Stomach | 2 | 2% |
| | All cancer-related deaths (total) | 102 | 100% |

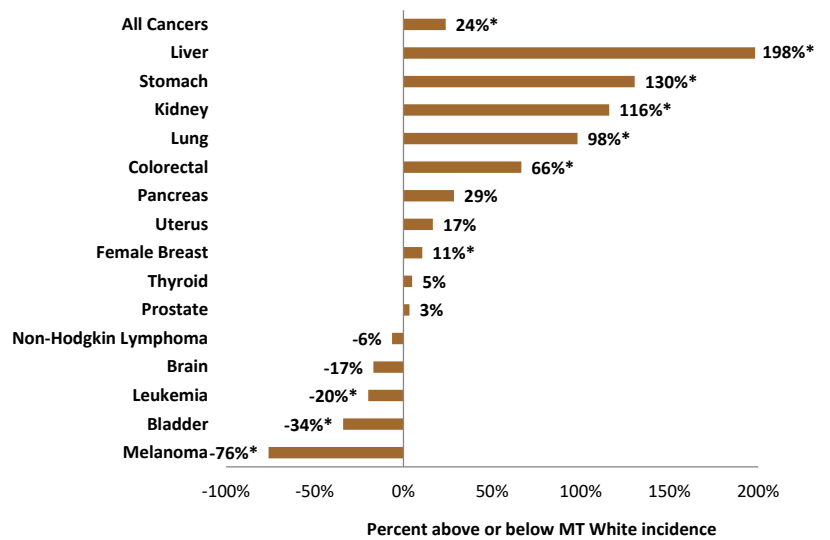
Data Source: Montana Central Tumor Registry, 2016—2020; Montana Death Records, 2016—2020

Figure 9. Age-adjusted cancer incidence and mortality trends in Montana by race, 2006—2020.



- Cancer incidence and mortality among MT AI have stayed about the same since 2006. There was not a decrease in cancers being diagnosed among MT AI in 2020 (Figure 9).
- Cancer incidence among MT AI was 24% higher than among MT Whites: 560.8 vs. 452.9 new cases per 100,000 (Figure 10).
- Cancer-related mortality was 35% greater among MT AI than among MT Whites (200.8 vs. 148.8 deaths per 100,000) (Figure 11).
- There were six types of cancer which occurred at significantly greater rates among MT AI compared to MT Whites: liver, kidney, stomach, lung, colorectal, and female breast cancer (Figure 10).
- Cancer mortality rates were significantly greater among MT AI for kidney, liver, stomach,

Figure 10. Comparison of American Indian and White incidence for select cancer sites in Montana, 2016—2020.



Figures 10 and 11 present the Montana American Indian-White Incidence Rate Ratio (IRR) and Mortality Rate Ratio (MRR) respectively. The IRR and MRR indicate which types of cancers among American Indians were above or below the age-adjusted rate of MT White population. This information is important in understanding the unique burden cancer presents to MT AI.

* Statistically significantly different. Data Source: Montana Central Tumor Registry, 2016—2020; Montana Death Records, 2016—2020

colorectal, and lung cancers compared to MT Whites (Figure 11).

- Bladder cancer, leukemia, and melanoma occurred at significantly lower rates among MT AI compared to MT Whites (Figure 10).
- Mortality rates from brain and other central nervous system cancers were significantly lower among MT AI compared to MT Whites (Figure 11).

