







MONTANA CENTRAL TUMOR REGISTRY ANNUAL REPORT

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All-site Cancer in Montana Quick Stats

6,460 MONTANANS

DIAGNOSED WITH CANCER EACH YEAR BETWEEN 2015—2019

2 IN 5 PEOPLE

WILL BE DIAGNOSED WITH CANCER IN THEIR LIFETIME

2,090 MONTANANS

DIED FROM CANCER EACH YEAR BETWEEN 2015—2019

SECOND LEADING

CAUSE OF DEATH AMONG MONTANANS FROM 2015—2019

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 colorectal cancer trends in Montana.

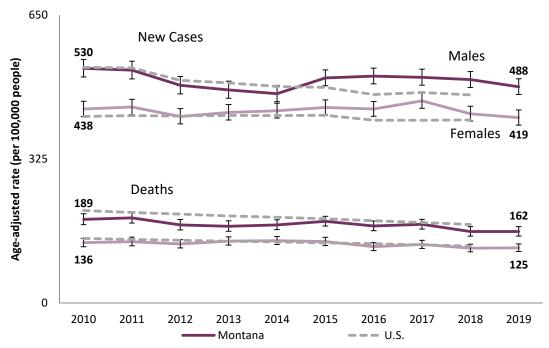
A total of 38,173 incident cancer cases were reported to the Montana Central Tumor Registry (MCTR) between 2015—2019, including invasive and in-situ cancers, benign tumors, and tumors of uncertain behavior. Invasive cancers accounted for 31,320 cases (82%); carcinoma in-situ accounted for 5,733 cases (15%). An average of 6,460 invasive cancers were diagnosed each year among Montana residents between 2015 and 2019.

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 2010—2019 (Figure 1). However, the difference in the incidence rate between males and females has decreased over the past decade.

Cancer incidence has decreased significantly among males in the past 10 years (Figure 1). This decrease is likely due, in part, to the declining incidence of lung and colorectal cancer among males.

Cancer was the second leading cause of death in Montana from 2015—2019, following heart disease. There were a total of 10,441 cancer deaths from 2015—2019; for an average of 2,090 cancer deaths each year over this time period.

Figure 1. Trends in age-adjusted cancer incidence (new cases) and mortality (deaths) in Montana and the U.S. by sex , 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

¹Lifetime Risk Estimates, SEER 21 Area, 2015-2017, Devcan Version 6.7.8, April 2020, National Cancer Institute. Accessed January 2021, https://seer.cancer.gov/csr/1975_2017/results_merged/topic_lifetime_risk.pdf#search=lifetime%20risk.

Four types of cancer accounted for almost half of all new cancers diagnosed in Montana from 2015—2019. These cancers were prostate (15%), female breast (14%), lung (11%), and colorectal (8%) (Table 1).

About one in four cancer-related deaths in Montana were due to lung cancer (23%), followed by colorectal (8%), pancreatic (7%), female breast (7%), and prostate (7%) cancer.

The incidence rate for cancer overall in Montana was estimated to be 4% above the U.S. incidence rate. This difference was statistically different and is at least partly because of higher rates of melanoma, prostate, bladder, female breast cancer, and leukemia in Montana (Figure 2). The incidence rate of melanoma was 27% higher

in Montana compared to the U.S. overall. In contrast, the incidence rate of lung cancer, non-Hodgkin lymphoma, and uterine cancer were significantly lower in Montana compared to the U.S. (Figure 2).

The cancer mortality rate for all-site cancer in Montana was significantly lower than the U.S. (Figure 3). Four cancer sites, uterus, lung, liver, and colorectal had significantly lower mortality rates in MT than the U.S. (Figure 3). Mortality rates in Montana were statistically higher for prostate cancer compared to the U.S. (Figure 3).

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 2015 through 2019.

