Cancer in Alaska – 2013

Alaska Cancer Registry
Section of Chronic Disease Prevention and Health Promotion
Alaska Department of Health and Social Services

May 2017

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Cancer in Alaska – 2013

May 2017

A Publication of the

Alaska Cancer Registry

State of Alaska
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Department of Health and Social Services
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A publication of the Alaska Cancer Registry
May 2017

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Executive Summary

This report summarizes the most recently available information about cancer incidence rates in Alaska. Many partners in Alaska are working to reduce cancer risk, find cancers earlier, improve treatment, increase the number of people who survive cancer and improve the quality of life for cancer survivors. Information included in this report about the burden of cancer overall and specific cancers serves as a valuable resource for the planning and evaluation of these efforts.

Data are from the Alaska Cancer Registry (ACR), a population-based cancer surveillance system that is funded by the Centers for Disease Control and Prevention. ACR collects data on all newly diagnosed cases of cancer for the State of Alaska. ACR collects a wide variety of information to determine cancer incidence, mortality, treatment and survival. The data are used to:

- Determine the incidence of cancer in Alaska with respect to geographic and demographic characteristics
- Monitor trends over time
- Monitor early detection, evaluate the effectiveness of cancer control programs and identify areas in need of public health interventions
- Determine how Alaska compares with the rest of the Nation
- Serve as a resource for health planners, medical professionals, researchers and others concerned about cancer

In 2013, ACR data showed:

- There were 2,664 new malignant cases of cancer diagnosed and 1,015 cancer deaths in Alaska.
- Breast cancer was the most commonly diagnosed cancer among women (415 cases) and prostate cancer was the most commonly diagnosed cancer among men (266 cases).
- Among both men and women, lung and bronchus cancer was the second most common cancer diagnosed (323 cases), and colorectal cancer was the third most common (272 cases).
- Overall cancer incidence has decreased in Alaska during the past decade, by an average of 3.6% per year between 2008 and 2013. Cancer incidence rates have also declined in the United States overall, but the current Alaska overall cancer incidence rate (410.7 per 100,000) is lower than the United States rate (430.6 per 100,000).
- Specifically, significant declines in cancer incidence were measured during recent years in Alaska for female breast, cervix, colorectal, leukemia, lung and bronchus, non-Hodgkin lymphoma, prostate and stomach.
- The incidence rates for melanoma of the skin and uterine cancer incidence have both increased in Alaska during recent years.

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Introduction

The Alaska Annual Cancer Report summarizes the most recently available information about cancer incidence rates in Alaska. This report can be used by Alaska's Comprehensive Cancer Control Partnership stakeholders – clinical and public health professionals as well as other health advocacy partners and the public – to support continued planning and evaluation of cancer prevention and control efforts.

What is cancer?
Cancer is a group of diseases, all of which involve uncontrolled growth and spread of abnormal cells.[1] There are over 100 different types of cancer.

The human body is made up of billions of cells. Normally, body cells grow, divide, and die in an orderly fashion. Cancer cells, however, continue to grow and divide and can spread to other parts of the body. These cells accumulate and form tumors (lumps) that compress, invade, and destroy normal tissue. If cells break away from such a tumor, they can travel through the bloodstream or the lymph system to other areas of the body. There, they may settle and form "colony" tumors. In their new location, the cancer cells continue growing. The spread of a tumor to a new site is called metastasis. Not all tumors are cancerous. Benign tumors do not metastasize and, with very rare exceptions, are not life-threatening.

When cancer spreads, it is still named after the body part where it started. For example, if prostate cancer spreads to the bones, it is still prostate cancer, and if breast cancer spreads to the lungs it is still called breast cancer. However, it is possible for a person to develop multiple unrelated types of cancer in different parts of the body over their lifetime.

Cancer is also classified by its appearance under a microscope, known as "histology". Different types of cancer vary in their rates of growth, patterns of spread, and responses to different types of treatment. That's why people with cancer need treatment that is aimed at their specific form of the disease.

Most cancer falls into five major histology groups. Within each group there are subtypes.

- **Carcinoma** is a cancer that develops from cells that cover the surface of the body (skin), glands (breast, prostate), and internal organs (lung, stomach, and intestines). Eighty to nighty percent of all cancers fall into this category.
- **Sarcoma** is a cancer that occurs in connective tissues such as bones, tendons, cartilage, fat, and muscle.
- **Leukemia** is a cancer that develops from cells in bone marrow that make blood, and circulates through other tissues. Leukemia does not usually form a tumor.

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[1] For more discussion, see American Cancer Society, 2015. *What is cancer? A guide for patients and families.* Available at: http://www.cancer.org/cancer/cancerbasics/what-is-cancer (last accessed 12/28/16)

- **Lymphoma** is a cancer that develops from cells in the immune system. Hodgkin lymphoma and non-Hodgkin lymphoma are in this group.
- **Myeloma** is a cancer that develops in the plasma cells of bone marrow.

Who is at risk for cancer?
Everyone. In the United States, an estimated half of all men and one-third of women will develop cancer during their lifetimes.[2] Today, millions of people are living with cancer or have been cured of the disease. The sooner a cancer is found, and the sooner treatment begins, the better the person's chances are of a cure.

Although there are certain specific childhood cancers that have an expected early age peak and then are rarely seen in the rest of the population, the occurrence of cancer generally increases with age; most cancers occur among middle-aged or older adults. The term "lifetime risk" is the probability that an individual, over the course of a lifetime, will develop cancer or die from it. The American Cancer Society (ACS) has published lifetime risks of developing specific cancers by age and gender,[3] estimating:

- One in 7 men will develop prostate cancer
- One in 8 women will develop breast cancer
- One in 14 men and one in 17 women will develop lung or bronchus cancer
- One in 21 men and one in 23 women will develop colorectal cancer

What causes cancer?
An estimated 70% or more of the most common types of cancers are due to behavioral, occupational, and environmental factors.[4] These cover external factors that affect us, and include tobacco, diet, exercise, viruses, radiation, chemicals in the workplace, and not just what is thought of as the environmental pollution of air, water, and food.

Tobacco is the greatest risk factor for all cancers combined and is the single leading preventable cause of cancer. Excessive alcohol consumption, particularly coupled with tobacco use, and failure to eat sufficient fresh fruits, vegetables and whole grains contribute to one-third of all cancer deaths.[5] Reduction of these risk factors can be controlled by individual behavioral

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[2] American Cancer Society (ACS), 2016. *Cancer Facts and Figures 2016*. Available at http://www.cancer.org/research/cancerfactsstatistics/index (last accessed 12/28/16).
[3] Ibid., page 14.
[4] Wu S., Powers S., Zhu W., and Hannun YA, 2016. Substantial contribution to extrinsic risk factors to cancer development. *Nature*, Jan 7; 529(7584): 43-47.
[5] World Health Organization. Cancer Fact Sheet. Revised February 2017. Available at: http://www.who.int/mediacentre/factsheets/fs297/en/ (last accessed 3/21/17)

choices.[6] Research indicates that genes play a role, but the currently known genetic "markers" alone account for only a small proportion of cancers.

Sometimes when a family member or friend is diagnosed with cancer, the tragedy makes us more aware of others in our community with cancer and we begin to be concerned that there may be an unusually large number of cancer cases in a certain area. Sometimes this may be the case, but not often. There are a certain number of cancers that are expected to occur in any U.S. population. The leading cancers in the U.S. will almost always be found in each community and include: lung, breast, prostate, and colorectal cancer.

[6] World Health Organization, 2016. Cancer prevention web page: http://www.who.int/cancer/prevention/en/ (last accessed 1/16/2017).

Data Sources

Alaska Cancer Registry
Most data in this report are from the Alaska Cancer Registry (ACR), a population-based cancer surveillance system that is funded by the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries. ACR is housed within the Alaska Department of Health and Social Services (DHSS), Division of Public Health (DPH).

ACR collects data on all newly diagnosed cases of cancer for the State of Alaska, including a wide variety of information to determine cancer incidence, mortality, and survival.

The data are used to:

- Determine the incidence of cancer in Alaska with respect to geographic and demographic characteristics
- Monitor trends over time, looking for unusual patterns
- Monitor early detection, evaluate the effectiveness of cancer control programs and identify areas in need of public health interventions
- Determine how Alaska compares with the rest of the U.S.
- Serve as a resource for health planners, medical professionals, researchers and others concerned about cancer

Regulations and confidentiality
ACR was established in January 1996 by Alaska Administrative Code (7 AAC 27.011), and has operated under several statutes and regulations required for compliance with state law and federal quality control guidelines since that time. The regulations require all hospitals, health care facilities and health care practitioners screening, diagnosing or providing treatment for cancer patients diagnosed on or after January 1, 1996 to report information on newly diagnosed cancer cases to the Alaska Division of Public Health. ACR uses quality control methods to assure that cases are not duplicated in the cancer database. ACR has interstate agreements with most other state health departments to ensure that information about Alaska residents diagnosed or treated in other states are shared with ACR.

Alaska law demands strict confidentiality and the protection of the identity of both cancer patients and sources reporting to ACR. An additional law protects facilities and physicians from any liability for their reporting to the registry program. Registry personnel are held to the highest standards of data confidentiality. Access to the ACR office and its data is restricted. Any research study involving data with unique identifiers must be reviewed by an Institutional Review Board, which protects rights to privacy and informed consent, with final approval resting with DHSS.

Quality assurance
ACR is a member of the North American Association of Central Cancer Registries (NAACCR), which sets standards for data definition, quality and completeness of reporting. Each year,

NAACCR provides an objective evaluation of state central cancer registry data for completeness, quality and timeliness. For 15 of the last 16 years, ACR has met the "Gold Standard", the highest level of certification available. In 2016, ACR met the Gold Standard for cancer data collected for the diagnosis year 2013, the data included in this report.

Data collected
ACR collects information on all in situ and malignant cancers (those with behavior codes 2 or 3 in the *International Classification of Disease for Oncology*, 3rd Ed.), as well as benign brain cancers diagnosed as of 2004 and later. Three cancers are exempt from reporting because they are rarely fatal, are easily treated at a physician's office, and usually do not require hospitalization. These are:

- Carcinoma in situ of the cervix
- Basal and squamous cell skin cancers (unless these are at an external genital area)

The specific information required to be reported on each cancer case includes demographic data (date of birth, sex, ethnicity, race, residence, etc.) and information on each primary tumor, including site, histology, staging and first course of cancer-directed treatment.

For more information on Alaska's cancer surveillance and ACR, visit
http://dhss.alaska.gov/dph/Chronic/Pages/Cancer/registry.aspx

Mortality Data
Information on Alaska residents who died from cancer was obtained from the Alaska Bureau of Vital Statistics, DPH. Only Alaska residents are included in mortality data.

For more information on Alaska's mortality data, visit
http://dhss.alaska.gov/dph/VitalStats/Pages/data/default.aspx

U.S. Cancer Rates
National cancer incidence rates are age-adjusted and come from the United States Cancer Statistics (USCS). The USCS data represents the combined data sets of the two U.S. cancer registry programs: National Program of Cancer Registries of CDC and the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI). These federal programs fund cancer registries in all 50 states, the District of Columbia, and the U.S. Pacific Island Jurisdiction.

For more information on U.S. cancer rates, visit
https://nccd.cdc.gov/uscs/

Alaska Population Estimates
The calculation of incidence rates requires population numbers by age, sex, and race. This information was available within NCI's cancer statistical program, SEER*Stat, which was used to produce the statistics for this report. SEER*Stat incorporated U.S. population data (including

annual Alaska population estimates) from the U.S. Census Bureau's Population Estimates Program and the National Center for Health Statistics.

For more information on single year of age population estimates by county visit https://seer.cancer.gov/popdata/singleages.html

Definitions

Age-adjusted Rates

A "crude" cancer rate is calculated by taking the number of cancer cases for a given population and dividing it by the total number of people in that population. However, cancer incidence and mortality rates in this report are calculated using the direct method and age-adjusted to the standard 2000 U.S. population; they are expressed as number of cases per 100,000 persons.

Age adjustment (sometimes called age standardization) is a statistical process that allows communities and states with different age structures to be compared. Age adjustment removes the influence of the differences in age distributions that occur from one population to another. Since the risk of developing cancer is strongly associated with age, a geographic area with a high proportion of elderly residents could not be accurately compared with a younger-age populated area unless rates were adjusted to a standard reference population – the older community group would always naturally have a higher cancer rate even if the two communities had the same cancer risk.

Effectively, rates for a specific age group in the population of interest are multiplied by the number of people in the same age group in a standard population (in this case, the U.S. 2000 population). Age adjustment is an internationally approved statistical method to remove confounding caused by age.

Alaska Regions

For each specific cancer profile, the number of new malignant cases for that cancer type are reported by borough/census area (BCA), while age-adjusted cancer incidence rates are reported by Alaska's 10 Behavioral Health Systems Regions. This is because many BCAs have small populations and rates would have to be suppressed for these BCAs due to small number of cases. Combining multiple BCAs into these larger established geographic regions makes the statistics more robust.

Behavioral Health Systems Region cancer rates are presented in a chart and include a 95% confidence interval. Rates and counts are not shown when there were fewer than 6 cases within the year (however if there were no cases in the year, the rate is shown as "0"). Appendix A, Table 4, of this report includes a list of borough and census areas included in each of Alaska's Behavioral Health Systems Regions, as well as the total population.

Confidence Intervals

Upper and lower confidence intervals for age-adjusted incidence rates were calculated using the method of Tiwari et al.[7] The "margin of error" is a common term for the "plus or minus" value around a point estimate, which in total represents the confidence interval. The

[7] Tiwari RC, Clegg LX, Zou Z. Efficient interval estimation for age-adjusted cancer rates. *Stat Methods Med Res* 2006 Dec;15(6):547-69.

confidence interval helps to understand the size of uncertainty of the "true value" in a population. Readers are advised to consider the precision of point estimates.

Our report uses 95% confidence intervals. If there is no bias in the data collection system, there is a 95% chance (95 times out of 100 time) that the confidence interval around an estimate will include the true value.

Uncertainty in our estimates occurs because the number of cases of cancer diagnosed is likely to change each year based on random variation. For example, perhaps 2 cases of stomach cancer were diagnosed in early January of the current year instead of December of the previous year because the physicians (or the patients) were on vacation at the end of the previous year. Therefore, the incidence of stomach cancer in the previous year would appear slightly lower than it might have been otherwise. The effect of random variation can be much greater when numbers of cases are small: if the 2 stomach cancers were 2 of only 4 for the entire year, then attributing those cases to the current year instead of the previous year more drastically affects the estimate of stomach cancer incidence than if those cases were 2 of 40 stomach cancers for the year.

Confidence intervals are also used as another way to test statistical significance. Generally, if the confidence intervals of two different rates overlap, we cannot be certain that there is a true difference between them. However, if the confidence intervals do not overlap, then we believe the true values of results for the two groups are different.

Incidence

An incident case is defined as a newly diagnosed primary cancer. A primary cancer, or site, is the cancer of origin, as opposed to a cancer that has spread, or metastasized, from another site. Since individuals can have more than one primary cancer, diagnosed either sequentially or at the same time, the number of incident cases may be greater than the number of persons who were diagnosed with cancer.

This report includes all cancer cases newly diagnosed in 2013. Only Alaska residents are included in the incidence data. Incidence data are presented as the number of cases and age-adjusted incidence rates.

The Alaska Cancer Registry follows standard protocols so that its incidence rates can be compared with those from other registries and the U.S. These include the following:

- Most cancers are grouped by the organ where they arise. The organ of origination is called the primary site.
- Rates are reported only for malignant cancers (those that have penetrated the basement membrane). The exception to this is cancer of the bladder, for which in situ cases are included with invasive cases because generally in situ bladder cancer is as aggressive as malignant bladder cancer. In addition, benign brain cancer rates are presented in this report.

- Basal cell and squamous cell carcinomas of the skin are excluded unless they occur at an external genital area. In these instances, they are considered cancers of the organs where they are located, not skin cancers.
- Cancers of the lymphatic, hematopoietic, and reticuloendothelial systems are grouped by their histology (e.g., leukemia, lymphoma), not by the anatomical sites where they occur. For example, lymphomas of the breast are grouped with non-Hodgkin lymphomas rather than with breast cancers.

Mortality

Deaths are attributed to cancer only if the underlying cause of death is listed as cancer.

Race

Cancer data in this report are presented by race group, regardless of ethnicity. The race groups are White (Caucasian), Black (African-American, African, and people of African descent), Alaska Natives (this also includes a small number of American Indians who are residents of Alaska), and Asian/Pacific Islanders (all Asian, Native Hawaiian and other Pacific Islander races combined). Some cancer cases are reported with "unknown race." Since this represents a relatively small number of cases (less than 2%) and it is not possible to calculate rates for a group with an undefined population, statistics by race for "unknown race" are not presented.

Stage at Time of Diagnosis

"Staging" measures the extent of disease at the time of initial diagnosis. Summary staging attempts to group cases with similar prognoses into categories of:

- *In situ:* non-invasive
- *Localized:* cancer confined to the primary site
- *Regional:* direct extension of tumor to adjacent organs, tissues, or lymph nodes
- *Distant:* metastasis to tissues or lymph nodes remote from the primary site
- *Unstaged*

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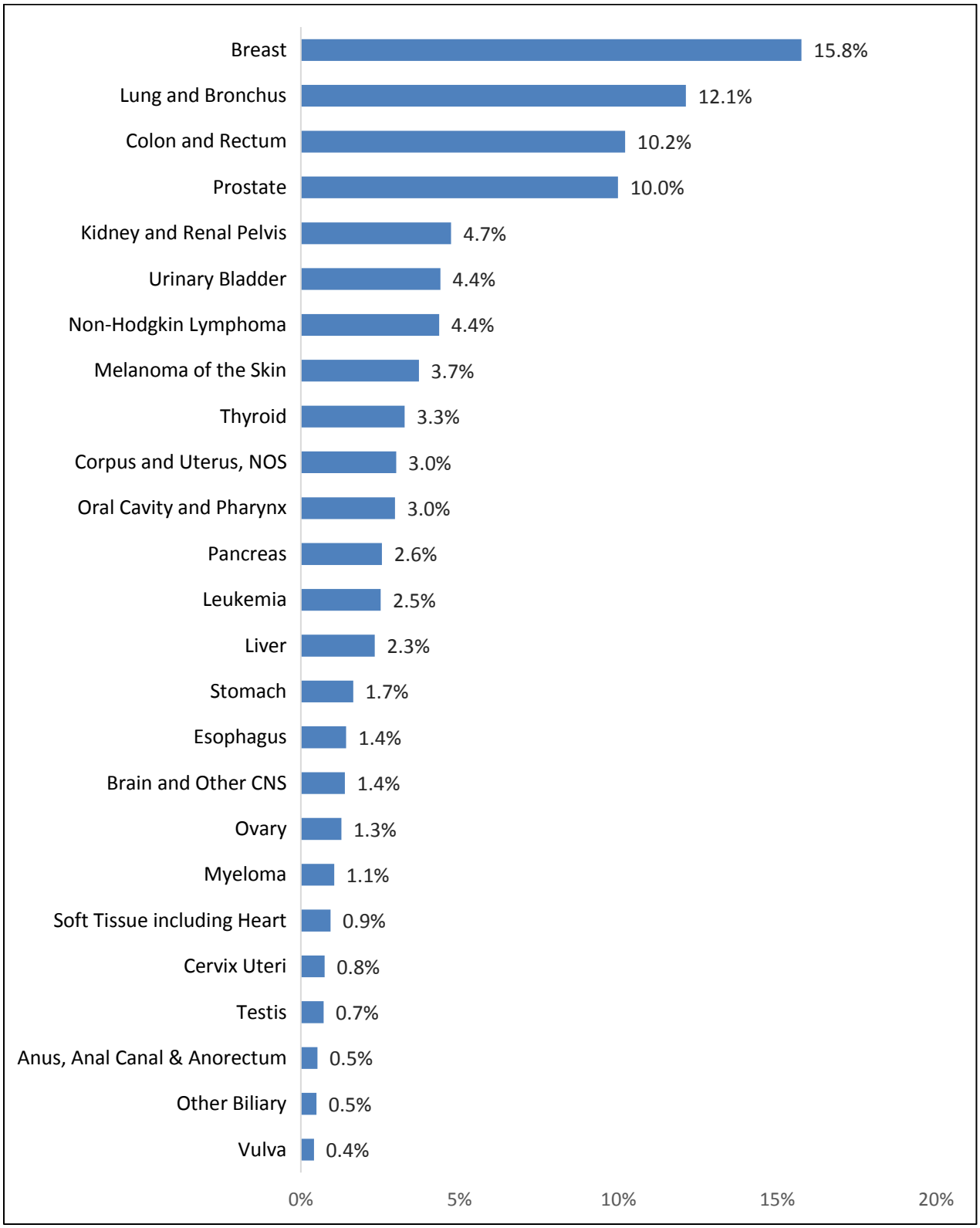
Cancer Incidence Rankings

The first section of this report summarizes the leading cancer types in Alaska in 2013.

The leading 25 cancers in the total population are shown. These are the cancers with the greatest number of incident cases diagnosed among Alaskans within the past year. Therefore, they also make up the largest percentages of all cancers diagnosed among Alaskans within the year.

The leading 10 cancers are also provided for men and women separately, because some cancers are only or mainly observed among men or women specifically (e.g., breast cancer among women or prostate cancer among men). Gender-specific rankings were based on the rate per 100,000 per male or female population; occasionally, the number of cases would suggest a slightly different rank-order, but the general conclusions would be the same.

25 Highest Ranked Cancer Types by Percent of Total Cancer Cases
2013 Cancer Incidence of Alaska Residents



10 Highest Ranked Cancers by Age-adjusted Rate among Males, Alaska 2013

Ranking	Cancer Types, Male	Rate	Count
1	Prostate	76.5	266
2	Lung and Bronchus	66.2	188
3	Colon and Rectum	43.7	139
4	Urinary Bladder	32.0	88
5	Non-Hodgkin Lymphoma	24.2	71
6	Kidney and Renal Pelvis	21.9	76
7	Melanoma of the Skin	17.2	52
8	Oral Cavity and Pharynx	14.5	57
9	Liver	12.3	46
10	Stomach	11.1	36

10 Highest Ranked Cancers by Age-adjusted Rate among Females, Alaska 2013

Ranking	Cancer Types, Female	Rate	Count
1	Breast	120.7	415
2	Lung and Bronchus	44.3	135
3	Colon and Rectum	42.8	133
4	Corpus and Uterus, NOS	22.3	80
5	Thyroid	19.3	64
6	Non-Hodgkin Lymphoma	14.7	45
7	Kidney and Renal Pelvis	14.0	50
8	Melanoma of the Skin	13.3	47
9	Leukemia	11.3	33
10	Ovary	11.0	34

Rates are per 100,000 and age-adjusted to the 2000 U.S. gender-specific population. All incidence rates are for malignant cases only.

Site-specific Cancer Summaries

In this section, cancer data are summarized by type of cancer, for overall cancers and for the leading 20 cancers specifically. See the Definitions section of this report for additional detail about terms or methods for reporting in this section.

Two-page summaries are provided only for the leading 20 cancers. Appendix A of this report includes detailed tables of incidence rates and counts for all cancers combined and 49 specific cancer types, including:

- Table 1: Cancer incidence overall and by gender
- Table 2: Cancer incidence by race
- Table 3: Cancer incidence by 5-year age groups

Each two-page summary includes charts or tables presenting:

- For the total population, and by gender and race:
    - Incidence rates
    - Mortality rates
    - Numbers of new malignant cases
    - Numbers of new in situ cases
    - Numbers of deaths
- Incidence rates by Behavioral Health Region
- Stage at diagnosis
- Total new malignant cases by borough/census area
- Incidence trend for Alaska (1996-2013) and the U.S. (2000-2013)

Each two-page summary also includes discussion points that summarize findings from the data presented. Unless otherwise noted, only statistically significant results are described in text as being "higher" or "lower" than other groups. This includes when findings from comparisons of incidence and mortality data are described in text for males and females, among race groups, between regions of Alaska and between Alaska and the U.S.

Cancer Risk Factors

Information in the discussion points about cancer risk factors was summarized from

American Cancer Society (ACS). *Cancer Facts and Figures 2016.* Atlanta, GA: American Cancer Society; 2016. Available online at http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf (last accessed 9/13/16)

Small Populations and Few Events

Data based on small populations and a small number of events require careful analysis. Alaska's population is divided into many small groups where variation is expected and may be attributed

to chance. Rates that are based on fewer than 6 cases are considered unstable because they have a large standard error. Also, it may be possible to identify an individual person in a small population when there are fewer than 6 cases. For these reasons, we suppress counts and rates when there are fewer than 6 cases in accordance with the national standard used by NAACCR, and indicate this suppression by using a carrot symbol (^).

When there are no cases in a specific time or place, this is reported as "0" but readers should be advised that there is still a margin of error around an estimate based on 0, and should not assume that this is the true value.

Note that rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

Alaska and United States comparisons

We compared the confidence intervals for Alaska's annual incidence rates with the U.S. rate. Differences between Alaska and the U.S. are only mentioned in the text when the U.S. rate is outside the 95% confidence interval of the Alaska rate. Detailed description and supporting tables for comparison of Alaska and United States annual cancer incidence rates are included in Appendix B of this report.

> Note to readers: This method may slightly overestimate differences between Alaska and U.S. rates because it does not consider the confidence interval around the U.S. rate. However, typically the U.S. confidence interval is very narrow.

Alaska trend analysis

Alaska trend data are presented to identify changes in patterns of cancer that need additional investigation.

Each specific cancer profile in this report shows annual age-adjusted incidence rates per each type of cancer in Alaska as a line graph, with Alaska's rates shown as a solid line. The shaded area surrounding that line is the 95% confidence interval for the annual rate. U.S. rates are shown as a dotted line for comparison.

Detailed description and supporting tables for Alaska's cancer trend analysis are included in Appendix B of this report.

> Note to readers: the simple trend examination for Alaska's overall population that is included in this report will <u>not</u> detect subgroup trend differences or shifts (e.g., variations in trend patterns by gender, age, or race).

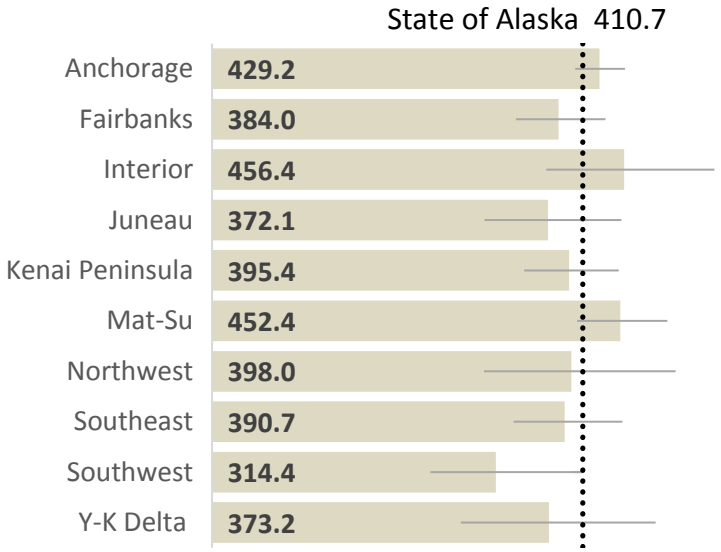
All Cancer Sites

Incidence and Mortality Summary, 2013

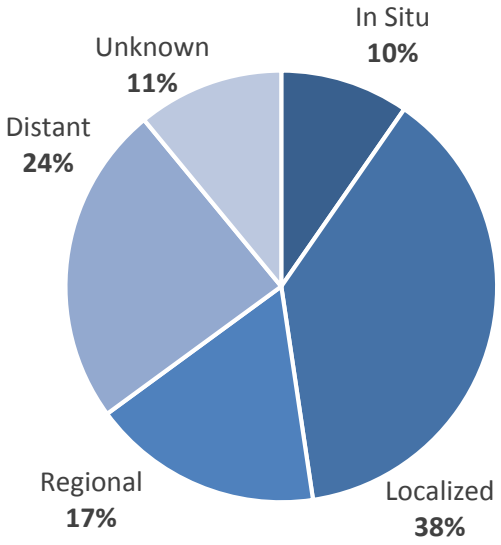
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	410.7	424.9	402.1	396.3	520.2	370.9	348.8
Mortality rate	173.4	190.9	161.2	157.4	275.3	197.3	126.8
Numbers of cases							
# of new malignant cases	2,664	1,352	1,312	1,974	453	75	153
# of new in situ cases	226	46	180	191	24	^	^
# of deaths	1,015	529	486	712	215	32	50

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates and counts include malignant cases, plus in situ bladder cancer cases.

Overall Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates include malignant cases, plus in situ bladder cancer cases

Discussion

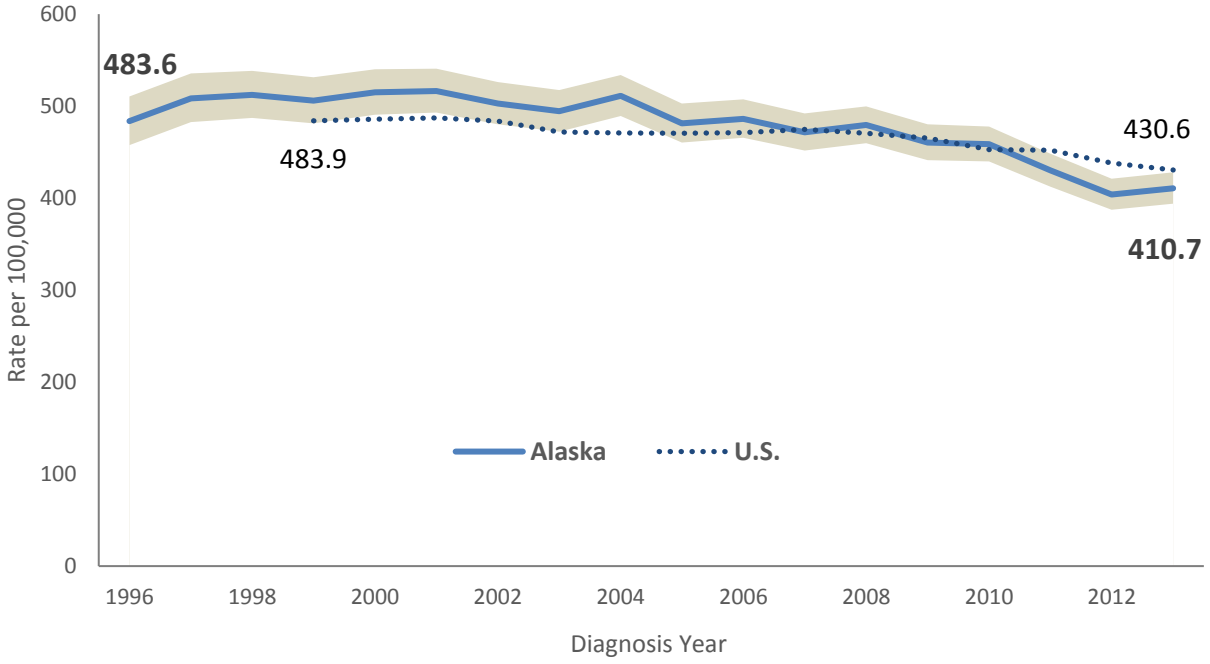
- In Alaska, overall cancer incidence is higher among Alaska Natives than among Whites or Asian/Pacific Islanders.
- Overall cancer incidence has decreased nationally and in Alaska during the past decade.
- Some risk factors for cancer (like age or some genetic factors) cannot be changed, but many other risk factors can be modified or prevented.
- In general, environmental factors, defined broadly to include tobacco use, diet, obesity, sun exposure, and infectious diseases like hepatitis and HPV, as well as chemicals and radiation cause an estimated 75% to 80% of all cancer cases in the United States. Tobacco is by far the largest contributor.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	^	Lake and Peninsula Borough	8
Aleutians West Census Area	10	Matanuska-Susitna Borough	383
Municipality of Anchorage	1,094	Nome Census Area	29
Bethel Census Area	40	North Slope Borough	23
Bristol Bay Borough	^	Northwest Arctic Borough	21
Denali Borough	^	Petersburg Borough	18
Dillingham Census Area	13	Prince of Wales-Hyder Census Area	24
Fairbanks North Star Borough	288	Sitka Borough	41
Haines Borough	9	Skagway Municipality	^
Hoonah-Angoon Census Area	7	Southeast Fairbanks Census Area	37
Juneau Borough	119	Valdez-Cordova Census Area	34
Kenai Peninsula Borough	262	Wrangell Borough	16
Ketchikan Gateway Borough	72	Yakutat Borough	0
Kodiak Island Borough	46	Yukon-Koyukuk Census Area	37
Kusilvak Census Area	19	**State of Alaska**	**2,664**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Overall Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.8.

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates include malignant cases, plus in situ bladder cancer cases.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

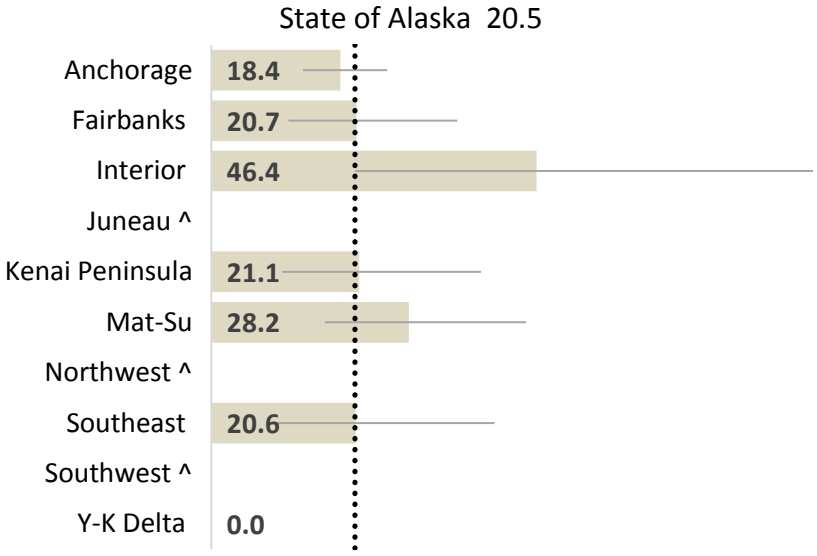
Bladder

Incidence and Mortality Summary, 2013

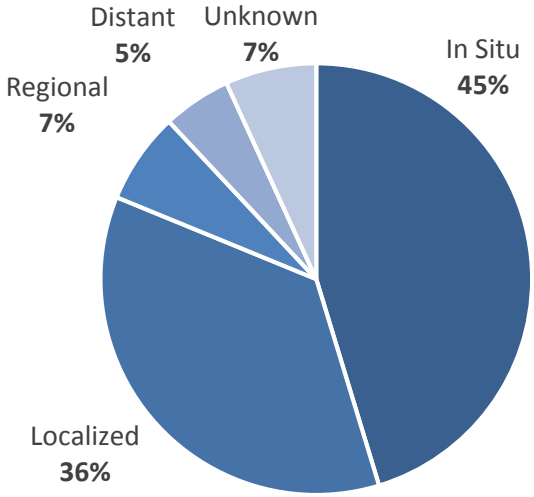
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	20.5	32.0	9.6	23.3	11.6	^	^
Mortality rate	2.1	2.9	^	1.6	^	^	0.0
Numbers of cases							
# of new malignant cases	64	50	14	54	7	^	^
# of new in situ cases	53	38	15	49	^	^	^
# of deaths	11	7	^	7	^	^	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates include malignant and in situ cases.