Reducing Cancer Burden in American Indian Communities in Montana

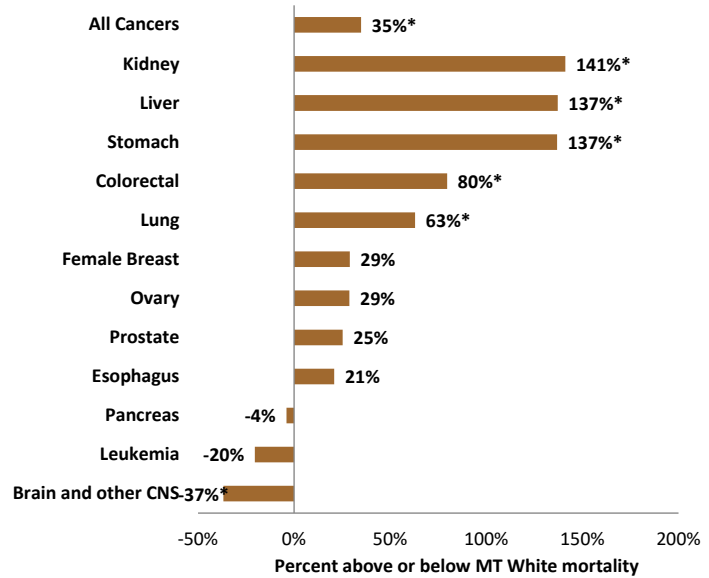
The cancer sites with higher incidence and mortality rates among MT AI have many behavioral risk factors in common. Commercial tobacco use increases the risk of all five sites; being obese increases the risk of kidney, liver, stomach, and colorectal cancers; and heavy alcohol use increases the risk of liver and colorectal cancer. More than twice as many AI adults reported current commercial tobacco use than White adults in 2021 (Figure 12).

The cancer disparity between MT AI and MT Whites could be reduced by reducing tobacco use and obesity and by increasing physical activity. Interventions focused on creating communities that support healthy behaviors with easy access to healthy food and safe physical activity and restrictions on unhealthy behaviors like smoke-free policies are an important step to reducing cancer risk.

Identifying American Indian patients in the Montana Central Tumor Registry (MCTR)

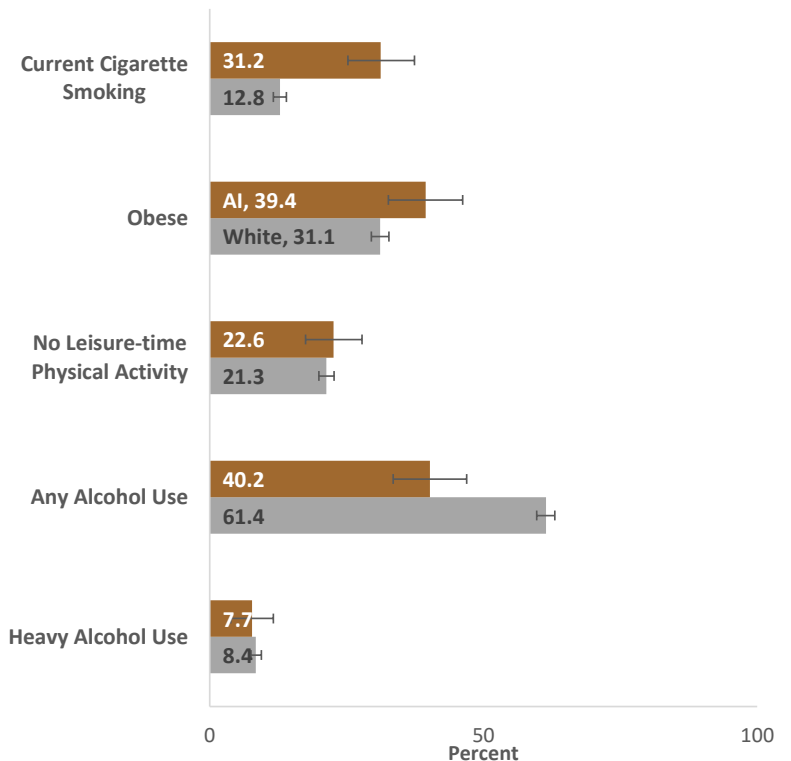
American Indians are often misclassified in health record systems. To better identify MT AI patients the MCTR links with Indian Health Services administrative files of enrolled recipients of IHS services from 1990 forward each year. This record linkage allows MCTR to identify additional AI patients in the registry. The addition of these patients greatly improves MCTR’s ability to describe the cancer burden among MT AI.

Figure 11. Comparison of American Indian and White Mortality for select cancer sites in Montana, 2016—2020.