New Cancers			Deaths				
Rank	Site	Avg. # per year	Percent	Rank	Site	Avg. # per year	Percent
1	Prostate	992	15%	1	Lung	472	23%
2	Female Breast	921	14%	2	Colorectal	176	8%
3	Lung	730	11%	3	Pancreas	151	7%
4	Colorectal	498	8%	4	Female Breast	140	7%
5	Melanoma	375	6%	5	Prostate	137	7%
6	Bladder	334	5%	6	Leukemias	82	4%
7	Non-Hodgkin Lymphoma	245	4%	6	Liver	82	4%
8	Kidney	235	4%	8	Non-Hodgkin Lymphoma	70	3%
9	Leukemias	207	3%	9	Brain & other CNS	67	3%
10	Uterus	186	3%	10	Esophagus	64	3%
11	Pancreas	177	3%	11	Bladder	60	3%
12	Thyroid	158	2%	12	Kidney	54	3%
13	Myeloma	103	2%	13	Ovary	49	2%
14	Liver	102	2%	14	Myeloma	44	2%
15	Brain & other CNS	92	1%	15	Melanoma	34	2%
	All new cancers	6,460	100%		All cancer-related deaths	2,090	100%

 ${\tt Data\ Source: Montana\ Central\ Tumor\ Registry,\ 2015-2019;\ Montana\ Death\ Records,\ 2015-2019;\ Mon$

Figure 2. Comparison of Montana and U.S. incidence rates for the select cancer sites, 2015—2019.

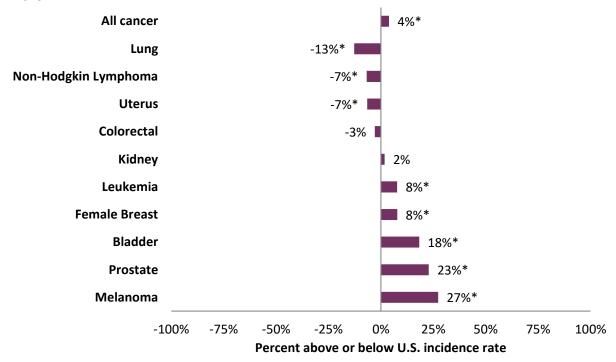
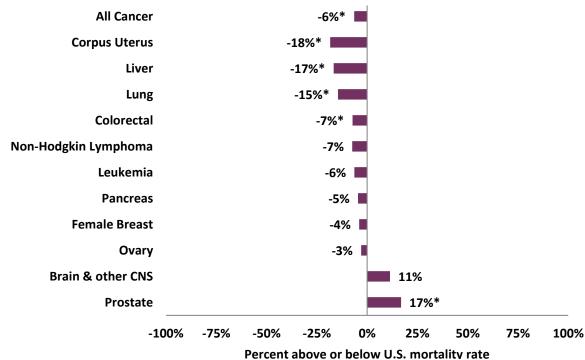


Figure 3. Comparison of Montana and U.S. mortality rates for the select cancer sites, 2015—2019.



Figures 2 and 3 present the Montana -U.S. Incidence Rate Ratio (IRR) and Mortality Rate Ratio (MRR). The IRR and MRR indicate which types of cancers among Montanans were above or below the U.S. age-adjusted incidence rate or mortality rate, respectively. This information is important in understanding the unique burden cancer presents to Montana.

Data Source: Montana Central Tumor Registry, 2015—2019; Montana Death Records, 2015—2019; United States Cancer Statistics, 2014—2018

^{*} Statistically significantly different

Colorectal Cancers in Montana Quick Stats

THIRD MOST COMMON

TYPE OF CANCER DIAGNOSED AND CANCER-RELATED DEATH

500 NEW CASES

OF COLORECTAL CANCER WERE DIAGNOSED EACH YEAR

180 DEATHS

DUE TO COLORECTAL CANCER EACH YEAR

35 PERCENT

OF CASES ARE DIAGNOSED AT THE LOCAL STAGE

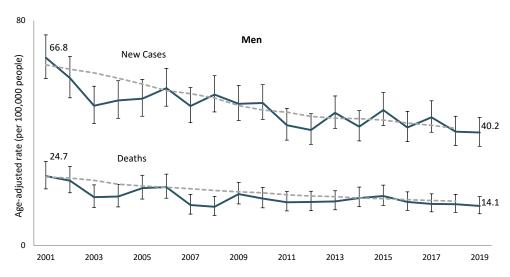
Special Feature:

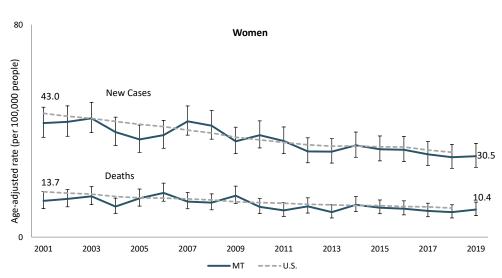
Colorectal Cancer Trends in Montana

Colorectal cancer (CRC) is the third most common type of cancer diagnosed and the third most common cause of cancer-related death among men and women in Montana.

- 2,489 Montanans were diagnosed with CRC between 2015—2019 for an average of 500 cases each year.
- 878 Montanans died of CRC between 2015—2019 for an average of 180 deaths each year.
- In 2019 the age-adjusted incidence rate of colorectal cancer among Montana men was 40.2 cases per 100,000 people and among Montana women it was 30.5 cases per 100,000 people (Figure 4).
- In 2019 the age-adjusted mortality rate of colorectal cancer among Montana men was 14.1 deaths per 100,000 people and among Montana women it was 10.4 deaths per 100,000 people (Figure 4).
- CRC incidence in Montana has decreased significantly since 2001 (Figure 4).
- Over the past 10-years the incidence and mortality rates of colorectal cancer among Montana adults were similar to U.S. adults (Figure 4).

Figure 4. Trends in age-adjusted colorectal cancer incidence (new cases) and mortality (deaths) in Montana and the U.S. by sex, 2001—2019.





Data Source: Montana Central Tumor Registry, 2001—2019; Montana Death Records, 2001—2019; United States Cancer Statistics, 2001—2018

 Men have significantly higher CRC incidence and mortality than women (Figure 4).

Figure 5. Stage at diagnosis of colorectal cancer in Montana and the U.S., 2015—2019.

- 35% of CRC cases in Montana were diagnosed at the local stage, about the same as in the U.S. overall (Figure 5).
- From 2015—2019, the average age at diagnosis was 67 years among men and 68 years among women (data not shown).
- Among young adults (aged less than 45 years) CRC incidence has increased by 3.3% each year since 2001 while incidence has decreased by 3.7% each year among older adults (aged 65 years or older) (Figure 6).
- CRC incidence had not changed significantly among adults aged 45 to 64 since 2001 (Figure 6).

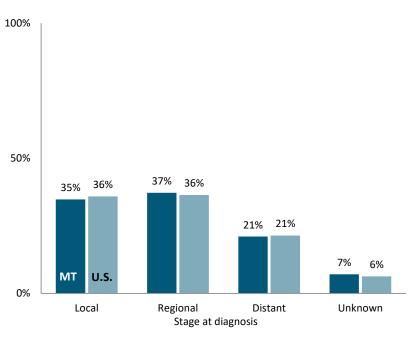
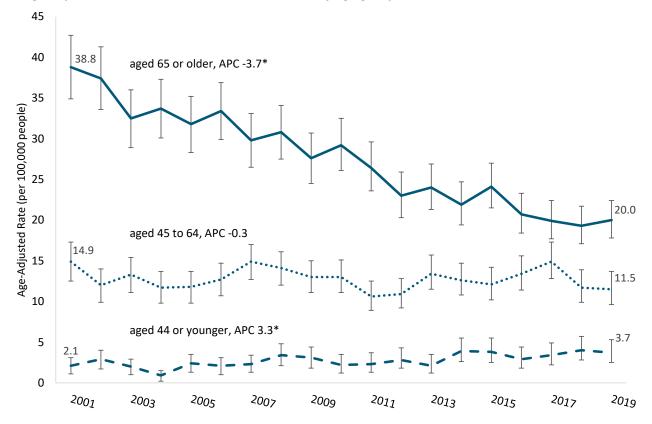


Figure 6. Age-adjusted colorectal cancer incidence trends by age group in Montana, 2001—2019.