Bladder Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates include malignant and in situ cases.

Discussion

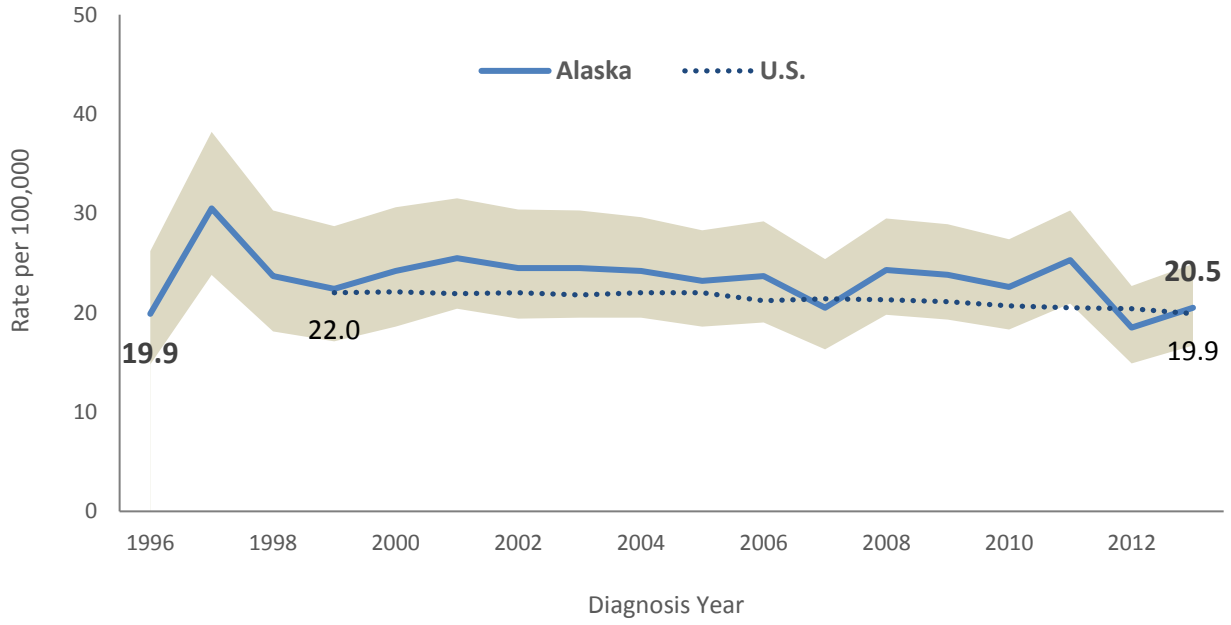
- Bladder cancer is the 6th most common cancer in Alaska, and is persistent in both the in situ and malignant stages.
- Bladder cancer incidence is higher among men than women in Alaska.
- Alaska's incidence rate is similar to the U.S. rate.
- Smoking is the most well-established risk factor for bladder cancer, accounting for about half of all cases. Other risk factors include working in the dye, rubber, leather or aluminum industries, being a painter, living in communities with high levels of arsenic in the water, and having a bladder-related birth defect.

Total New Malignant and In Situ Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	19
Municipality of Anchorage	45	Nome Census Area	^
Bethel Census Area	0	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	^	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	15	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	6
Kenai Peninsula Borough	11	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	0	**State of Alaska**	**117**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Bladder Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.2.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates for bladder cancer include malignant and in situ cases.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

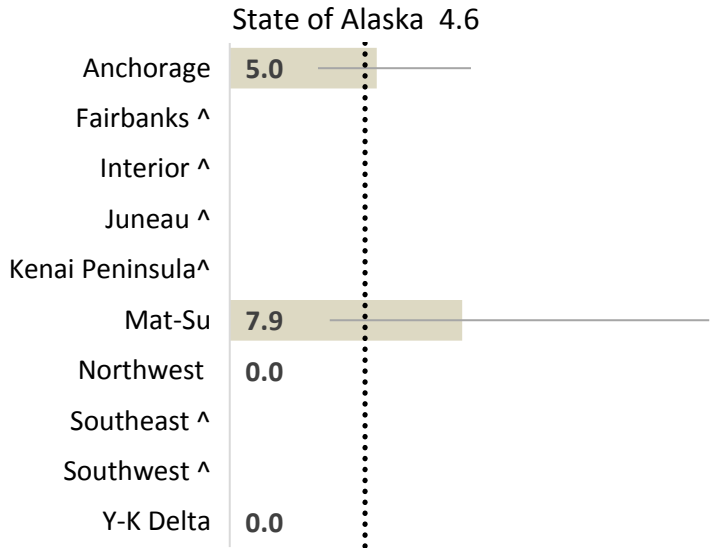
Brain and Other Central Nervous System (CNS) – Malignant Cases

Incidence and Mortality Summary, 2013

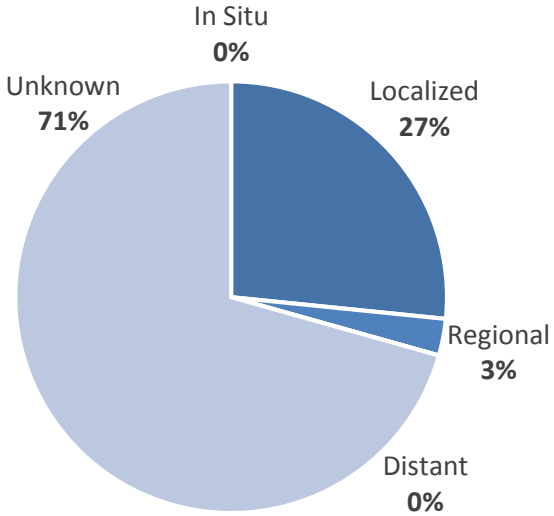
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	4.6	5.8	3.3	5.4	^	^	^
Mortality rate	4.5	5.1	4.1	5.5	^	0.0	0.0
Numbers of cases							
# of new malignant cases	37	24	13	32	^	^	^
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	30	17	13	28	^	0	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Brain/CNS Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

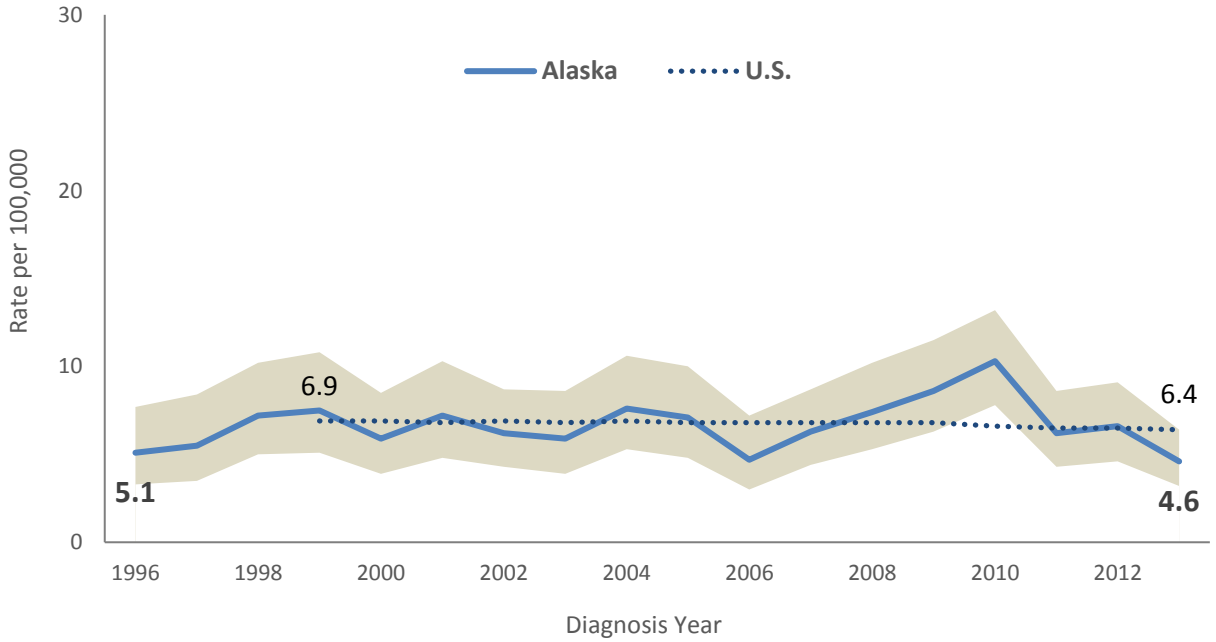
- In most malignant brain and other CNS cancers, the stage at diagnosis is not known.
- Alaska's incidence rate is similar to the national rate.
- Other than radiation (primarily from medical treatment for other cancers), there are no known lifestyle-related or environmental causes of brain tumors. In most cases, it is not known why people without inherited syndromes develop brain or spinal cord tumors. Research continues regarding risk factors and specific gene changes related to brain/CNS cancer.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	8
Municipality of Anchorage	18	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	^	Sitka Borough	0
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	0	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	0	**State of Alaska**	**37**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Brain and other CNS Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

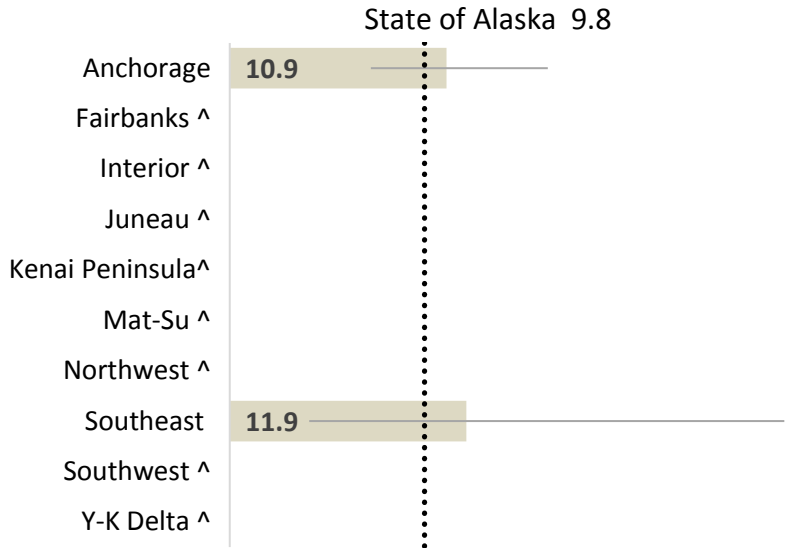
Brain and Other Central Nervous System (CNS) – Benign Cases

Incidence and Mortality Summary, 2013

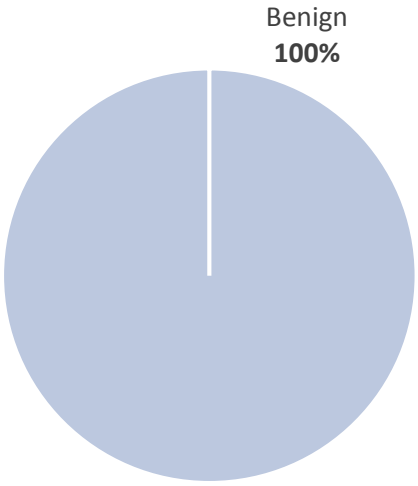
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	9.8	6.6	12.9	8.6	15.2	^	^
Mortality rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Numbers of cases							
# of new benign cases	64	22	42	45	13	^	^
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	0	0	0	0	0	0	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for benign cases only.

Benign Brain/CNS Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for benign cases only.

Discussion

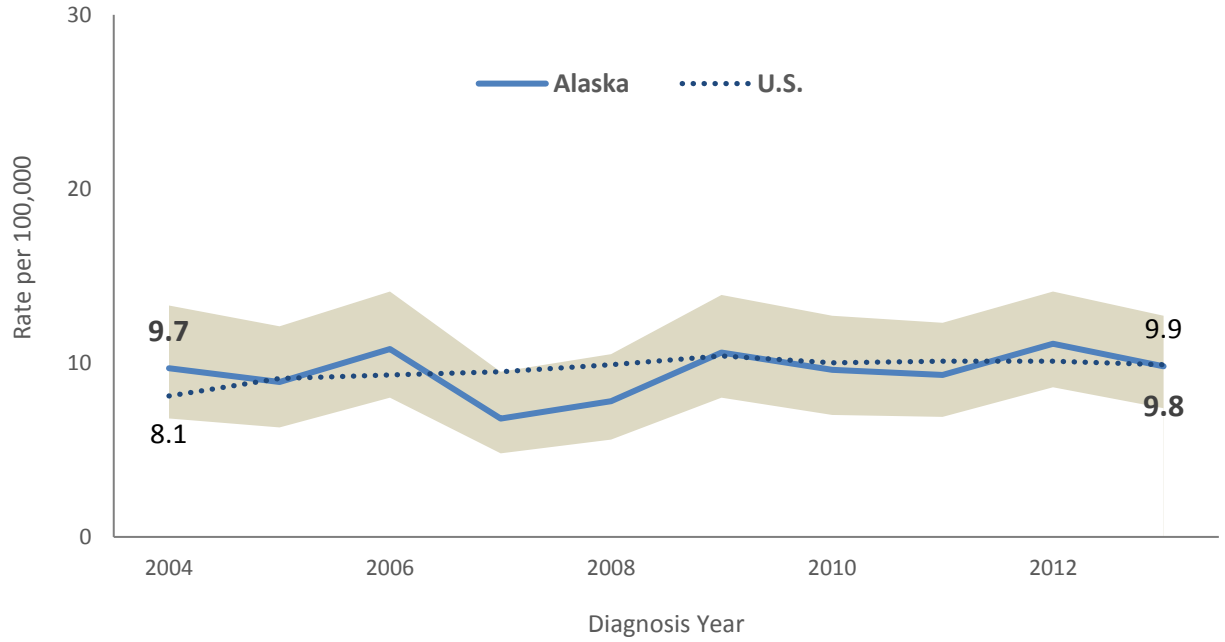
- Benign (non-cancerous) brain and other CNS tumors are considered benign because they don't spread to other parts of the body, like cancers can do, but they are often removed because even benign tumors can cause significant health problems.
- Benign brain and other CNS tumors include most of those that start from the Schwann cells (Schwannomas), the meninges (Meningiomas), and in the pituitary glands.
- Alaska's incidence rate is similar to the national rate.

Total New Benign Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	^
Municipality of Anchorage	30	Nome Census Area	^
Bethel Census Area	0	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	^	Petersburg Borough	0
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	^	Sitka Borough	^
Haines Borough	0	Skagway Municipality	^
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**64**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Benign Brain and other CNS Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for benign cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

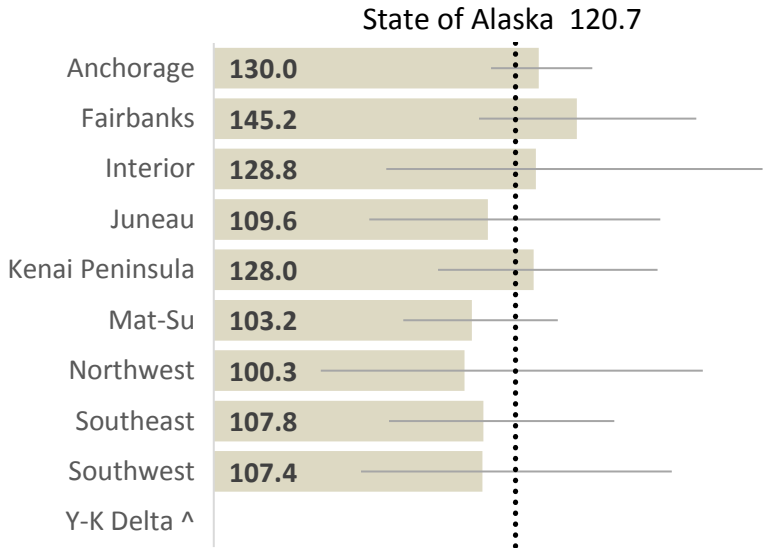
Breast (Female)

Incidence and Mortality Summary, 2013

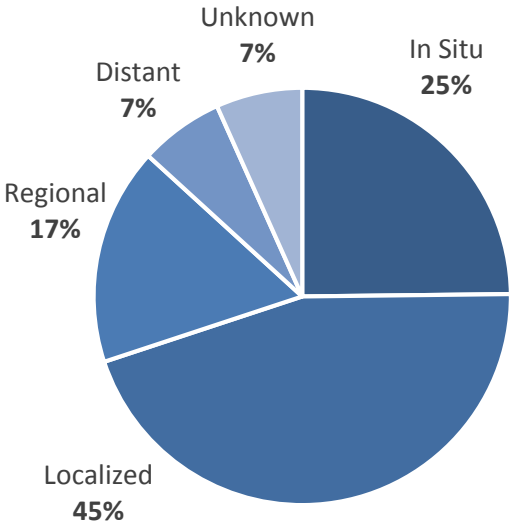
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 women							
Incidence rate	NA	NA	120.7	119.0	136.9	139.3	88.5
Mortality rate	NA	NA	19.5	19.0	17.8	^	^
Numbers of cases							
# of new malignant cases	NA	NA	415	308	68	14	24
# of new in situ cases	NA	NA	137	113	15	^	^
# of deaths	NA	NA	61	46	8	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Breast Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

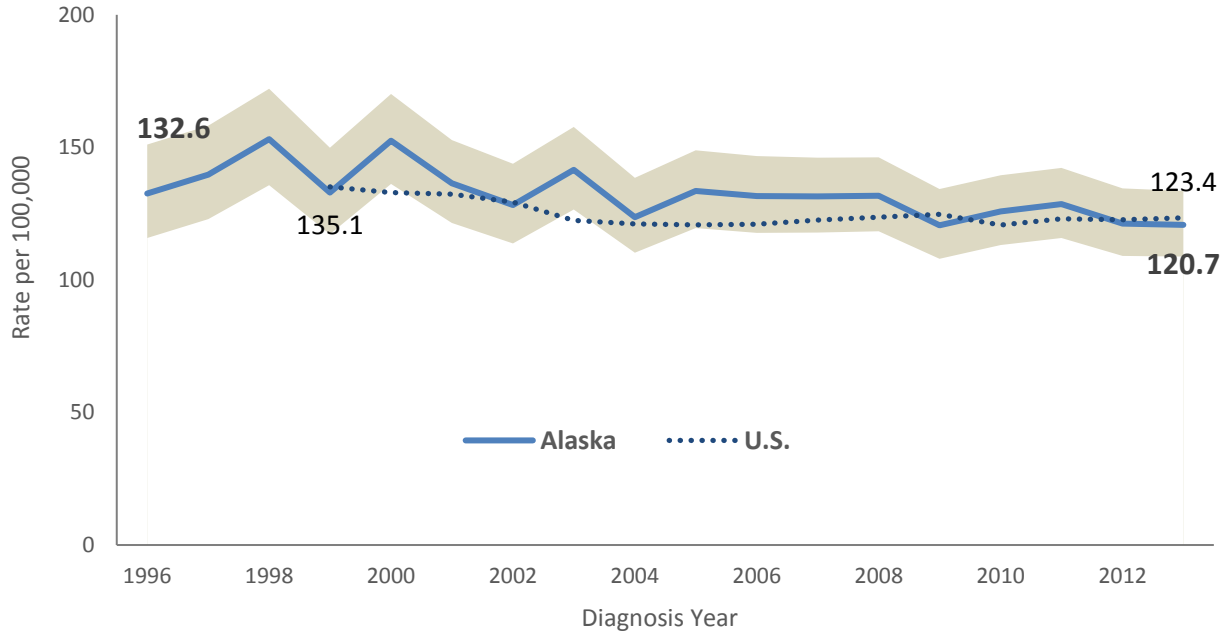
- Breast cancer is the most commonly occurring cancer among women in Alaska.
- Most female breast cancer cases are diagnosed at the localized stage.
- Alaska's incidence rate has historically been similar to the national rate.
- Risk factors for breast cancer among women include genetic factors as well as behavioral factors such as excessive alcohol use, obesity and smoking. As with most cancers, risk increases with age.

Total New Malignant Cases by Borough/Census Area, 2013 (Female only)

Aleutians East Borough	^	Lake and Peninsula Borough	^
Aleutians West Census Area	^	Matanuska-Susitna Borough	52
Municipality of Anchorage	182	Nome Census Area	8
Bethel Census Area	^	North Slope Borough	^
Bristol Bay Borough	^	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	^
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	53	Sitka Borough	6
Haines Borough	^	Skagway Municipality	^
Hoonah-Angoon Census Area	^	Southeast Fairbanks Census Area	^
Juneau Borough	19	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	40	Wrangell Borough	^
Ketchikan Gateway Borough	10	Yakutat Borough	0
Kodiak Island Borough	9	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	0	**State of Alaska**	**415**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Breast Cancer (Female) Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.6.

Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

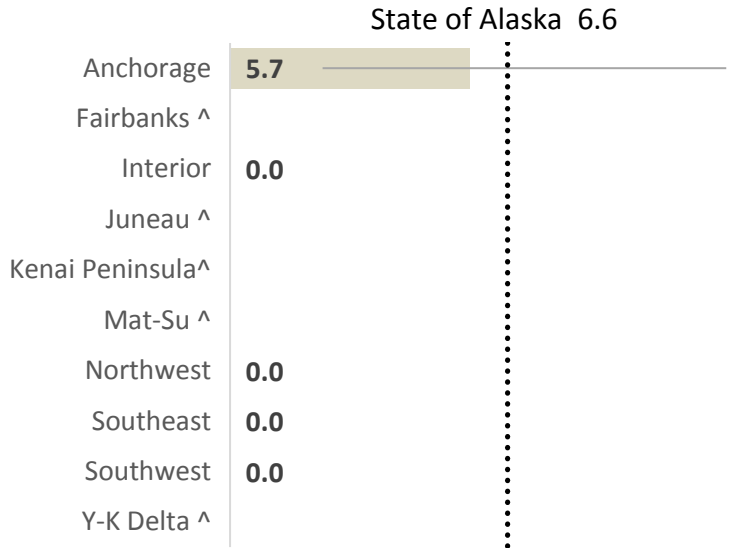
Cervix

Incidence and Mortality Summary, 2013

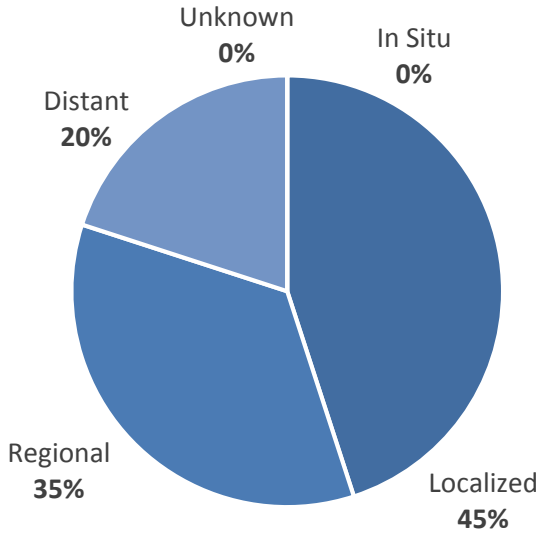
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 women							
Incidence rate	NA	NA	6.6	6.5	^	0.0	^
Mortality rate	NA	NA	2.3	2.2	^	0.0	^
Numbers of cases							
# of new malignant cases	NA	NA	20	14	^	0	^
# of new in situ cases	NA	NA	0	0	0	0	0
# of deaths	NA	NA	9	7	^	0	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Cervical Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

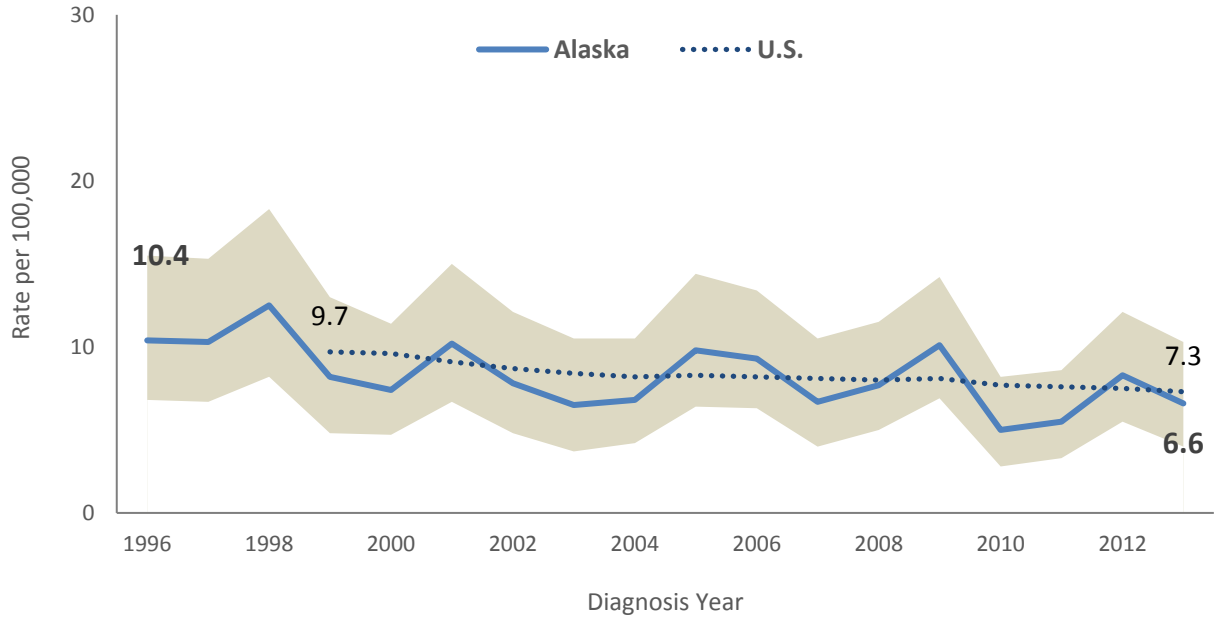
- Incidence and mortality rates for cervical cancer have declined since the mid-1970's.
- Alaska's incidence rate pattern is similar to the national trend.
- Most cervical cancers are caused by persistent infection with certain types of human papillomavirus (HPV), even though HPV infections are common they rarely cause cervical cancer. Progression to cancer may be influenced by many factors, including a suppressed immune system, a high number of childbirths, cigarette smoking, and long-term use of birth control pills.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	^
Municipality of Anchorage	7	Nome Census Area	0
Bethel Census Area	^	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	^	Sitka Borough	0
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	0	Yakutat Borough	0
Kodiak Island Borough	0	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	^	**State of Alaska**	**20**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Cervical Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

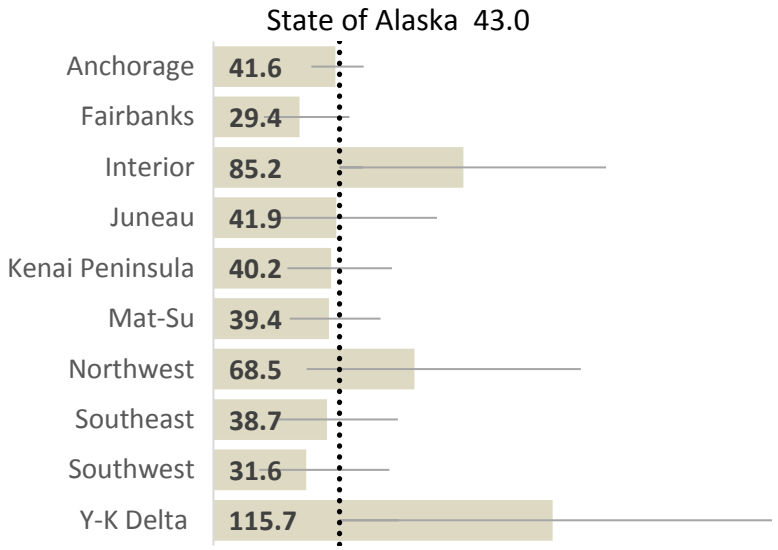
Colorectal

Incidence and Mortality Summary, 2013

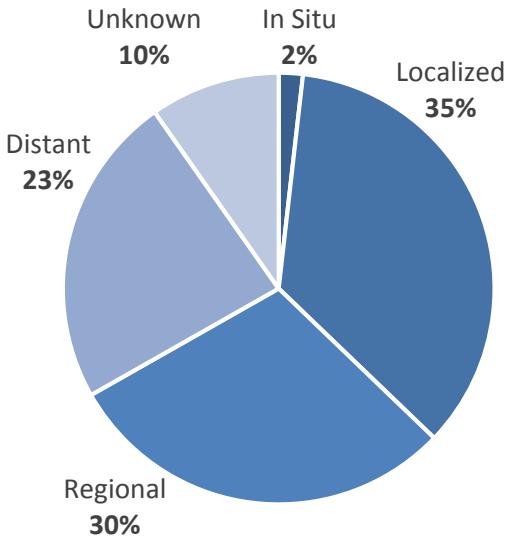
	Total	Male	Female	White	Alaska Native	Black	Asian/ Pacific Islander
Rates per 100,000 population							
Incidence rate	43.0	43.7	42.8	34.4	95.0	^	38.6
Mortality rate	16.8	20.9	13.1	12.8	41.4	^	^
Numbers of cases							
# of new malignant cases	272	139	133	167	80	^	19
# of new in situ cases	^	^	^	^	^	0	0
# of deaths	100	59	41	57	34	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Colorectal Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

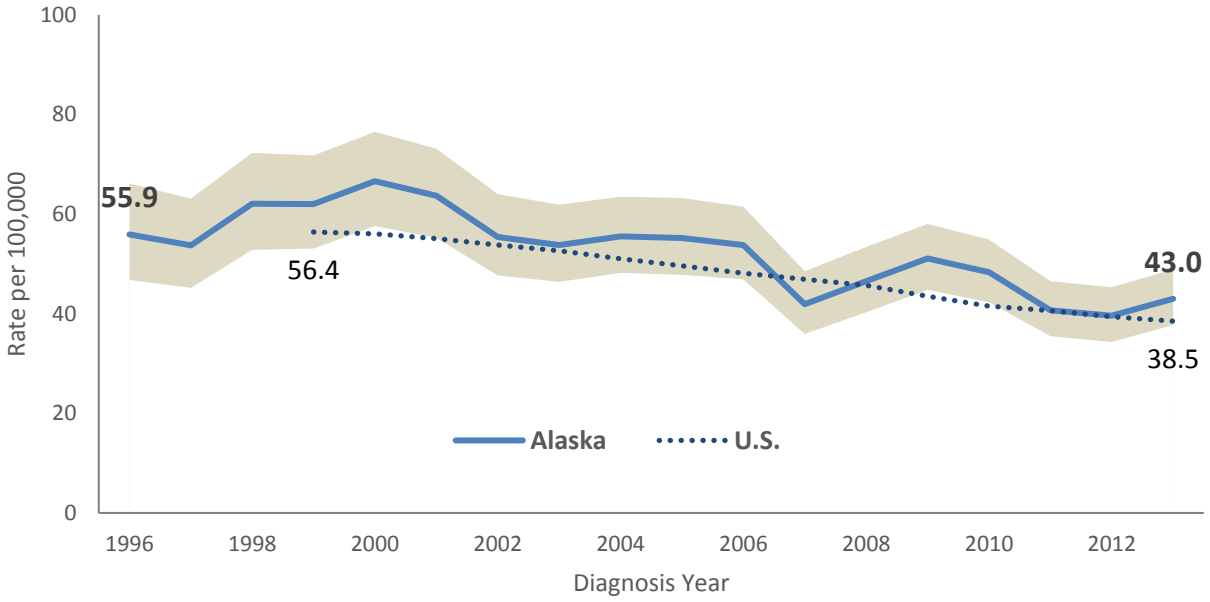
- Colorectal cancer is the third most common cancer found in men (after prostate and lung) and in women (after breast and lung) in Alaska.
- Alaska Native people have rates that are nearly 3 times higher than Whites and Asian/Pacific Islanders in Alaska.
- Nationally, colorectal cancer incidence and mortality rates have been decreasing. Alaska's incidence rate pattern is similar to the national one.
- The risk of colorectal cancer increases with age. Modifiable risk factors include obesity, physical inactivity, smoking, moderate to heavy alcohol use, and diets high in red meats and processed meats, as well as low intake of fruit and vegetables.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	^
Aleutians West Census Area	^	Matanuska-Susitna Borough	32
Municipality of Anchorage	103	Nome Census Area	^
Bethel Census Area	12	North Slope Borough	^
Bristol Bay Borough	^	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	^
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	20	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	8
Juneau Borough	12	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	26	Wrangell Borough	^
Ketchikan Gateway Borough	7	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	10
Kusilvak Census Area	^	**State of Alaska**	**272**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Colorectal Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.3.

