



Tobacco Use Increases the Risk of Cancer

Tobacco use causes cancer throughout the body. Smoking, exposure to secondhand smoke, and smokeless tobacco use can cause cancer in the bladder, blood, cervix, colon and rectum, esophagus, kidney, liver, lungs, bronchi, trachea, mouth and throat, pancreas, stomach, and voice box (Figure 1). Tobacco use is the leading preventable cause of cancer accounting for **1 out of 3** cancer deaths in the United States.¹

Key Messages

Tobacco use is the leading preventable cause of cancer.

2,400 new cases of tobacco-associated cancers are diagnosed among Montanans each year.

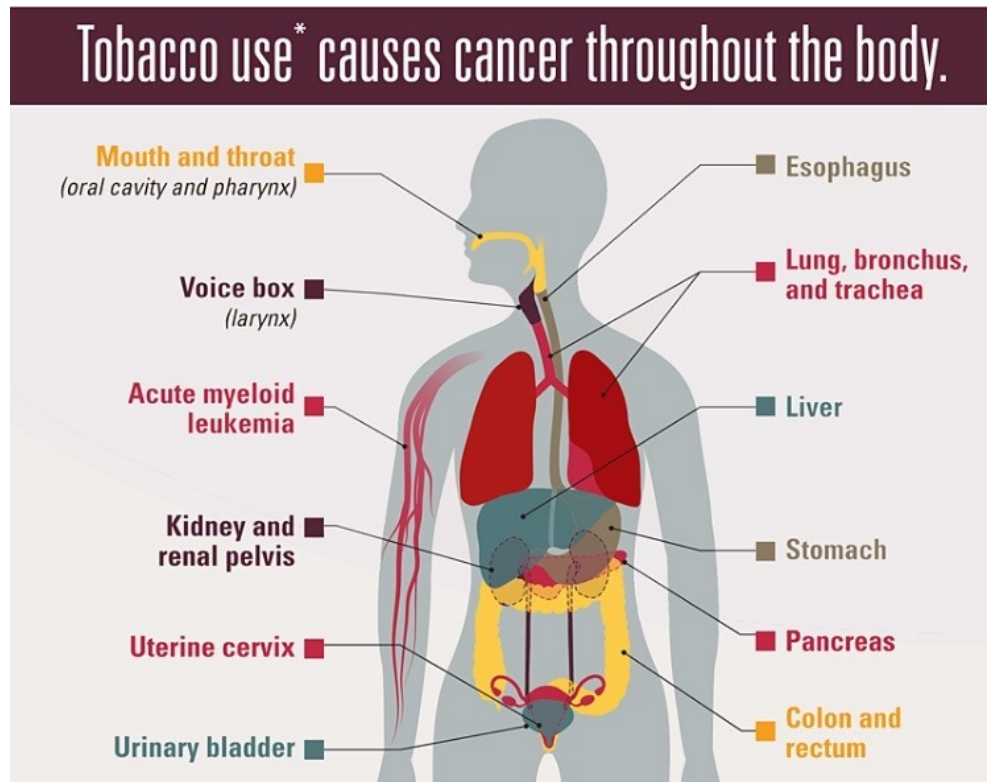
American Indian Montanans have a 60% higher rate of tobacco associated cancers than White Montanans.

Almost 200,000 Montana adults currently use tobacco

The Montana Tobacco Quit Line is a free service for all Montanans who want to quit using tobacco products.

1-800-QUIT-NOW

Figure 1: Sites of Tobacco-associated Cancer



Montana Cancer Control

Programs

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Helena, Montana 59260-2951

(406) 444-2732

<https://dphhs.mt.gov/publichealth/cancer>

How common are tobacco-associated cancers?

In Montana, an average of **2,400** new cases of tobacco-associated cancers are diagnosed each year, about 40% of all new cancers. The rate of tobacco-associated cancers was significantly lower in Montana compared to the United States (180.7 vs. 187.9 new cases per 100,000 people; data not shown) from 2013 to 2017.