Data Sources: Montana Central Tumor Registry, 2001—2019,

^{*}Annual percent change (APC) is significantly different than zero at alpha=0.05 level

Figure 7. Age-adjusted colorectal cancer incidence and mortality by race and sex in Montana, 2015—2019.

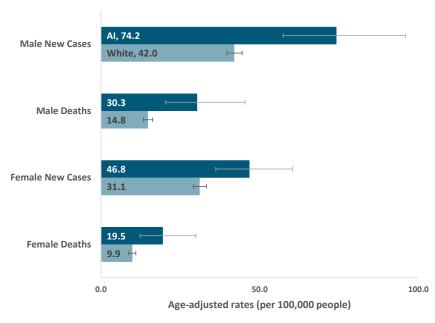
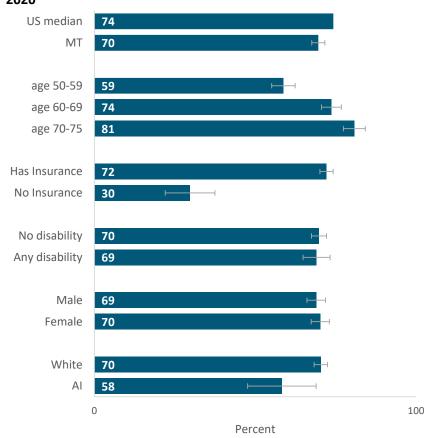


Figure 8. Percent of Montana adults who reported having USPSTF recommended colorectal cancer screening by selected characteristics, 2020



- American Indian (AI) men and women both had significantly higher CRC incidence and mortality than white men and women respectively (Figure 7).
- Additionally a lower proportion of Al patients were diagnosed with CRC at local stage (25%) than white patients (36%) (data not shown).

Colorectal Cancer Screening

Colorectal cancer screening can reduce both the incidence and mortality of colorectal cancer by diagnosing cancers at an earlier stage and by preventing cancers through the identification and removal of pre-cancerous polyps. However, many MT adults have not been screened. In 2020, 70% of MT adults aged 50 to 75 reported being up to date with recommended CRC screening (Figure 8). That was significantly less than the national median (74%). A significantly lower proportion of younger adults (aged 50 to 59) and adults with no health insurance reported being up to date with CRC screening than older adults and adults with insurance, respectively (Figure 8).

The United States Preventive Services Task Force (USPSTF) recommends that adults aged 45 to 75 years of age be screened for colorectal cancer.² USPSTF recently updated their recommendations to expand screening from adults aged 50 to 75 to also include adults aged 45 to 49. The change in recommendation follows the rising CRC incidence among younger adults being observed nationally and in MT.3 Each person should talk to their health care provider to asses their CRC risk and determine what type of CRC screening test is best for them.

Data Sources: Montana Central Tumor Registry, 2000—2019, United States Caner Statistics 2014—2018, and Behavioral Risk Factor Surveillance System, 2020.

Cancer Among Montana American Indians Quick Stats

310 NEW CASES

OF CANCER DIAGNOSED EACH YEAR

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 Indians throughout Montana.

From 2015—2019, there were a total of 1,558 Montana American Indians (MT AI) diagnosed with cancer for an average of 310 new cases each year.

Lung and female breast cancer were each the most commonly diagnosed cancer among MT AI followed by prostate, colorectal, and kidney cancers (Table 2). These five types of cancer accounted for 57% of all cancers diagnosed among MT AI. MT AI men and women had about the same cancer incidence rate from 2015—2019 (591 new cases per 100,000 men and 542 new cases per 100,000 women). The average age at diagnosis was 62 years old among MT AI men and 61 years old among MT AI women.