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

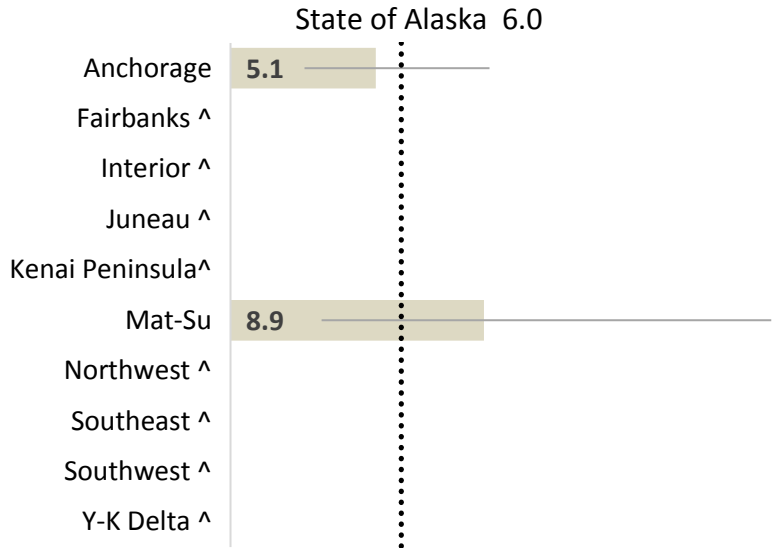
Esophagus

Incidence and Mortality Summary, 2013

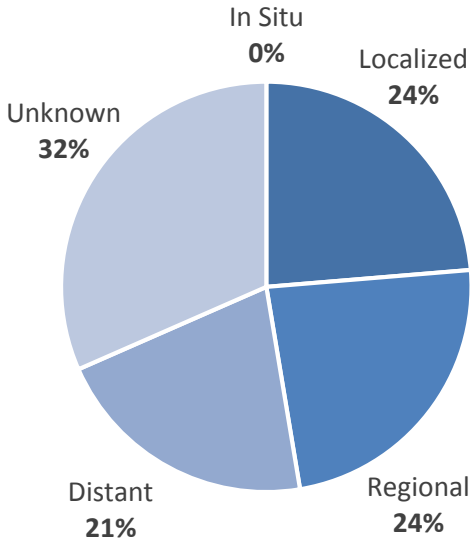
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	6.0	9.1	3.1	5.7	10.4	^	0.0
Mortality rate	4.7	7.5	2.3	4.4	6.7	^	0.0
Numbers of cases							
# of new malignant cases	38	29	9	27	10	^	0
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	31	24	7	23	6	^	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Esophageal Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

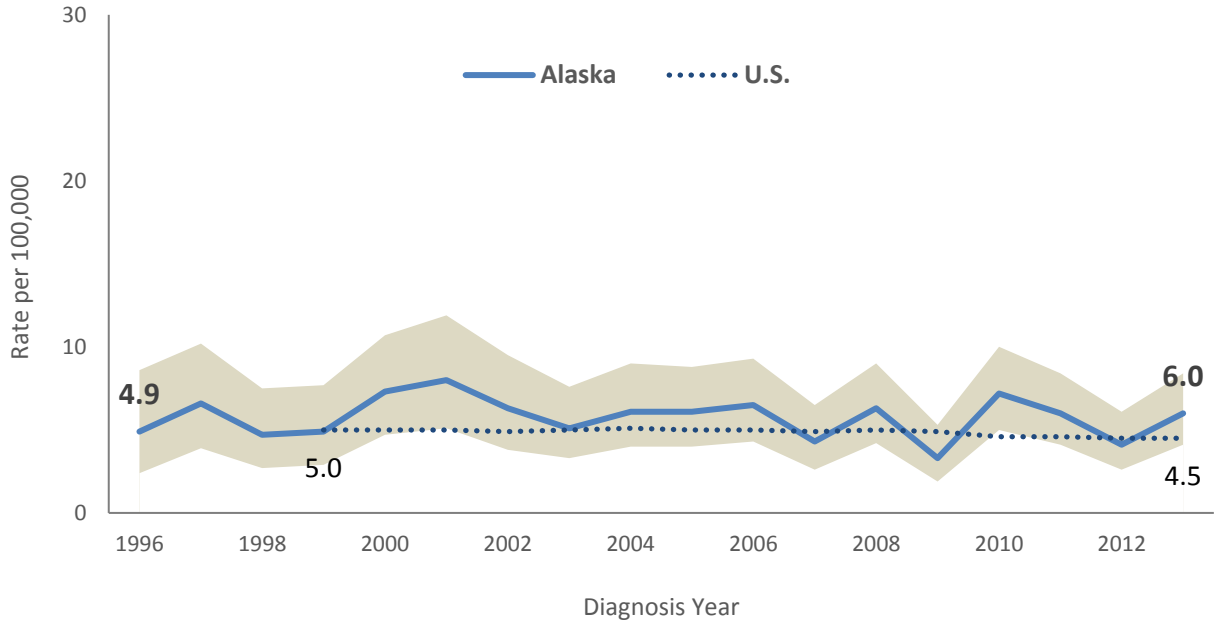
- Alaska's incidence rate for esophageal cancer has been historically similar to the national incidence rate.
- Risk factors for esophageal cancer include tobacco use (smoking or smokeless), reflux disease (GERD), obesity, alcohol use (particularly in combination with smoking), genetic conditions, human papilloma virus (HPV), and esophageal exposure to lye or some types of chemicals.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	7
Municipality of Anchorage	13	Nome Census Area	^
Bethel Census Area	^	North Slope Borough	0
Bristol Bay Borough	^	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	^	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	^	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	0	Yakutat Borough	0
Kodiak Island Borough	0	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**38**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Esophageal Cancer Incidence Trend, Alaska and U.S.



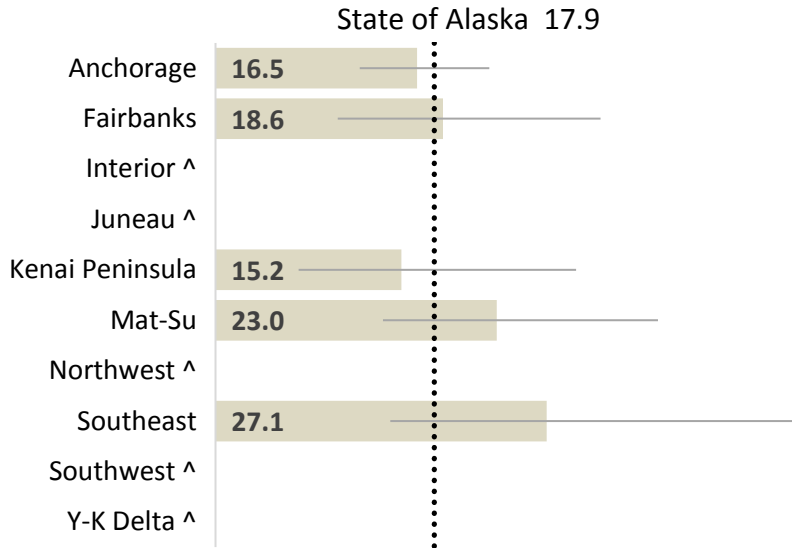
Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Incidence and Mortality Summary, 2013

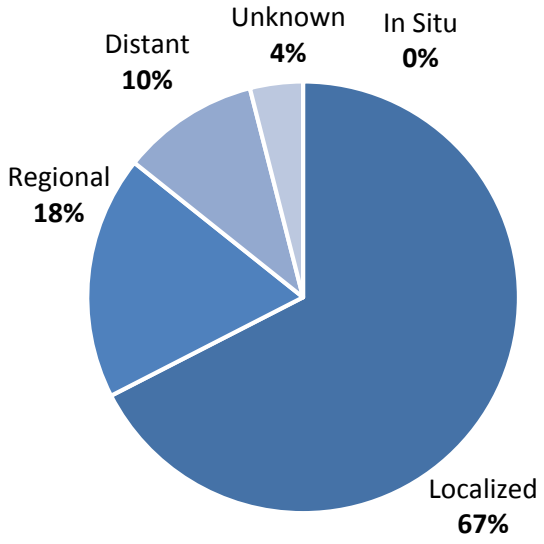
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	17.9	21.9	14.0	16.5	28.4	^	17.7
Mortality rate	5.5	5.9	4.9	5.4	^	^	0.0
Numbers of cases							
# of new malignant cases	126	76	50	89	28	^	8
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	28	15	13	21	^	^	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Kidney Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

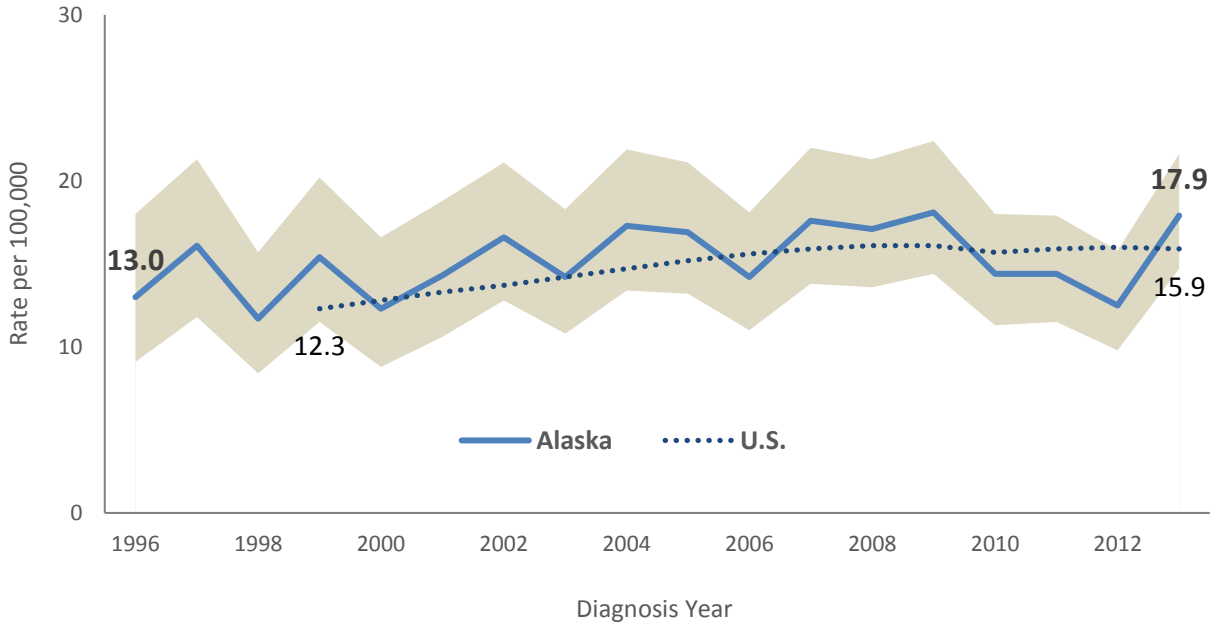
- Kidney cancer is a disease in which malignant cancer cells form in the tubules of the kidney. It is the 5th most common cancer in Alaska.
- Men have higher incidence rates than women in Alaska.
- Alaska's incidence rate has been historically similar to the national incidence rate.
- Risk factors for kidney cancer include smoking, obesity, high blood pressure, chronic renal failure, and occupational exposure to certain chemicals. A small proportion of renal cell cancers are the result of rare hereditary conditions.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	17
Municipality of Anchorage	34	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	^	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	11	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	6	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	8	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	^	**State of Alaska**	**126**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Kidney Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

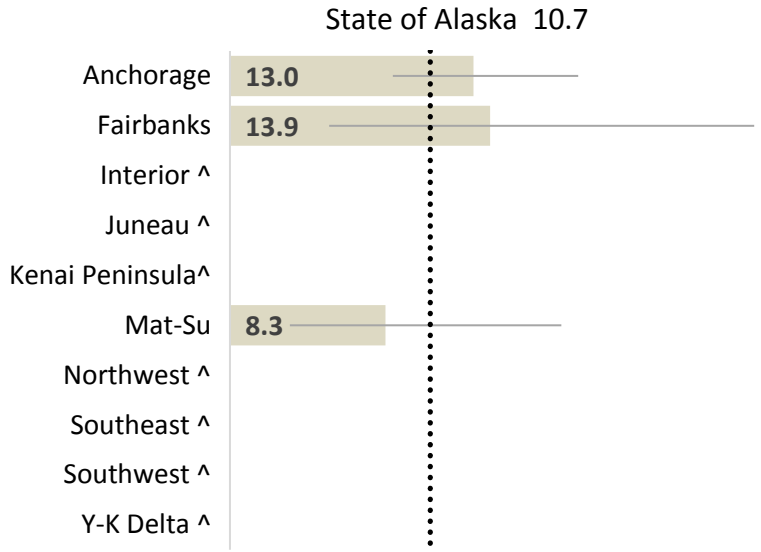
Leukemia

Incidence and Mortality Summary, 2013

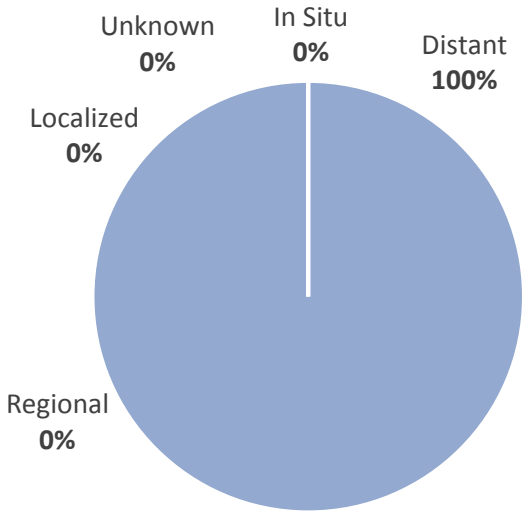
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	10.7	9.5	11.3	10.5	12.8	^	^
Mortality rate	5.4	4.8	6.3	5.7	^	0.0	0.0
Numbers of cases							
# of new malignant cases	67	34	33	48	15	^	^
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	28	11	17	21	^	0	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Leukemia Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

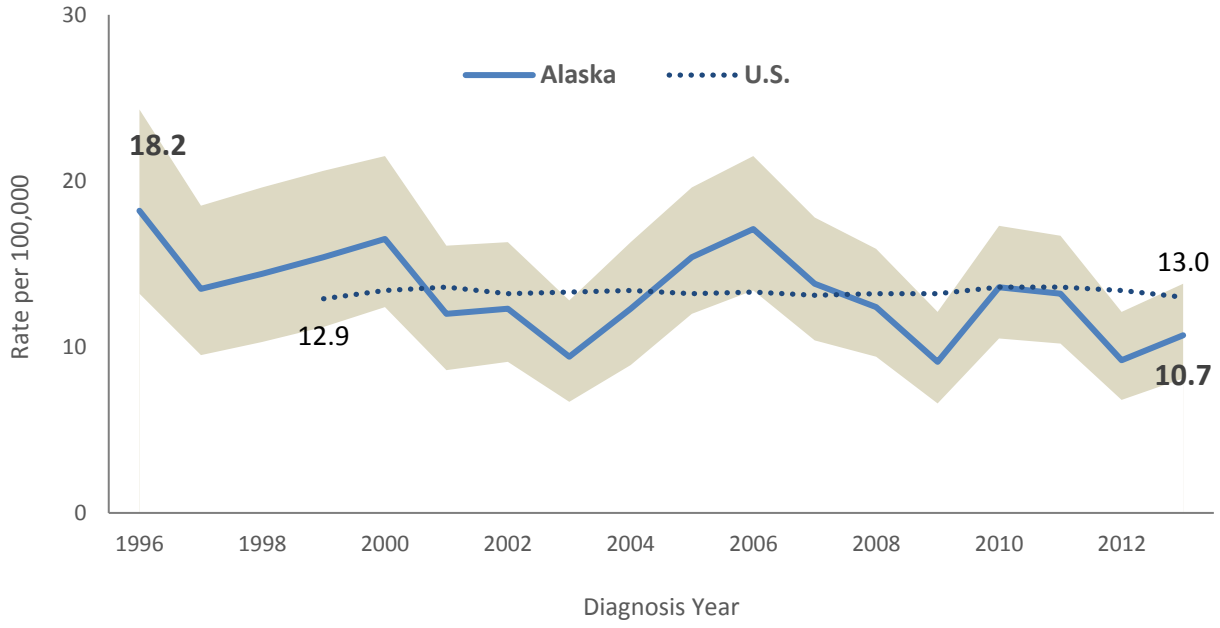
- Leukemia is a cancer of the bone marrow.
- All leukemia is classified as being at the distant stage.
- Alaska's incidence rate is currently similar to the U.S. rate.
- Exposure to ionizing radiation increases the risk of most types of leukemia. Other risk factors include being treated with chemotherapy, genetic factors, working in the rubber-manufacturing industry, and obesity. Cigarette smoking is a risk factor for (adult) acute myeloid leukemia, and parental smoking before and after childbirth is a risk factor for childhood leukemia.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	^
Aleutians West Census Area	0	Matanuska-Susitna Borough	7
Municipality of Anchorage	33	Nome Census Area	0
Bethel Census Area	^	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	7	Sitka Borough	0
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	0	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	0	**State of Alaska**	**67**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Leukemia Incidence Trend, Alaska and U.S.



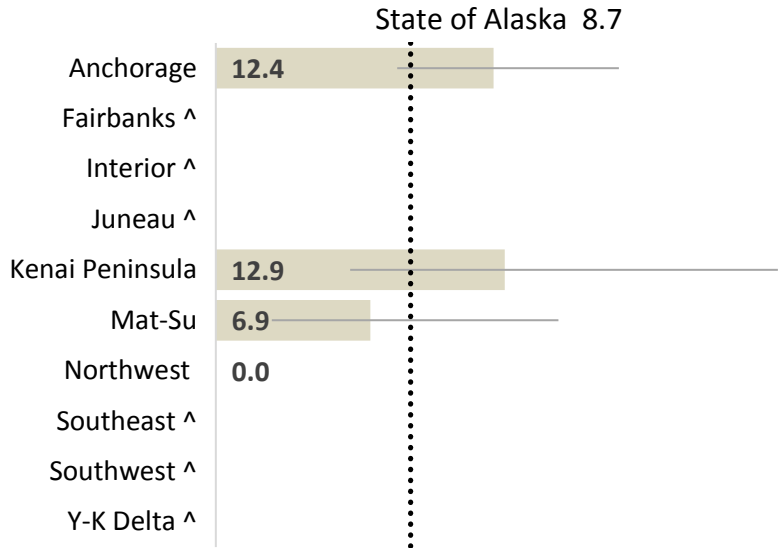
Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Incidence and Mortality Summary, 2013

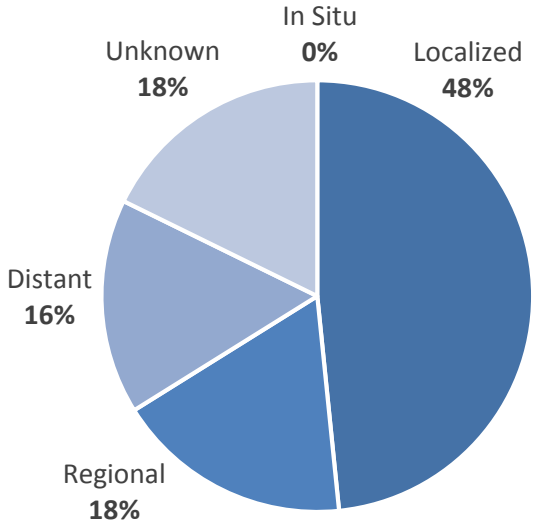
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	8.7	12.3	5.1	8.1	9.4	^	16.7
Mortality rate	5.2	8.0	2.2	5.0	4.9	^	^
Numbers of cases							
# of new malignant cases	62	46	16	45	10	^	6
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	37	30	7	27	6	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Liver Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

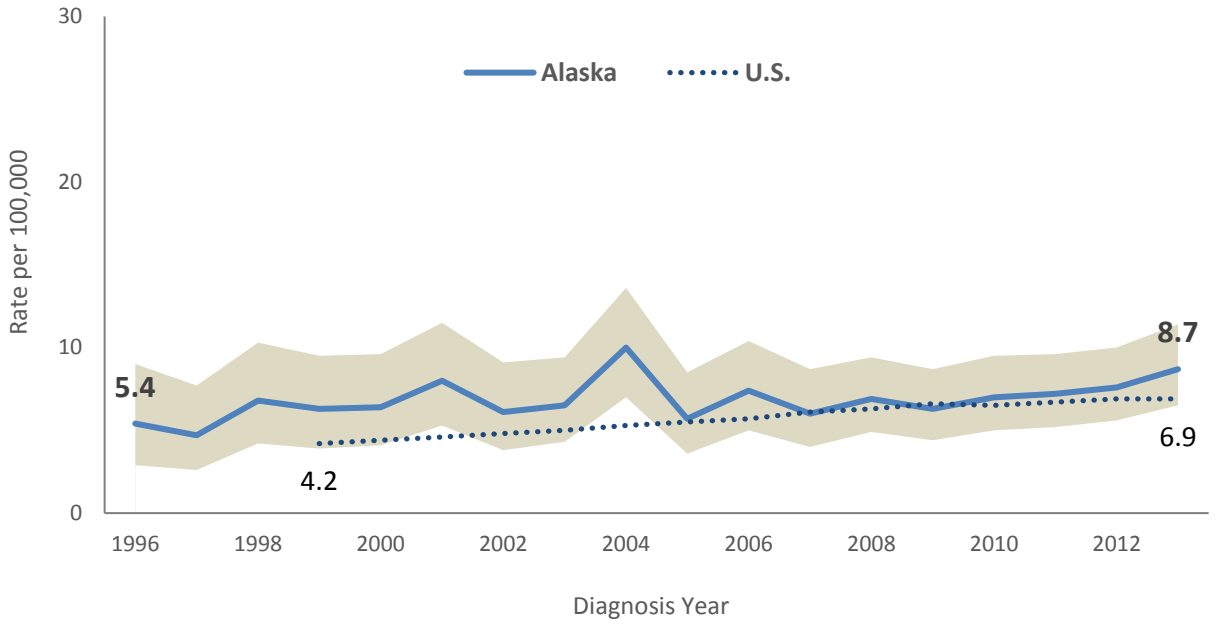
- Liver cancer rates are higher among men than women.
- Most liver cancer cases are diagnosed at the localized stage.
- Liver cancer incidence has increased nationally among adults age 50 and older, although it has recently been decreasing among adults younger than 50 years of age.
- The most important risk factors for liver cancer in the U.S. are chronic infection with hepatitis B virus (HBV) and/or hepatitis C virus (HCV), heavy alcohol consumption, obesity, diabetes, tobacco smoking, and certain rare genetic disorders, such as hemochromatosis.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	7
Municipality of Anchorage	31	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	^
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	^	Sitka Borough	0
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	11	Wrangell Borough	^
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	^	**State of Alaska**	**62**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Liver Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

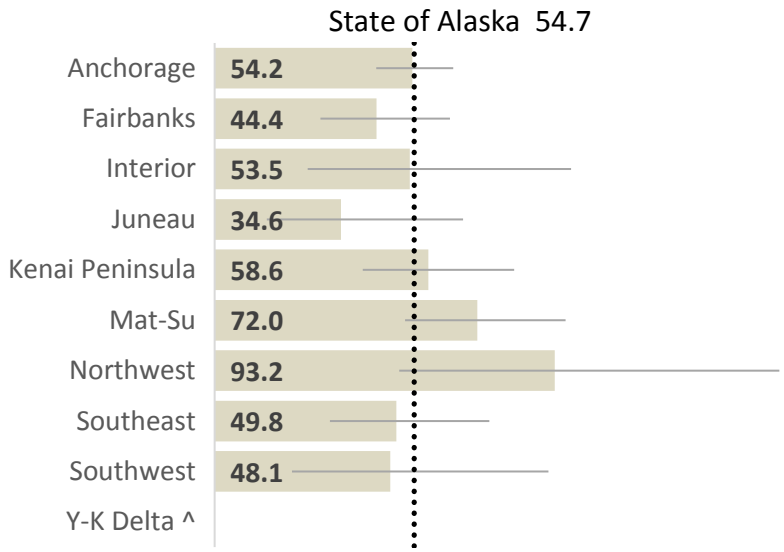
Lung and Bronchus

Incidence and Mortality Summary, 2013

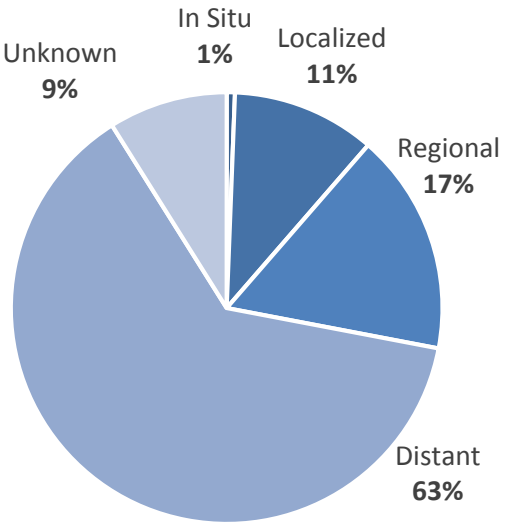
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	54.7	66.2	44.3	50.2	83.9	57.1	44.7
Mortality rate	47.3	51.2	45.3	43.9	71.6	^	40.8
Numbers of cases							
# of new malignant cases	323	188	135	229	63	10	20
# of new in situ cases	^	^	0	^	0	0	0
# of deaths	272	136	136	196	53	^	17

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Lung Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

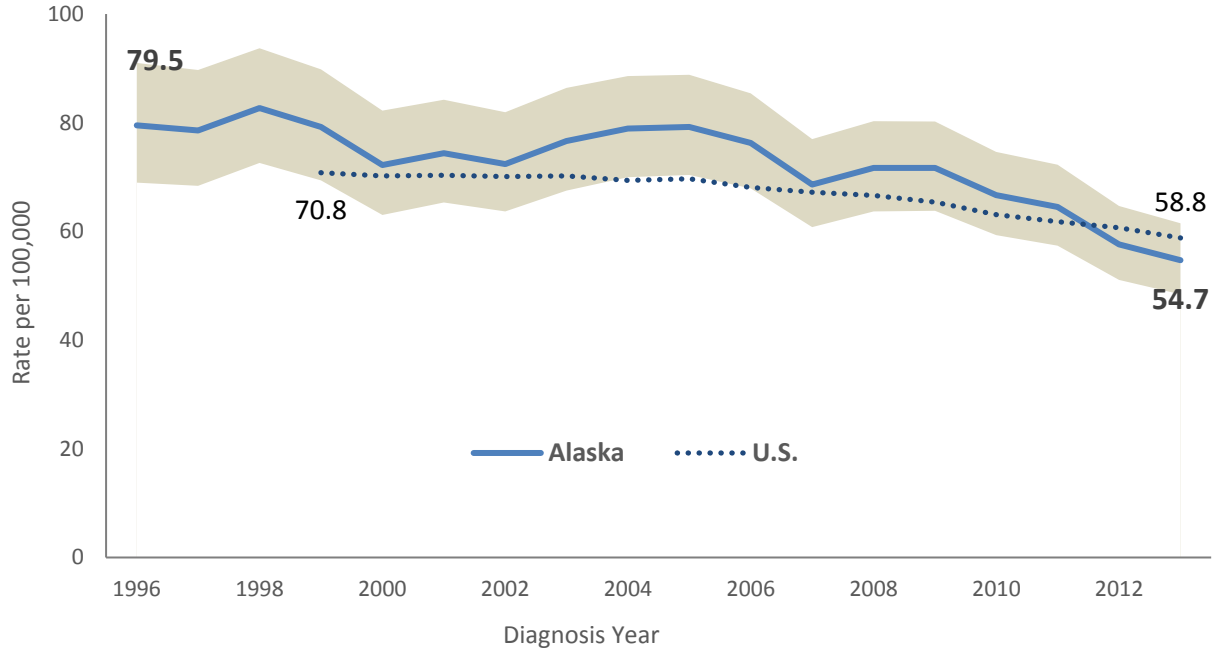
- Lung cancer is the second most common cancer in both men and women, and accounts for about 1 in 4 cancer deaths nationally.
- Men have higher incidence rates than women.
- Alaska Native people have higher incidence rates than Whites in Alaska.
- Lung cancer incidence has been declining nationally and in Alaska.
- Smoking (tobacco) is the most prevalent risk factor for lung cancer. Other risk factors include workplace or environmental exposures such as secondhand smoke, radon gas, asbestos, certain metals and chemicals, radiation, air pollution, and diesel exhaust.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	^
Aleutians West Census Area	^	Matanuska-Susitna Borough	51
Municipality of Anchorage	122	Nome Census Area	^
Bethel Census Area	^	North Slope Borough	7
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	^	Petersburg Borough	^
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	32	Sitka Borough	7
Haines Borough	^	Skagway Municipality	0
Hoonah-Angoon Census Area	^	Southeast Fairbanks Census Area	^
Juneau Borough	9	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	39	Wrangell Borough	0
Ketchikan Gateway Borough	10	Yakutat Borough	0
Kodiak Island Borough	6	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**323**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Lung and Bronchus Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.3.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

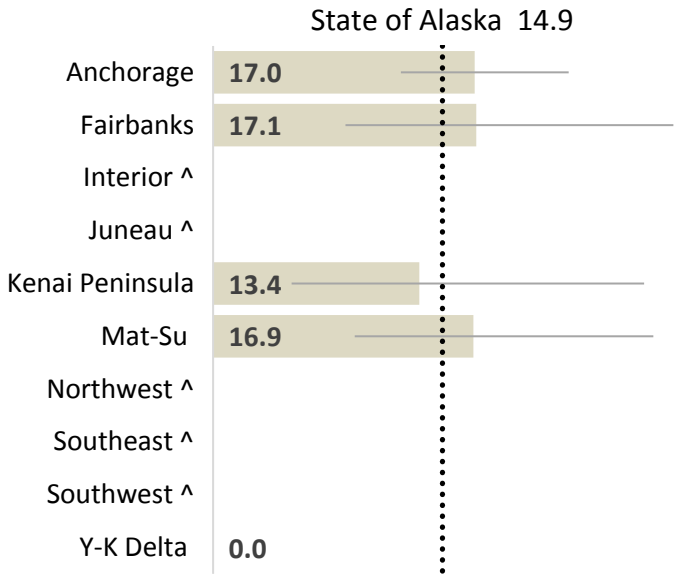
Melanoma of the Skin

Incidence and Mortality Summary, 2013

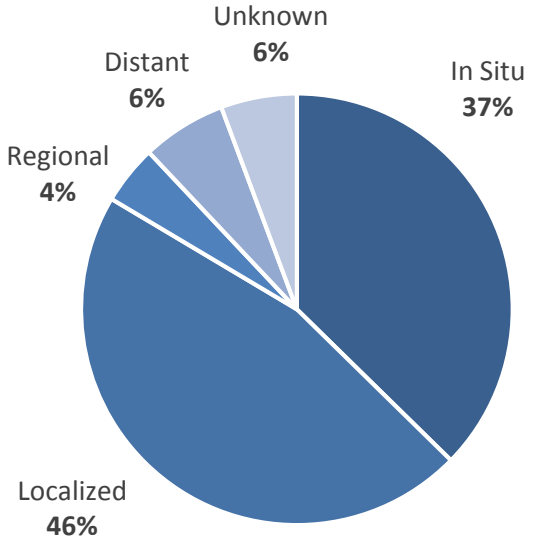
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	14.9	17.2	13.3	18.5	6.3	0.0	0.0
Mortality rate	2.0	2.9	^	2.5	0.0	0.0	0.0
Numbers of cases							
# of new malignant cases	99	52	47	92	6	0	0
# of new in situ cases	59	32	27	54	^	0	0
# of deaths	11	8	^	11	0	0	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Melanoma Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

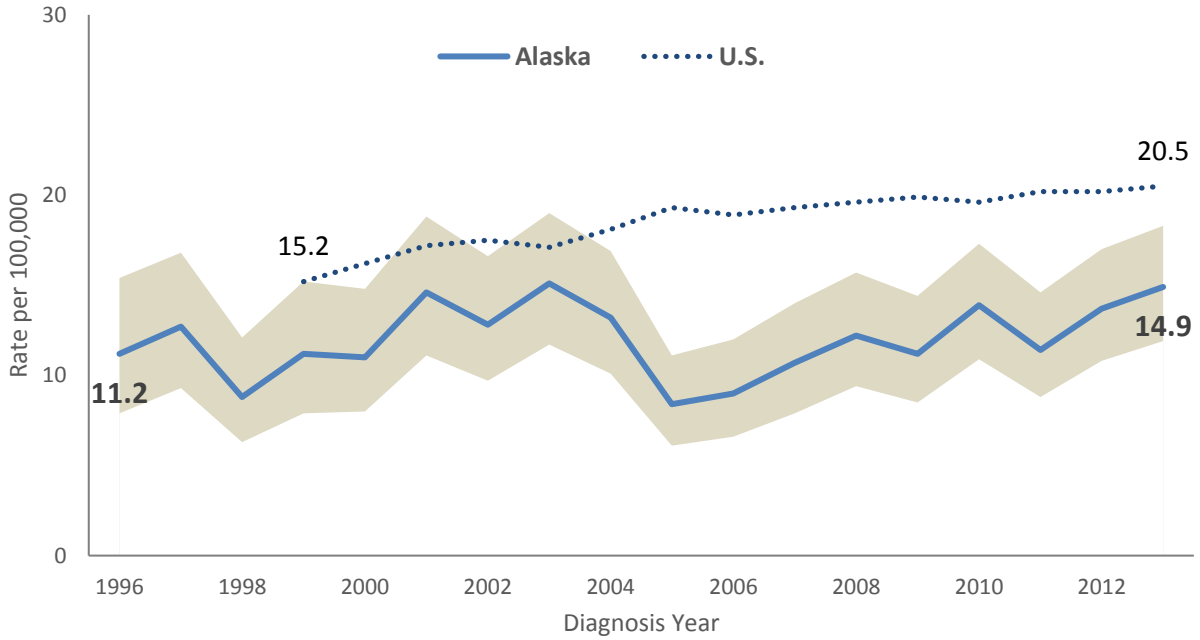
- Melanoma (skin) cancer is the 8th most common cancer in Alaska.
- Melanoma of the skin incidence rates have increased nationally in the past 30 years, but Alaska's incidence rate is lower than that of the U.S. overall.
- Risk factors for melanoma of the skin include personal or family history of melanoma (skin) cancer and the presence of atypical, large or numerous (more than 50) moles. High exposure to ultraviolet (UV) radiation, from sunlight or use of indoor tanning, is a major risk factor for all types of skin cancer.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	15
Municipality of Anchorage	45	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	14	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	7	Wrangell Borough	^
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	0	**State of Alaska**	**99**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Melanoma Cancer Incidence Trend, Alaska and U.S.



