



# Cancer Among Alaska Native People

AN EXECUTIVE SUMMARY  
OF THE ALASKA NATIVE  
TUMOR REGISTRY'S

50  
year report



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM

Alaska Native Epidemiology Center  
Alaska Native Tumor Registry









# Introduction

Cancer remains the leading cause of death among Alaska Native (AN) people. During the most recent 5 year period for which we have data (2014–2018), there were on average each year 480 new cases of cancer diagnosed and 183 cancer deaths. Monitoring cancer diagnoses and deaths among Alaska Native people can help us provide better care to Alaska Native cancer patients, and help us understand risk factors for these cancers. Ultimately, our goal is to reduce the burden of this disease.

This brochure summarizes 50 years of data on cancer diagnoses and deaths among Alaska Native people. It gives information on the leading cancers, how rates of these cancers vary throughout the state, and how they have changed over time.

These data were collected by the Alaska Native Tribal Health Consortium's Alaska Native Tumor Registry (ANTR), and are available in full in the 50-year report, which can be found online at: <http://anthctoday.org/epicenter/publications.html>

# Leading Cancers

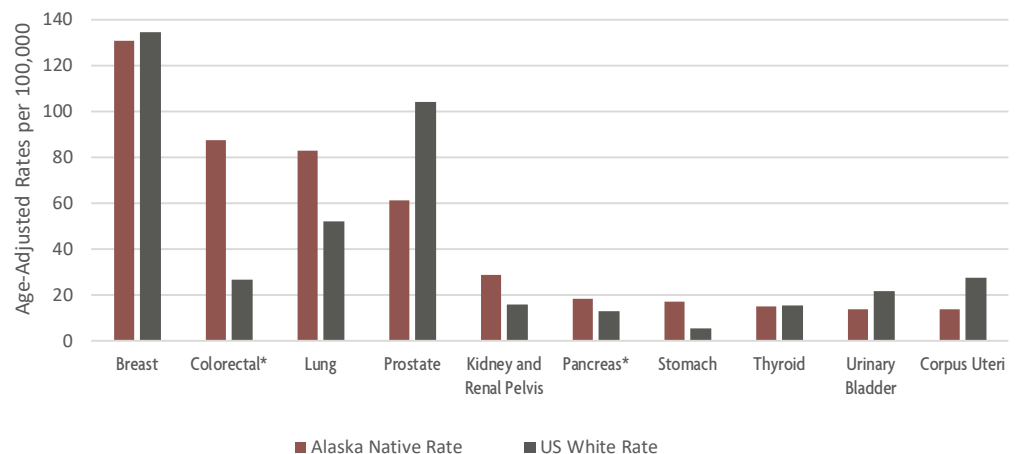
## Among Alaska Native people, 2014–2018

The four leading cancers (breast, colorectal, lung, prostate) account for more than 50% of all cancers diagnosed among Alaska Native people.

Cancers of the lung, colon & rectum, stomach, kidney, and nasopharynx are more common in Alaska Native people than in US White people. Cancers of the prostate, urinary bladder, corpus uteri, and melanoma are less common among Alaska Native people than among US White people.

Avoiding tobacco, eating healthily, and keeping physically active, as well as scheduling age-appropriate cancer screenings are the best ways to reduce the risk of death from lung, breast, colorectal and prostate cancers.

### CANCER SITE RATES





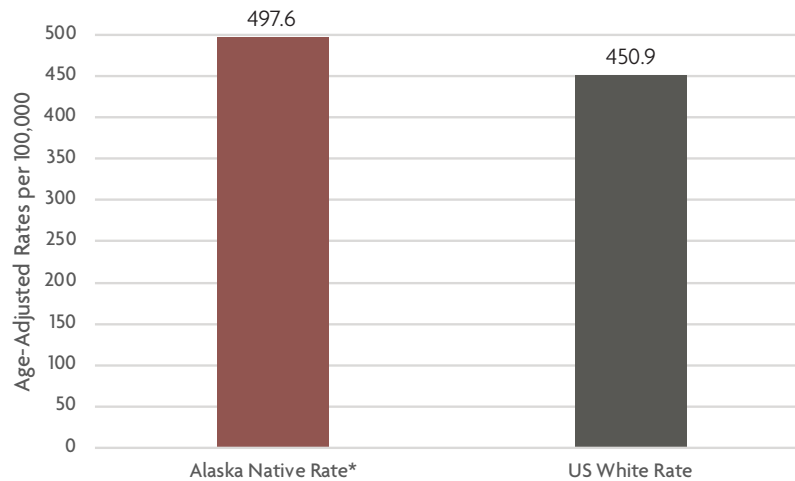
## TOP TEN CANCER COUNTS

Cancer Site	Alaska Native Count	Alaska Native Rate	US White Rate
Breast	340	130.8	134.4
Colorectal*	405	87.6	36.7
Lung	373	83	52.3
Prostate	126	61.2	104.1
Kidney and Renal Pelvis	150	28.9	15.9
Pancreas*	84	18.5	12.9
Stomach	82	17.2	5.7
Thyroid	80	15	15.5
Urinary Bladder	60	13.9	21.9
Corpus Uteri	40	13.7	27.7
<b>All Sites</b>	<b>2401</b>	<b>497.6</b>	<b>450.9</b>

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population. Source: Alaska Native Tumor Registry