From 2015—2019, cancer was the second leading cause of death with 516 cancer related deaths among MT Al. On average, there were 100 cancer deaths each year. Lung cancer accounted for 26% of cancer related deaths among MT Al (Table 2).

Table 2. Number and percent of new cancer cases (incidence) and cancer-related deaths (mortality) among American Indians for the 10 most common cancers in Montana over the 5-year period 2015—2019.

New Cancers					
Rank	Site	Avg # per year	Percent		
1	Female Breast	48	15%		
2	Lung	48	15%		
3	Prostate	36	11%		
4	Colorectal	32	10%		
5	Kidney	19	6%		
6	Liver	11	4%		
7	Uterus	10	3%		
8	Non-Hodgkin Lymphoma	9	3%		
9	Thyroid	9	3%		
10	Pancreas	8	3%		
	All new cancers (total)	310	100%		

Deaths					
Rank	Site	Avg # per year	Percent		
1	Lung	26	26%		
2	Colorectal	12	12%		
3	Female Breast	7	7%		
4	Liver	7	7%		
5	Pancreas	6	6%		
6	Prostate	4	4%		
7	Kidney	4	3%		
8	Stomach	3	3%		
9	Esophagus	3	3%		
10	Leukemia	3	3%		
	All cancer-related deaths (total)	100	100%		

Data Source: Montana Central Tumor Registry, 2015—2019; Montana Death Records, 2015—2019

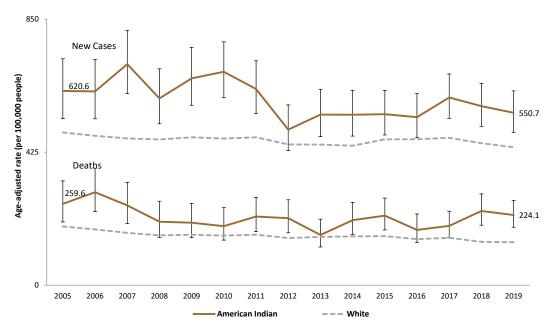
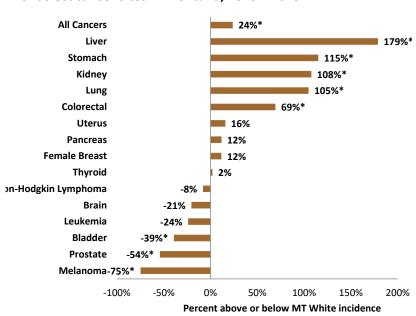


Figure 9. Age-adjusted cancer incidence and mortality trends in Montana by race, 2005—2019.

- Overall, new cancer cases (incidence) occurred at a significantly greater rate among MT AI (550.7 cases per 100,000 people) compared to MT Whites (440.8 cases per 100,000 people) (Figure 9).
- The overall cancer-related death rate (mortality) was also significantly greater among MT AI (224.1 deaths per 100,000 people) compared to MT Whites (137.4 deaths per 100,000) (Figure 9).
- There were five types of cancer which occurred at significantly greater rates among MT AI compared to MT Whites. These cancers were liver, kidney, stomach, lung, and colorectal (Figure 10).
- Cancer mortality rates were significantly greater among MT AI

Data Source: Montana Central Tumor Registry, 2005—2019; Montana Death Records, 2005—2019

Figure 10. Comparison of American Indian and White incidence for select cancer sites in Montana, 2015—2019.



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.

Data Source: Montana Central Tumor Registry, 2015—2019

^{*} Statistically significantly different

for the same five cancer sites compared to MT Whites (Figure 11).

- Bladder cancer, prostate cancer, 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. Some of these risk behaviors are also more common among AI adults than among white adults. More than twice as many AI adults reported current tobacco use and obesity than white adults in 2020 (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, 2015—2019.