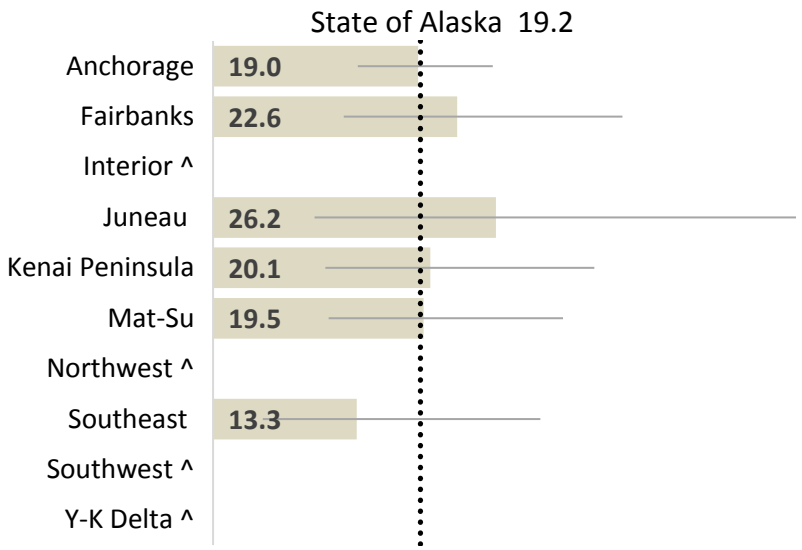
Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.2.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Incidence and Mortality Summary, 2013

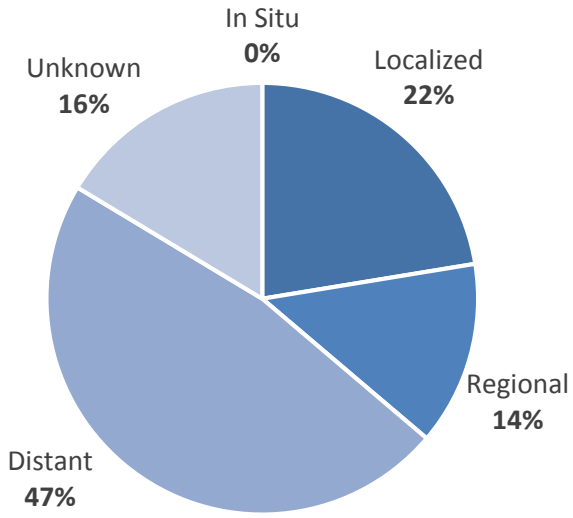
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	19.2	24.2	14.7	19.9	10.2	42.7	18.8
Mortality rate	4.6	5.6	3.7	4.2	^	^	0.0
Numbers of cases							
# of new malignant cases	116	71	45	94	8	6	8
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	24	13	11	17	^	^	0

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Non-Hodgkin Lymphoma Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

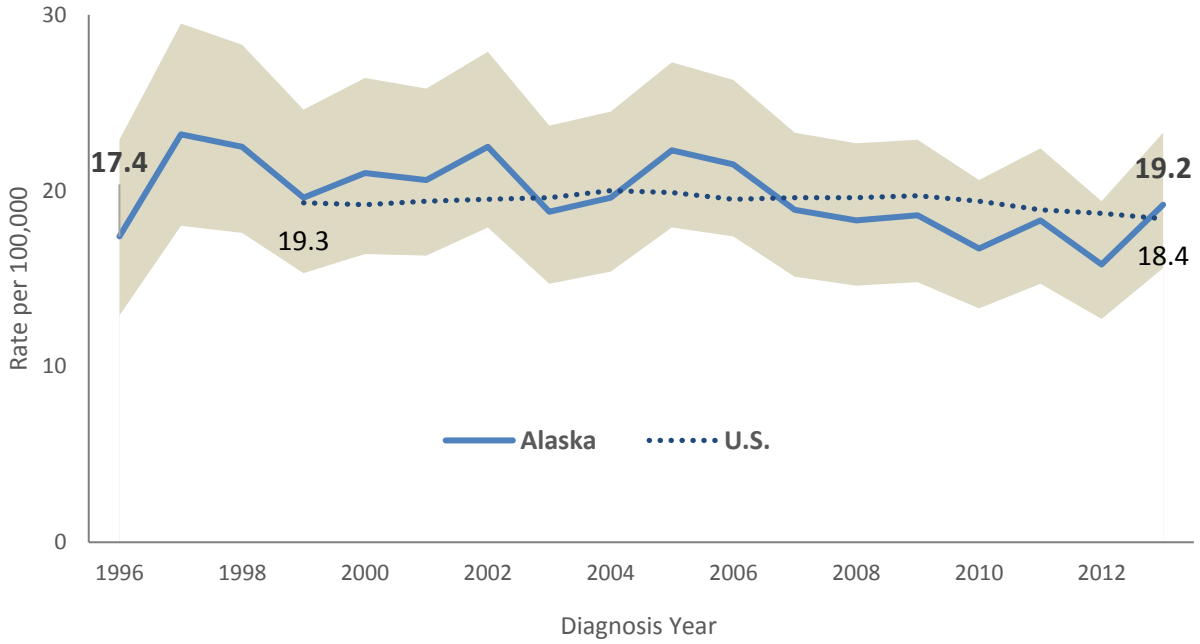
- Non-Hodgkin lymphoma is the 7th most common cancer in Alaska.
- Alaska's incidence rate is similar to the national rate.
- Most of the few known risk factors for lymphoma are associated with severely altered immune function. Certain infectious agents, including Epstein-Barr virus, HIV and hepatitis C, can increase the risk of some lymphoma subtypes. Family history of lymphoma is also a risk factor.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	^	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	16
Municipality of Anchorage	45	Nome Census Area	0
Bethel Census Area	^	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	^	Petersburg Borough	^
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	16	Sitka Borough	^
Haines Borough	^	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	7	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	14	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**116**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Non-Hodgkin Lymphoma Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.2.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

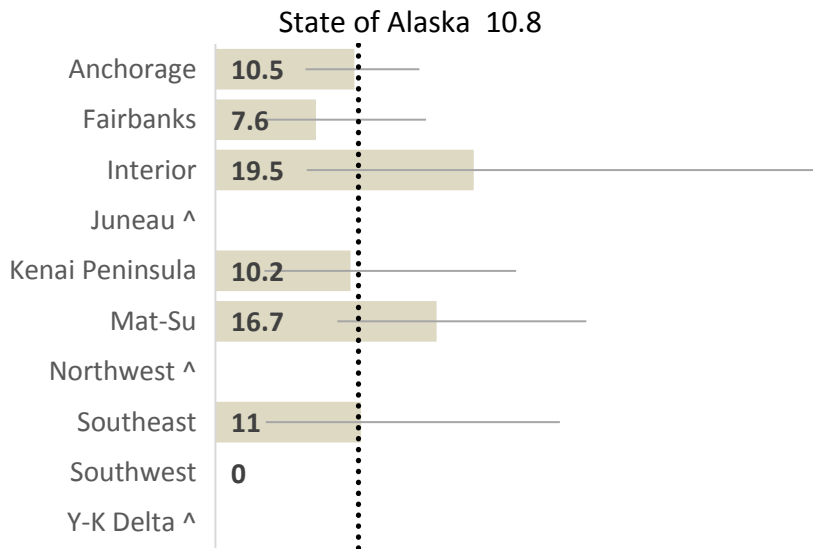
Oral Cavity and Pharynx

Incidence and Mortality Summary, 2013

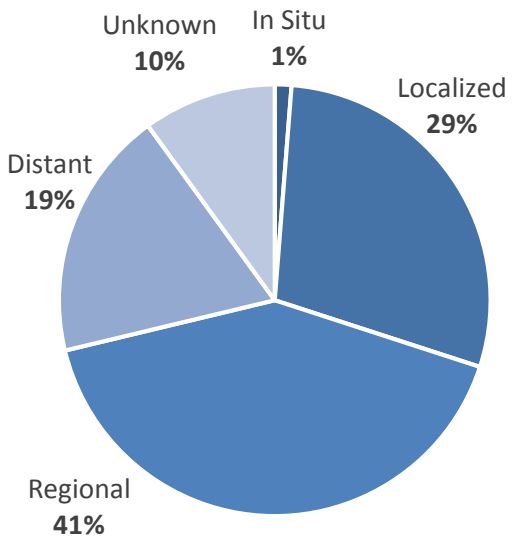
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	10.8	14.5	7.0	10.0	18.2	0.0	^
Mortality rate	2.3	3.0	^	1.0	9.0	^	^
Numbers of cases							
# of new malignant cases	79	57	22	58	17	0	^
# of new in situ cases	^	^	0	0	^	0	0
# of deaths	15	10	^	6	7	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
All incidence rates are for malignant cases only. Rates are per 100,000 and age-adjusted to the 2000 U.S. Population

Oral Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

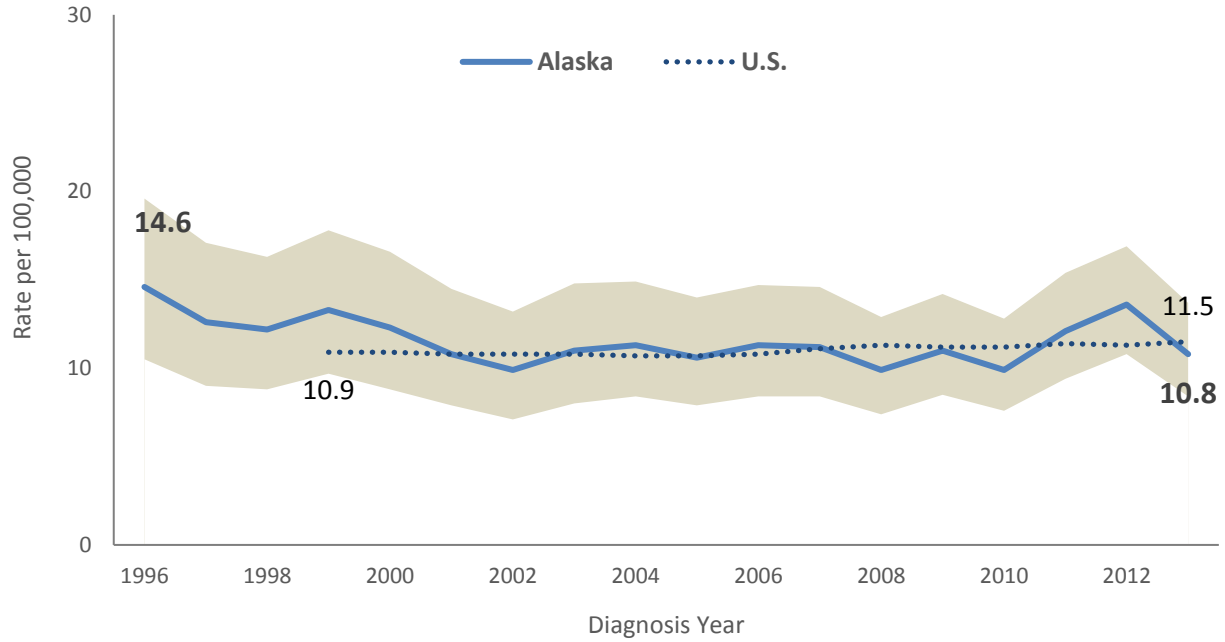
- Oral cavity and pharynx cancer is the 8th most common cancer among men in Alaska.
- Men have higher incidence rates than women.
- Alaska's incidence rate has been historically similar to the US.
- Known risk factors include tobacco use in any form (smoked and smokeless) and excessive alcohol consumption. Studies note a synergistic relationship between smoking and alcohol, resulting in a 30-fold increased risk for heavy drinking and smoking together. Having human papilloma virus (HPV) infection of the mouth and throat also increases risk.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	16
Municipality of Anchorage	30	Nome Census Area	^
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	8	Sitka Borough	0
Haines Borough	^	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	7	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	0	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	^	**State of Alaska**	**79**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Oral Cavity and Pharynx Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

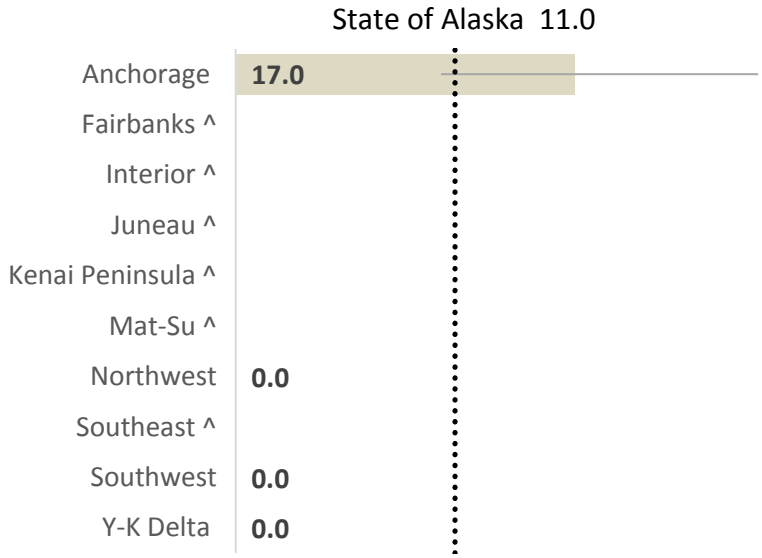
Ovary

Incidence and Mortality Summary, 2013

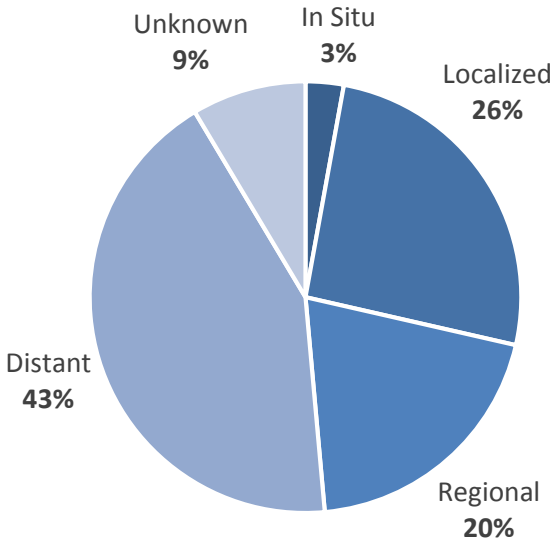
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 women							
Incidence rate	NA	NA	11.0	11.7	^	0.0	^
Mortality rate	NA	NA	5.9	7.0	^	0.0	^
Numbers of cases							
# of new malignant cases	NA	NA	34	26	^	0	^
# of new in situ cases	NA	NA	^	^	0	0	0
# of deaths	NA	NA	18	16	^	0	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Ovarian Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

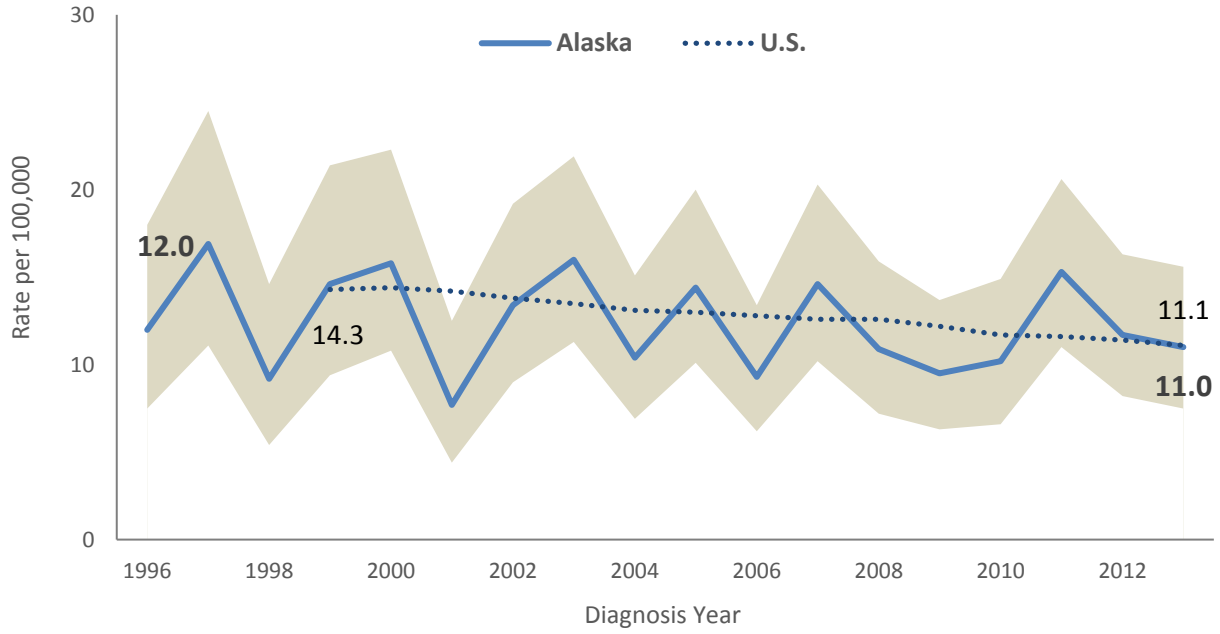
- Ovarian cancer is the 10th most common cancer in women in Alaska.
- Incidence and mortality rates for ovarian cancer have been declining nationally.
- Alaska's incidence rate is similar to the national incidence rate.
- The most important risk factor for ovarian cancer is a strong family history of breast or ovarian cancer. Other medical conditions associated with increased risk include pelvic inflammatory disease and Lynch syndrome. The use of menopausal hormone therapy also increases risk. Tobacco smoking increases the risk of a rare type of ovarian cancer (mucinous).

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	^
Municipality of Anchorage	22	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	^	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	0	Yakutat Borough	0
Kodiak Island Borough	0	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	0	**State of Alaska**	**34**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Ovarian Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.2.
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

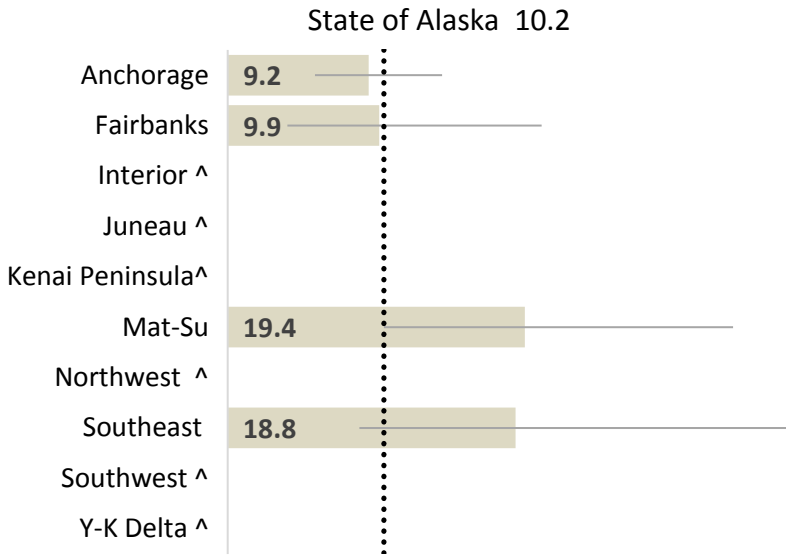
Pancreas

Incidence and Mortality Summary, 2013

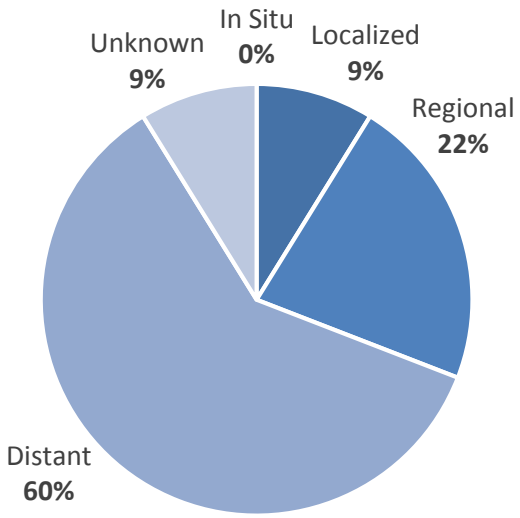
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	10.2	10.3	10.2	3.0	27.7	^	^
Mortality rate	11.1	9.8	12.6	11.0	12.9	^	^
Numbers of cases							
# of new malignant cases	68	33	35	14	25	^	^
# of new in situ cases	0	0	0	^	0	0	0
# of deaths	69	30	39	54	10	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
All incidence rates are for malignant cases only. Rates are per 100,000 and age-adjusted to the 2000 U.S. Population

Pancreatic Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

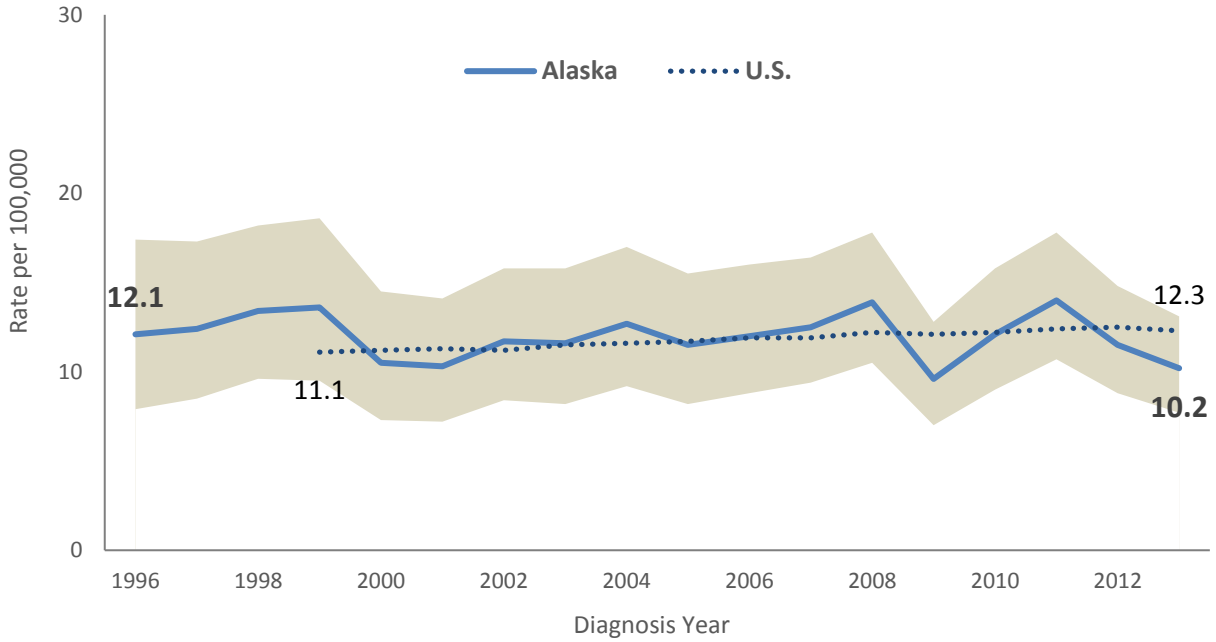
- Nationally, pancreatic cancer incidence rates have increased since 2000. Alaska's incidence rate is currently similar to the U.S. rate.
- The risk of pancreatic cancer in cigarette smokers is about twice that for those who never smoked. Use of smokeless tobacco also increases risk. Other risk factors include a family history of pancreatic cancer, a personal history of chronic pancreatitis or diabetes, and obesity.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	15
Municipality of Anchorage	24	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	^
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	8	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	^	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	^	Wrangell Borough	^
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**68**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Pancreatic Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

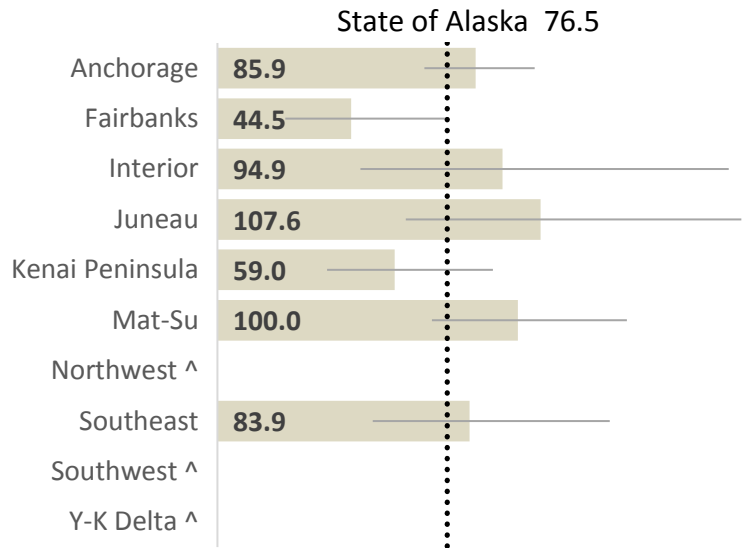
Prostate

Incidence and Mortality Summary, 2013

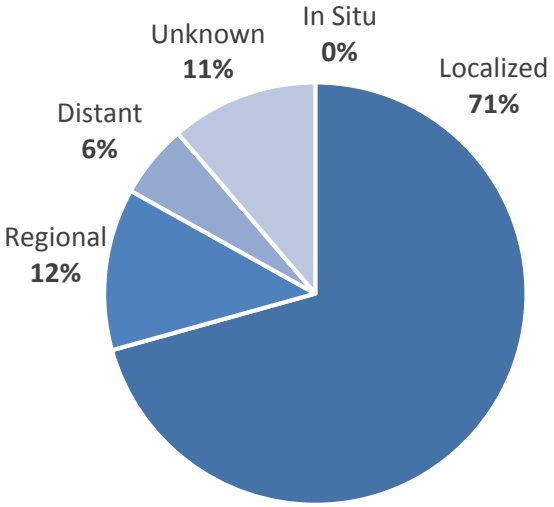
	Total	Male	Female	White	Alaska Native	Black	Asian/ Pacific Islander
Rates per 100,000 men							
Incidence rate	NA	76.5	NA	78.5	42.5	105.6	88.0
Mortality rate	NA	17.3	NA	16.5	^	^	^
Numbers of cases							
# of new malignant cases	NA	266	NA	222	17	13	12
# of new in situ cases	NA	0	NA	0	0	0	0
# of deaths	NA	38	NA	30	^	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (men) and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Prostate Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (men) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

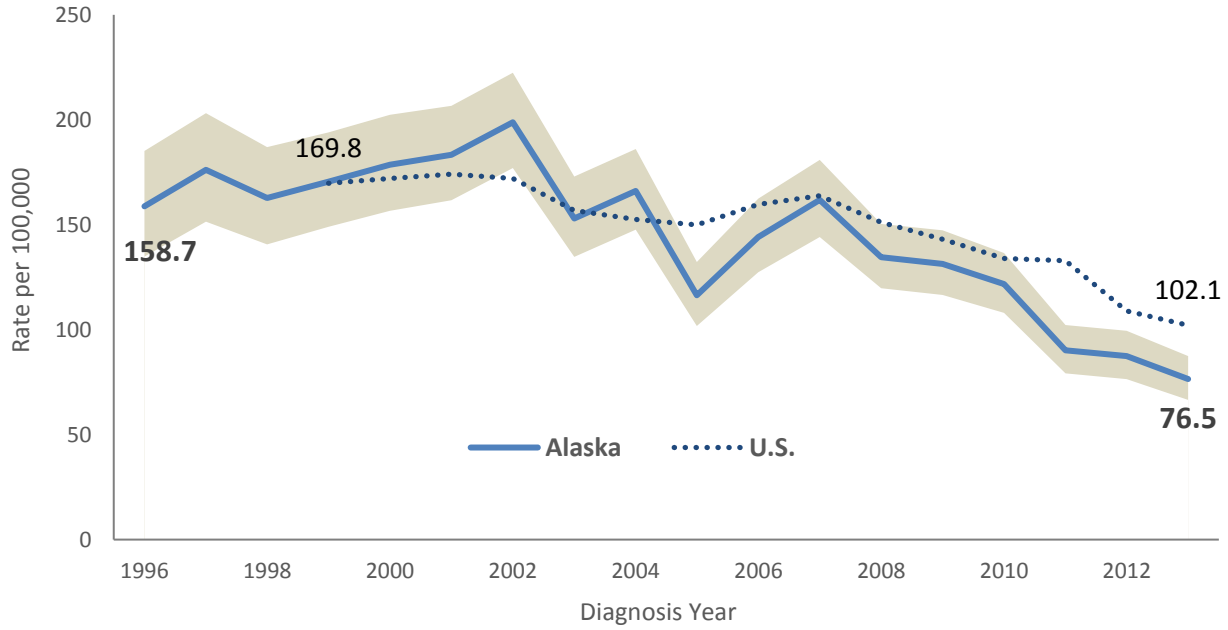
- Prostate cancer is the most common cancer in men.
- Incidence rates of prostate cancer are highest among African American men nationally.
- Rates have declined in the past 10 years in Alaska and nationally.
- The only well-established risk factors for prostate cancer are increasing age, African ancestry, a family history of the disease, and certain inherited genetic conditions. Studies suggest that obesity and smoking do not increase the overall risk of developing prostate cancer, but may increase risk of developing aggressive/fatal disease.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	^	Matanuska-Susitna Borough	48
Municipality of Anchorage	110	Nome Census Area	^
Bethel Census Area	^	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	0	Petersburg Borough	^
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	16	Sitka Borough	^
Haines Borough	^	Skagway Municipality	^
Hoonah-Angoon Census Area	^	Southeast Fairbanks Census Area	^
Juneau Borough	22	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	24	Wrangell Borough	^
Ketchikan Gateway Borough	7	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**266**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Prostate Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.7.
Rates are per 100,000 (men) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

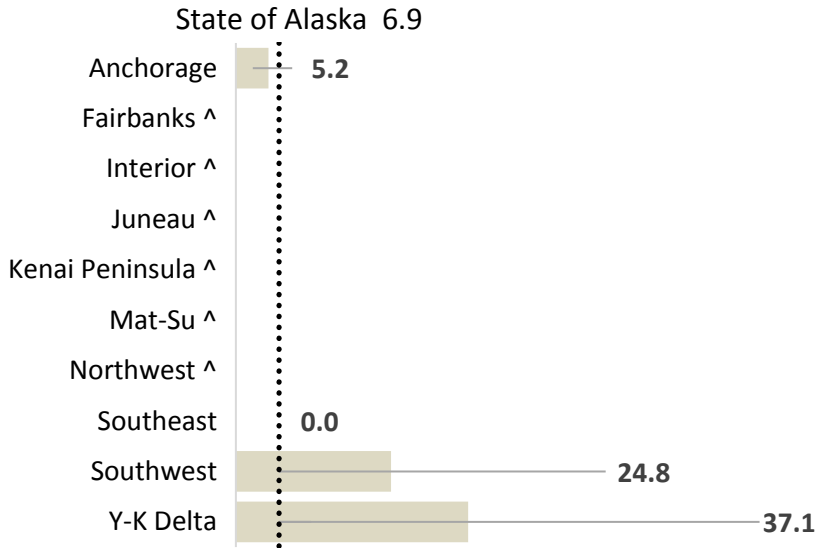
Stomach

Incidence and Mortality Summary, 2013

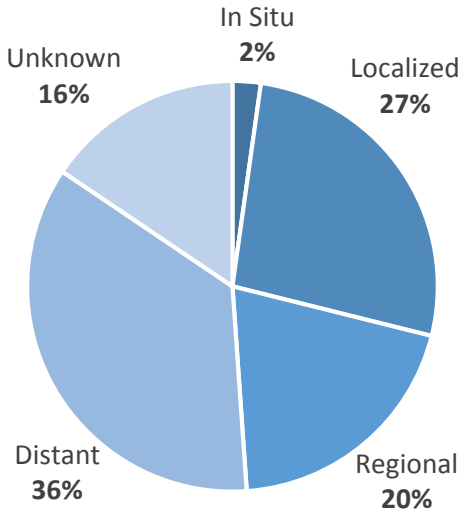
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	6.9	11.1	2.6	3.0	27.7	^	^
Mortality rate	6.2	8.0	4.1	1.7	28.5	^	^
Numbers of cases							
# of new malignant cases	44	36	8	14	25	^	^
# of new in situ cases	^	0	^	^	0	0	0
# of deaths	37	26	11	8	23	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Stomach Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

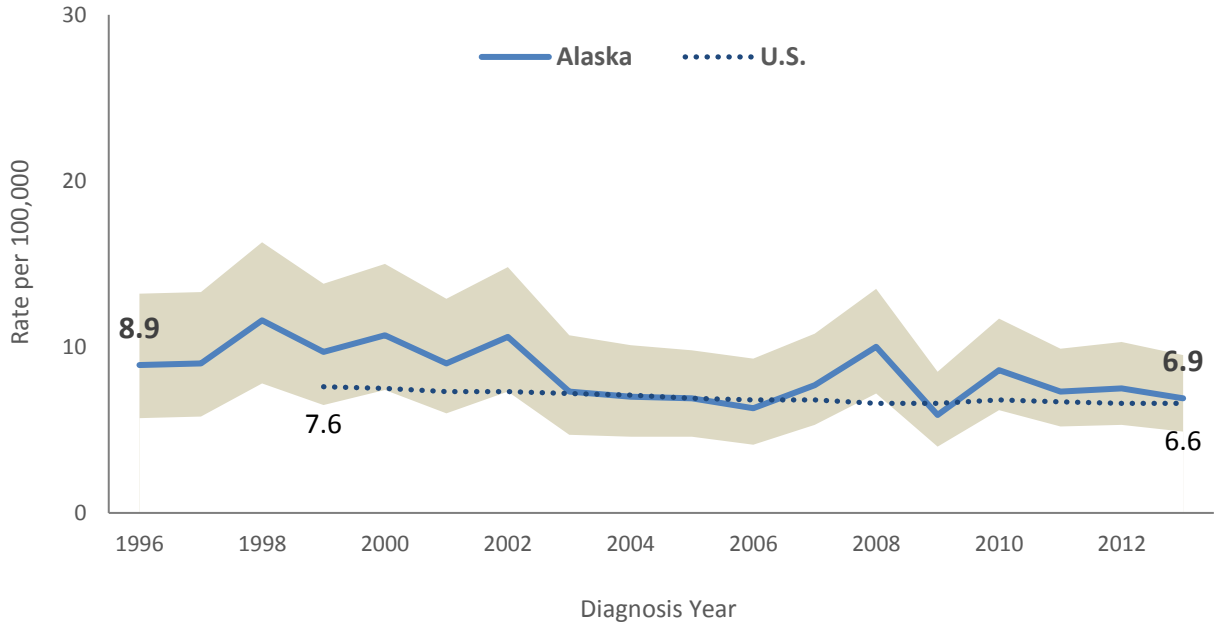
- Stomach (gastric) cancer is the 10th most common cancer among men in Alaska.
- Alaska Native people have higher stomach cancer incidence and mortality rates than Whites.
- Men have higher stomach cancer incidence and mortality rates than women.
- Alaska's incidence rate has been historically similar to the national rate.
- The bacterium *Helicobacter pylori (H. pylori)* is the strongest risk factor for stomach cancer, accounting for the majority of cases worldwide. Other risk factors include smoking, family history of stomach cancer, a diet high in salted or smoked foods, and a diet low in fruits and vegetables.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	^	Matanuska-Susitna Borough	^
Municipality of Anchorage	14	Nome Census Area	0
Bethel Census Area	^	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	^	Prince of Wales-Hyder Census Area	0
Fairbanks North Star Borough	^	Sitka Borough	0
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	0
Juneau Borough	^	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	^	Wrangell Borough	0
Ketchikan Gateway Borough	0	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	^	**State of Alaska**	**44**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Stomach Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