\*Statistically different to US White rate

## ALL SITES CANCER RATE • 2014–2018



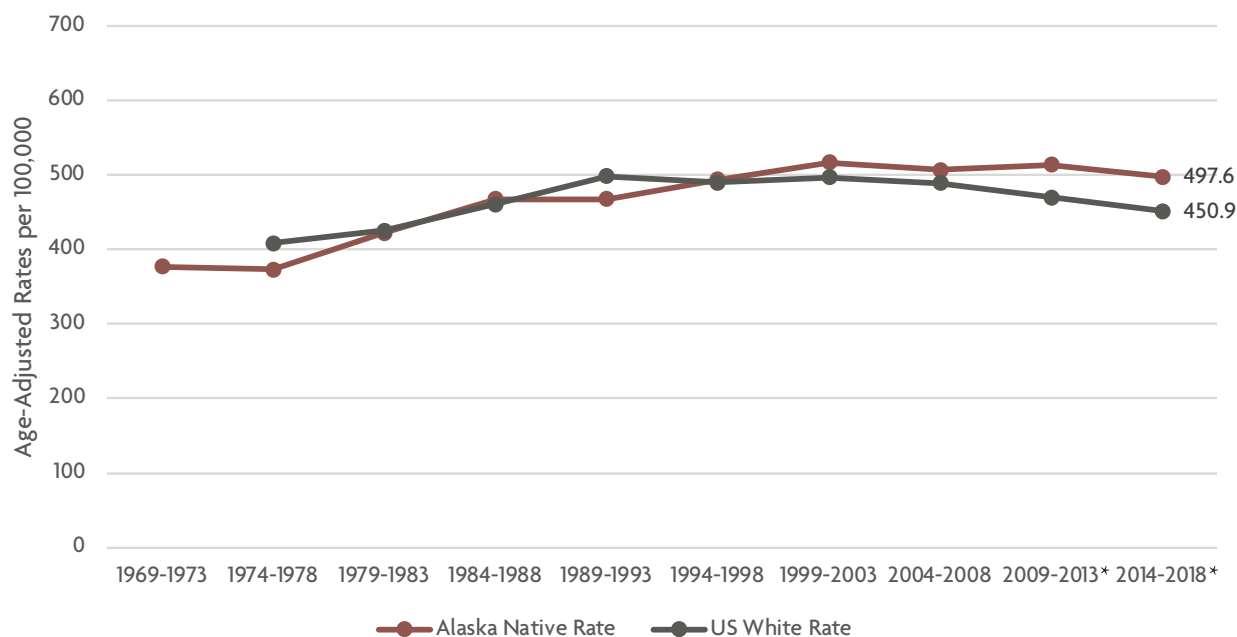
# Trends in Cancer



## Among Alaska Native people, All Sites, 1969–2018

For nearly 40 years, cancer rates among Alaska Native people were similar to those among US White people. However, cancer rates among Alaska Native people have increased over the last decade, even as cancer rates among US White people have decreased.

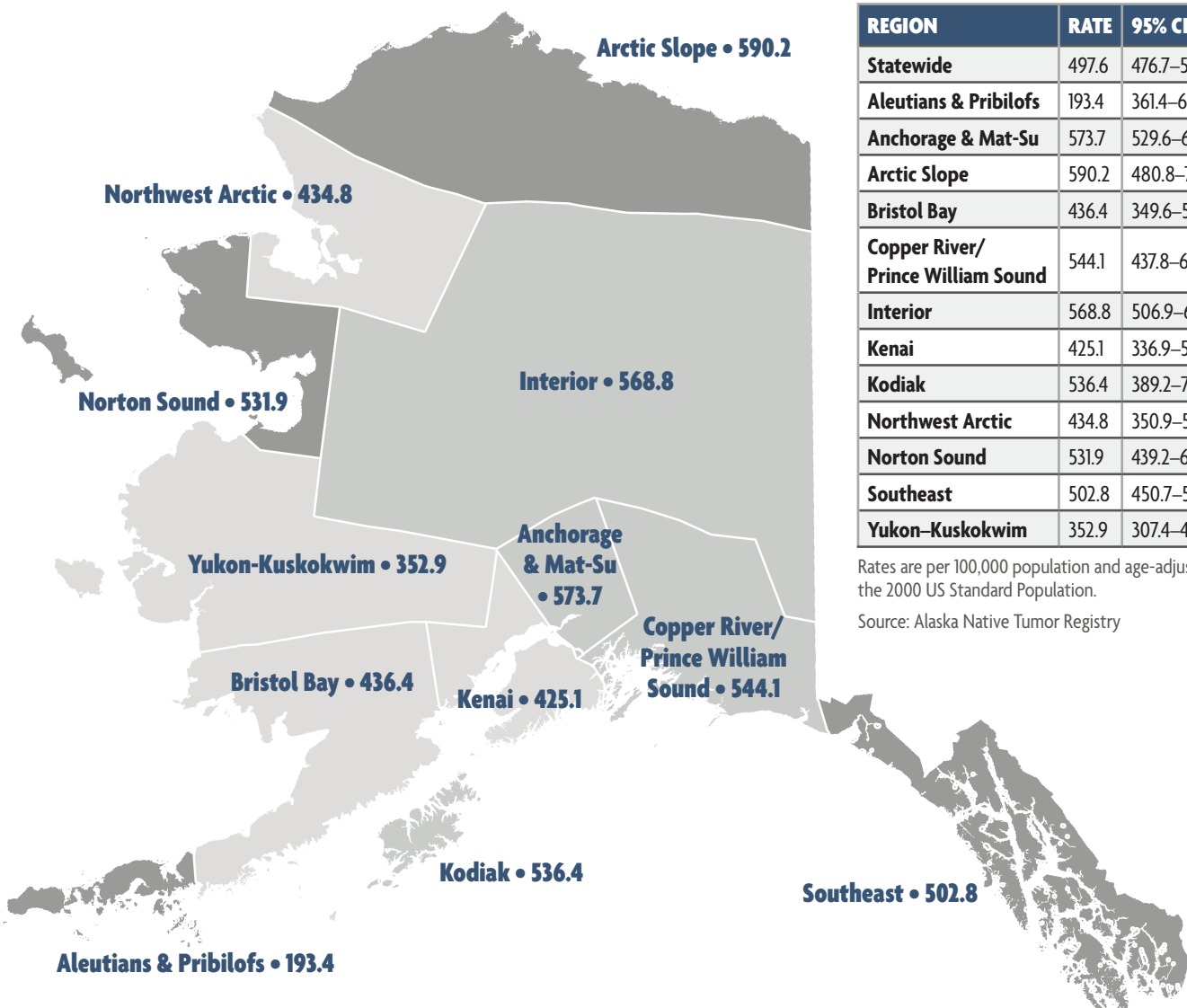
Approximately 4 in 10 Alaska Native men and 5 in 10 Alaska Native women will be diagnosed with cancer in their lifetime (ANTR).