*Tobacco use includes smoked (cigarettes and cigars) and smokeless (snuff and chewing tobacco) tobacco products. Content source: Division of Cancer Prevention and Control, Centers for Disease Control and Prevention

<https://www.cdc.gov/cancer/tobacco/index.htm>



Cancer of the trachea, lung, and bronchus was the most common type of tobacco-associated cancer among Montanans (53.9 new cases per 100,000 people; data not shown). **9 out of 10** cases of lung cancer are caused by tobacco.¹

Cancer of the colon and rectum is the second most common tobacco-associated cancer (38.3 cases per 100,000 people; data not shown).

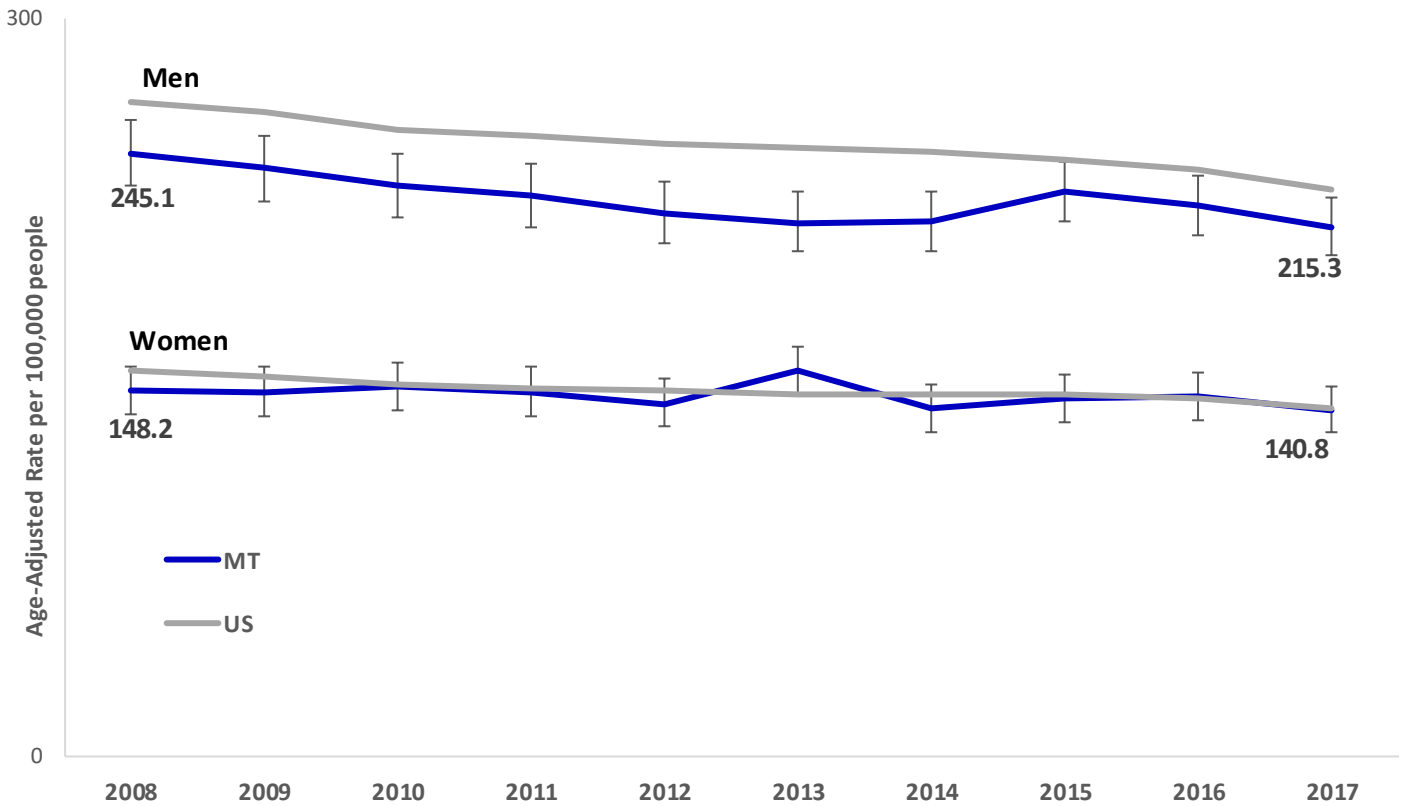
What are the trends in tobacco-associated cancers?