American Indian

Figure 12. Percent of Adults who Report Select Risk Behaviors by Race, Montana, 2021.



Data Source: Montana Behavioral Risk Factor Surveillance System, 2021

Female Breast Cancer in Montana
Quick Stats

920
WOMEN

WERE DIAGNOSED WITH BREAST CANCER EACH YEAR

NUMBER
ONE

TYPE OF CANCER DIAGNOSED AMONG WOMEN

NUMBER
TWO

CAUSE OF CANCER DEATH AMONG WOMEN

68
PERCENT

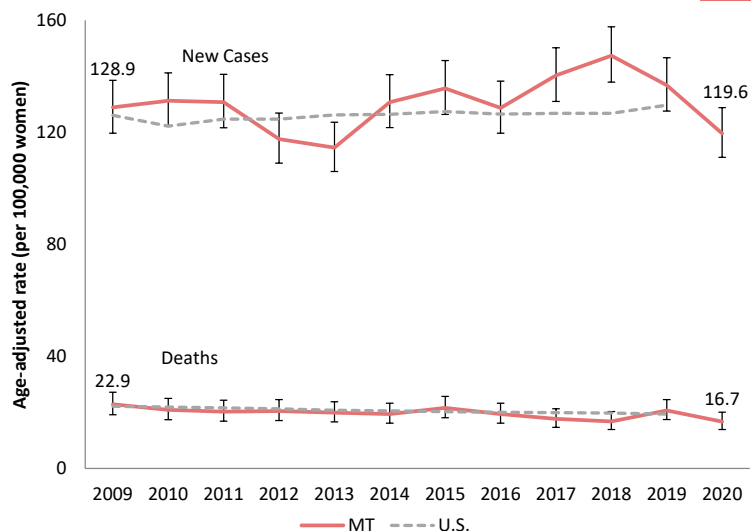
DIAGNOSED AT THE LOCAL STAGE

Female Breast Cancer Incidence & Mortality in Montana

Breast cancer was the most common cancer diagnosed among Montana women, accounting for 31% of new cancers.

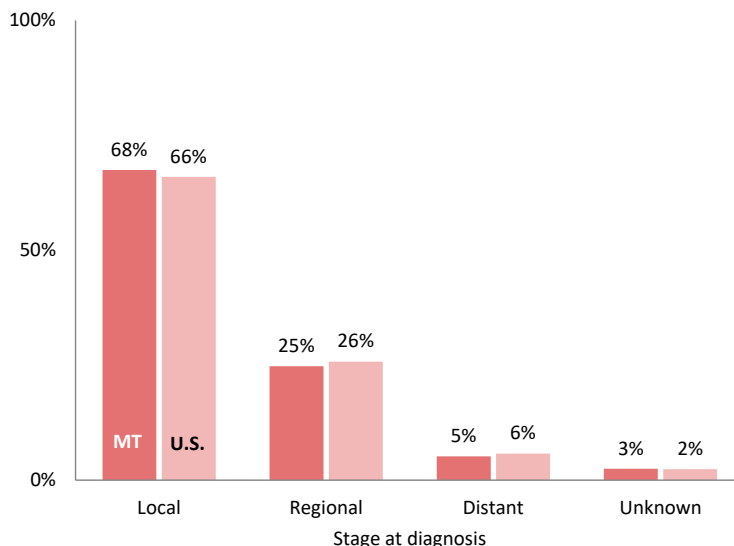
- 4,588 women in Montana were diagnosed with invasive breast cancer between 2016—2020, for an average of 920 women each year.
- 685 women died of breast cancer in Montana between 2016—2020 for an average of 140 women each year.
- In 2020, the age-adjusted incidence rate of breast cancer in Montana was 119.6 new cases per 100,000 women and the mortality rate was 16.7 deaths per 100,000 women (Figure 13).
- The decrease in breast cancer incidence in 2020 is likely due to under-diagnosis caused by the COVID-19 pandemic. Routine screening was canceled or delayed during 2020 and some cancers that would have normally been diagnosed may have gone undetected.
- Over the past 10 years the incidence and mortality rates of breast cancer among Montana women were similar to U.S. women (Figure 13).
- In Montana, 68% of breast cancers were diagnosed at the local stage. Stage at diagnosis in Montana was similar to the U.S. (Figure 14).
- Women were, on average, 64 years old at the time of diagnosis (data not shown).
- Age at diagnosis ranged from 21 to 100. 15% of female breast cancer cases were diagnosed in women under the age of 50 (data not shown).