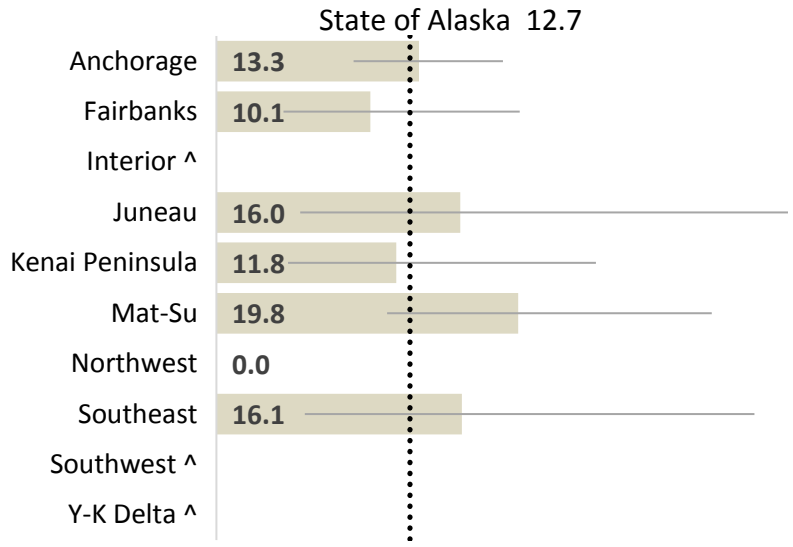
Thyroid

Incidence and Mortality Summary, 2013

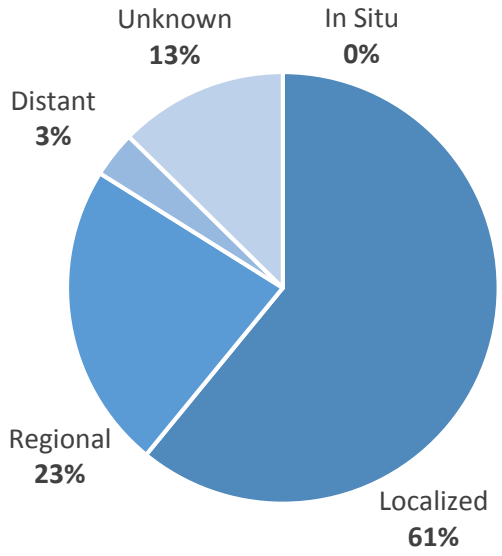
	Total	Male	Female	White	Alaska Native	Black	Asian/Pacific Islander
Rates per 100,000 population							
Incidence rate	12.7	6.5	19.3	12.7	14.0	^	^
Mortality rate	^	^	^	^	^	0.0	^
Numbers of cases							
# of new malignant cases	87	23	64	67	12	^	^
# of new in situ cases	0	0	0	0	0	0	0
# of deaths	^	^	^	^	^	0	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Thyroid Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

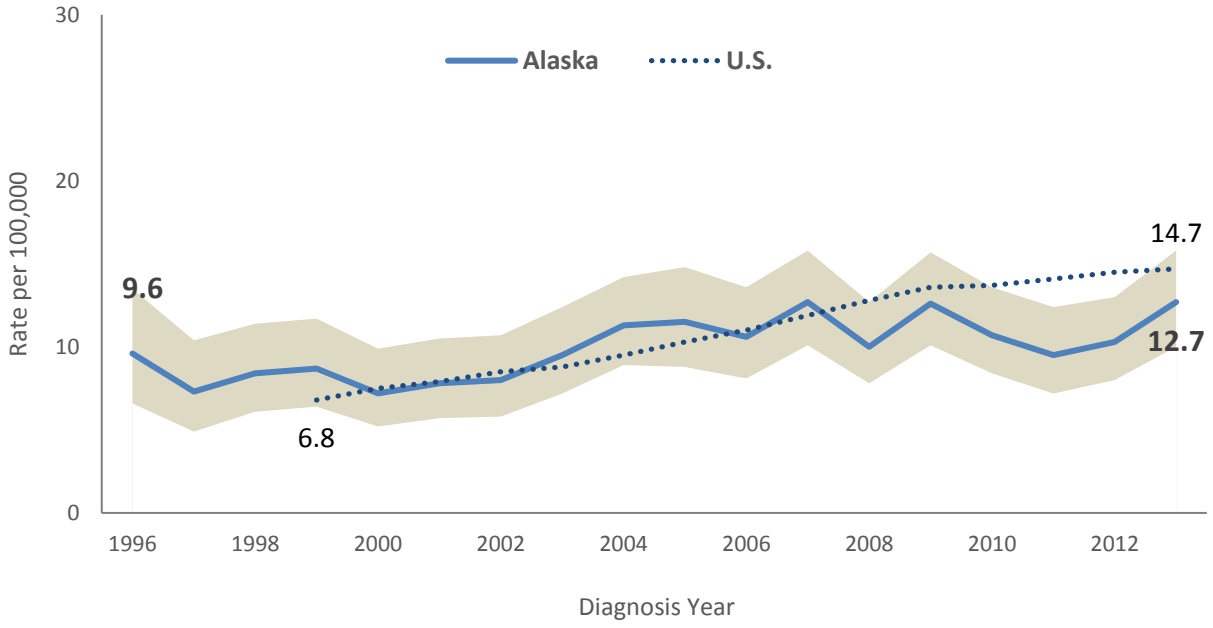
- Thyroid cancer is the 9th most commonly occurring cancer in Alaska.
- Rates are higher among women than men.
- Most thyroid cancer cases are diagnosed at the localized stage.
- Thyroid cancer incidence has increased nationally between 1999 and 2013. Alaska's incidence rate shows a similar pattern although the change is not statistically significant.
- Risk factors for thyroid cancer include being female, having a history of enlarged thyroid or thyroid nodules, and genetic factors. Unlike most other adult cancers, 70% of thyroid cancer cases are diagnosed in patients younger than age 60.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	0	Matanuska-Susitna Borough	17
Municipality of Anchorage	34	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	0
Bristol Bay Borough	0	Northwest Arctic Borough	0
Denali Borough	^	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	11	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	6	Valdez-Cordova Census Area	0
Kenai Peninsula Borough	8	Wrangell Borough	0
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	0
Kusilvak Census Area	^	**State of Alaska**	**87**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Thyroid Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.1.

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

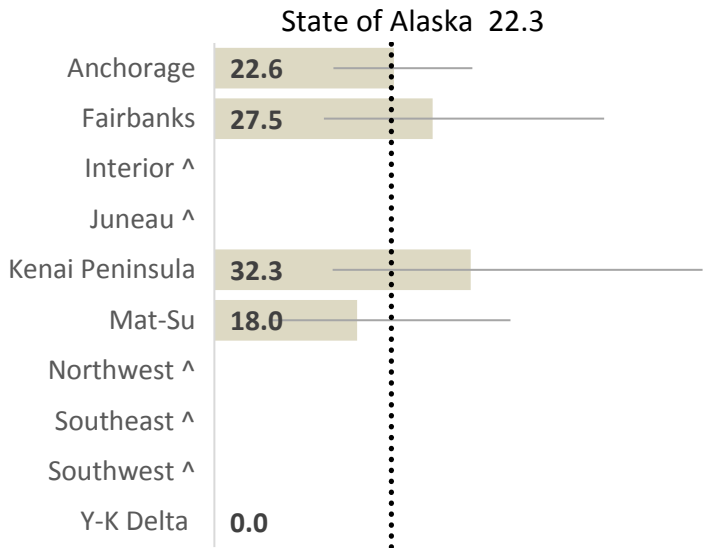
Uterus

Incidence and Mortality Summary, 2013

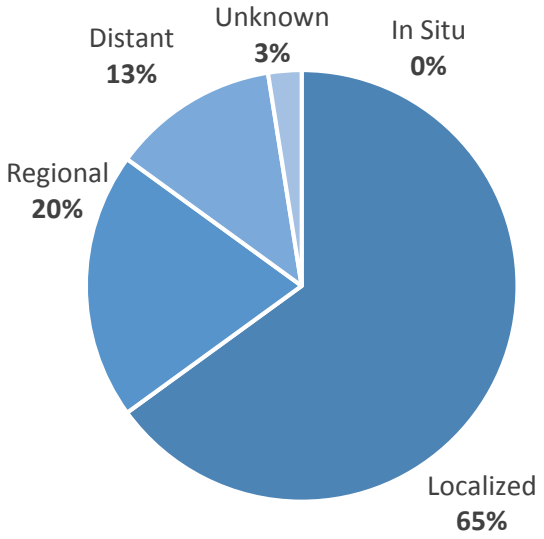
	Total	Male	Female	White	Alaska Native	Black	Asian/ Pacific Islander
Rates per 100,000 women							
Incidence rate	NA	NA	22.3	22.5	25.9	0.0	20.7
Mortality rate	NA	NA	5.2	3.6	^	^	^
Numbers of cases							
# of new malignant cases	NA	NA	80	61	12	0	7
# of new in situ cases	NA	NA	0	0	0	0	0
# of deaths	NA	NA	15	8	^	^	^

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. All incidence rates are for malignant cases only.

Uterine Cancer Incidence Rate by Alaska Behavioral Health Systems Region, 2013



Stage at Diagnosis, 2013



^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.

Discussion

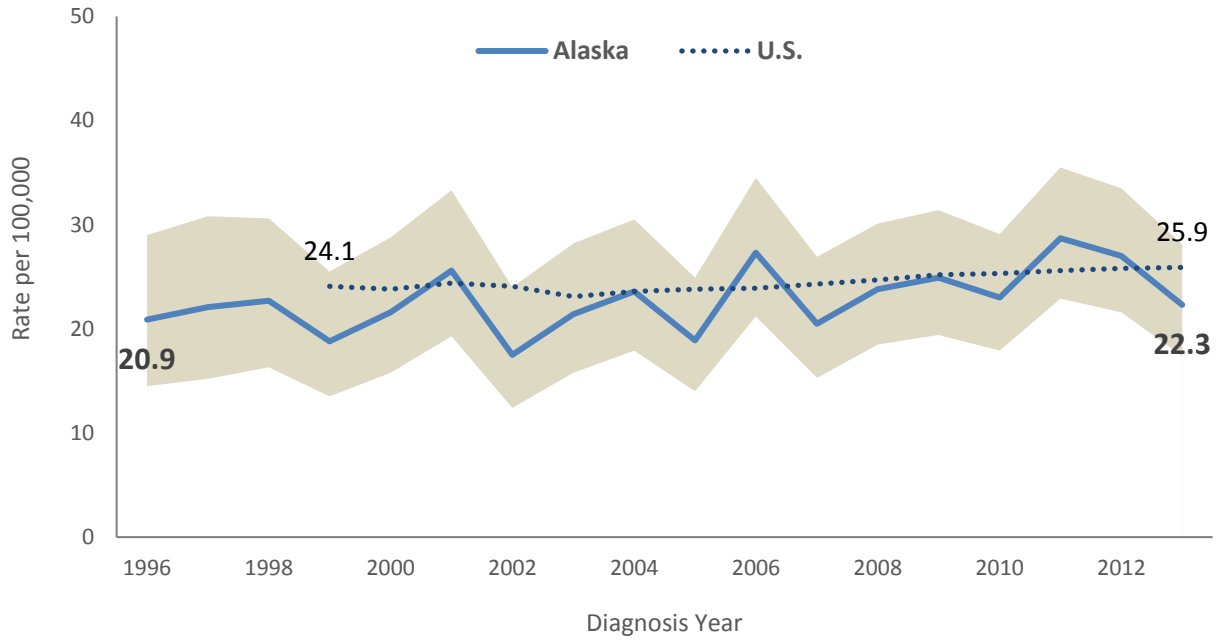
- Uterine cancer is the 4th most common cancer in women in Alaska.
- Most uterine cancer cases are diagnosed at the localized stage.
- Alaska's incidence rate is similar to the national incidence rate.
- Risk factors for uterine cancer include obesity and/or abdominal fatness, and medical conditions including diabetes and Lynch syndrome. Other risk factors that increase estrogen exposure include menopausal estrogen therapy, later menopause, never having children, and a history of polycystic ovary syndrome.

Total New Malignant Cases by Borough/Census Area, 2013

Aleutians East Borough	0	Lake and Peninsula Borough	0
Aleutians West Census Area	^	Matanuska-Susitna Borough	8
Municipality of Anchorage	33	Nome Census Area	0
Bethel Census Area	0	North Slope Borough	^
Bristol Bay Borough	0	Northwest Arctic Borough	^
Denali Borough	0	Petersburg Borough	0
Dillingham Census Area	0	Prince of Wales-Hyder Census Area	^
Fairbanks North Star Borough	13	Sitka Borough	^
Haines Borough	0	Skagway Municipality	0
Hoonah-Angoon Census Area	0	Southeast Fairbanks Census Area	^
Juneau Borough	^	Valdez-Cordova Census Area	^
Kenai Peninsula Borough	10	Wrangell Borough	^
Ketchikan Gateway Borough	^	Yakutat Borough	0
Kodiak Island Borough	^	Yukon-Koyukuk Census Area	^
Kusilvak Census Area	0	**State of Alaska**	**80**

^ Indicates statistic not displayed due to a low number of cases (fewer than 6, but more than 0).

Uterine Cancer Incidence Trend, Alaska and U.S.



Shading shows 95% confidence interval for Alaska's annual rates. 95% confidence interval for U.S. rates is about ± 0.2.
Rates are per 100,000 (women) and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

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APPENDICES

Appendix A: Supporting Data

Table 1: Cancer Incidence Overall and by Gender, Alaska 2013

	Total		Male		Female	
	Rate	Count	Rate	Count	Rate	Count
All Sites	410.7	2,664	424.9	1,352	402.1	1,312
Oral Cavity and Pharynx	10.8	79	14.5	57	7.0	22
Esophagus	6.0	38	9.1	29	3.1	9
Stomach	6.9	44	11.1	36	2.6	8
Small Intestine	1.9	11	^	^	2.2	7
Colon and Rectum	43.0	272	43.7	139	42.8	133
Anus, Anal Canal and Anorectum	2.4	14	3.4	9	^	^
Liver	8.7	62	12.3	46	5.1	16
Intrahepatic Bile Duct	^	^	^	^	^	^
Gallbladder	1.7	10	2.7	6	^	^
Other Biliary	1.9	13	1.6	7	2.1	6
Pancreas	10.2	68	10.3	33	10.2	35
Retroperitoneum	0	0	0	0	0	0
Peritoneum, Omentum and Mesentery	1.1	6	^	^	^	^
Other Digestive Organs	^	^	^	^	^	^
Nose, Nasal Cavity and Middle Ear	1.0	6	^	^	^	^
Larynx	1.7	11	3.1	10	^	^
Lung and Bronchus	54.7	323	66.2	188	44.3	135
Pleura	0	0	0	0	0	0
Other Respiratory Organs	^	^	^	^	0	0
Bones and Joints	0.9	6	^	^	^	^
Soft Tissue including Heart	3.4	25	4.3	16	2.5	9
Melanoma of the Skin	14.9	99	17.2	52	13.3	47
Other Non-Epithelial Skin	1.8	8	^	^	^	^
Breast	60.6	420	^	^	120.7	415
Cervix Uteri	NA	NA	NA	NA	6.6	20
Corpus and Uterus, NOS	NA	NA	NA	NA	22.3	80
Ovary	NA	NA	NA	NA	11.0	34
Vagina	NA	NA	NA	NA	^	^
Vulva	NA	NA	NA	NA	4.4	11
Other Female Genital Organs	NA	NA	NA	NA	^	^
Prostate	NA	NA	76.5	266	NA	NA
Testis	NA	NA	4.8	19	NA	NA
Penis	NA	NA	^	^	NA	NA
Other Male Genital Organs	NA	NA	^	^	NA	NA

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population.
^ Statistic not displayed due to fewer than 6 cases.

Table 1: Cancer Incidence Overall and by Gender, Alaska 2013 (continued)

	Total		Male		Female	
	Rate	Count	Rate	Count	Rate	Count
Urinary Bladder	20.5	117	32.0	88	9.6	29
Kidney and Renal Pelvis	17.9	126	21.9	76	14.0	50
Ureter	^	^	0	0	^	^
Thyroid	12.7	87	6.5	23	19.3	64
Other Endocrine including Thymus	^	^	0	0	^	^
Hodgkin Lymphoma	1.1	8	^	^	^	^
Non-Hodgkin Lymphoma	19.2	116	24.2	71	14.7	45
Myeloma	4.7	28	6.5	19	3.2	9
Leukemia	10.7	67	9.5	34	11.3	33
Mesothelioma	1.6	8	3.4	7	^	^
Ureter	^	^	0	0	^	^
Other Urinary Organs	^	^	^	^	0	0
Eye and Orbit	^	^	^	^	^	^
Kaposi Sarcoma	0	0	0	0	0	0
Miscellaneous	16.3	98	21.6	61	12.1	37

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population.
^ Statistic not displayed due to fewer than 6 cases.

Table 2: Cancer Incidence by Race, Alaska 2013

	All races		White		Black		Alaska Native		Asian/ Pacific Islander	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
All Sites	410.7	2,664	396.3	1,974	370.9	75	520.2	453	348.8	153
Oral Cavity and Pharynx	10.8	79	10.0	58	0	0	18.2	17	^	^
Esophagus	6.0	38	5.7	27	^	^	10.4	10	0	0
Stomach	6.9	44	3.0	14	^	^	27.7	25	^	^
Small Intestine	1.9	11	2.2	9	^	^	0	0	^	^
Colon and Rectum	43	272	34.4	167	^	^	95.0	80	38.6	19
Anus, Anal Canal and Anorectum	2.4	14	2.6	12	0	0	^	^	0	0
Liver	8.7	62	8.1	45	^	^	9.4	10	16.7	6
Intrahepatic Bile Duct	^	^	^	^	0	0	0	0	0	0
Gallbladder	1.7	10	1.6	7	^	^	^	^	^	^
Other Biliary	1.9	13	1.6	8	0	0	^	^	^	^
Pancreas	10.2	68	10.4	54	^	^	11.3	10	^	^
Retroperitoneum	0	0	0	0	0	0	0	0	0	0
Peritoneum, Omentum and Mesentery	1.1	6	^	^	0	0	^	^	0	0
Other Digestive Organs	^	^	^	^	^	^	^	^	0	0
Nose, Nasal Cavity and Middle Ear	1.0	6	^	^	^	^	0	0	0	0
Larynx	1.7	11	1.8	10	0	0	^	^	0	0
Lung and Bronchus	54.7	323	50.2	229	57.1	10	83.9	63	44.7	20
Pleura	0	0	0	0	0	0	0	0	0	0
Other Respiratory Organs	^	^	0	0	0	0	^	^	0	0
Bones and Joints	0.9	6	^	^	0	0	^	^	0	0
Soft Tissue including Heart	3.4	25	3.5	18	^	^	^	^	^	^
Melanoma of the Skin	14.9	99	18.5	92	0	0	6.3	6	0	0
Other Non-Epithelial Skin	1.8	8	2.3	8	0	0	0	0	0	0
Breast	60.6	420	59.0	313	69.6	14	71.0	68	50.1	24
Cervix Uteri*	6.6	20	6.5	14	0	0	^	^	^	^
Corpus and Uterus, NOS*	22.3	80	22.5	61	0	0	25.9	12	20.7	7
Ovary*	11.0	34	11.7	26	0	0	^	^	^	^
Vagina*	^	^	^	^	0	0	^	^	0	0
Vulva*	4.4	11	4.4	6	0	0	^	^	0	0
Other Female Genital Organs*	^	^	^	^	0	0	^	^	0	0
Prostate*	76.5	266	78.5	222	105.6	13	42.5	17	88.0	12
Testis*	2.6	19	1.9	9	^	^	4.1	6	^	^
Penis*	^	^	^	^	0	0	^	^	0	0
Other Male Genital Organs*	^	^	^	^	0	0	0	0	0	0

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population.
* Rates are gender-specific, for men or women alone
^ Statistic not displayed due to fewer than 6 cases.

Table 2: Cancer Incidence by Race, Alaska 2013 (continued)

	All races		White		Black		Alaska Native		Asian/ Pacific Islander	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Urinary Bladder	20.5	117	23.3	103	^	^	11.6	8	^	^
Kidney and Renal Pelvis	17.9	126	16.5	89	^	^	28.4	28	17.7	8
Ureter	^	^	0	0	0	0	^	^	^	^
Other Urinary Organs	^	^	^	^	0	0	0	0	^	^
Eye and Orbit	^	^	^	^	0	0	^	^	0	0
Brain & Other CNS	4.6	37	5.4	32	^	^	^	^	^	^
Thyroid	12.7	87	12.7	67	^	^	14.0	12	^	^
Other Endocrine including Thymus	^	^	^	^	0	0	0	0	0	0
Hodgkin Lymphoma	1.1	8	1.3	6	^	^	0	0	0	0
Non-Hodgkin Lymphoma	19.2	116	19.9	94	42.7	6	10.2	8	18.8	8
Myeloma	4.7	28	4.3	19	^	^	^	^	0	0
Leukemia	10.7	67	10.5	48	^	^	12.8	15	^	^
Mesothelioma	1.6	8	1.4	6	0	0	^	^	^	^
Kaposi Sarcoma	0	0	0	0	0	0	0	0	0	0
Miscellaneous	16.3	98	16.1	74	^	^	14.0	11	25.7	11

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population.
* Rates are gender-specific, for men or women alone
^ Statistic not displayed due to fewer than 6 cases.

Table 3: Cancer Incidence, Alaska 2013: Number of Cases by Age Group

	00-04 years	05-09 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years
All Sites	14	6	^	12	22	41	42	50	101	148	249	356	413	410	315	228	160	93
Oral Cavity & Pharynx	0	0	0	0	0	0	^	^	^	^	8	14	17	17	8	^	^	0
Esophagus	0	0	0	0	0	0	0	0	^	^	^	6	7	7	6	^	^	^
Stomach	0	0	0	0	0	0	0	^	0	^	6	6	^	8	^	^	^	0
Small Intestine	0	0	0	0	0	0	0	0	0	^	^	0	^	^	^	^	^	0
Colon and Rectum	0	0	0	^	0	^	^	^	13	21	28	31	45	38	33	26	16	11
Anus, Anal Canal and Anorectum	0	0	0	0	0	0	0	0	0	^	^	^	^	^	^	^	^	^
Liver	0	0	0	0	0	0	0	0	^	^	9	15	12	6	8	^	^	^
Intrahepatic Bile Duct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	^	0	0	^
Gallbladder	0	0	0	0	0	0	0	0	0	0	^	^	^	0	^	^	^	^
Other Biliary	0	0	0	0	0	0	0	0	0	^	^	0	^	6	^	^	0	^
Pancreas	0	0	0	0	0	0	^	0	0	^	7	15	7	14	11	8	^	^
Retroperitoneum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peritoneum, Omentum and Mesentery	0	0	0	0	0	0	0	0	0	0	^	^	^	0	0	^	^	^
Other Digestive Organs	0	0	0	0	0	0	0	0	0	0	0	^	^	0	0	^	0	^
Nose, Nasal Cavity and Middle Ear	0	0	0	0	0	0	0	0	0	0	0	^	^	^	^	0	^	0
Larynx	0	0	0	0	0	0	0	0	0	0	^	^	0	^	^	0	^	0
Lung and Bronchus	0	0	0	0	0	0	^	0	6	10	17	35	51	63	50	39	34	17
Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Respiratory Organs	0	0	0	0	0	0	0	0	^	0	0	^	0	0	0	0	0	0
Bones and Joints	0	0	0	0	^	^	0	0	^	0	^	^	0	0	0	0	^	0
Soft Tissue incl. Heart	^	^	0	^	^	^	0	0	^	^	^	^	^	^	^	0	^	^
Melanoma of the Skin	0	0	0	^	^	^	^	6	10	7	11	12	13	9	9	7	^	^
Other Non-Epithelial Skin	0	0	0	0	0	0	0	0	0	0	0	0	0	^	^	^	^	^
Breast	0	0	0	^	^	6	7	^	22	39	58	65	66	60	38	18	19	15

	00-04 years	05-09 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years
Cervix Uteri	0	0	0	0	0	^	^	^	^	^	^	^	^	0	^	^	0	^
Corpus & Uterus, NOS	0	0	0	0	0	^	^	^	^	^	11	18	15	9	^	^	6	^
Ovary	0	0	0	0	^	0	^	^	^	^	^	^	^	^	^	^	^	0
Vagina	0	0	0	0	0	0	0	0	0	0	^	0	^	0	0	0	0	0
Vulva	0	0	0	0	0	0	0	0	0	^	0	^	0	0	^	^	^	^
Other Female Genital Organs	0	0	0	0	^	0	0	0	0	^	0	0	0	0	^	0	0	0
Prostate	0	0	0	0	0	0	0	0	^	6	18	33	71	59	36	28	9	^
Testis	0	0	^	^	^	^	^	^	^	^	0	^	^	0	0	0	0	0
Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	^	^	0	0
Other Male Genital Organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	^	0	0
Urinary Bladder	0	0	0	0	0	^	^	^	^	0	7	12	12	24	21	18	13	^
Kidney & Renal Pelvis	^	^	0	0	0	^	^	^	7	9	10	22	23	18	14	10	^	0
Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	^	0	0	0
Other Urinary Organs	0	0	0	0	0	0	0	0	0	0	0	0	0	^	0	^	0	0
Eye and Orbit	0	0	0	0	^	0	0	0	0	0	0	0	^	0	0	0	^	0
Brain & Other CNS	0	^	^	0	^	^	^	^	^	^	6	9	^	^	0	^	0	0
Thyroid	0	0	^	^	^	12	8	9	10	8	6	8	9	^	^	^	^	^
Other Endocrine including Thymus	^	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hodgkin Lymphoma	0	0	^	^	^	0	0	^	^	0	^	0	0	0	0	0	0	0
Non-Hodgkin Lymphoma	0	0	0	0	^	^	^	6	^	9	8	11	17	15	18	13	9	^
Myeloma	0	0	0	0	0	0	0	0	^	^	^	^	^	^	6	^	^	^
Leukemia	7	^	0	^	^	^	^	^	^	^	8	^	6	^	8	^	^	^
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	^	^	^	^	^	^
Kaposi Sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	^	0	0	^	0	^	0	0	^	^	^	15	10	20	14	10	7	8

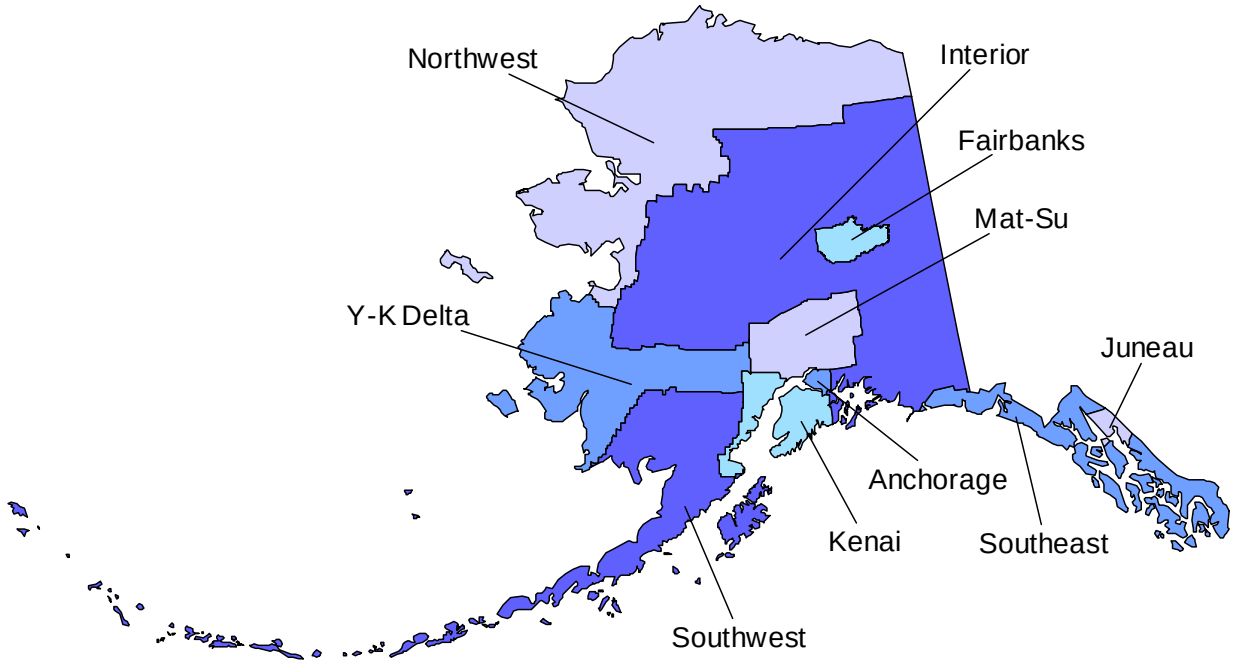
Rates are per 100,000 and age-adjusted to the 2000 U.S. Population.
^Statistic not displayed due to fewer than 6 cases.

Table 4: Alaska Behavioral Health Systems Regions with 2013 Alaska Resident Population by Borough/Census Area

Behavioral Health Systems Region	Boroughs/Census Areas	Population
State of Alaska		**736,399**
Anchorage	Anchorage Municipality	**301,134**
Fairbanks	Fairbanks North Star Borough	**99,632**
Interior	Denali Borough	1,793
	Southeast Fairbanks Census Area	7,100
	Valdez-Cordova Census Area	9,821
	Yukon-Koyukuk Census Area	5,650
Total		**24,364**
Juneau	Juneau City and Borough	**33,064**
Kenai Peninsula	Kenai Peninsula Borough	**56,862**
Mat-Su	Matanuska-Susitna Borough	**96,074**
Northwest	Nome Census Area	9,875
	North Slope Borough	9,876
	Northwest Arctic Borough	7,796
Total		**27,547**
Southeast	Haines Borough	2,530
	Hoonah-Angoon Census Area	2,183
	Ketchikan Gateway Borough	13,856
	Petersburg Borough	3,216
	Prince of Wales-Hyder Census Area	6,434
	Sitka City and Borough	9,039
	Skagway Municipality	982
	Wrangell City and Borough	2,456
	Yakutat City and Borough	622
Total		**41,318**
Southwest	Aleutians East Borough	3,281
	Aleutians West Census Area	5,833
	Bristol Bay Borough	933
	Dillingham Census Area	5,022
	Kodiak Island Borough	13,824
	Lake and Peninsula Borough	1,689
Total		**30,582**
Y-K Delta	Bethel Census Area	17,874
	Kusilvak Census Area	7,948
Total		**25,822**

Vintage 2013. All numbers are based on 2013 geography.
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; U.S. Census Bureau; and National Center for Health Statistics

Figure 1: Alaska Behavioral Health Systems Regions Map



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Appendix B: Detailed Trend Tables and Analysis

This Appendix includes detailed trend information for all cancers and for the 20 site-specific cancers included in the Summaries section of this report.

Each cancer type has two pages of information

- one page showing a trend graph, with text summarizing the findings; and
- one page showing a table of annual age-adjusted rates, confidence intervals and counts for Alaska between 1996 and 2013, as well as the U.S. rates from 1999 to 2013, and the percent difference between the Alaska and U.S. rates.

Assessing trends

Trends for Alaska's age-adjusted cancer incidence rates were assessed using the National Cancer Institute's (NCI) Joinpoint Regression Program, Version 4.3.1.0 (April 2016, NCI Statistical Research and Applications Branch; software available at https://surveillance.cancer.gov/joinpoint/). Joinpoint is a national standard for analysis of population-based cancer statistical trends.

The software identifies "joinpoints" (points of inflection where trends have significantly changed). The program starts with the minimum number of joinpoints (e.g., 0 joinpoints, or a straight line), and tests whether more joinpoints are statistically significant and must be added to the model (up to the maximum allowed number; 3 for this report).

For each joinpoint time segment, the estimated annual percentage change (APC) was calculated by fitting a least squares regression line to the natural logarithm of the rates. When the APC is statistically significant as different from zero (e.g., significantly different from a flat line), it is marked with a "^" symbol in the output that accompanies the chart. This APC can be interpreted as the average percent increase or decrease in cancer incidence during that period.