\*Statistically different to US White rate



# REGIONAL CANCER INCIDENCE RATES • ALL SITES 2014–2018



REGION	RATE	95% CI
Statewide	497.6	476.7–519.2
Aleutians & Pribilofs	193.4	361.4–657.7
Anchorage & Mat-Su	573.7	529.6–620.6
Arctic Slope	590.2	480.8–717.1
Bristol Bay	436.4	349.6–538.2
Copper River/ Prince William Sound	544.1	437.8–668.4
Interior	568.8	506.9–636.2
Kenai	425.1	336.9–529.2
Kodiak	536.4	389.2–721.2
Northwest Arctic	434.8	350.9–532.8
Norton Sound	531.9	439.2–638.4
Southeast	502.8	450.7–559.3
Yukon–Kuskokwim	352.9	307.4–403.3

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population.

Source: Alaska Native Tumor Registry



# Trends in Breast Cancer

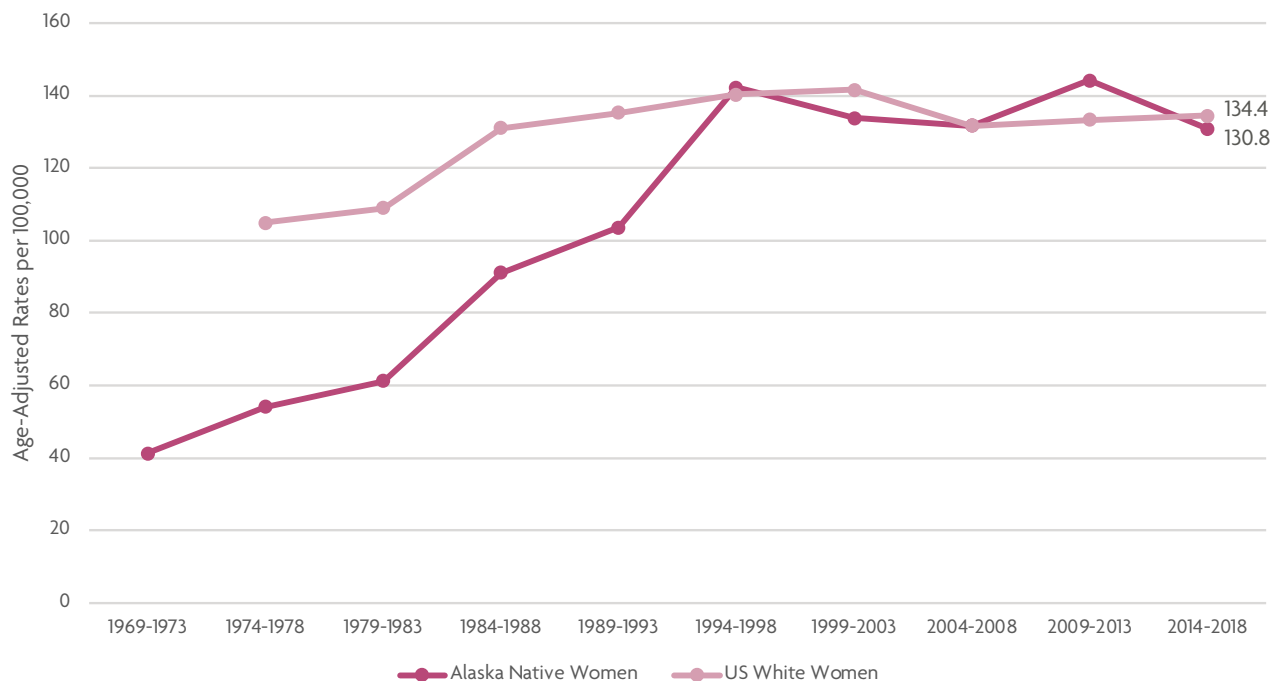
## Among Alaska Native Women 1969–2018

Breast cancer is the most commonly diagnosed cancer among Alaska Native women. It accounts for almost 1 in every 3 cancers among Alaska Native women.

In the 1970s, breast cancer was much less common in Alaska Native women than in US White women. However, between 1970 and

the mid-1990s, rates more than tripled, and since then have remained stable and similar to US White women's rates.

About 3 in 4 of Alaska Native women aged 50–74 report having had a mammogram within the last two years (BRFSS\*\*, 2004–2018). This is about the same as among US White women.