Men had higher incidence rates of tobacco-associated cancers than women in Montana and throughout the United States (Figure 2). The increased rate among men was due to significantly

higher incidence of cancers of the: colon and rectum, bladder, kidney, mouth and throat, liver, esophagus, and stomach. The rate of esophageal cancer among Montana men from 2013 to 2017 was almost **5 times higher** than among Montana women.

However, the incidence rate of tobacco-associated cancers has decreased significantly since 2008 among men going from 245.1 new cases per 100,000 in 2008 to 215.3 per 100,000 in 2017 (Figure 2). During the same time, the rate of tobacco-associated cancers has stayed about the same among women.

Figure 2: Incidence of Tobacco-Associated Cancers among Females and Males in **Montana (MT)** and the **United States (US)**, 2008–2017



1 The health consequences of smoking – 50 years of progress: a report of the Surgeon General. – Atlanta, GA. : U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.



Montana men had significantly lower incidence rates of tobacco-associated cancers than US men, but Montana women had similar rates as US women (Figure 2).

The rate of tobacco-associated cancers among American Indian Montanans was more than 60% higher than among White Montanans from 2013 to 2017 (Figure 3). The increased rate among American Indians is due to significantly higher rates of cancers of the: trachea, lung, and bronchus, colon and rectum, and kidney. The largest difference in rates between American Indian Montanans and White Montanans was in kidney cancer where the rate was more than **2 times higher** among American Indians.

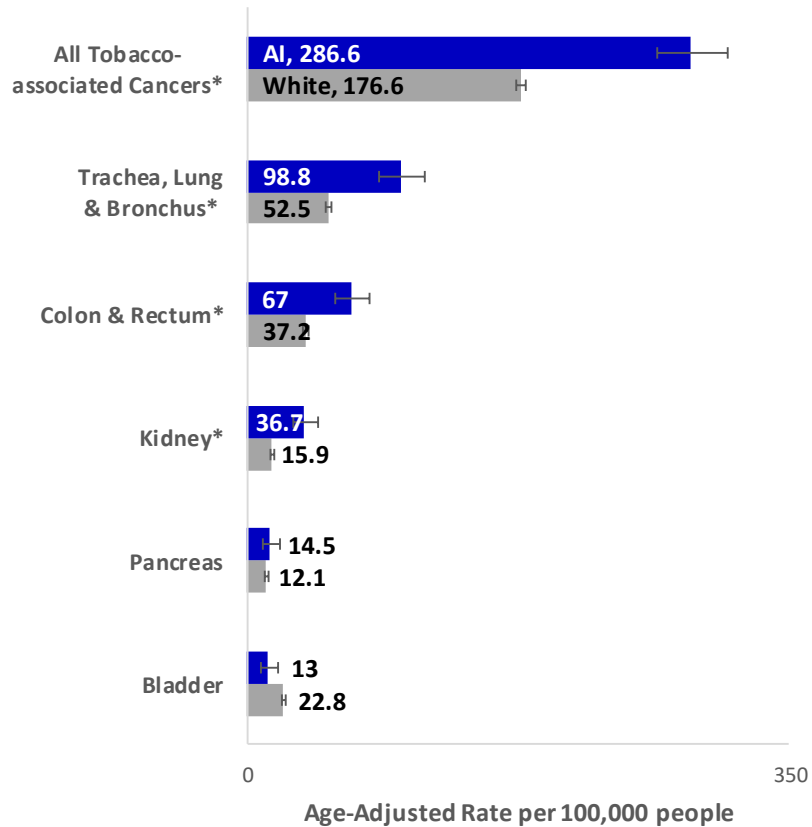
How do rates of tobacco-associated cancers vary by tobacco use history?