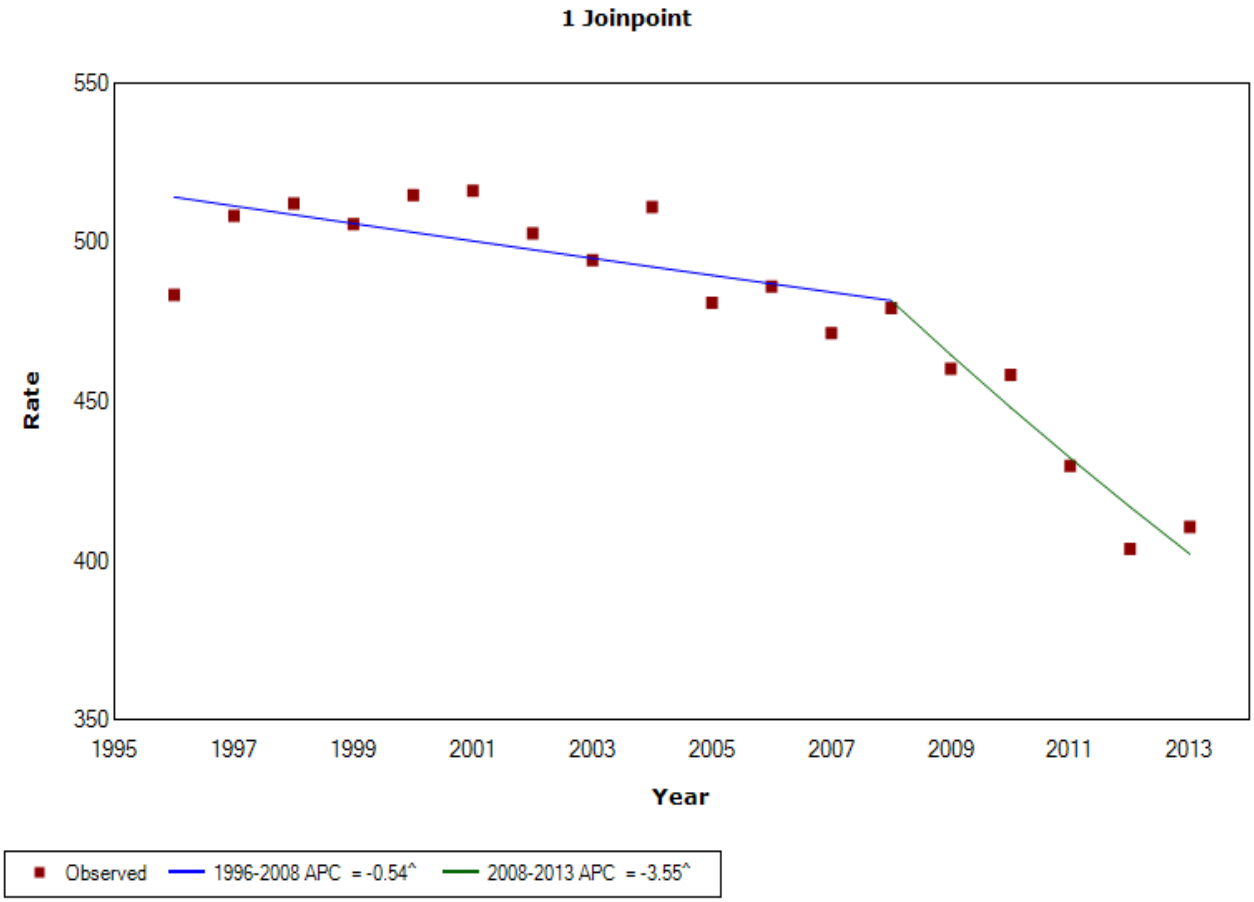
Alaska and U.S. annual cancer incidence comparisons

Comparisons between Alaska and U.S. cancer incidence rates are presented to identify where Alaska appears consistently higher or lower than the U.S. The intent of this section is to highlight patterns of difference – for example, when differences between Alaska and the U.S. appear for three or more years in a row.

Meaningful differences between Alaska and the U.S. were identified by flagging when the U.S. rate falls above the upper bound of the confidence interval for Alaska's rate (e.g., Alaska is "better than the U.S.", noted in appendix tables by a "-" symbol), or when the U.S. rate falls below the lower bound of the confidence interval for Alaska's rate (e.g., Alaska is "worse than the U.S.", noted in appendix tables by a "+" symbol).

This method may slightly overestimate differences between Alaska and U.S. rates because it does not consider the confidence interval around the U.S. rate. However, typically the U.S. confidence interval is very narrow.

All Cancer Sites



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2008, Alaska's cancer incidence rates for all cancers decreased by an average of 0.54% per year.

From 2008 to 2013, Alaska's cancer incidence rates have significantly decreased, by an average of 3.55% per year.

This suggests that declines have been greater in the past six years in comparison to historical rates.

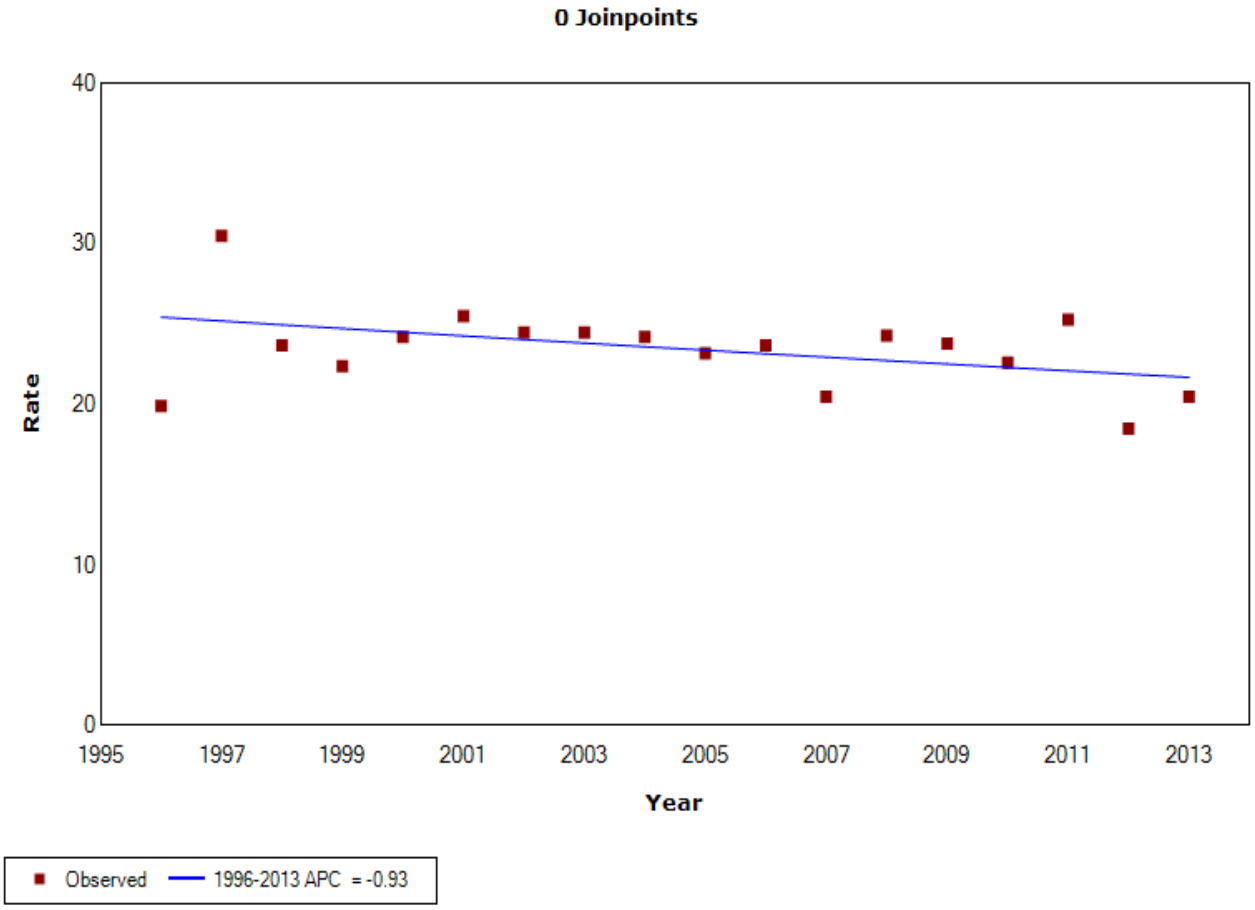
All Cancer Sites

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	483.6	457.6	510.6	1680			
1997	508.5	482.5	535.4	1827			
1998	512.3	487.1	538.4	1920			
1999	505.9	481.4	531.3	1966	483.9	5%	
2000	514.9	490.6	539.9	2053	485.9	6%	+
2001	516.4	493.0	540.7	2187	487.2	6%	+
2002	502.9	480.3	526.2	2239	483.7	4%	
2003	494.5	472.4	517.4	2266	471.8	5%	+
2004	511.2	489.3	533.9	2430	470.7	9%	+
2005	481.2	460.3	502.8	2371	470.5	2%	
2006	486.2	465.5	507.5	2496	471.1	3%	
2007	471.6	451.6	492.2	2513	474.6	-1%	
2008	479.5	459.8	499.8	2671	470.4	2%	
2009	460.5	441.4	480.2	2647	465.3	-1%	
2010	458.5	439.9	477.7	2746	452.8	1%	
2011	430.0	412.3	448.2	2666	451.9	-5%	-
2012	403.9	387.2	421.0	2612	438.1	-8%	-
2013	410.7	394.0	427.9	2664	430.6	-5%	-

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates and counts include malignant cases, plus in situ bladder cancer cases. Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.8% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's overall cancer incidence rate was greater than the U.S. rate in 2000, 2001 and 2004, but has been lower than the national rate for 3 of the past 5 years.

Bladder



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's bladder cancer incidence rates did not change significantly.

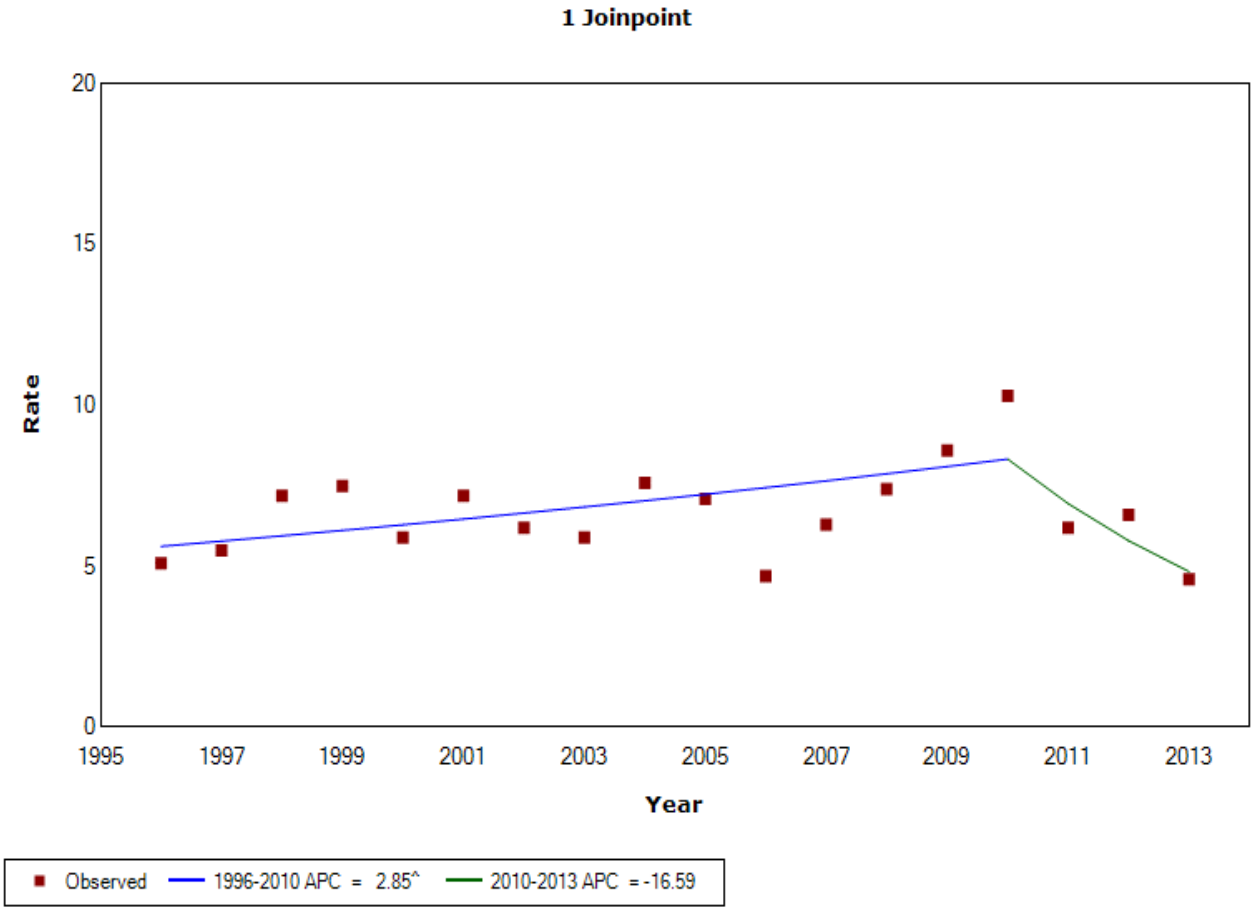
Bladder

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	19.9	14.8	26.2	62			
1997	30.5	23.8	38.2	89			
1998	23.7	18.1	30.3	72			
1999	22.4	17.1	28.7	71	22.0	2%	
2000	24.2	18.6	30.6	79	22.1	10%	
2001	25.5	20.4	31.5	98	21.9	16%	
2002	24.5	19.4	30.4	91	22.0	11%	
2003	24.5	19.5	30.3	96	21.8	12%	
2004	24.2	19.5	29.6	106	22.0	10%	
2005	23.2	18.6	28.3	103	22.0	5%	
2006	23.7	19	29.2	102	21.2	12%	
2007	20.5	16.3	25.4	98	21.4	-4%	
2008	24.3	19.8	29.5	120	21.3	14%	
2009	23.8	19.3	28.9	120	21.1	13%	
2010	22.6	18.3	27.4	117	20.7	9%	
2011	25.3	20.9	30.3	134	20.5	23%	+
2012	18.5	14.9	22.7	109	20.4	-9%	
2013	20.5	16.7	24.9	117	19.9	3%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates include malignant and in situ cases. Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.2% outside of the CI range for Alaska. National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's bladder cancer incidence rate was about the same as than the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 1 of the past 5 years.

Brain and Other CNS-Malignant



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2010, Alaska's malignant brain and other CNS cancer incidence rates significantly increased by an average of 2.85% per year.

From 2010 to 2013, Alaska's these rates appear to decrease but the trend is not significant. This suggests that additional years of data are needed to determine the trend in malignant brain cancer is decreasing.

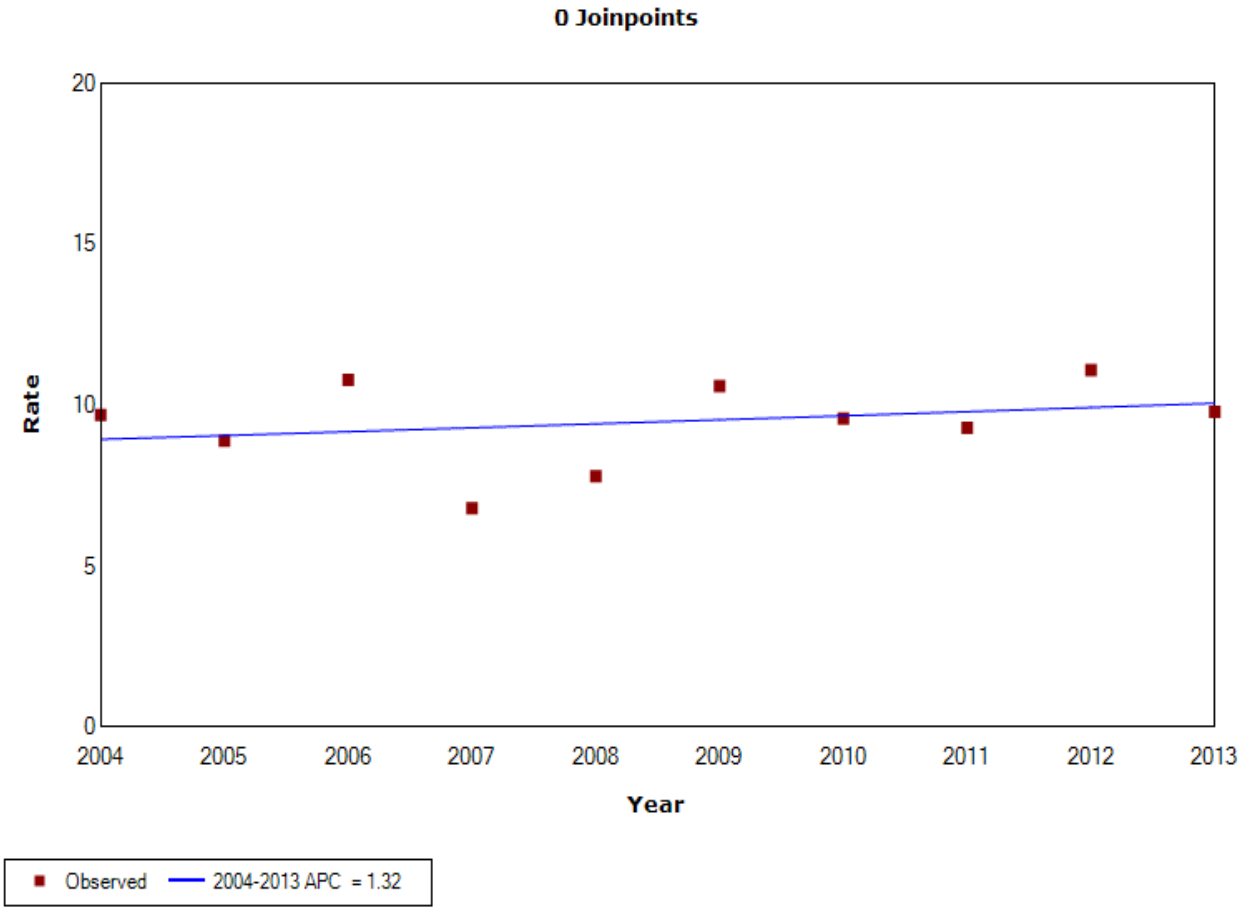
Brain and Other CNS-Malignant

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	5.1	3.3	7.7	27			
1997	5.5	3.5	8.4	28			
1998	7.2	5.0	10.2	39			
1999	7.5	5.1	10.8	35	6.9	9%	
2000	5.9	3.9	8.5	31	6.9	-14%	
2001	7.2	4.8	10.3	35	6.8	6%	
2002	6.2	4.3	8.7	36	6.9	-10%	
2003	5.9	3.9	8.6	31	6.8	-13%	
2004	7.6	5.3	10.6	41	6.9	10%	
2005	7.1	4.8	10.0	38	6.8	4%	
2006	4.7	3.0	7.2	26	6.8	-31%	
2007	6.3	4.4	8.7	40	6.8	-7%	
2008	7.4	5.3	10.2	46	6.8	9%	
2009	8.6	6.3	11.5	53	6.8	26%	
2010	10.3	7.8	13.2	68	6.6	56%	+
2011	6.2	4.3	8.6	40	6.5	-5%	
2012	6.6	4.6	9.1	42	6.5	2%	
2013	4.6	3.2	6.4	37	6.4	-28%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.1% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's malignant brain and other CNS cancer incidence rate was about the same as than the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 1 of the past 5 years.

Brain and Other CNS-Benign



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05
Note: Data for benign brain and other CNS cancers are not available prior to 2004.

Alaska's benign brain and other CNS cancer incidence rates did not significantly change between 2004 and 2013.

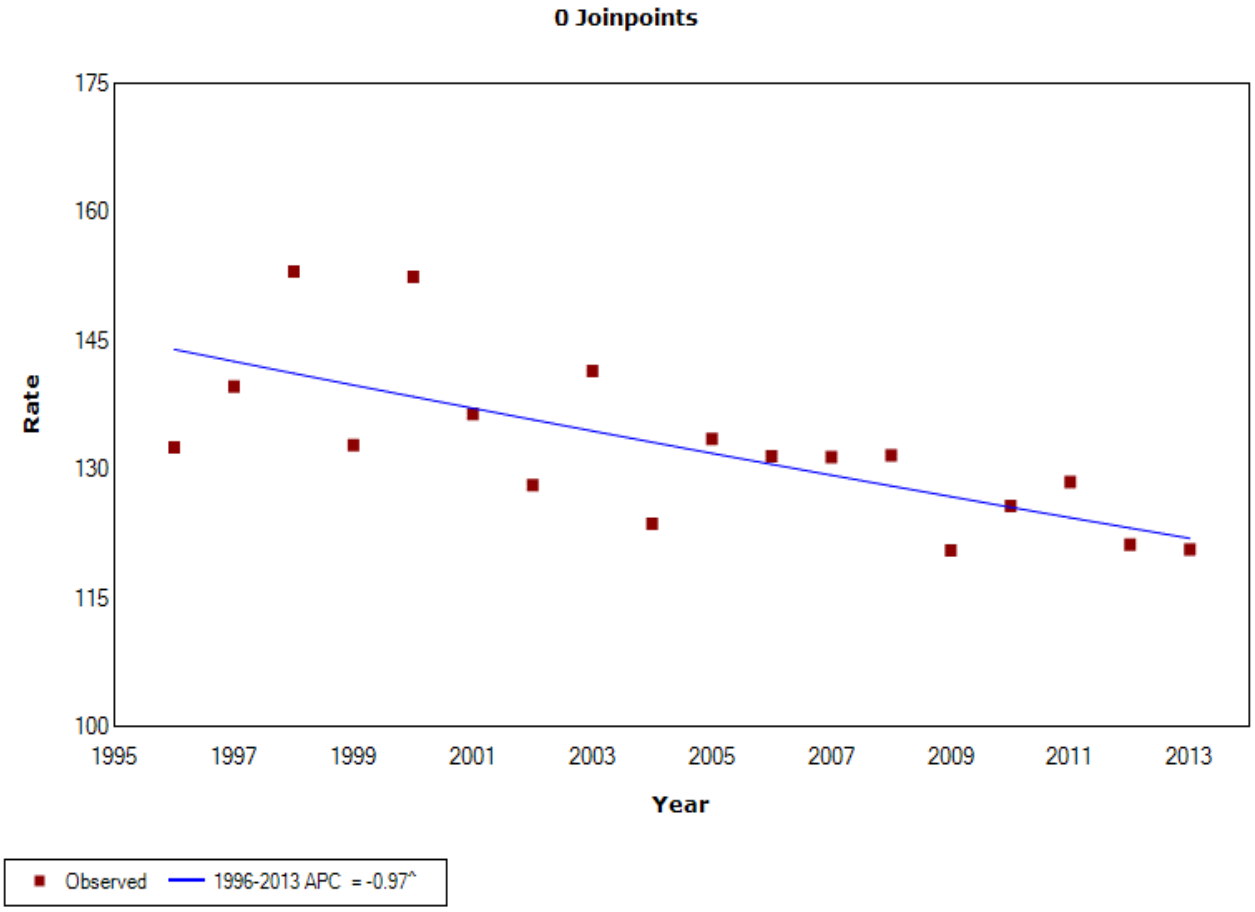
Brain and Other CNS-Benign

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004	9.7	6.8	13.3	44	8.1	20%	
2005	8.9	6.3	12.1	46	9.1	-2%	
2006	10.8	8.0	14.1	61	9.3	16%	
2007	6.8	4.8	9.5	40	9.5	-28%	
2008	7.8	5.6	10.5	47	9.9	-21%	
2009	10.6	8.0	13.9	62	10.4	2%	
2010	9.6	7.0	12.7	56	10.0	-4%	
2011	9.3	6.9	12.3	61	10.1	-8%	
2012	11.1	8.6	14.1	77	10.1	10%	
2013	9.8	7.4	12.7	64	9.9	-1%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for benign cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.1% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).
Note: Data for benign brain and other CNS cancers are not available prior to 2004.

Alaska's benign brain and other CNS cancers incidence rate was about the same as than the U.S. rate for most years between 2004 and 2013.

Breast (Female)



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's breast cancer incidence rates significantly decreased by 0.97% per year.

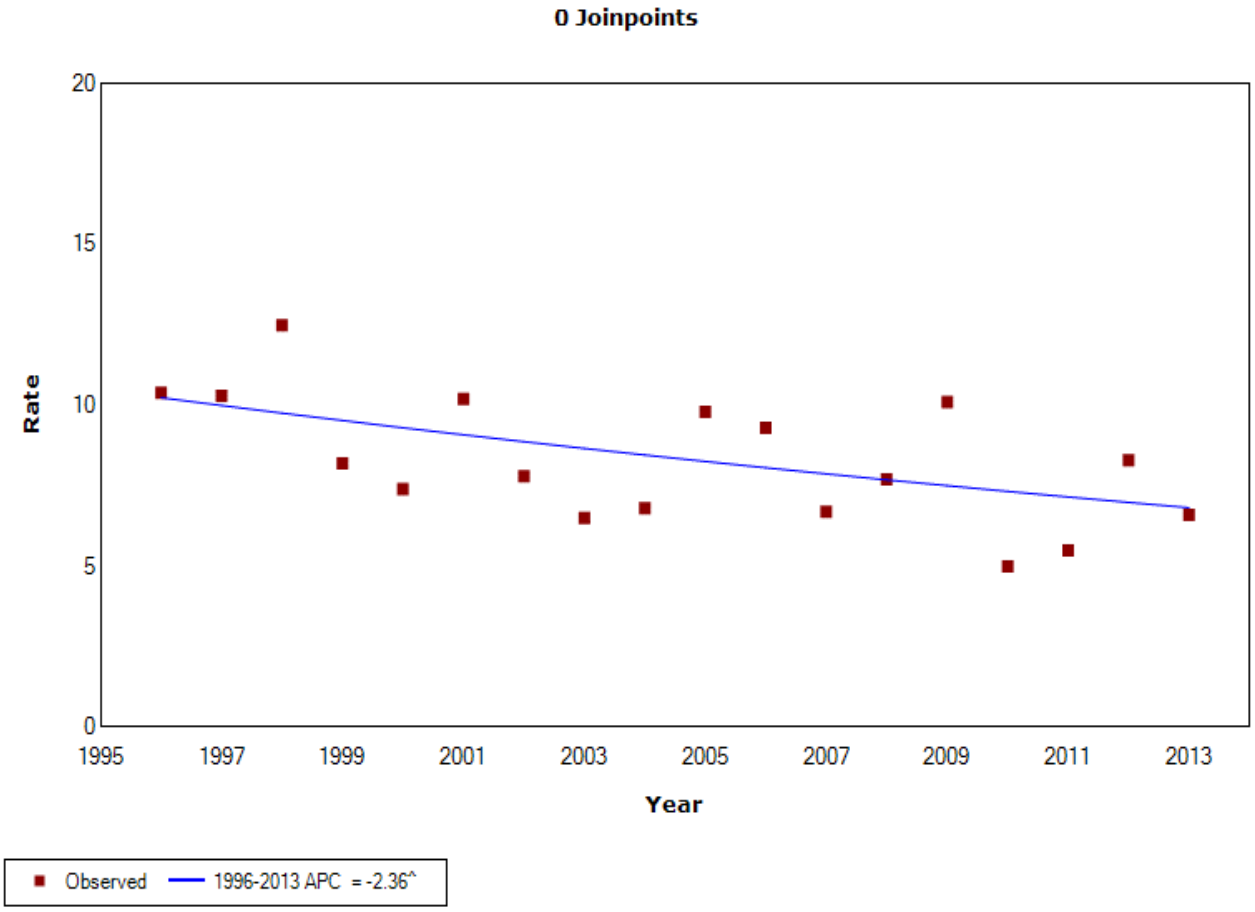
Breast (Female)

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	132.6	115.8	151.1	269			
1997	139.7	122.9	158.2	290			
1998	153.1	135.7	172.1	331			
1999	132.9	117.3	149.9	305	135.1	-2%	
2000	152.5	136.2	170.1	359	132.9	15%	+
2001	136.5	121.5	152.8	340	132.3	3%	
2002	128.2	113.8	143.8	325	129.3	-1%	
2003	141.5	126.5	157.7	369	122.5	16%	+
2004	123.7	110.2	138.5	339	121.1	2%	
2005	133.6	119.5	148.9	367	120.8	11%	
2006	131.6	117.7	146.7	370	121.0	9%	
2007	131.5	117.9	146.1	388	122.6	7%	
2008	131.7	118.3	146.2	399	123.7	6%	
2009	120.6	108.0	134.3	375	124.7	-3%	
2010	125.8	113.2	139.5	410	120.7	4%	
2011	128.6	115.8	142.3	418	123.1	4%	
2012	121.3	109.1	134.5	403	122.7	-1%	
2013	120.7	108.8	133.6	415	123.4	-2%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's breast cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2000 and in 2003.

Cervix



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's cervix cancer incidence rates significantly decreased by 2.36% per year.

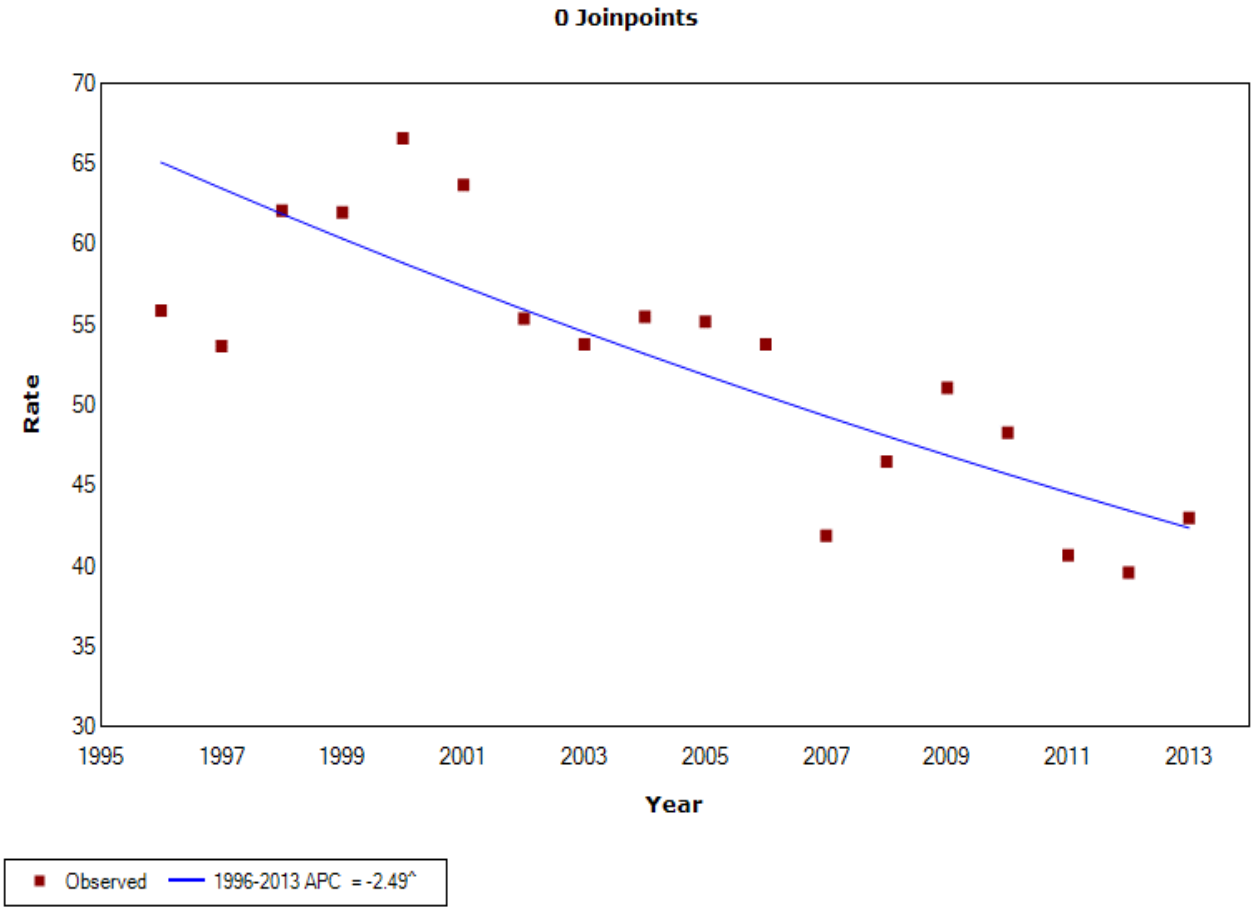
Cervix

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	10.4	6.8	15.5	28			
1997	10.3	6.7	15.3	28			
1998	12.5	8.2	18.3	32			
1999	8.2	4.8	13.0	21	9.7	-15%	
2000	7.4	4.7	11.4	23	9.6	-23%	
2001	10.2	6.7	15.0	29	9.1	12%	
2002	7.8	4.8	12.1	23	8.7	-10%	
2003	6.5	3.7	10.5	18	8.4	-23%	
2004	6.8	4.2	10.5	21	8.2	-17%	
2005	9.8	6.4	14.4	28	8.3	18%	
2006	9.3	6.3	13.4	32	8.2	13%	
2007	6.7	4.0	10.5	20	8.1	-17%	
2008	7.7	5.0	11.5	26	8.0	-4%	
2009	10.1	6.9	14.2	34	8.1	25%	
2010	5.0	2.8	8.2	16	7.7	-35%	
2011	5.5	3.3	8.6	20	7.6	-28%	
2012	8.3	5.5	12.1	29	7.5	11%	
2013	6.6	4.0	10.3	20	7.3	-10%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's cervix cancer incidence rate has been similar to the U.S. rate between 1999 and 2013.

Colorectal



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, colorectal cancer incidence rates in Alaska decreased by about 2.49% per year.