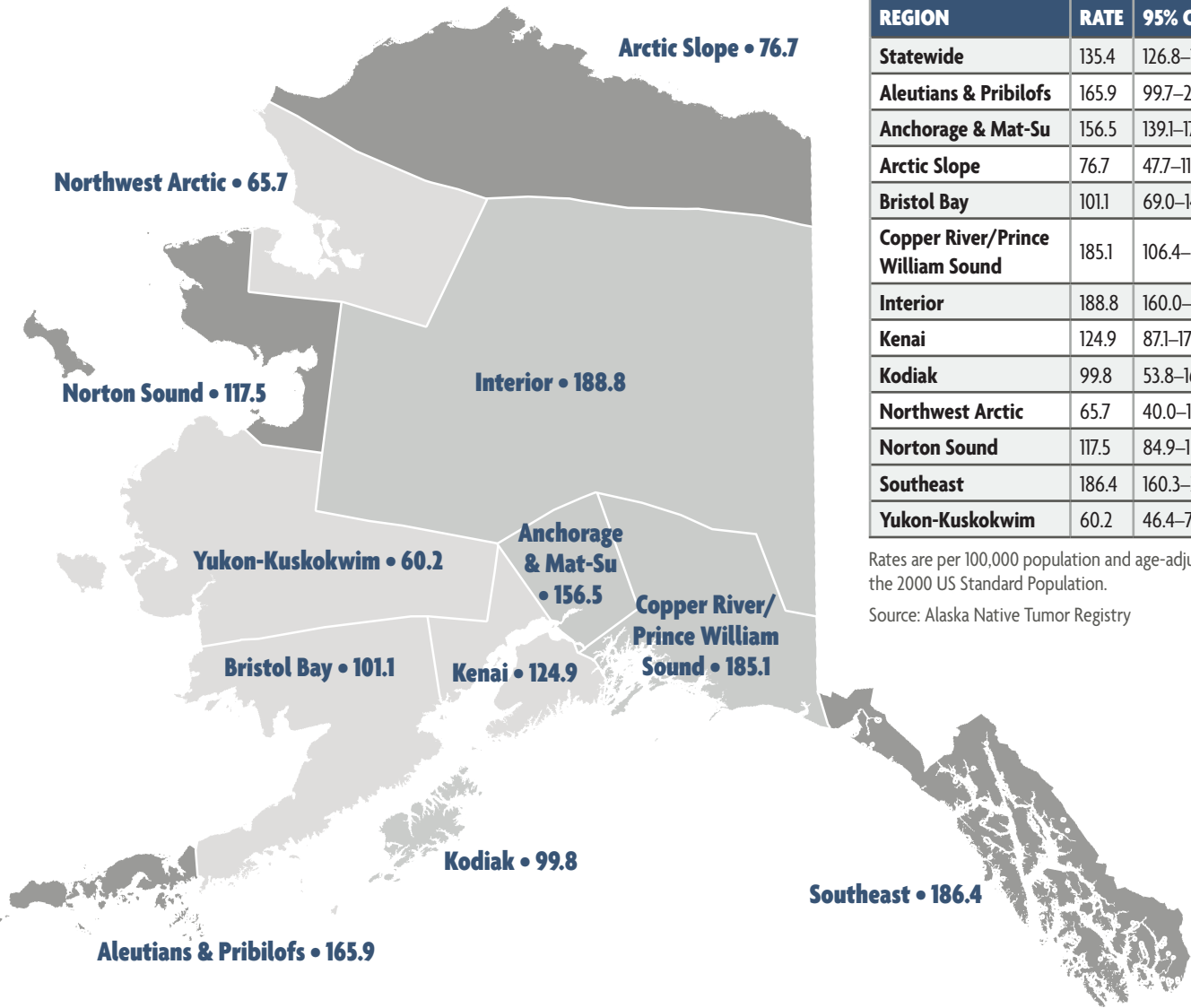


\*Statistically different to US White rate

\*\*Behavioral Risk Factor Surveillance System



# REGIONAL BREAST CANCER INCIDENCE RATES • 2014–2018



REGION	RATE	95% CI
Statewide	135.4	126.8–144.5
Aleutians & Pribilofs	165.9	99.7–259.5
Anchorage & Mat-Su	156.5	139.1–175.4
Arctic Slope	76.7	47.7–116.8
Bristol Bay	101.1	69.0–143.0
Copper River/Prince William Sound	185.1	106.4–299.1
Interior	188.8	160.0–221.3
Kenai	124.9	87.1–173.6
Kodiak	99.8	53.8–169.2
Northwest Arctic	65.7	40.0–101.8
Norton Sound	117.5	84.9–158.4
Southeast	186.4	160.3–215.4
Yukon-Kuskokwim	60.2	46.4–77.0

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population.

Source: Alaska Native Tumor Registry



# Trends in Colorectal Cancer



## Among Alaska Native people, 1969–2018

Colorectal cancer incidence rates for Alaska Native people have been much higher than for US White people for almost 50 years.

Since the mid-1980s, colorectal cancer rates have been declining among US White people.

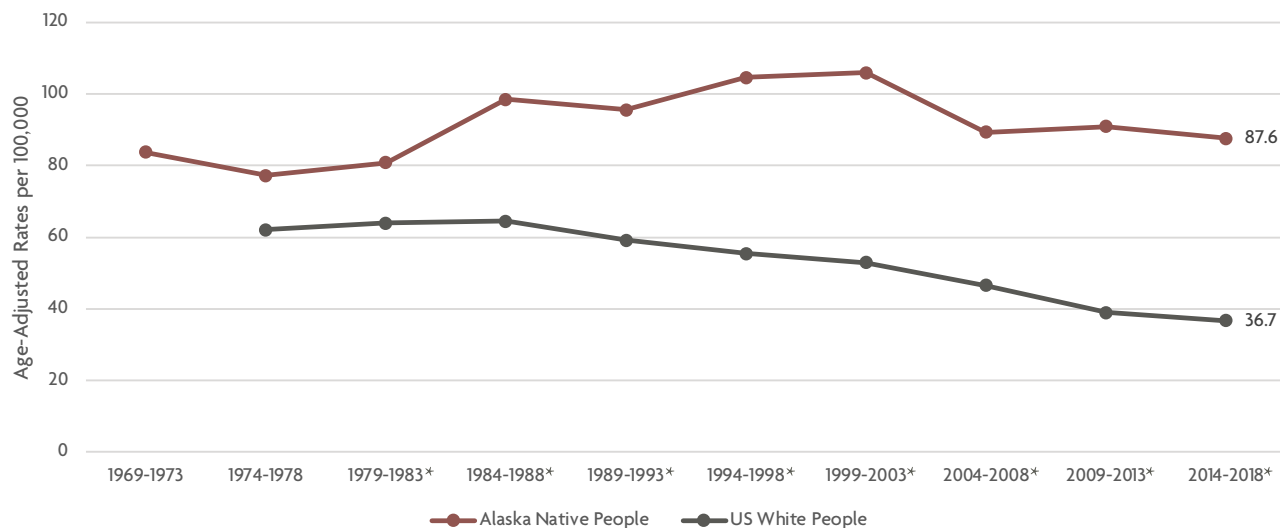
We have not seen the same declines among Alaska Native people.