As would be expected, the age-adjusted incidence rate of tobacco-associated cancers was highest among current tobacco users (Figure 4). Current tobacco users had a rate of tobacco-associated cancers that was almost **4 times higher** than people who had never used tobacco. People who had previously used tobacco also had significantly higher rates than those who never used tobacco. But their rate was significantly less than those who currently use tobacco (Figure 4). It is never too late to quit using tobacco and reduce the risk of cancer and many other diseases.

Tobacco use prevention is key to decreasing cancer risk

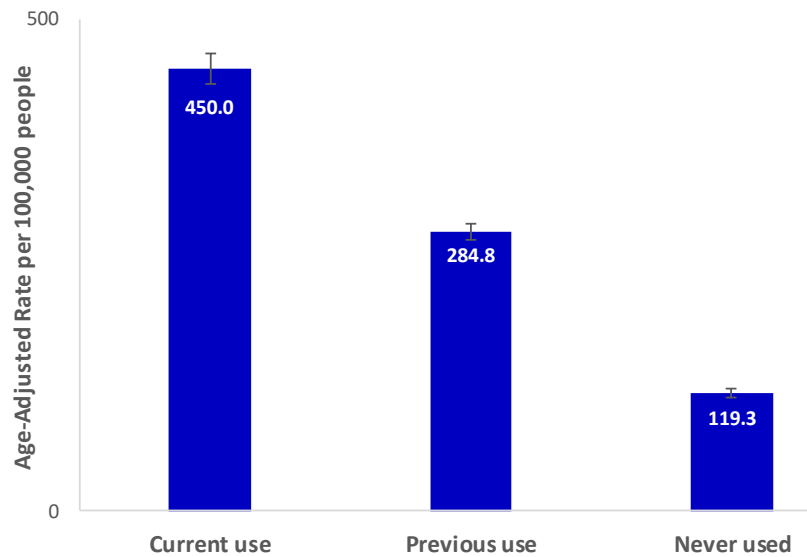
In 2018, **23%** of Montana adults reported currently using tobacco (smoking cigarettes or using smokeless tobacco).² Tobacco use is more common

Figure 3: Incidence of Tobacco-Associated Cancers among American Indian (AI) and White Montanans, 2013–2017



*Rate among American Indians is significantly higher than the rate among Whites

Figure 4: Incidence of Tobacco-Associated Cancers by History of Tobacco Use, 2013–2017



among men than among women (Figure 5). However, the proportion of men who currently use tobacco has decreased significantly since 2011 while the proportion of women has stayed about the same. The trends in tobacco use are similar to the trends in tobacco-associated cancer incidence.

Conclusions

Tobacco-associated cancers are largely preventable. Preventing youth initiation of tobacco products and helping current tobacco users quit will reduce the incidence of tobacco-associated cancers. Policies such as higher tobacco taxes, raising the minimum age of sale for tobacco products to 21 years, and prohibiting marketing of tobacco products that target youth and young adults are important ways to prevent initiation of tobacco use among youth. Quit Lines are telephone-based programs for helping tobacco users quit and they have been proven to be effective. The Montana Tobacco Quit Line is a free

service, available to all Montanans, that offers proactive coaching, individualized quit plans, free nicotine replacement therapy, and reduced-cost cessation medication. The Quit Line also offers three specialized programs targeting populations disproportionately burdened by tobacco use:

- 1) The Quit Now Montana Pregnancy Program
- 2) The American Indian Commercial Tobacco Quit Line
- 3) My Life, My Quit (for Montanans under the age of 18)

Limitations

While tobacco-use history is included in MCTR data about 13% of tobacco-associated cancer cases were coded as unknown. Additionally, among patients with known tobacco use, many different risk factors might contribute to the development of tobacco-associated cancers such as genetic mutations, chronic

infections, obesity, and alcohol use. This report does not measure what proportion of cancer cases are attributable to tobacco use. It only reports on the incidence of cancers that are known to be associated with tobacco use. Differences in the incidence of tobacco-associated cancers are affected by all of these risk factors combined and this report cannot determine how much of the difference is due to tobacco use.

Figure 5: Current Tobacco Use among Females and Males in Montana, BRFSS, 2011–2017