Figure 13. Trends in age-adjusted female breast cancer incidence and mortality in Montana and the U.S., 2009—2020.



Data Source: Montana Central Tumor Registry, 2009—2020; Montana Death Records, 2009—2020; United States Cancer Statistics, 2009—2019

Figure 14. Stage at diagnosis of female breast cancer in Montana and the U.S., 2016—2020.



Data Source: Montana Central Tumor Registry, 2016—2020; United States Cancer Statistics, 2015—2019

Prostate Cancer in Montana
Quick Stats

**1,020
NEW CASES**

OF PROSTATE CANCER WERE DIAGNOSED EACH YEAR

**NUMBER
ONE**

TYPE OF CANCER DIAGNOSED AMONG MEN

**140
DEATHS**

DUE TO PROSTATE CANCER EACH YEAR

**75
PERCENT**

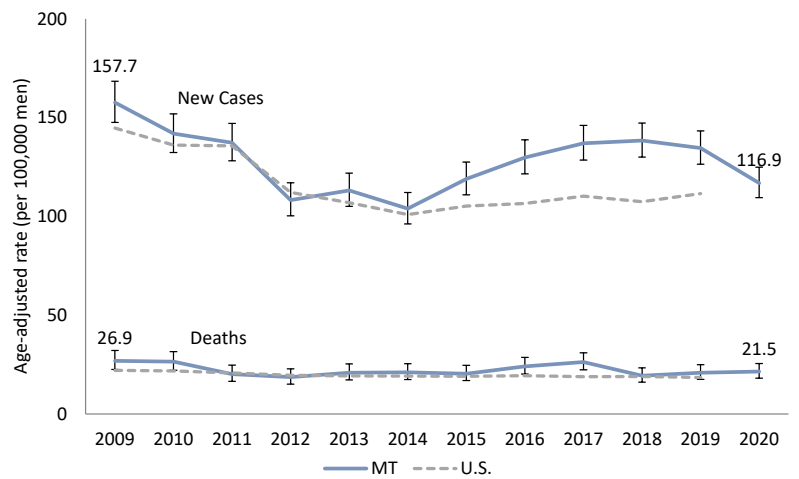
DIAGNOSED AT THE LOCAL STAGE

Prostate Cancer Incidence & Mortality in Montana

Prostate cancer was the most common cancer diagnosed among Montana men, accounting for 29% of new cancers.