Colorectal cancer screening is a very important tool for catching colorectal cancer early and reducing the burden of this disease. First-degree relatives (parents, siblings, children) of persons

diagnosed with colorectal cancer are at increased risk, and may benefit from earlier screening.

Colorectal cancer screening for Alaska Native people over age 50 increased from 25% in 1993 to nearly 70% in 2018 (BRFSS, 1993, 2018)

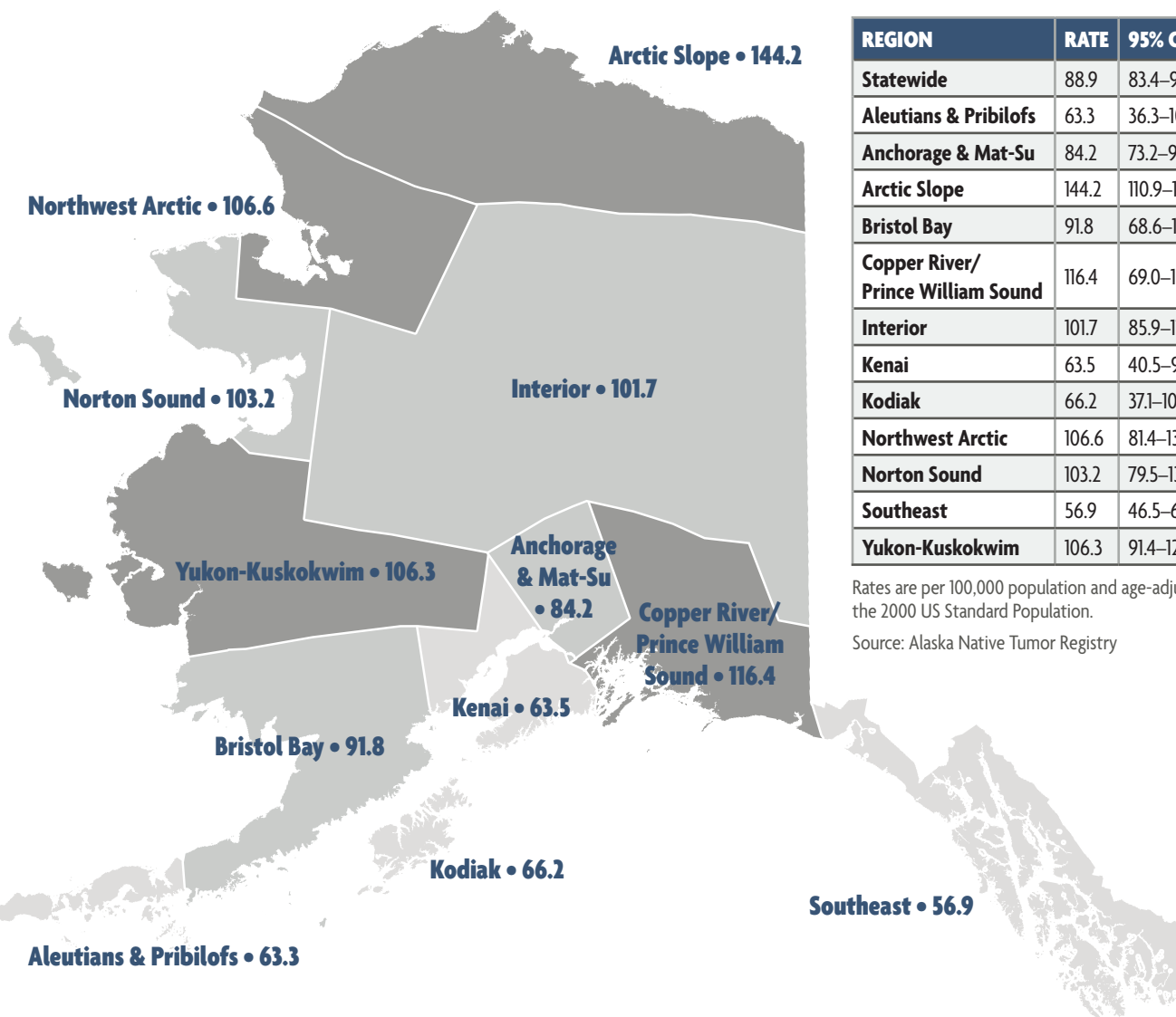
Because of the high rate of colorectal cancer in Alaska Native people, in 2013 the Alaska Native Medical Center recommended that Alaska Native people start screening at age 40 instead of age 50, which is the current national recommendation.



\*Statistically different to US White rate



## REGIONAL COLORECTAL CANCER INCIDENCE RATES • 2014–2018



REGION	RATE	95% CI
Statewide	88.9	83.4–94.7
Aleutians & Pribilofs	63.3	36.3–102.5
Anchorage & Mat-Su	84.2	73.2–96.5
Arctic Slope	144.2	110.9–184.3
Bristol Bay	91.8	68.6–120.5
Copper River/ Prince William Sound	116.4	69.0–183.8
Interior	101.7	85.9–119.6
Kenai	63.5	40.5–94.8
Kodiak	66.2	37.1–108.9
Northwest Arctic	106.6	81.4–137.2
Norton Sound	103.2	79.5–131.6
Southeast	56.9	46.5–69.0
Yukon-Kuskokwim	106.3	91.4–123.0

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population.

Source: Alaska Native Tumor Registry



# Trends in Lung Cancer

## Among Alaska Native People, 1969–2018

Since the mid-1980's, lung cancer rates in Alaska Native people have been higher than in US White people.

Since the 1960's, there have been more diagnoses of lung cancer in Alaska Native men than in Alaska Native women. A similar pattern is observed in US White men and women.

Rates of lung cancer increased among Alaska Native men between 1969 and 1994, but have been decreasing since that time.