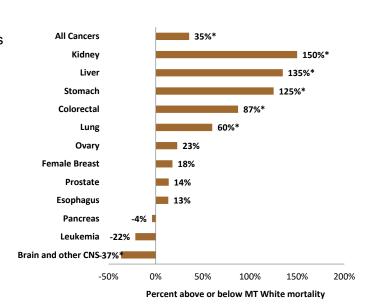
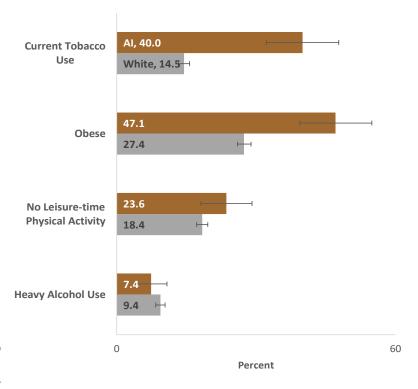


Figure 12. Percent of Adults who Report Select Risk Behaviors by Race, Montana, 2020.



Data Source: Montana Behavioral Risk Factor Surveillance System, 2020

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

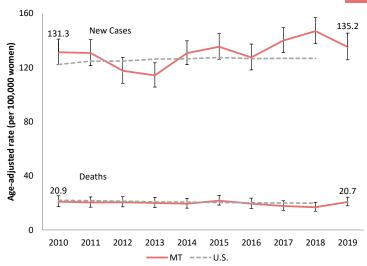
DIAGNOSED AT THE LOCAL STAGE

Female Breast Cancer Incidence & Mortality in Montana

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

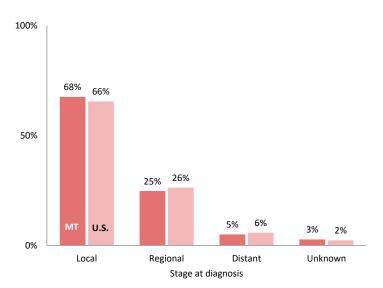
- 4,605 women in Montana were diagnosed with invasive breast cancer between 2015— 2019, for an average of 920 women each year.
- 695 women died of breast cancer in Montana between 2015—2019 for an average of 140 women each year.
- In 2019, the age-adjusted incidence rate of breast cancer in Montana was 135.2 new cases per 100,000 women and the mortality rate was 20.7 deaths per 100,000 women (Figure 13).
- 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 99. 14% 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., 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

Figure 14. Stage at diagnosis of female breast cancer in Montana and the U.S., 2015—2019.



Data Source: Montana Central Tumor Registry, 2015—2019; United States Cancer Statistics, 2014—2018