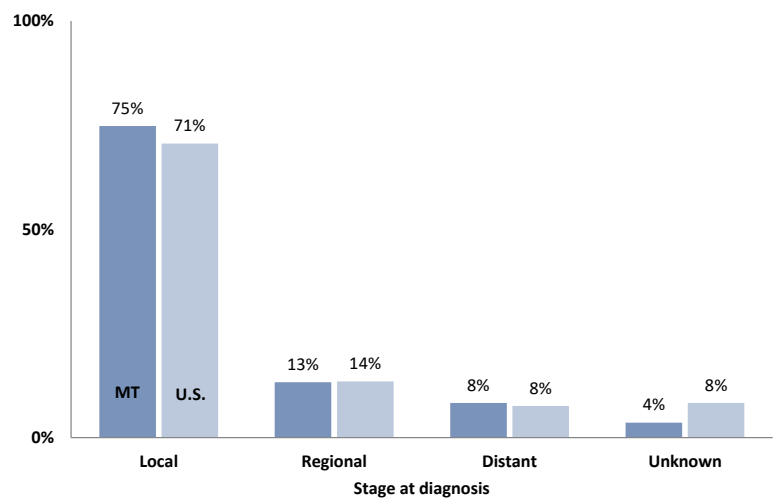
- 5,119 Montana men were diagnosed with prostate cancer between 2016—2020, for an average 1,020 new cases each year.
- 709 men died of prostate cancer between 2016—2020 for an average of 140 deaths each year in Montana.
- In 2020, the age-adjusted incidence rate of prostate cancer in Montana was 116.9 new cases per 100,000 men and the mortality rate was 21.5 deaths per 100,000 men (Figure 15).
- The decrease in prostate cancer incidence in 2020 is likely due to under-diagnosis caused by the COVID-19 pandemic. Routine screening was canceled or delayed during 2020 and some cancers that would have normally been diagnosed may have gone undetected.
- From 2009 to 2014 the incidence rate of prostate cancer in Montana decreased significantly but incidence rates increased from 2014 to 2017 and have remained about the same from 2017 to 2019 (Figure 15).
- The incidence of prostate cancer in Montana has been significantly higher than in the U.S. since 2015. However, prostate cancer mortality in Montana remains similar to the U.S. rate (Figure 15).
- 75% of prostate cancers were diagnosed at the local stage. Stage at diagnosis in Montana was similar to the U.S. (Figure 16).
- In Montana the average age at diagnosis was 68 years (data not shown).

Figure 15. Trends in age-adjusted prostate cancer incidence and mortality in Montana and the U.S., 2009—2020.



Data Source: Montana Central Tumor Registry, 2009—2020; Montana Death Records, 2009—2020; United States Cancer Statistics, 2009—2019

Figure 16. Stage at diagnosis of prostate cancer in Montana and the U.S., 2016—2020.



Data Source: Montana Central Tumor Registry, 2016—2020; United States Cancer Statistics, 2015—2019

Lung Cancer in Montana
Quick Stats

715
NEW CASES
OF LUNG CANCER DIAGNOSED EACH YEAR

45
PERCENT
OF LUNG CANCER CASES DIAGNOSED AT THE DISTANT STAGE

NUMBER
ONE
CAUSE OF CANCER RELATED DEATHS

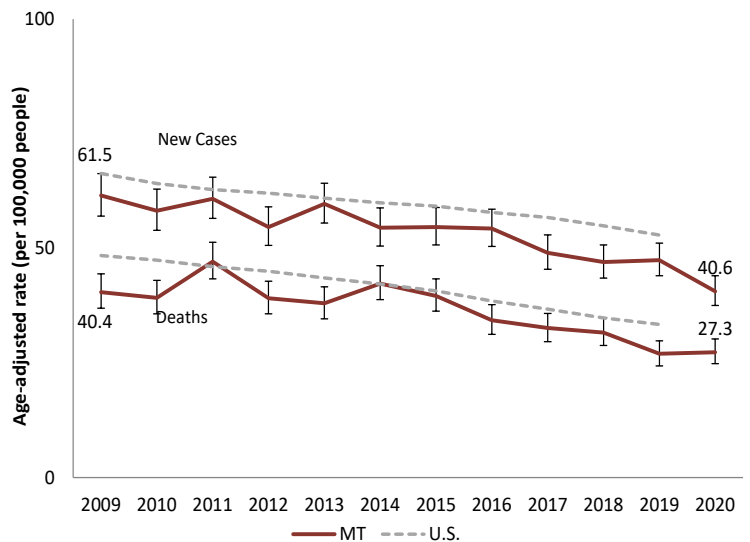
450
DEATHS
DUE TO LUNG CANCER EACH YEAR

Lung Cancer Incidence & Mortality in Montana

Lung cancer was the 2nd most common cancer in Montana men and women accounting for about 11% of all cancer cases. It is also one of the most deadly cancers and is the leading cause of cancer-related death.