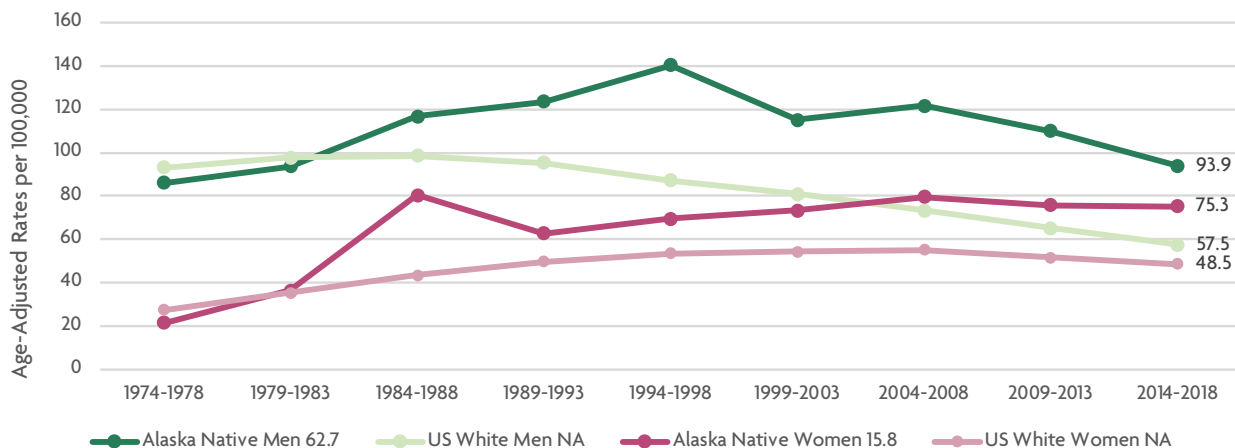
However, lung cancer remains about 1.5 times more common in Alaska Native men than in US White men.

The pattern is slightly different in women.

Rates increased from 1969 to the early 2000s in Alaska Native and in US White women, but appear to have leveled off since that time. Similar to men, rates are higher among Alaska Native women than among US White women.

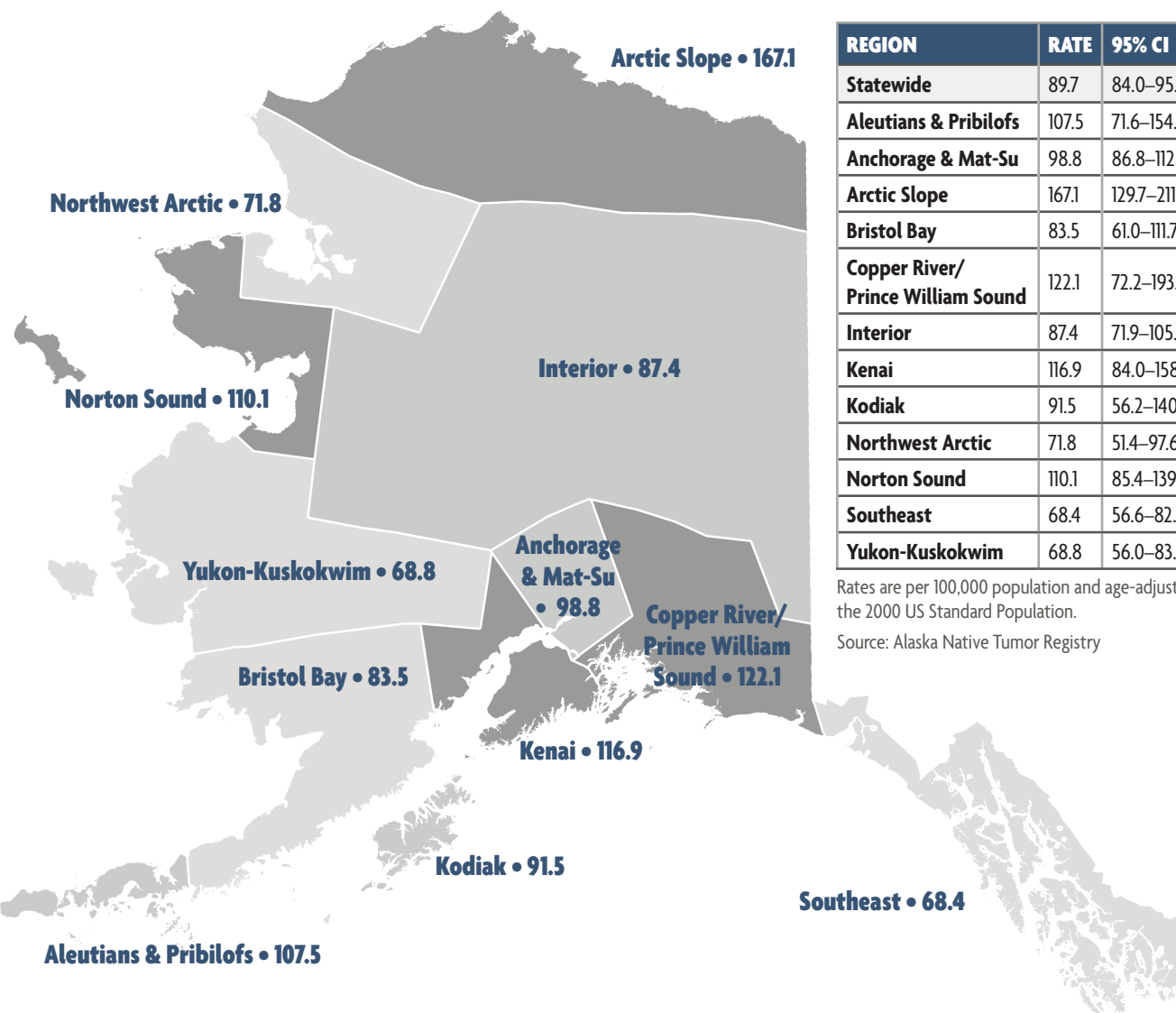
Smoking is the leading cause of lung cancer, causing about 90% of cases (CDC). Avoiding any tobacco use is one of the best ways that you can prevent lung cancer.