Prostate Cancer in Montana Quick Stats

990 NEW CASES

OF PROSTATE CANCER WERE DIAGNOSED EACH YEAR

NUMBER TWO

CAUSE OF CANCER RELATED DEATH AMONG MEN

140 DEATHS

DUE TO PROSTATE CANCER EACH YEAR

75 PERCENT

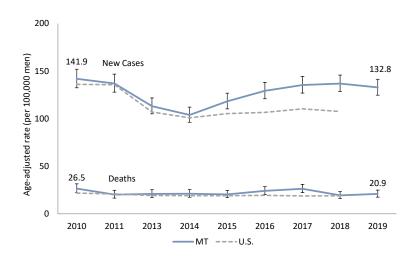
DIAGNOSED AT THE LOCAL STAGE

Prostate Cancer Incidence & Mortality in Montana

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

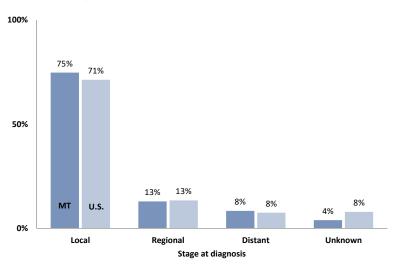
- 4,958 Montana men were diagnosed with prostate cancer between 2015—2019, for an average 990 new cases each year.
- 684 men died of prostate cancer between 2015—2019 for an average of 140 deaths each year in Montana.
- Prostate cancer was the 2nd leading cause of cancer-related deaths among Montana men from 2015—2019.
- In 2019, the age-adjusted incidence rate of prostate cancer in Montana was 132.8 new cases per 100,000 men and the mortality rate was 20.9 deaths per 100,000 men (Figure 15).
- From 2010—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 since 2017 (Figure 15).
- The incidence of prostate cancer in Montana has been significantly higher than in the U.S. since 2015. However, mortality in Montana remains similar to prostate cancer mortality in the U.S. (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., 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

Figure 16. Stage at diagnosis of prostate cancer in Montana and the U.S., 2015—2019.



Data Source: Montana Central Tumor Registry, 2015—2019; United States Cancer Statistics , 2014—2018

Lung Cancer in Montana Quick Stats

730 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

470 DEATHS

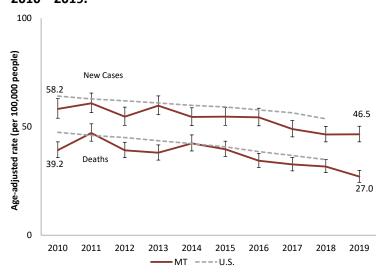
DUE TO LUNG CANCER EACH YEAR

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.

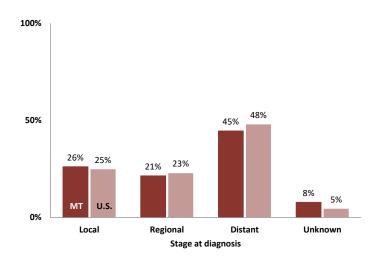
- 3,648 Montanans were diagnosed with lung cancer between 2015—2019, for an average of 730 new cases each year.
- 2,359 Montanans died of lung cancer between 2015—2019 for an average of 470 deaths each year.
- Lung cancer was the leading cause of cancer-related deaths from 2015—2019, accounting for 23% of cancer-related deaths.
- In 2019 the age-adjusted incidence rate of lung cancer in Montana was 46.5 new cases per 100,000 people and the mortality rate was 27.0 deaths per 100,000 people (Figure 17).
- Lung cancer incidence and mortality rates continue to decrease in Montana and the U.S. (Figure 17)
- 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., 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

Figure 18. Stage at diagnosis of lung cancer in Montana and the U.S., 2015—2019.



Data Source: Montana Central Tumor Registry, 2015—2019; United States Cancer Statistics, 2014—2018

Urinary Bladder Cancer in Montana Quick Stats

FOURTH MOST COMMON

TYPE OF CANCER DIAGNOSED AMONG MEN

330 NEW CASES

OF URINARY BLADDER CANCER WERE DIAGNOSED EACH YEAR

60 DEATHS

DUE TO URINARY BLADDER CANCER EACH YEAR

4 TIMES

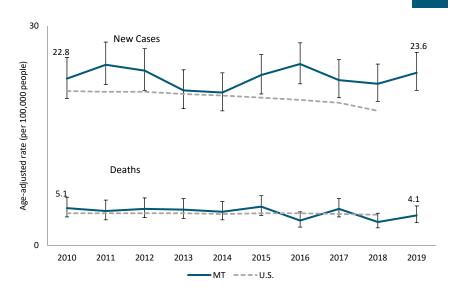
HIGHER INCIDENCE AND MORTALITY AMONG MEN THAN AMONG WOMEN

Urinary Bladder Cancer Incidence & Mortality in Montana

Urinary bladder cancer is the fourth most common type of cancer diagnosed among MT men. More than half (59%) of cases are diagnosed at the earliest stage, in situ.