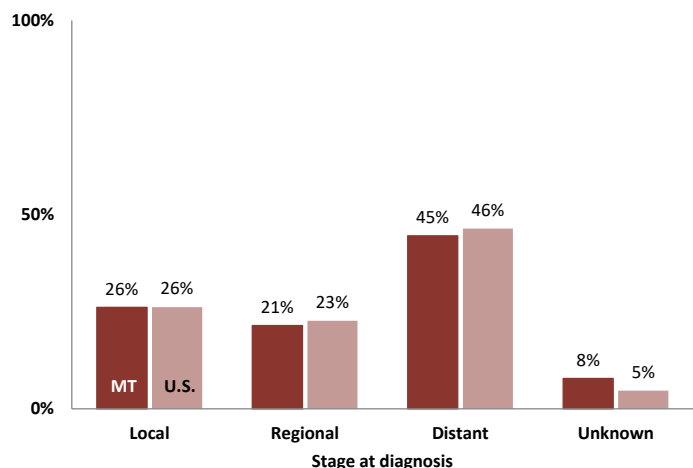
- 3,578 Montanans were diagnosed with lung cancer between 2016—2020, for an average of 715 new cases each year.
- 2,251 Montanans died of lung cancer between 2016—2020 for an average of 450 deaths each year.
- Lung cancer was the leading cause of cancer-related deaths from 2016—2020, accounting for 22% of cancer-related deaths.
- In 2020 the age-adjusted incidence rate of lung cancer in Montana was 40.6 new cases per 100,000 people and the mortality rate was 27.3 deaths per 100,000 people (Figure 17).
- Lung cancer incidence and mortality has continued to decrease in Montana and the U.S. since 2009 (Figure 17).
- Some of the decrease in lung cancer incidence in 2020 could be due to under-diagnosis caused by the COVID-19 pandemic. Routine screening was canceled or delayed during 2020 and some cancers that would have normally been diagnosed may have gone undetected.
- In Montana, 45% of lung cancers were diagnosed at the distant stage while only 26% were diagnosed at the local stage. Stage at diagnosis in Montana was similar to the U.S. (Figure 18).
- The average age at diagnosis was 71 years for both men and women (data not shown).

Figure 17. Trends in age-adjusted lung cancer incidence and mortality in Montana and the U.S., 2009—2020.



Data Source: Montana Central Tumor Registry, 2009—2020; Montana Death Records, 2009—2020; United States Cancer Statistics, 2009—2019

Figure 18. Stage at diagnosis of lung cancer in Montana and the U.S., 2016—2020.



Data Source: Montana Central Tumor Registry, 2016—2020; United States Cancer Statistics, 2015—2019

Colorectal Cancer in Montana
Quick Stats

**THIRD
MOST COMMON**

TYPE OF CANCER DIAGNOSED AMONG MEN AND WOMEN

**500
NEW CASES**

OF COLORECTAL CANCER WERE DIAGNOSED EACH YEAR

**170
DEATHS**

DUE TO COLORECTAL CANCER EACH YEAR

**33
PERCENT**

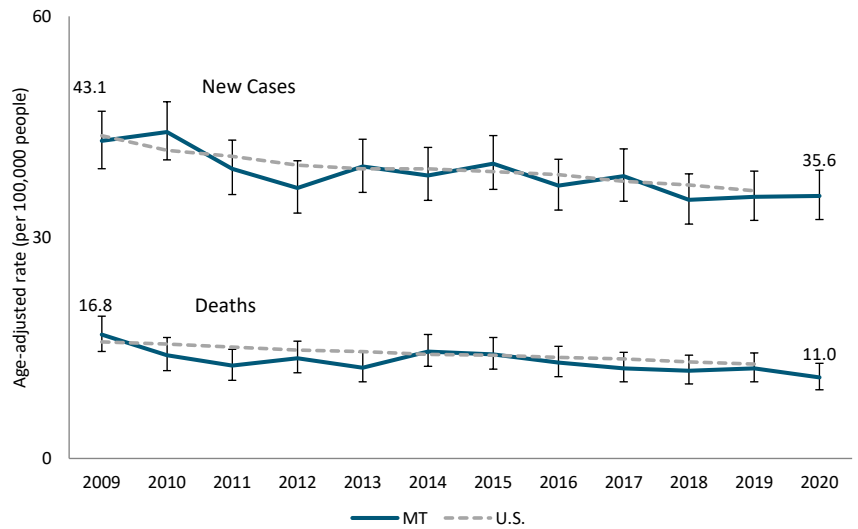
OF CASES ARE DIAGNOSED AT THE LOCAL STAGE

Colorectal Cancer Incidence & Mortality in Montana

Colorectal cancer (CRC) is the third most common type of cancer diagnosed in MT and the third most common cause of cancer deaths. MT men have significantly higher CRC incidence than MT women.