Approximately 32% of the Alaska Native population are current smokers, which is more than twice the number of smokers in the US White population (BRFSS, 2018).





## REGIONAL LUNG CANCER INCIDENCE RATES • 2014–2018



REGION	RATE	95% CI
Statewide	89.7	84.0–95.7
Aleutians & Pribilofs	107.5	71.6–154.9
Anchorage & Mat-Su	98.8	86.8–112.0
Arctic Slope	167.1	129.7–211.9
Bristol Bay	83.5	61.0–111.7
Copper River/ Prince William Sound	122.1	72.2–193.4
Interior	87.4	71.9–105.3
Kenai	116.9	84.0–158.4
Kodiak	91.5	56.2–140.7
Northwest Arctic	71.8	51.4–97.6
Norton Sound	110.1	85.4–139.6
Southeast	68.4	56.6–82.0
Yukon-Kuskokwim	68.8	56.0–83.8

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population.

Source: Alaska Native Tumor Registry



# Trends in Prostate Cancer

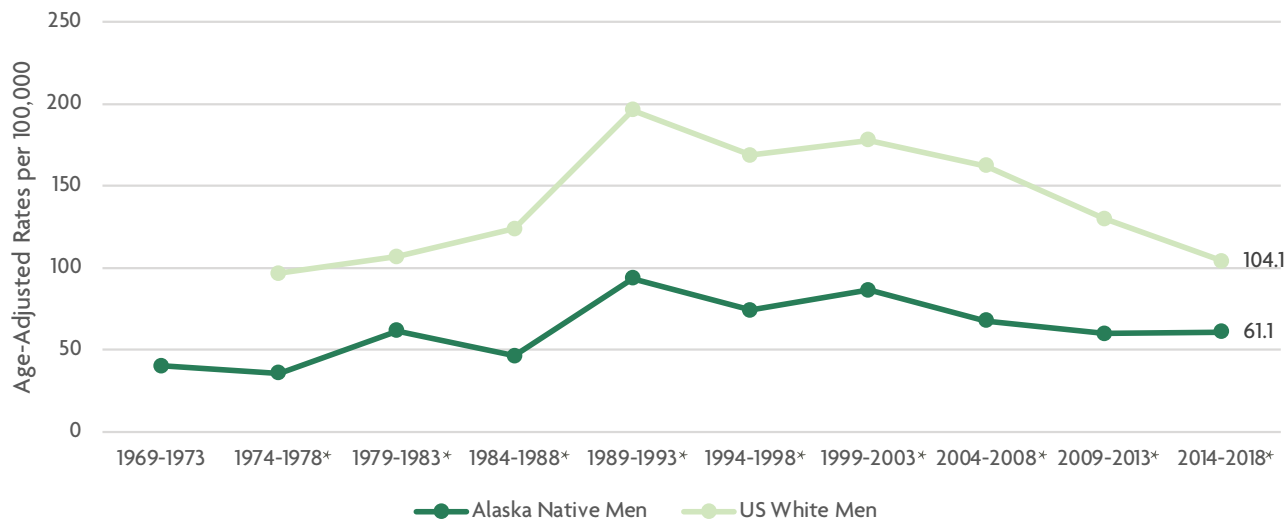


## Among Alaska Native Men, 1969–2018

Prostate cancer is the third leading cancer among Alaska Native men, after lung and colorectal cancers.

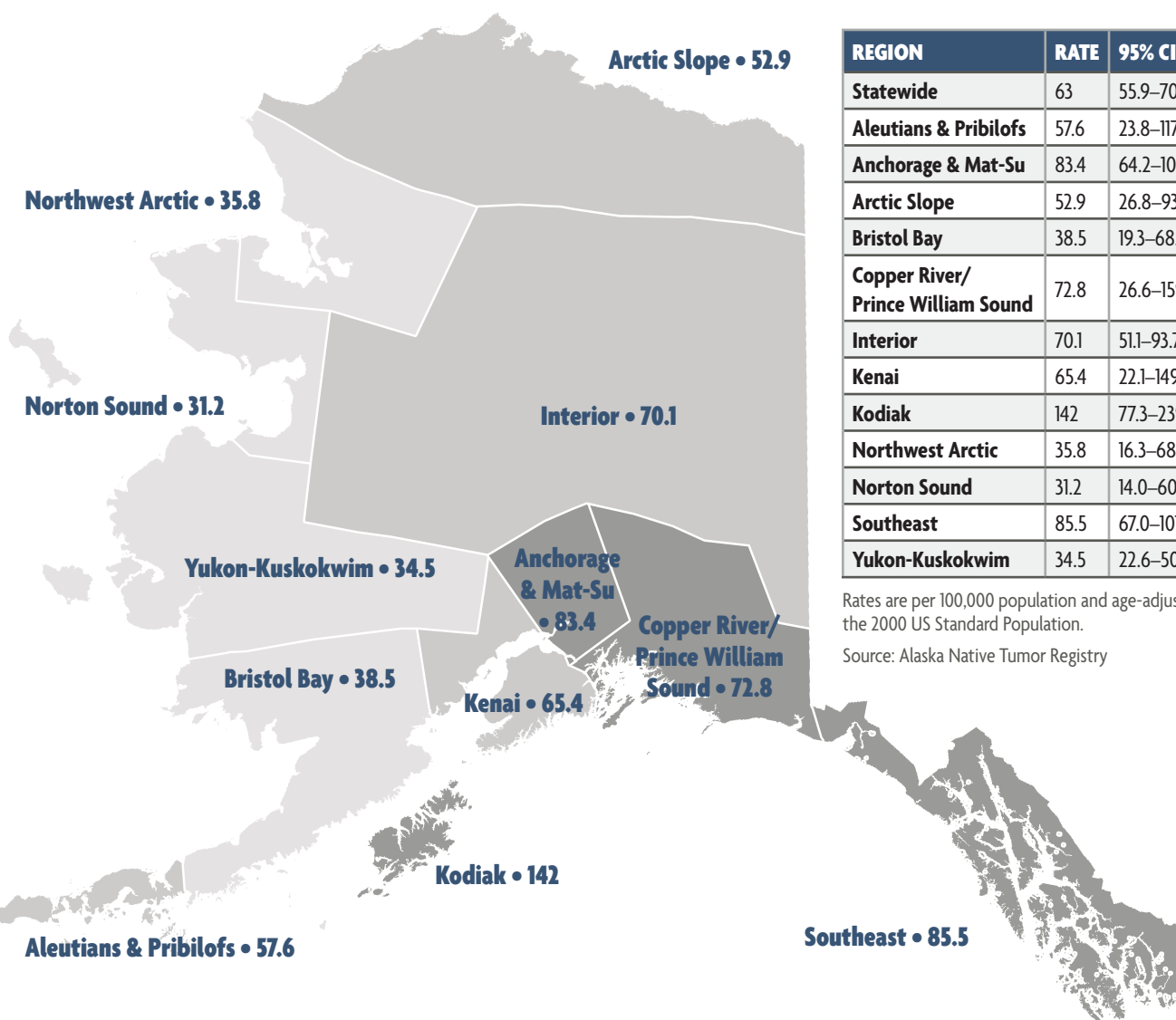
Prostate cancer rates among Alaska Native men remain consistently about half the rates of prostate cancer among US White men.

