

# Preventable Deaths in Montana: Cancer Deaths by Region

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## Key Findings

- Cancer is the leading cause of death in Montana.
- An estimated 530 Montanans die prematurely (before age 80) each year of breast, colorectal, and lung cancers.
  - Preventing tobacco use and helping current tobacco user to quit can prevent deaths due to lung and several other types of cancer.
  - Screening for breast, cervical, and colorectal cancer (CRC) can prevent death due to these cancers.

## Background

In 2012, cancer was the leading cause of death in Montana, followed closely by heart disease.<sup>1</sup> Each year there are approximately 5,500 Montanans diagnosed with cancer.<sup>2</sup> Cancer is common; in fact, 1 in 2 men and 1 in 3 women will be diagnosed with cancer at some point in their lifetimes.<sup>3</sup>

Cancer is a general term for over 100 unique diseases. Each type of cancer is associated with its own set of risk factors. Some of these risk factors are unchangeable, like age and genetics. However there are several actions individuals and communities can take to reduce the risk of cancer.

Tobacco smoke is known to not only cause lung cancer but also cause cancers all over the body -- 13 different types of cancer.<sup>4</sup> Lung cancer is the second leading cause of cancer death among men and women.<sup>1</sup> Nearly 90% of all lung cancer cases are attributable to tobacco use.<sup>5</sup>

Screening for breast, cervical, and colorectal cancer (CRC) can prevent death due to these cancers. In the case of cervical and colorectal cancers, screening can even prevent these cancers from ever developing. Regular screening among adults 50 years and older could reduce CRC mortality by 60%.<sup>5</sup>

This surveillance report assessed Montana death records to describe the rate of lung cancer, breast cancer, and colorectal cancer deaths within 13 cancer control regions across the state. Comparing these rates across the state allows communities to identify potentially preventable deaths in their area and take steps to reduce the burden of cancer for their population.

## Results

### Lung Cancer Deaths

Lung and bronchus cancer was the leading cause of cancer death among Montanans under the age of 80 with an average 345 deaths per year (age-adjusted death rate of 31.7 [30.6—32.8] deaths per 100,000 people). The two regions with the lowest rates of lung cancer death were region 6 and region 12 setting

the benchmark at 23.3 deaths per 100,000 people. Regions 7, 3, and 10 had the highest rates of lung cancer deaths.

### Breast Cancer Deaths

Statewide, 84 women die of breast cancer each year, on average, before the age of 80 (age-adjusted death rate of 15.1 [14.1—16.2] per 100,000 people). Regions 1 and 7 had the lowest rates of breast cancer deaths setting the benchmark at 12.4 deaths per 100,000 people. Regions 2, 6, 9, and 13 had the highest rates of breast cancer deaths.

### Colorectal Cancer Deaths

Statewide, 99 men and women die of colorectal cancer before the age of 80 (age-adjusted rate of 9.1 [8.5—9.7] deaths per 100,000 persons). Regions 2 and 6 had the lowest rates of colorectal cancer deaths setting the benchmark at 7.7 deaths per 100,000 people. Regions 9, 11, and 12 had the highest rates of colorectal cancer deaths.

Age-adjusted cancer death rate per 100,000 people among Montanans aged 0 to 79 years, 2003-2012

Region	Counties contained in the region	Lung & Bronchus	95% CI	Breast (female)	95% CI	Colorectal	95% CI
1	Lincoln, Flathead, Sanders, and Lake	29.4	26.9 - 32.1	14.3	11.8 - 17.2	9.0	7.6 - 10.5
2	Missoula, Mineral, and Ravalli	29.7	27.1 - 32.6	16.5	13.8 - 19.6	7.9	6.5 - 9.5
3	Lewis & Clark, Jefferson, Broadwater, and Meagher	36.0	32.1 - 40.4	14.8	11.5 - 18.9	8.5	6.6 - 10.7
4	Powell, Granite, Deer Lodge, Silver Bow, Beaverhead, and Madison	34.1	30.4 - 38.2	15.1	11.5 - 19.6	9.5	7.6 - 11.9
5	Glacier, Toole, Liberty, Pondera, and Teton	34.0	28.3 - 40.9	15.6	10.2 - 23.4	8.1	5.5 - 11.9
6	Gallatin, Park, and Sweet Grass	19.7	16.8 - 23.0	16.9	13.4 - 21.1	7.5	5.7 - 9.6
7	Cascade and Chouteau	38.4	34.6 - 42.5	10.5	7.9 - 14.0	9.2	7.4 - 11.4
8	Stillwater, Carbon, Yellowstone, and Big Horn	33.8	31.2 - 36.6	14.6	12.3 - 17.3	9.2	7.9 - 10.7
9	Hill, Blain, and Phillips	35.4	26.6 - 47.0	17.0	10.7 - 26.3	12.4	8.6 - 17.5