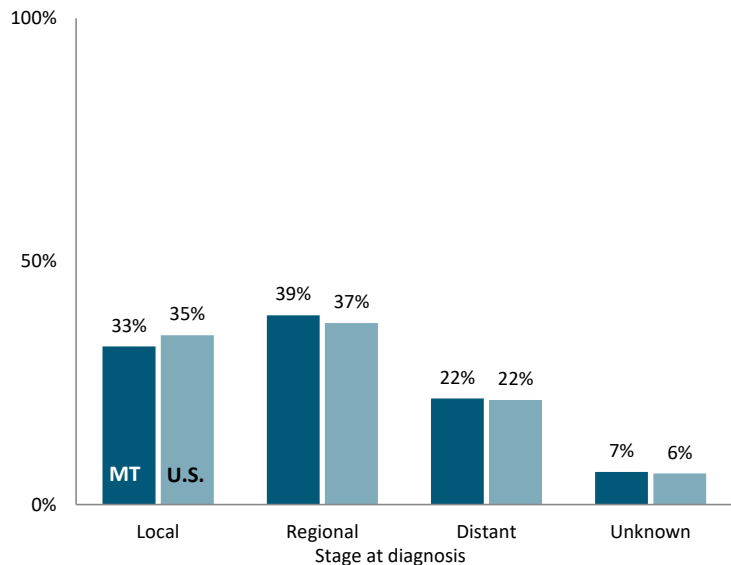
- 2,476 Montanans were diagnosed with CRC between 2016—2020 for an average of 500 cases each year.
- 854 Montanans died of CRC between 2016—2020 for an average of 170 deaths each year.
- In 2020 the age-adjusted incidence rate of CRC in Montana was 35.6 cases per 100,000 people and the mortality rate was 11.0 deaths per 100,000 people (Figure 19).
- CRC incidence and mortality in Montana has been about the same as in the U. S. since 2009 (Figure 19).
- Unlike other screening amenable cancers, CRC incidence was not lower than expected in 2020 (Figure 19).
- CRC incidence was significantly higher among men than among women (40.9 vs. 30.5 cases per 100,000) (data not shown).
- From 2016—2020, the average age at diagnosis was 67 years among men and 68 years among women (data not shown).
- 61% of CRC cases in Montana were diagnosed at the regional or distant stage (Figure 20).

Figure 19. Trends in age-adjusted colorectal cancer incidence and mortality in Montana and the U.S., 2009—2020.



Data Source: Montana Central Tumor Registry, 2009—2020; Montana Death Records, 2009—2020; United States Cancer Statistics, 2009—2019

Figure 20. Stage at diagnosis of colorectal cancer in Montana and the U.S., 2016—2020.



Data Source: Montana Central Tumor Registry, 2016—2020; United States Cancer Statistics, 2015—2019