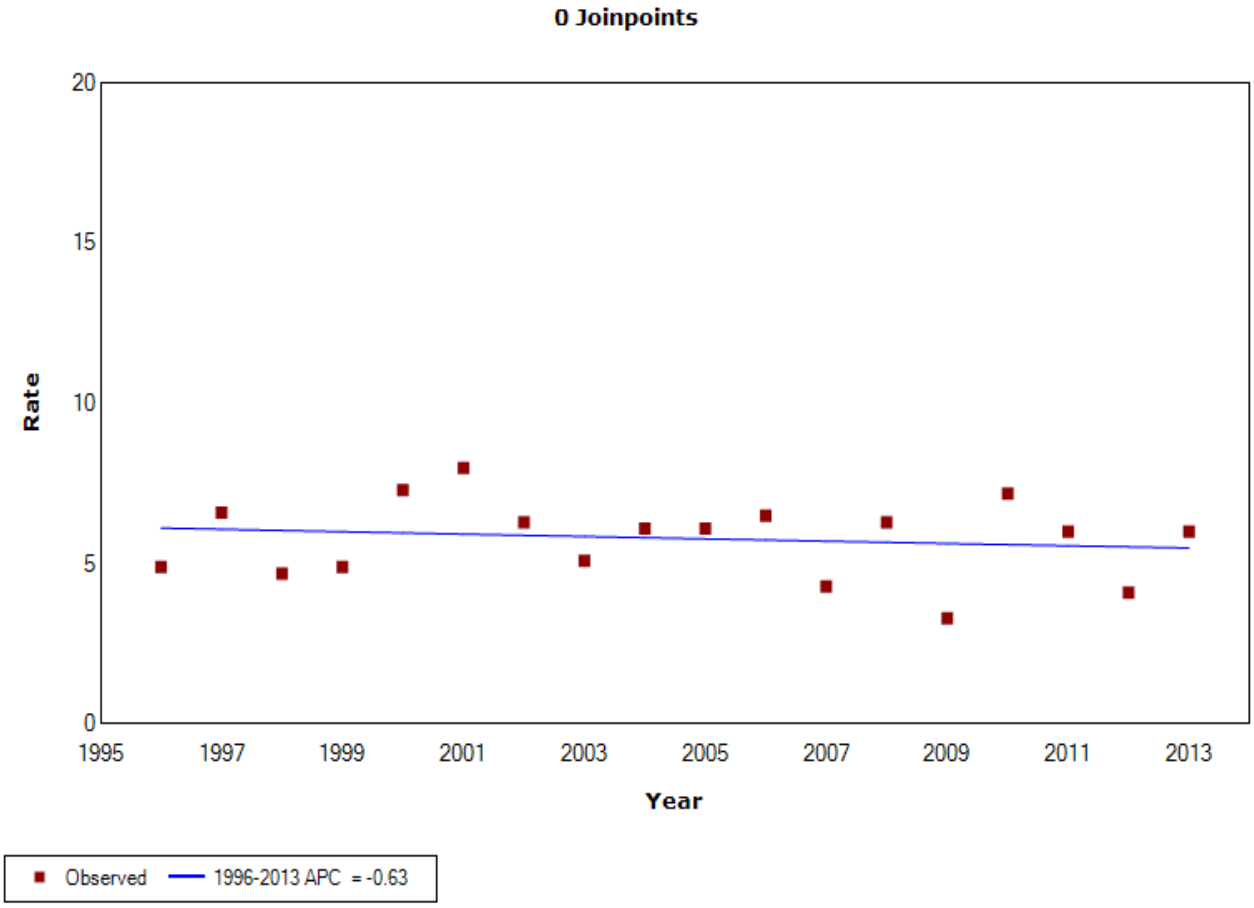
Colorectal

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	55.9	46.8	66.1	171			
1997	53.7	45.2	63.1	179			
1998	62.1	52.8	72.3	197			
1999	62.0	53.1	71.8	209	56.4	10%	
2000	66.6	57.6	76.5	232	56.0	19%	+
2001	63.7	55.2	73.1	238	55.1	16%	+
2002	55.4	47.7	64.0	215	53.8	3%	
2003	53.8	46.4	61.9	226	52.6	2%	
2004	55.5	48.2	63.5	248	51.0	9%	
2005	55.2	47.8	63.2	240	49.6	11%	
2006	53.8	46.9	61.5	255	48.1	12%	
2007	41.9	35.9	48.5	210	46.9	-11%	
2008	46.5	40.3	53.4	241	45.7	2%	
2009	51.1	44.8	58.0	285	43.5	17%	+
2010	48.3	42.3	54.9	279	41.5	16%	+
2011	40.7	35.5	46.5	259	40.6	0%	
2012	39.6	34.3	45.3	243	39.4	1%	
2013	43.0	37.7	48.9	272	38.5	12%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.3% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's colorectal cancer incidence rate has been the same or greater than the U.S. rate most of the years between 1999 and 2013.

Esophagus



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's esophageal cancer incidence rates did not change significantly between 1996 and 2013.

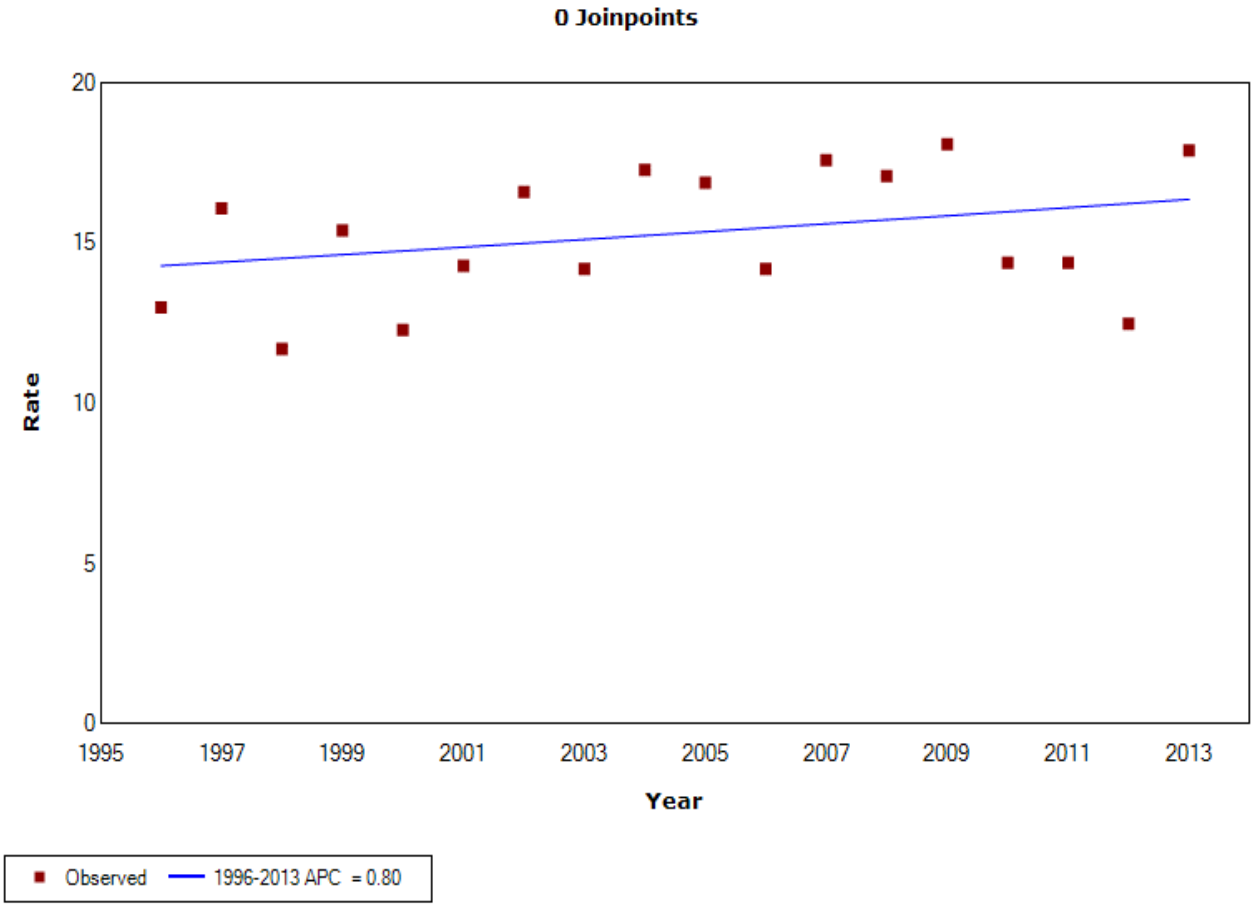
Esophagus

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	4.9	2.4	8.6	14			
1997	6.6	3.9	10.2	22			
1998	4.7	2.7	7.5	18			
1999	4.9	2.9	7.7	20	5.0	-2%	
2000	7.3	4.7	10.7	29	5.0	46%	
2001	8.0	5.1	11.9	28	5.0	60%	+
2002	6.3	3.8	9.5	23	4.9	29%	
2003	5.1	3.3	7.6	28	5.0	2%	
2004	6.1	4.0	9.0	28	5.1	20%	
2005	6.1	4.0	8.8	31	5.0	22%	
2006	6.5	4.3	9.3	35	5.0	30%	
2007	4.3	2.6	6.5	24	4.9	-12%	
2008	6.3	4.2	9.0	33	5.0	26%	
2009	3.3	1.9	5.3	21	4.9	-33%	
2010	7.2	5.0	10.0	41	4.6	57%	+
2011	6.0	4.1	8.4	38	4.6	30%	
2012	4.1	2.6	6.1	29	4.5	-9%	
2013	6.0	4.1	8.4	38	4.5	33%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's esophageal cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2001 and in 2010.

Kidney and Renal Pelvis



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's kidney and renal cancer incidence rates did not change significantly between 1996 and 2013.

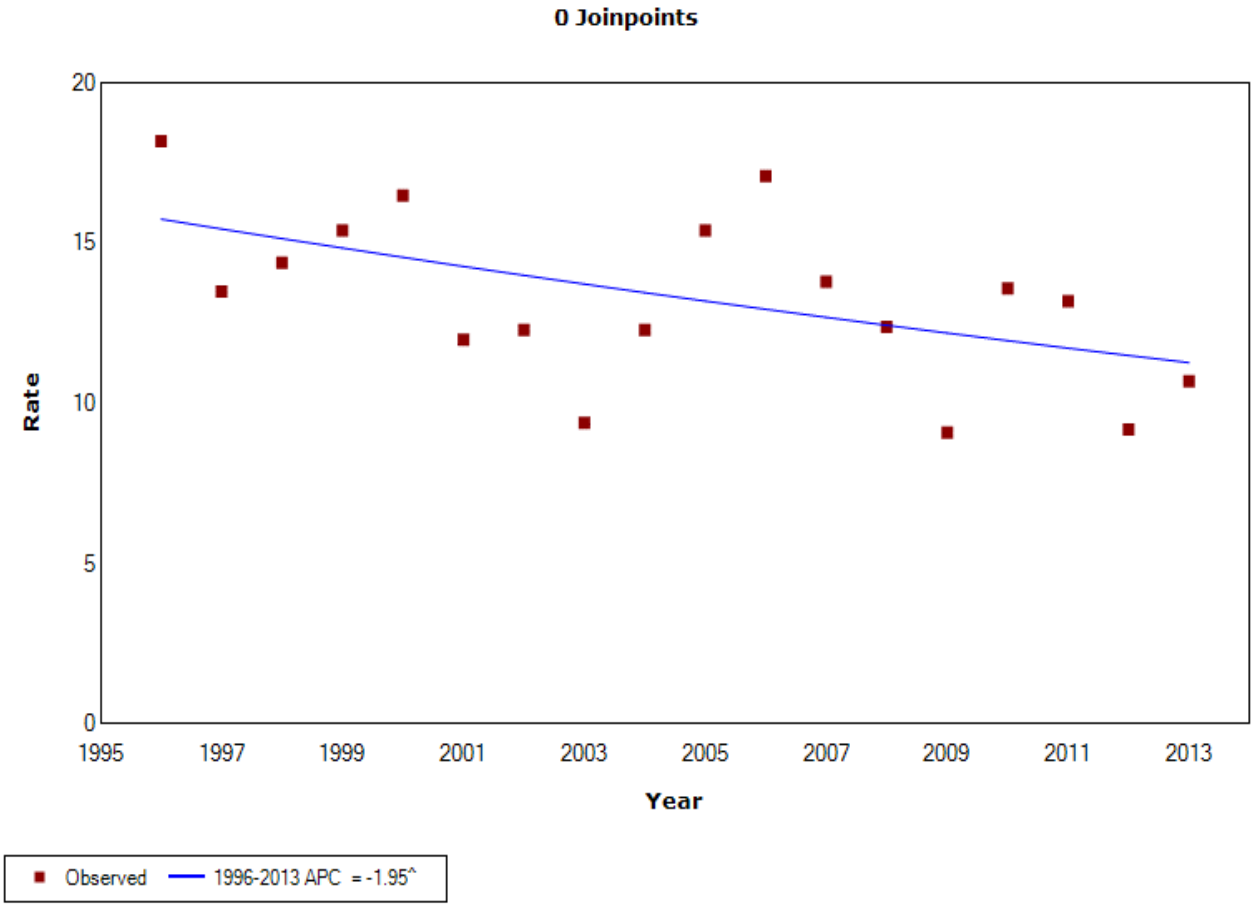
Kidney and Renal Pelvis

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	13.0	9.1	18.0	43			
1997	16.1	11.8	21.3	59			
1998	11.7	8.4	15.7	52			
1999	15.4	11.5	20.2	65	12.3	25%	
2000	12.3	8.8	16.6	49	12.8	-4%	
2001	14.3	10.6	18.8	58	13.3	8%	
2002	16.6	12.8	21.1	78	13.7	21%	
2003	14.2	10.8	18.3	72	14.2	0%	
2004	17.3	13.4	21.9	79	14.7	18%	
2005	16.9	13.2	21.1	87	15.2	11%	
2006	14.2	11.0	18.1	79	15.6	-9%	
2007	17.6	13.8	22.0	90	15.9	11%	
2008	17.1	13.6	21.3	99	16.1	6%	
2009	18.1	14.4	22.4	101	16.1	12%	
2010	14.4	11.3	18.0	90	15.7	-8%	
2011	14.4	11.5	17.9	98	15.9	-9%	
2012	12.5	9.8	15.8	85	16.0	-22%	-
2013	17.9	14.7	21.6	126	15.9	13%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's kidney and renal pelvis cancer incidence rate was about the same as than the U.S. rate for most years between 1999 and 2013. Alaska's rate was lower than the national rate in 2012.

Leukemia



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's leukemia cancer incidence rates significantly decreased by an average of 1.95% per year.

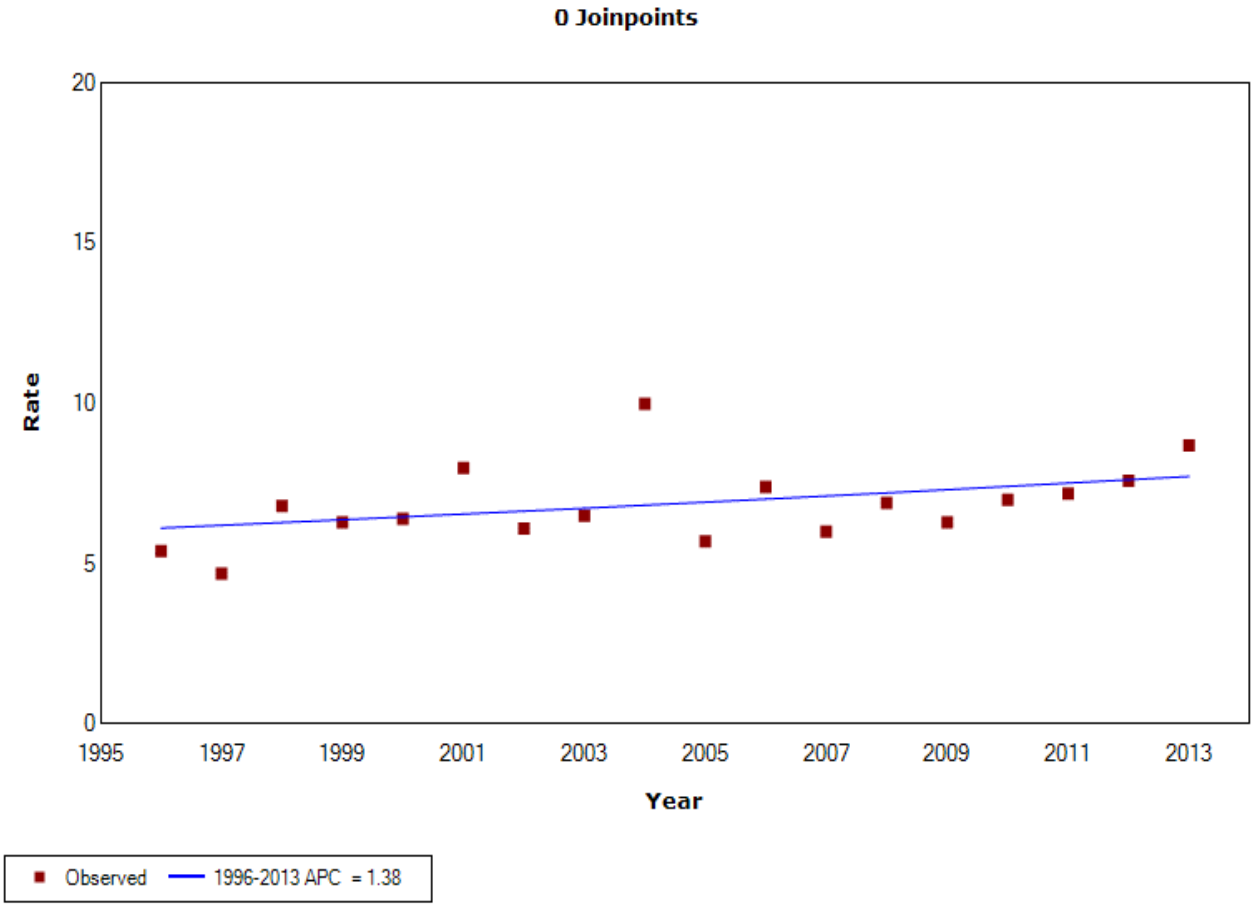
Leukemia

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	18.2	13.2	24.3	58			
1997	13.5	9.5	18.5	52			
1998	14.4	10.3	19.6	51			
1999	15.4	11.2	20.6	59	12.9	19%	
2000	16.5	12.4	21.5	68	13.4	23%	
2001	12.0	8.6	16.1	52	13.6	-12%	
2002	12.3	9.1	16.3	59	13.2	-7%	
2003	9.4	6.7	12.8	47	13.3	-29%	-
2004	12.3	8.9	16.3	55	13.4	-8%	
2005	15.4	12.0	19.6	81	13.2	17%	
2006	17.1	13.4	21.5	86	13.3	29%	+
2007	13.8	10.4	17.8	68	13.1	5%	
2008	12.4	9.4	15.9	70	13.2	-6%	
2009	9.1	6.6	12.1	54	13.2	-31%	-
2010	13.6	10.5	17.3	76	13.6	0%	
2011	13.2	10.2	16.7	76	13.6	-3%	
2012	9.2	6.8	12.1	59	13.4	-31%	-
2013	10.7	8.1	13.8	67	13.0	-18%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's leukemia cancer incidence rate was about the same as than the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2006, but lower in 2003, 2009 and 2012.

Liver



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's liver cancer incidence rates did not change significantly between 1996 and 2013.

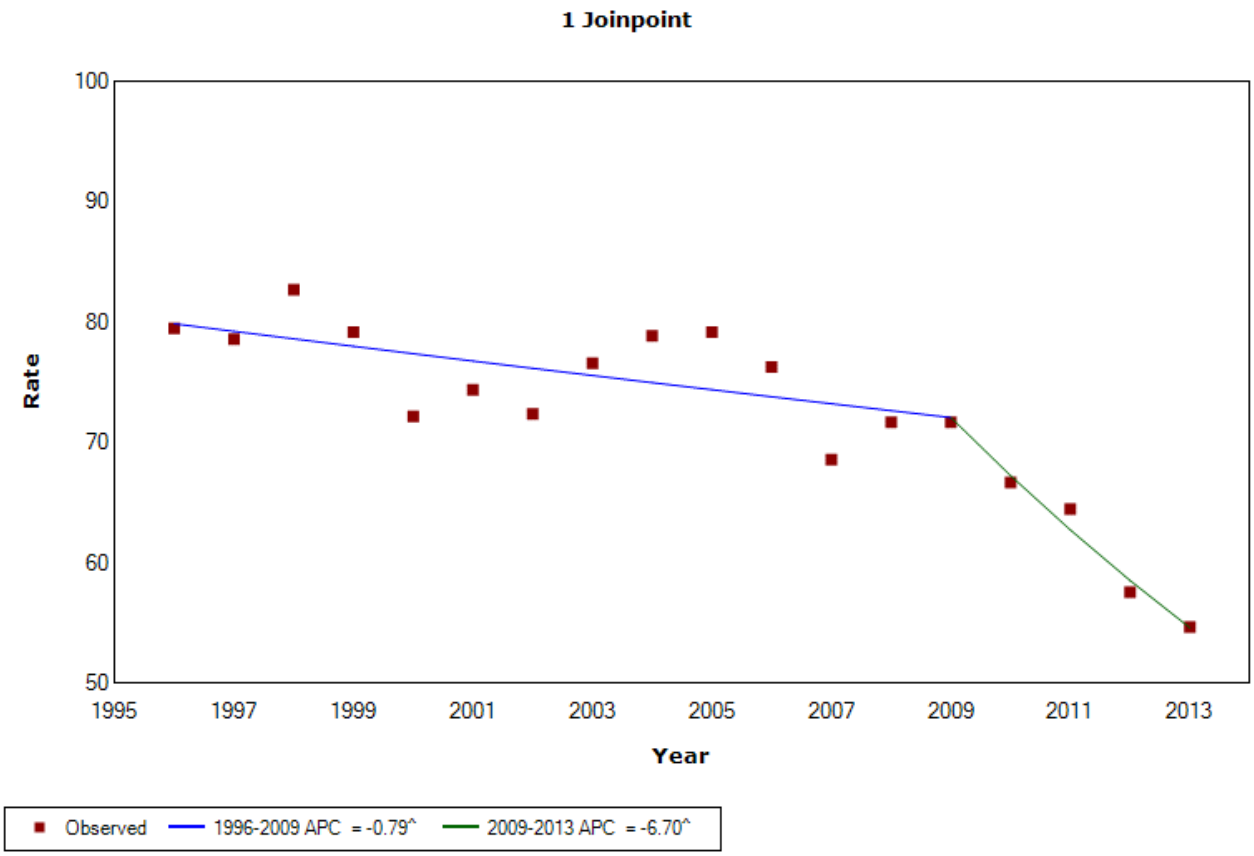
Liver

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	5.4	2.9	9.0	15			
1997	4.7	2.6	7.7	19			
1998	6.8	4.2	10.3	26			
1999	6.3	3.9	9.5	26	4.2	50%	
2000	6.4	4.1	9.6	27	4.4	45%	
2001	8.0	5.3	11.5	34	4.6	74%	+
2002	6.1	3.8	9.1	28	4.8	27%	
2003	6.5	4.3	9.4	34	5.0	30%	
2004	10.0	7.0	13.6	47	5.3	89%	+
2005	5.7	3.6	8.5	28	5.5	4%	
2006	7.4	5.0	10.4	40	5.7	30%	
2007	6.0	4.0	8.7	33	6.1	-2%	
2008	6.9	4.9	9.4	45	6.3	10%	
2009	6.3	4.4	8.7	45	6.6	-5%	
2010	7.0	5.0	9.5	48	6.5	8%	
2011	7.2	5.2	9.6	54	6.7	7%	
2012	7.6	5.6	10.0	59	6.9	10%	
2013	8.7	6.5	11.4	62	6.9	26%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's liver cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2001 and in 2004.

Lung and Bronchus



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2009, Alaska's lung and bronchus cancer incidence rates decreased by an average of 0.79% per year.

From 2009 to 2013, Alaska's cancer incidence rates have significantly decreased, by an average of 6.7% per year.

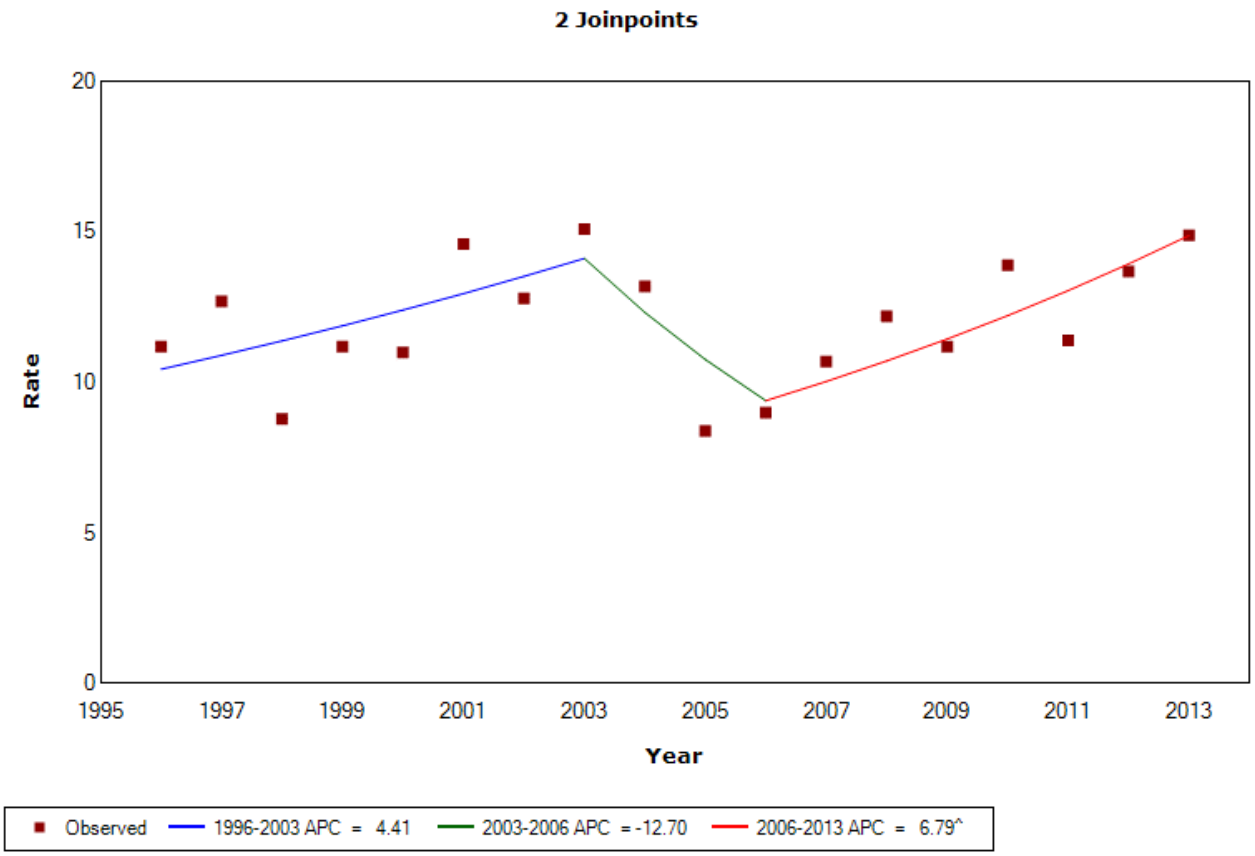
Lung and Bronchus

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	79.5	69.0	91.0	253			
1997	78.6	68.4	89.7	258			
1998	82.7	72.6	93.7	280			
1999	79.2	69.4	89.8	275	70.8	12%	
2000	72.2	63.0	82.2	260	70.2	3%	
2001	74.4	65.3	84.2	283	70.3	6%	
2002	72.4	63.7	81.9	289	70.1	3%	
2003	76.6	67.5	86.4	299	70.2	9%	
2004	78.9	70.0	88.6	327	69.4	14%	+
2005	79.2	70.4	88.8	337	69.7	14%	+
2006	76.3	67.9	85.4	350	68.1	12%	
2007	68.6	60.8	77.0	329	67.2	2%	
2008	71.7	63.7	80.3	349	66.6	8%	
2009	71.7	63.8	80.2	361	65.4	10%	
2010	66.7	59.3	74.6	356	63.1	6%	
2011	64.5	57.4	72.3	347	61.8	4%	
2012	57.6	51.1	64.7	337	60.7	-5%	
2013	54.7	48.4	61.5	323	58.8	-7%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's lung and bronchus cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2004 and 2005.

Melanoma of the Skin



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Although melanoma cancer incidence rates in Alaska did not change significantly overall between 1996 and 2013, there has been a significant increase between 2006 and 2013, during which incidence rates have increased by an average of 6.79% per year.

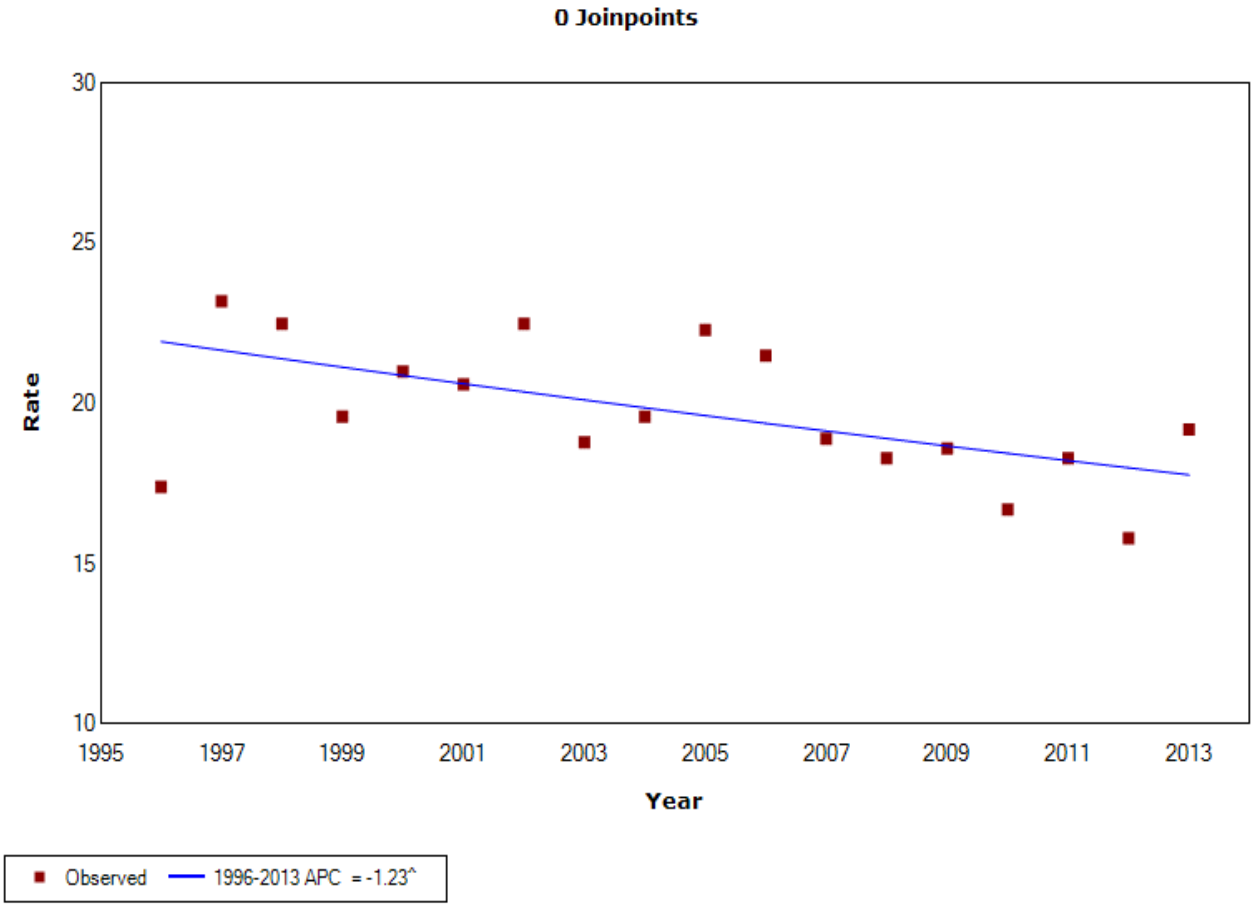
Melanoma of the Skin

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	11.2	7.9	15.4	48			
1997	12.7	9.3	16.8	63			
1998	8.8	6.3	12.1	46			
1999	11.2	7.9	15.2	51	15.2	-26%	
2000	11.0	8.0	14.8	56	16.2	-32%	-
2001	14.6	11.1	18.8	71	17.2	-15%	
2002	12.8	9.7	16.6	70	17.5	-27%	-
2003	15.1	11.7	19.0	85	17.1	-12%	
2004	13.2	10.1	16.9	73	18.1	-27%	-
2005	8.4	6.1	11.1	52	19.3	-56%	-
2006	9.0	6.6	12.0	55	18.9	-52%	-
2007	10.7	7.9	14.0	60	19.3	-45%	-
2008	12.2	9.4	15.7	74	19.6	-38%	-
2009	11.2	8.5	14.4	72	19.9	-44%	-
2010	13.9	10.9	17.3	91	19.6	-29%	-
2011	11.4	8.8	14.6	77	20.2	-44%	-
2012	13.7	10.8	17.0	91	20.2	-32%	-
2013	14.9	11.9	18.3	99	20.5	-27%	-

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's melanoma cancer incidence rate has been lower than the U.S. rate for most years between 1999 and 2013.

Non-Hodgkin Lymphoma



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's cancer incidence rates of Non-Hodgkin lymphoma decreased significantly by an average of 1.23% per year.

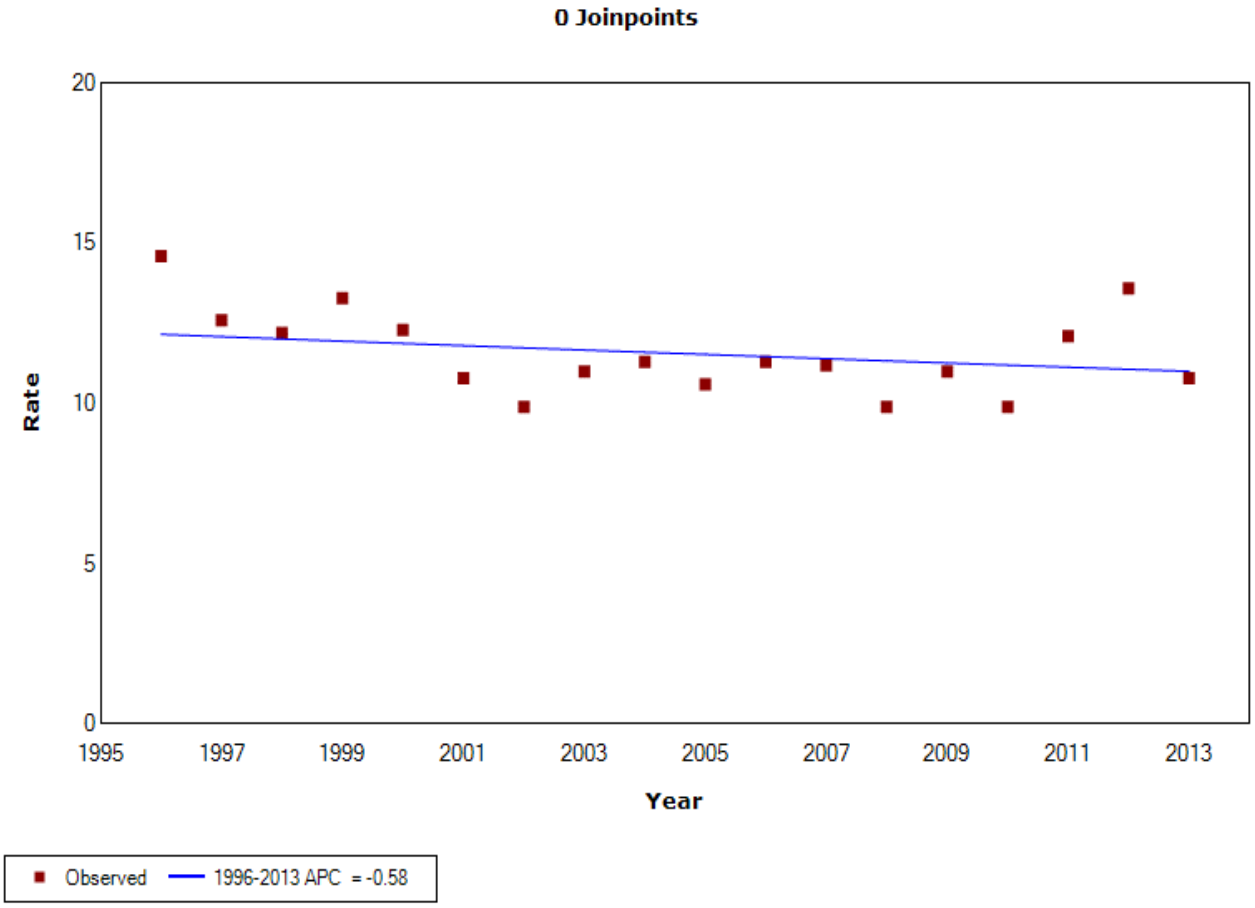
Non-Hodgkin Lymphoma

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	17.4	12.9	22.9	65			
1997	23.2	18.0	29.5	90			
1998	22.5	17.6	28.3	92			
1999	19.6	15.3	24.6	90	19.3	2%	
2000	21.0	16.4	26.4	89	19.2	9%	
2001	20.6	16.3	25.8	91	19.4	6%	
2002	22.5	17.9	27.9	99	19.5	15%	
2003	18.8	14.7	23.7	87	19.6	-4%	
2004	19.6	15.4	24.5	90	20.0	-2%	
2005	22.3	17.9	27.3	111	19.9	12%	
2006	21.5	17.4	26.3	112	19.5	10%	
2007	18.9	15.1	23.3	103	19.6	-4%	
2008	18.3	14.6	22.7	101	19.6	-7%	
2009	18.6	14.8	22.9	102	19.7	-6%	
2010	16.7	13.3	20.6	99	19.4	-14%	
2011	18.3	14.7	22.4	108	18.9	-3%	
2012	15.8	12.7	19.4	106	18.7	-16%	
2013	19.2	15.6	23.3	116	18.4	4%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's cancer incidence rate of Non-Hodgkin lymphoma has been about the same as the U.S. rate between 1999 and 2013.