Region	Counties contained in the region	Lung & Bronchus	95% CI	Breast (female)	95% CI	Colorectal	95% CI
10	Judith Basin, Fergus, Petroleum, Wheatland, Golden Valley, and Musselshell	38.4	31.8 - 46.5	15.9	10.4 - 25.2	10.4	7.1 - 15.4
11	Valley, Daniels, Sheridan, and Roosevelt	27.1	21.4 - 34.4	16.3	10.4 - 25.4	11.0	7.5 - 16.3
12	Garfield, Rosebud, Treasure, Custer, Powder River, and Carter	26.8	21.4 - 33.6	15.7	10.0 - 24.4	14.0	10.0 - 19.6
13	Richland, McCone, Dawson, Wibaux, Prairie, and Fallon	31.6	25.7 - 38.8	22.3	15.1 - 32.6	10.5	7.3 - 15.1
	All Montana	31.7	30.6 - 32.8	15.1	14.1 - 16.2	9.1	8.5 - 9.7

## Steps for Prevention

**Utilize the Montana Tobacco Quit Line.** The Quit Line is a free service for all Montanans who want to quit using tobacco products. A Quit Coach will assist callers with developing an individualized quit plan. The Quit Line offers some of the best tools to quit using all forms of tobacco in the country, including free nicotine replacement therapy and discounted cessation medications to callers who enroll in the coaching program.

**Increase cancer screening.** The Montana Cancer Control Programs provides breast, cervical, and colorectal cancer screenings to uninsured or under-insured women and men meeting age, income, and other eligibility criteria.

**Educate adults with health insurance to get screened.** The Montana Cancer Control Programs has worked statewide with insurance partners to educate and encourage over 125,000 Montanans with health insurance to get screened.

**Implement smoke-free and tobacco-free policies.** The Montana Tobacco Use Prevention Program continues to work closely with medical campuses, multi-unit housing owners/managers, university/college campuses and schools to encourage the adoption of smoke-free and tobacco-free policies. These types of policies not only protect Montanans from secondhand smoke exposure but also actively change the social norms related to tobacco use.

**Support Employer Worksite Wellness Initiatives.** Local health departments in each of the 13 regions have partnered with over 40 community businesses since 2010 to increase breast, cervical and colorectal cancer screening rates and establish policies addressing cancer screening, nutrition, physical activity and breastfeeding standards.

**Ensure medical clinics recommend and follow-up on cancer screenings.** The Montana Cancer Control Programs has partnered with 45 medical clinics to increase the number of patients up-to-date with colorectal cancer screening. Medical clinics have made improvements to their office practices to support cancer screening education, recommendation, follow-up, and communication.

## Methods

Ten years of Montana death certificate data (from 2003 to 2012) were compiled to obtain sufficient data for region-specific cancer death rates. Only deaths of Montana residents under the age of 80 years were included in this analysis. Deaths before the age of 80 years were considered premature to be consistent with the average life expectancy for the total US population.<sup>6</sup> Deaths due to select cancers were analyzed (ICD-10 underlying death coded C18-C20, C26 [colorectal], C34 [lung and bronchus], and C50 [breast cancer]).<sup>7</sup> All rates were age adjusted to the 2000 US standard population.<sup>8</sup> A benchmark was set from the average of the two lowest rates among the regions for each type of cancer. This benchmark can serve as an attainable goal for other regions in Montana.

## What can be done

Individuals can:

- Quit using tobacco
- Eliminate exposure to secondhand smoke
- Get screened for cancer: Adults 50 and over should be screened for breast and colorectal cancer. Women aged 21 to 65 should be screened for cervical cancer.

• Exercise

• Eat a healthful diet

• Drink alcohol in moderation

Communities can:

- Establish smoke-free and tobacco-free policies
- Support worksite wellness initiatives
- Ensure medical clinics recommend and follow-up on cancer screenings

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