Rates of prostate cancer among Alaska Native men have remained relatively stable over the past 50 years.



\*Statistically different to US White rate

## REGIONAL PROSTATE CANCER INCIDENCE RATES • 2014–2018



REGION	RATE	95% CI
Statewide	63	55.9–70.7
Aleutians & Pribilofs	57.6	23.8–117.0
Anchorage & Mat-Su	83.4	64.2–106.6
Arctic Slope	52.9	26.8–93.9
Bristol Bay	38.5	19.3–68.6
Copper River/ Prince William Sound	72.8	26.6–159.1
Interior	70.1	51.1–93.7
Kenai	65.4	22.1–149.3
Kodiak	142	77.3–239.0
Northwest Arctic	35.8	16.3–68.0
Norton Sound	31.2	14.0–60.1
Southeast	85.5	67.0–107.6
Yukon-Kuskokwim	34.5	22.6–50.5

Rates are per 100,000 population and age-adjusted to the 2000 US Standard Population.

Source: Alaska Native Tumor Registry





# Cancer Mortality

## Among Alaska Native people, 2014–2018

One in five deaths among Alaska Native people is due to cancer.

**Lung:** Lung cancer remains the leading cause of cancer mortality among Alaska Native men and women.

**Colorectal cancer:** Alaska Native people have a colorectal cancer mortality rate which is nearly three times higher than that among US White people.

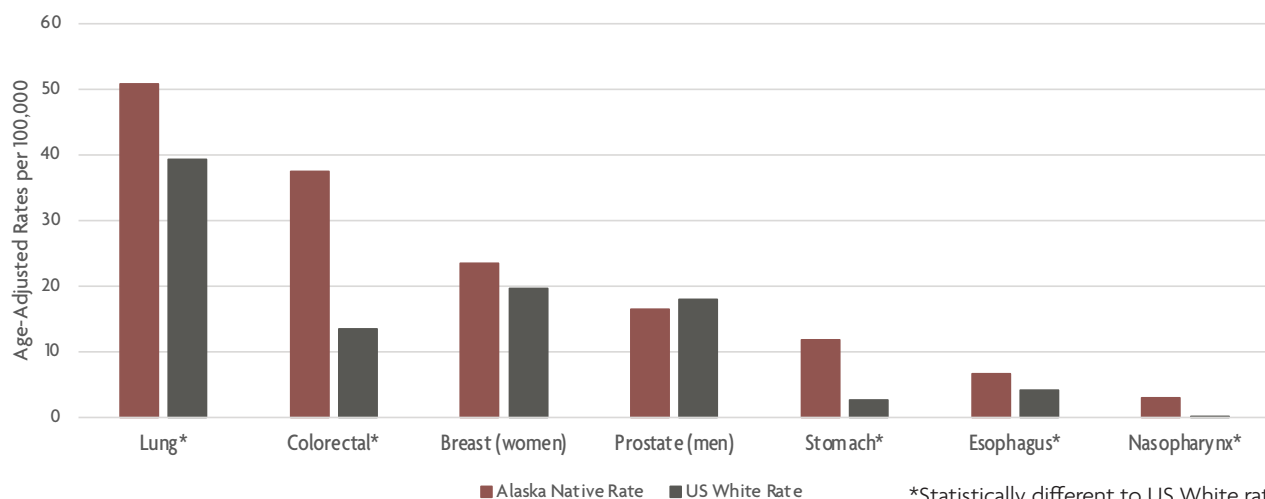
**Breast:** Breast cancer remains the third leading cause of cancer mortality among Alaska Native women.

**Prostate:** While the rate of new cases of prostate cancer among Alaska Native people is lower than

among US White people, mortality rates are about the same.

**Stomach:** Mortality from stomach cancer among Alaska Native people is nearly five times that among US White people.

**Nasopharynx:** Although this cancer site remains uncommon, it is 15 times more common among Alaska Native people than among US White people. Mortality for nasopharyngeal cancer is 29 times higher among Alaska Native people than among US White people.



## SELECTED CANCER MORTALITY AMONG ALASKA NATIVE PEOPLE

Men and Women	Alaska Native Count	Alaska Native Rate	US White Rate
Lung*	218	50.8	39.3
Colorectal*	149	37.4	13.4
Breast (women)	56	23.5	19.6
Prostate (men)	20	16.4	17.9
Stomach*	57	11.8	2.6
Esophagus*	33	6.6	4.1
Nasopharynx*	14	2.9	0.1
All Malignant Cancers*	913	211.6	156.3

\*Statistically different to US White rate











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# Contact us

For more information, please contact us at:

(907) 729-3949 | [ANTR@anthc.org](mailto:ANTR@anthc.org)

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