Oral Cavity and Pharynx



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's oral cavity and pharynx cancer incidence rates did not change significantly between 1996 and 2013.

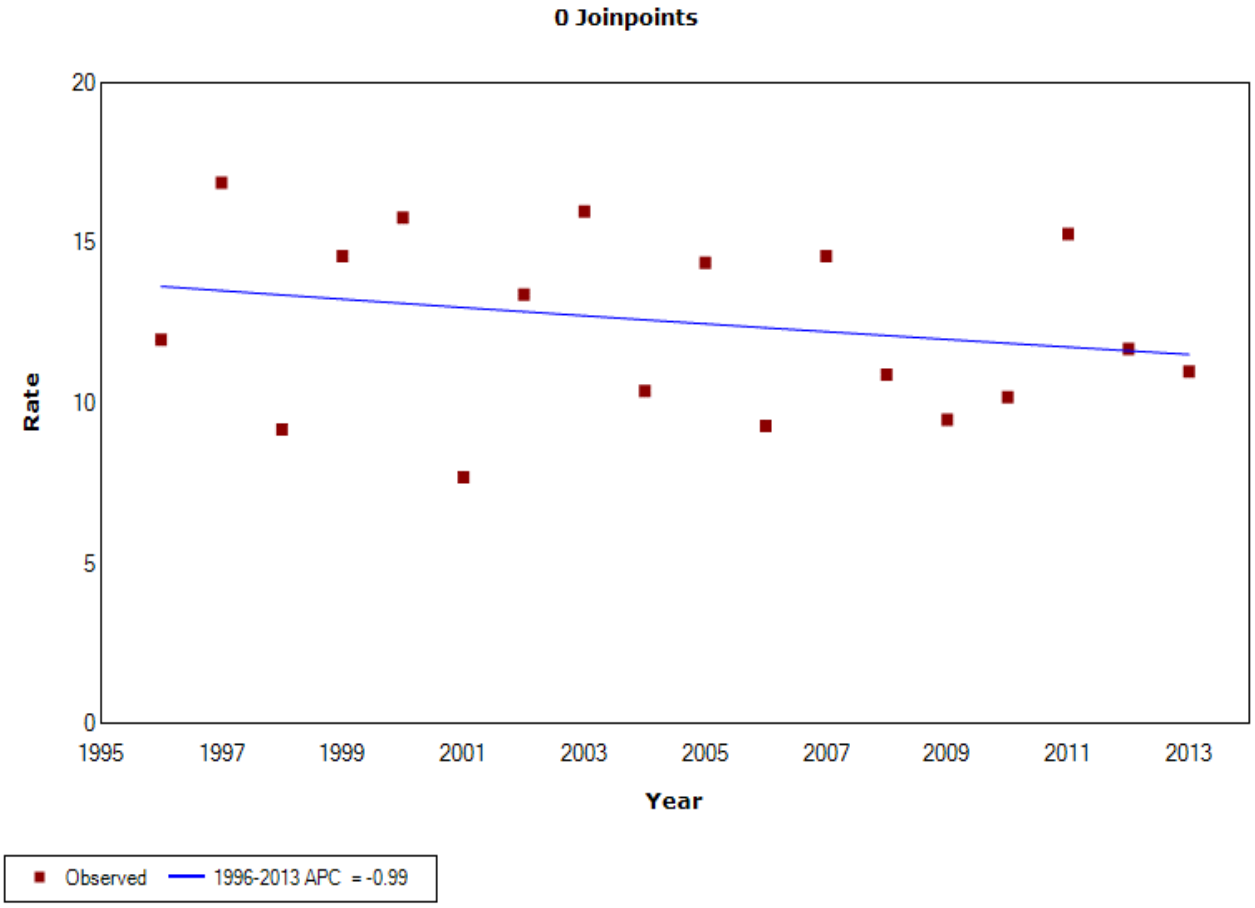
Oral Cavity and Pharynx

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	14.6	10.5	19.6	51			
1997	12.6	9.0	17.1	50			
1998	12.2	8.8	16.3	53			
1999	13.3	9.7	17.8	55	10.9	22%	
2000	12.3	8.8	16.6	48	10.9	13%	
2001	10.8	7.9	14.5	52	10.8	0%	
2002	9.9	7.1	13.2	50	10.8	-8%	
2003	11.0	8.0	14.8	52	10.8	2%	
2004	11.3	8.4	14.9	59	10.7	6%	
2005	10.6	7.9	14.0	59	10.7	-1%	
2006	11.3	8.4	14.7	60	10.8	5%	
2007	11.2	8.4	14.6	66	11.1	1%	
2008	9.9	7.4	12.9	63	11.3	-12%	
2009	11.0	8.5	14.2	74	11.2	-2%	
2010	9.9	7.6	12.8	70	11.2	-12%	
2011	12.1	9.4	15.4	81	11.4	6%	
2012	13.6	10.8	16.9	94	11.3	20%	
2013	10.8	8.4	13.7	79	11.5	-6%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's oral cavity and pharynx cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013.

Ovary



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's ovarian cancer incidence rates did not change significantly between 1996 and 2013.

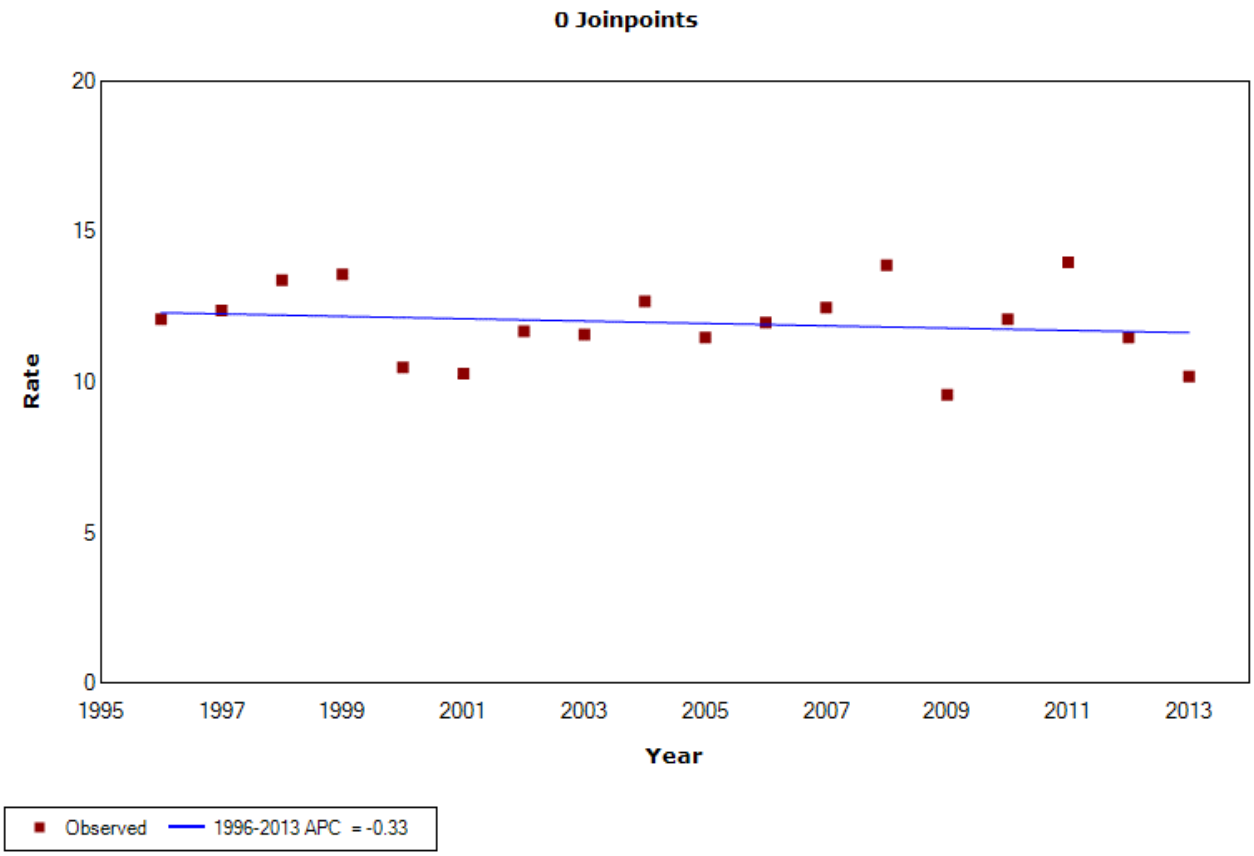
Ovary

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	12.0	7.5	18.0	26			
1997	16.9	11.1	24.5	31			
1998	9.2	5.4	14.6	21			
1999	14.6	9.4	21.4	29	14.3	2%	
2000	15.8	10.8	22.3	35	14.4	10%	
2001	7.7	4.4	12.5	17	14.2	-46%	-
2002	13.4	9.0	19.2	33	13.8	-3%	
2003	16.0	11.3	21.9	43	13.5	19%	
2004	10.4	6.9	15.1	30	13.1	-21%	
2005	14.4	10.1	20.0	40	13.0	11%	
2006	9.3	6.2	13.4	31	12.8	-27%	
2007	14.6	10.2	20.3	41	12.6	16%	
2008	10.9	7.2	15.9	30	12.6	-13%	
2009	9.5	6.3	13.7	32	12.2	-22%	
2010	10.2	6.6	14.9	29	11.7	-13%	
2011	15.3	11.0	20.6	47	11.6	32%	
2012	11.7	8.2	16.3	40	11.4	3%	
2013	11.0	7.5	15.6	34	11.1	-1%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's ovarian cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was lower than the national rate in 2001.

Pancreas



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

Alaska's pancreatic cancer incidence rates did not change significantly between 1996 and 2013.

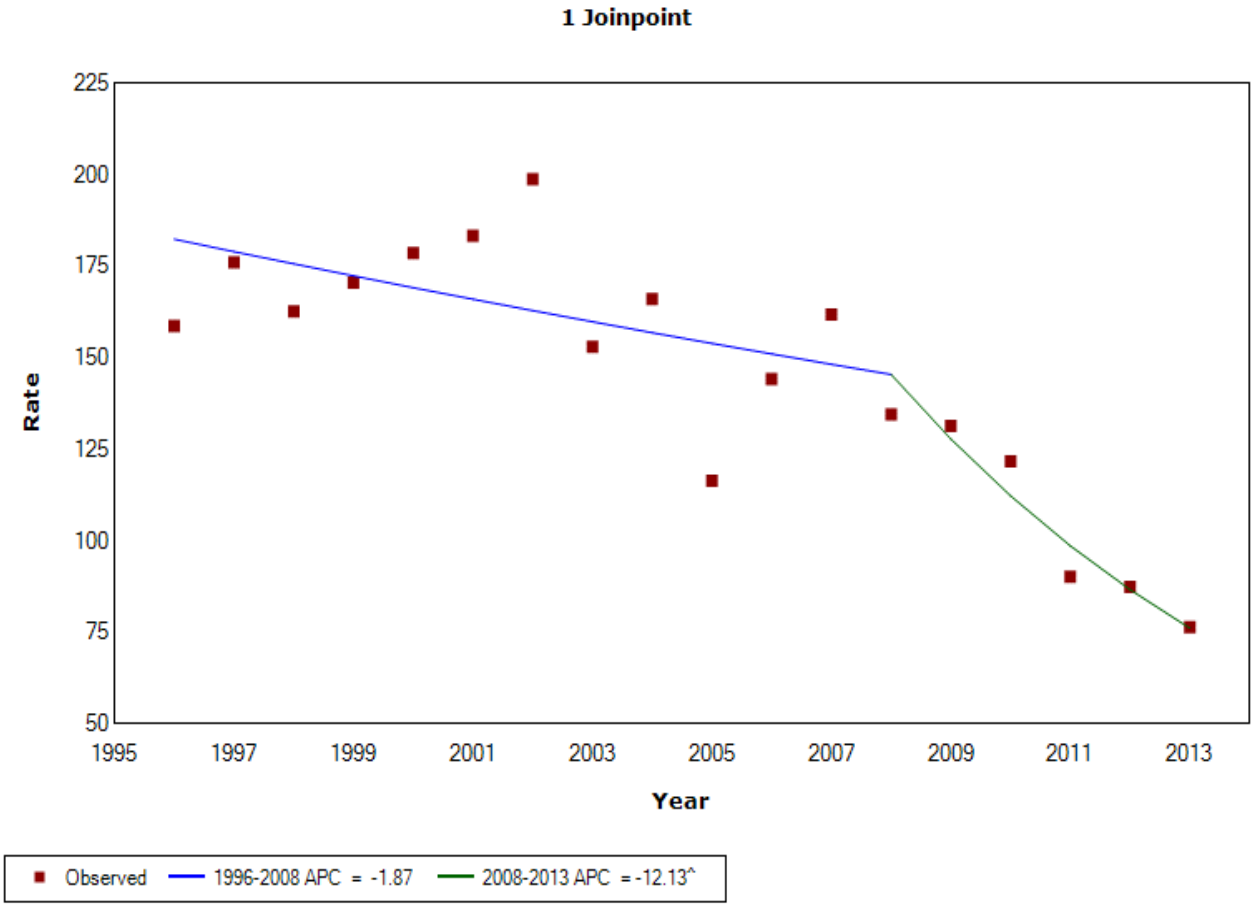
Pancreas

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	12.1	7.9	17.4	35			
1997	12.4	8.5	17.3	38			
1998	13.4	9.6	18.2	48			
1999	13.6	9.5	18.6	44	11.1	23%	
2000	10.5	7.3	14.5	41	11.2	-6%	
2001	10.3	7.2	14.1	41	11.3	-9%	
2002	11.7	8.4	15.8	49	11.2	4%	
2003	11.6	8.2	15.8	47	11.5	1%	
2004	12.7	9.2	17.0	51	11.6	9%	
2005	11.5	8.2	15.5	46	11.7	-2%	
2006	12.0	8.8	16.0	53	11.9	1%	
2007	12.5	9.4	16.4	62	11.9	5%	
2008	13.9	10.5	17.8	69	12.2	14%	
2009	9.6	7.0	12.8	55	12.1	-21%	
2010	12.1	9.0	15.8	64	12.2	-1%	
2011	14.0	10.7	17.8	74	12.4	13%	
2012	11.5	8.8	14.8	71	12.5	-8%	
2013	10.2	7.7	13.1	68	12.3	-17%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's esophageal cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2001 and in 2010.

Prostate



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 2008 to 2013, Alaska's prostate cancer incidence rates decreased significantly by an average of 12.13% per year.

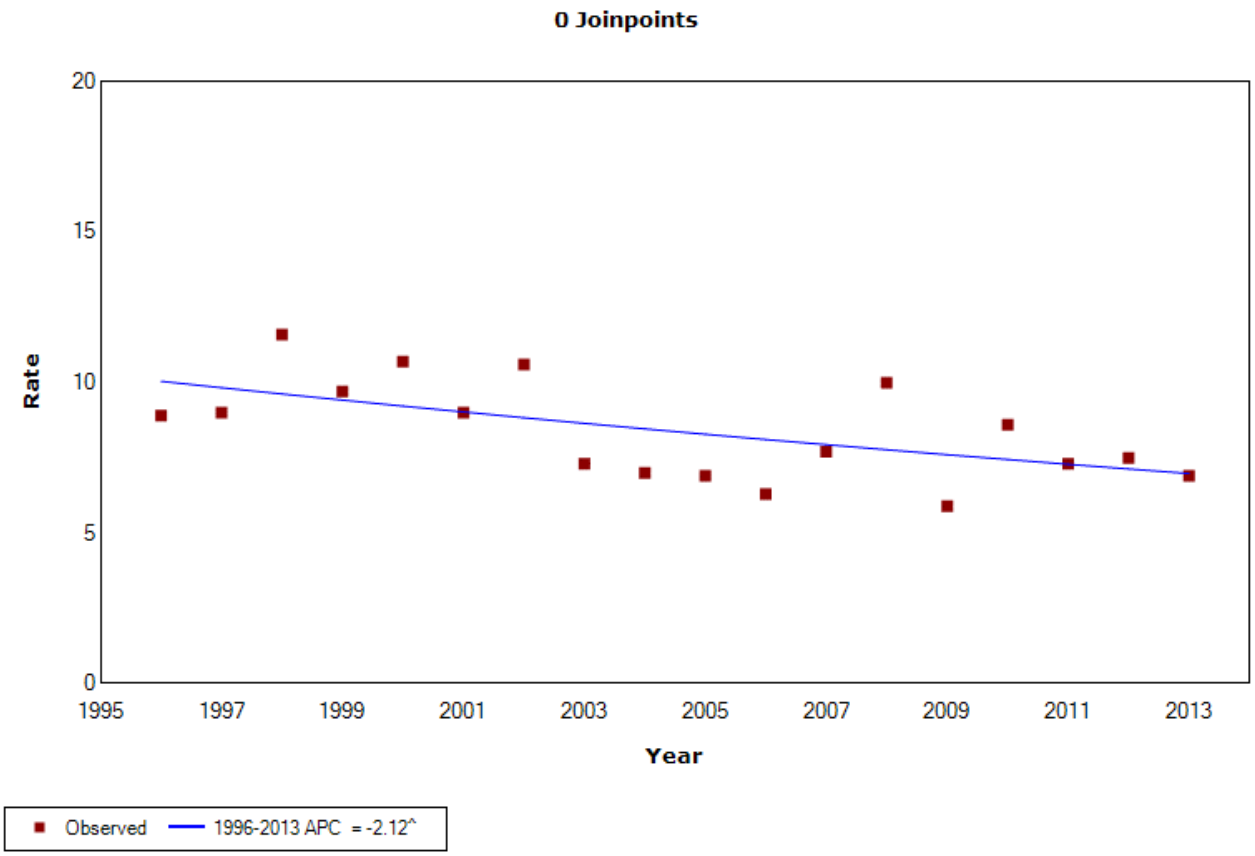
Prostate

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	158.7	134.8	185.2	218			
1997	176.1	151.5	203.1	243			
1998	162.7	140.6	187.0	249			
1999	170.5	149.0	194.0	286	169.8	0%	
2000	178.6	156.7	202.3	305	172.1	4%	
2001	183.3	161.7	206.6	340	174.1	5%	
2002	198.8	177.0	222.4	394	172.0	16%	+
2003	153.0	134.7	173.0	319	156.8	-2%	
2004	166.1	147.6	186.1	373	152.5	9%	
2005	116.4	101.8	132.3	291	150.0	-22%	-
2006	144.2	127.4	162.5	357	159.7	-10%	
2007	161.8	144.1	180.9	406	163.8	-1%	
2008	134.5	119.8	150.4	384	151.1	-11%	-
2009	131.4	116.6	147.4	377	143.0	-8%	
2010	121.7	108.0	136.5	377	133.9	-9%	
2011	90.2	79.2	102.2	314	132.9	-32%	-
2012	87.4	76.4	99.5	295	108.9	-20%	-
2013	76.5	66.6	87.4	266	102.1	-25%	-

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's prostate cancer incidence rate was about the same as or lower than the U.S. rate for most years between 1999 and 2013. Alaska's rate was lower than the national rate in 3 of the past 5 years.

Stomach



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's stomach cancer incidence rates decreased significantly by an average of 2.12% per year.

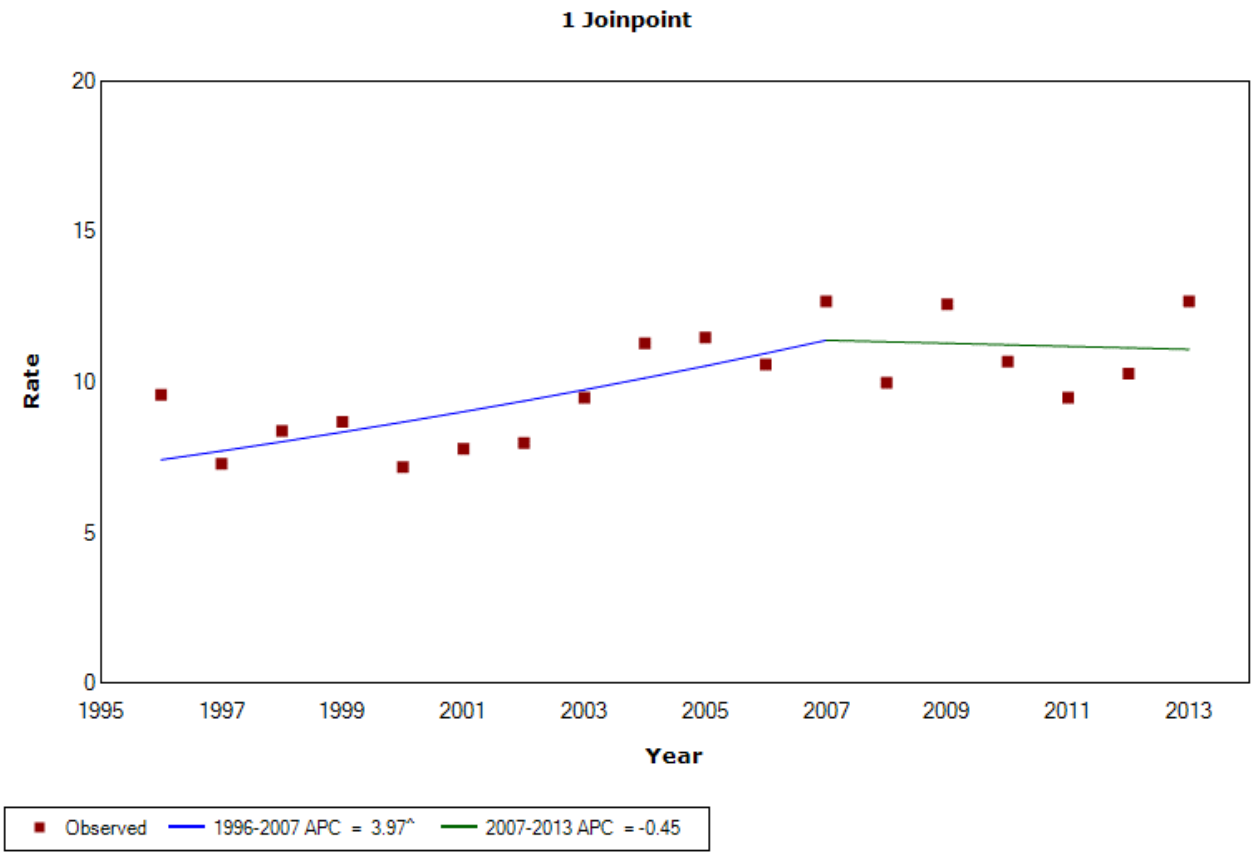
Stomach

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	8.9	5.7	13.2	29			
1997	9.0	5.8	13.3	31			
1998	11.6	7.8	16.3	37			
1999	9.7	6.5	13.8	36	7.6	28%	
2000	10.7	7.4	15.0	38	7.5	43%	
2001	9.0	6.0	12.9	33	7.3	23%	
2002	10.6	7.3	14.8	39	7.3	45%	
2003	7.3	4.7	10.7	30	7.2	1%	
2004	7.0	4.6	10.1	32	7.1	-1%	
2005	6.9	4.6	9.8	36	6.9	0%	
2006	6.3	4.1	9.3	30	6.8	-7%	
2007	7.7	5.3	10.8	38	6.8	13%	
2008	10.0	7.2	13.5	49	6.6	52%	+
2009	5.9	4.0	8.5	35	6.6	-11%	
2010	8.6	6.2	11.7	48	6.8	26%	
2011	7.3	5.2	9.9	48	6.7	9%	
2012	7.5	5.3	10.3	43	6.6	14%	
2013	6.9	4.9	9.5	44	6.6	5%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's stomach cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013. Alaska's rate was higher than the national rate in 2008.

Thyroid



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, thyroid cancer incidence rates in Alaska increased significantly between 1996 and 2013 by an average of 2.43% per year. However, most of that increase occurred between 1996 and 2007 (during which rates increased by an average of almost 4% per year). Between 2007 and 2013, there is no significant trend.

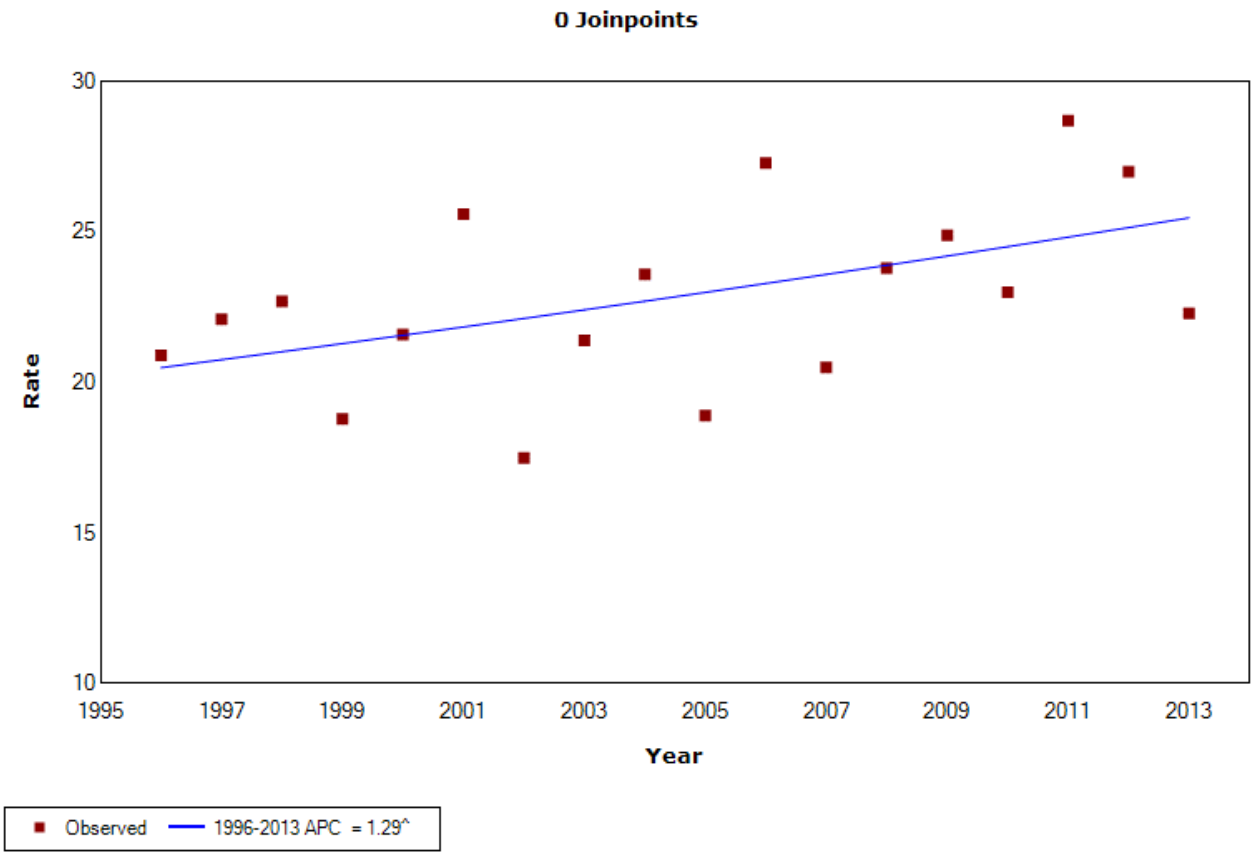
Thyroid

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	9.6	6.6	13.5	45			
1997	7.3	4.9	10.4	40			
1998	8.4	6.1	11.4	48			
1999	8.7	6.4	11.7	52	6.8	28%	
2000	7.2	5.2	9.9	44	7.5	-4%	
2001	7.8	5.7	10.5	49	7.9	-1%	
2002	8.0	5.8	10.7	50	8.5	-6%	
2003	9.5	7.2	12.4	61	8.8	8%	
2004	11.3	8.9	14.2	78	9.5	19%	
2005	11.5	8.8	14.8	69	10.3	12%	
2006	10.6	8.1	13.6	69	11.0	-4%	
2007	12.7	10.1	15.8	88	11.9	7%	
2008	10.0	7.8	12.7	72	12.8	-22%	-
2009	12.6	10.1	15.7	90	13.6	-7%	
2010	10.7	8.4	13.6	76	13.7	-22%	-
2011	9.5	7.2	12.4	62	14.1	-33%	-
2012	10.3	8.0	13.0	76	14.5	-29%	-
2013	12.7	10.0	15.8	87	14.7	-14%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's thyroid cancer incidence rate has been similar to the U.S. rate for most years between 1999 and 2013. Alaska's rate was lower than the national rate for 3 of the past 5 years.

Uterus



^ The Annual Percent Change (APC) is significantly different from zero at alpha=.05

From 1996 to 2013, Alaska's uterine cancer incidence rates increased significantly by an average of 1.29% per year.

Uterus

	ALASKA				U.S.		
YEAR	**Annual rate**	**Lower CI**	**Upper CI**	**Count**	**Annual rate**	***AK % difference from U.S. rate***	***+ AK higher than US - AK lower than US***
1996	20.9	14.5	29.0	41			
1997	22.1	15.2	30.8	39			
1998	22.7	16.3	30.6	47			
1999	18.8	13.5	25.5	45	24.1	-22%	
2000	21.6	15.8	28.8	51	23.8	-9%	
2001	25.6	19.3	33.3	62	24.4	5%	
2002	17.5	12.4	24.0	42	24.1	-27%	-
2003	21.4	15.8	28.2	55	23.1	-7%	
2004	23.6	17.9	30.5	64	23.6	0%	
2005	18.9	14.0	24.9	55	23.8	-21%	
2006	27.3	21.2	34.5	77	23.9	14%	
2007	20.5	15.3	26.9	57	24.3	-16%	
2008	23.8	18.5	30.1	78	24.7	-4%	
2009	24.9	19.4	31.4	79	25.2	-1%	
2010	23.0	17.9	29.1	77	25.3	-9%	
2011	28.7	22.9	35.5	97	25.6	12%	
2012	27.0	21.6	33.5	93	25.8	5%	
2013	22.3	17.4	28.1	80	25.9	-14%	

Rates are per 100,000 and age-adjusted to the 2000 U.S. Population. Incidence rates are for malignant cases only.
Alaska rates are marked as higher (+) or lower (-) than the U.S. if the U.S. rate is ± 0.5% outside of the CI range for Alaska.
National data source: United States Cancer Statistics (Centers for Disease Control and Prevention [CDC] and the National Cancer Institute [NCI]).

Alaska's uterine cancer incidence rate was about the same as the U.S. rate for most years between 1999 and 2013.

References and Resources

Cancer Risk Factors
Some risk factors for cancer - like age or some genetic factors - cannot be changed, but many other risk factors can be modified or prevented. However, an estimated 75% to 80% of all cancer cases in the United States are the result of risk factors that can be changed such as tobacco use, diet, obesity, sun exposure, and infectious diseases like hepatitis and HPV, as well as chemicals and radiation exposure.

Information in this report about cancer risk factors was summarized from

American Cancer Society (ACS). *Cancer Facts and Figures 2016.* Atlanta, GA: American Cancer Society; 2016. Available online at http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf (last accessed 9/13/16)

Alaska Department of Health and Social Services Cancer Control Programs
Information about the Alaska Cancer Prevention and Control Program, Alaska Department of Health and Social Services (DHSS), Division of Public Health, is available at http://dhss.alaska.gov/dph/Chronic/Pages/Cancer/default.aspx

Information about specific cancer prevention, detection and control programs within the Alaska DHSS can be found at the following sites:

Alaska Cancer Surveillance and Registry
http://dhss.alaska.gov/dph/Chronic/Pages/Cancer/registry.aspx

Alaska Comprehensive Cancer Control Program
http://dhss.alaska.gov/dph/Chronic/Pages/Cancer/comprehensive.aspx

Alaska Comprehensive Cancer Control Partnership
http://dhss.alaska.gov/dph/Chronic/Pages/Cancer/partnership/default.aspx

Breast and Cervical Health Check (BCHC) Program
http://dhss.alaska.gov/dph/wcfh/Pages/bchc/default.aspx

Additional Data Resources

Informed Alaskans is a data visualization initiative to make state, regional and community health data readily accessible.
http://dhss.alaska.gov/dph/InfoCenter/Pages/ia/default.aspx

The Indicator-Based Information System for Public Health (AK-IBIS) site provides contextual information on the health status of Alaskans and the state of Alaska's healthcare system.
http://ibis.dhss.alaska.gov/

InstantAtlas health profiles make state, regional and community health data readily accessible through health maps.
http://dhss.alaska.gov/dph/InfoCenter/Pages/ia/instantatlas.aspx