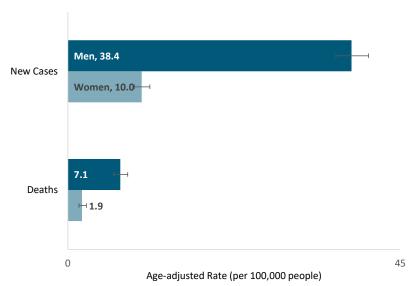
- 1,668 Montanans were diagnosed with bladder cancer between 2015—2019 for an average of 330 cases each year.
- 299 Montanans died of bladder cancer between 2015—2019 for an average of 60 deaths each year.
- In 2019 the age-adjusted incidence rate of bladder cancer in Montana was 23.6 cases per 100,000 people and the mortality rate was 4.1 deaths per 100,000 people (Figure 19).
- Bladder cancer incidence in Montana has been significantly higher than in the U. S. since 2015 (Figure 19).
- Bladder cancer mortality among Montana adults were similar to U.S. adults (Figure 19).
- Bladder cancer incidence and mortality were both almost 4 times higher among men than among women (Figure 20).
- From 2015—2019, the average age at diagnosis was 72 years among men and 71 years among women (data not shown).
- 59% of bladder cancer cases in Montana were diagnosed at the in situ stage, more than in the U.S. overall (data not shown).

Figure 19. Trends in age-adjusted urinary bladder cancer incidence and mortality in Montana and the U.S., 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

Figure 20. Age-adjusted incidence and mortality of urinary bladder cancer in Montana by sex, 2015—2019.



Data Source: Montana Central Tumor Registry, 2015—2019.

Cancer in Montana, 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

⁵ Islami F, Goding Sauer A, Miller KD, et al. Proportion and number of cancer cases and deaths attributable to potentially modifiable risk factors in the United States. ICA Cancer J Clin 2018;68:31-54.

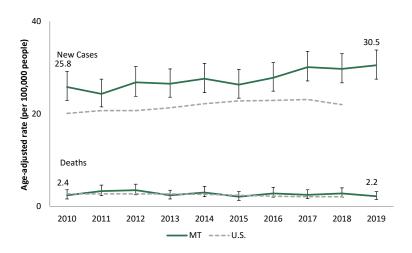
Melanoma

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 fifth most common type of cancer in Montana.

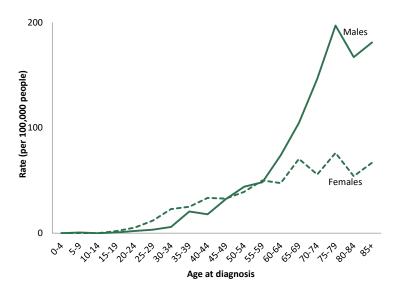
- 1,876 Montanans were diagnosed with melanoma between 2015—2019, for an average of 380 new cases each year.
- 168 Montanans died of melanoma between 2015—2019 for an average of 34 deaths each year.
- Melanoma was the 2nd leading cause of cancer among teens and young adults aged 15 to 39, accounting for 13% of cases in that age group from 2015—2019 (data not shown).
- In 2019, the age-adjusted incidence rate of melanoma in Montana was 30.5 new cases per 100,000 people and the mortality rate was 2.2 deaths per 100,000 people (Figure 21).
- The melanoma incidence rate has increased significantly since 2010 (Figure 21).
- The melanoma incidence rate in Montana was significantly higher than in the U.S but mortality rates were similar in Montana and the U.S. (Figure 21).
- In Montana the average age at diagnosis was 66 years for men and 59 years for women (data not shown).
- The overall incidence rate for males and females was similar but females have higher incidence at younger ages and males have higher incidence at older ages (Figure 22).

Figure 21. Trends in age-adjusted melanoma incidence and mortality in Montana and the U.S., 2010—2019.



Data Source: Montana Central Tumor Registry, 2010—2019; Montana Death Records, 2010—2019; United States Cancer Statistics, 2010—2018

Figure 22. Melanoma incidence by age group among males and females in Montana, 2015—2019.



Data Source: Montana Central Tumor Registry, 2015—2019;