Melanoma in Montana
Quick Stats

380
NEW CASES

OF MELANOMA DIAGNOSED EACH YEAR

95%
OF CASES

ARE CAUSED BY EXPOSURE TO ULTRAVIOLET (UV) LIGHT⁵

SECOND
MOST COMMON

CAUSE OF CANCER AMONG TEENS AND YOUNG ADULTS (AGED 15 TO 39) IN MONTANA

86
PERCENT

DIAGNOSED AT THE LOCAL STAGE

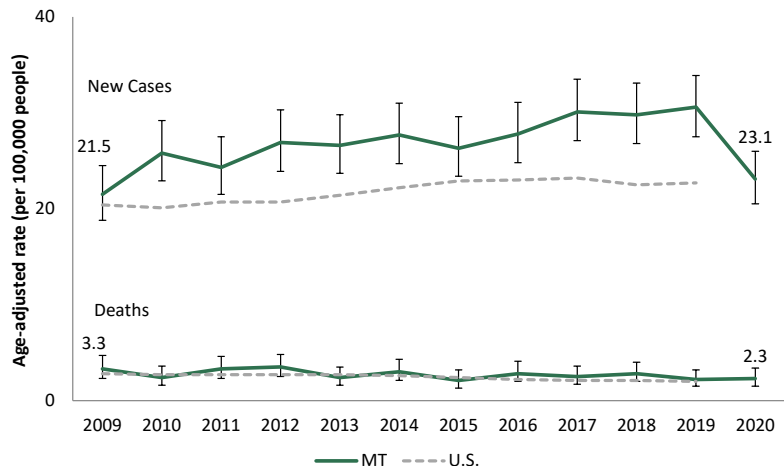
Melanoma

Incidence in Montana

Melanoma is the most dangerous form of skin cancer and is the most likely to spread to other areas of the body. Melanoma is the fourth most common type of cancer among men and women in MT.

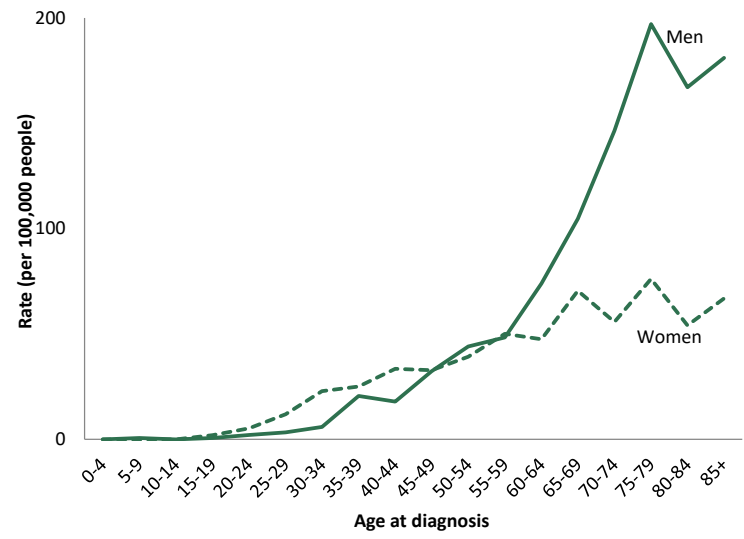
- 1,866 Montanans were diagnosed with melanoma between 2016—2020, for an average of 380 new cases each year.
- 173 Montanans died of melanoma between 2016—2020 for an average of 35 deaths each year.
- Melanoma was the 2nd leading cause of cancer among teens and young adults aged 15 to 39, accounting for 13% of cases in that age group from 2016—2020 (data not shown).
- In 2020, the age-adjusted incidence rate of melanoma in Montana was 23.1 new cases per 100,000 people and the mortality rate was 2.3 deaths per 100,000 people (Figure 21).
- The decrease in melanoma incidence in 2020 is likely due to under-diagnosis caused by the COVID-19 pandemic. Routine screening was canceled or delayed during 2020 and some cancers that would have normally been diagnosed may have gone undetected.
- Prior to 2020, melanoma incidence had increased significantly since 2009 (Figure 21).
- The melanoma incidence in Montana was significantly higher than in the U.S but mortality was similar in Montana and the U.S. (Figure 21).
- The overall incidence rate for men and women was similar but women have higher incidence at younger ages and men have higher incidence at older ages (Figure 22).

Figure 21. Trends in age-adjusted melanoma incidence and mortality in Montana and the U.S., 2009—2020.



Data Source: Montana Central Tumor Registry, 2009—2020; Montana Death Records, 2009—2020; United States Cancer Statistics, 2009—2019

Figure 22. Melanoma incidence by age group among males and females in Montana, 2016—2020.



Data Source: Montana Central Tumor Registry, 2016—2020;