

Cancer Incidence and Mortality in Nebraska: 2014



NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES

April, 2017

The Nebraska Cancer Registry contains a wealth of information, not all of which is included in this report:

What types of data are available?

- Demographic: age at diagnosis, gender, race/ethnicity, county of residence
- Medical history: date of diagnosis, primary site, cell type, stage of disease at diagnosis
- Therapy: surgery, radiation therapy, chemotherapy, immunotherapy, hormone therapy
- Follow up: length of survival, cause of death

Who may request data from the Nebraska Cancer Registry?

- Medical Researchers
- Health Planners
- Market Researchers
- Health Care Facility Administrators
- Physicians
- Nurses
- Health Care Facility Cancer Committees
- Oncology Conference Planners and Speakers
- Patient Care Evaluators
- Pharmaceutical Companies
- Government Officials
- Concerned Citizens
- Students

How do I make a request?

Contact the Office of Health Statistics at the
Nebraska Department of Health and Human Services
Division of Public Health
P.O. Box 95026, Lincoln, NE 68509-5026
Phone 402-471-2180, Monday-Friday between 8 AM and 5 PM

Please note: To comply with confidentiality regulations, the Nebraska Department of Health and Human Services reserves the right to limit the amount and type of data that are released in response to a request.

NEBRASKA CANCER REGISTRY 2014 ANNUAL REPORT

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EXECUTIVE SUMMARY

The Cancer Incidence and Mortality in Nebraska annual report for 2014 provides a comprehensive overview of the impact of cancer in Nebraska. The purpose of the report is to present the most recent statistics that describe cancer incidence and mortality in Nebraska, for the entire state and by county and region; in-depth analyses of selected cancer sites; and comparisons of trends between Nebraska and the United States. Findings from the report include:

- **Overall Cancer Incidence:** In 2014, there were 9,514 diagnoses of cancer among Nebraska residents. This number is slightly higher than the number of cancers that were diagnosed in 2013 (9,476).
- **Cancer Incidence by Gender:** In 2014, prostate, lung, and colorectal cancers were the most frequently diagnosed cases among Nebraska men, while breast, lung, and colorectal cancers were the most frequently diagnosed cases among Nebraska women. Taken together, these cancers accounted for about half of all cancer cases diagnosed among Nebraska residents in 2014.
- **Cancer Incidence by Age:** During the past five years (2010-2014), more than half (55%) of all cancers in Nebraska occurred among people 65 years of age and older. Less than 1% were diagnosed among children and adolescents. The average age at diagnosis was 65.3 years of age.
- **Cancer Incidence by Site:** During the past five years (2010-2014), cancers of the stomach, liver, lung, prostate, and in situ female breast were diagnosed significantly less often among Nebraska residents when compared to the US as a whole, while endometrial and testicular cancers were diagnosed significantly more often. The number of melanomas diagnosed among Nebraska residents set a new single-year record in 2014, with 486 cases.
- **Cancer Incidence by Race:** During the past decade (2005-2014), African-Americans in Nebraska were significantly more likely to be diagnosed with myeloma, colorectal, kidney, lung, pancreas, prostate, stomach, and liver cancers than were whites. Liver cancer diagnoses were also significantly more frequent among Native Americans, Asian-American/Pacific Islanders and Hispanics compared to whites.
- **Overall Cancer Mortality:** In 2014, 3,443 Nebraska residents died from cancer, which is a slight decrease from the 2013 cancer death total of 3,458. This is the sixth year in a row that cancer has surpassed heart disease as Nebraska's leading cause of death.
- **Cancer Mortality by Site:** During the past five years (2010-2014), deaths from cancers of the stomach, liver, lung, ovary, and female breast occurred significantly less often among Nebraska residents when compared to the U.S. as a whole, while deaths from invasive brain tumors occurred significantly more often. Lung cancer

was the leading cause of cancer mortality in Nebraska in 2014, accounting for 25.6% of all cancer deaths, followed by colorectal cancer. During the past two decades, prostate and female breast cancer mortality rates in Nebraska have both declined by about 40%, which is consistent with national trends.

- **Cancer Incidence by County:** Below are the Nebraska counties where cancer incidence during 2010-2014 was significantly different ($p < .01$) from the state:

| <i>Significantly lower ▼</i> | | <i>Significantly higher ▲</i> | |
|------------------------------|----------------------------|-------------------------------|----------------------|
| <i>County</i> | <i>Primary Sites</i> | <i>County</i> | <i>Primary Sites</i> |
| Cedar | Lung & bronchus | Douglas | Lung & bronchus |
| Cherry | Melanoma of the skin | Madison | Prostate |
| Cuming | Urinary bladder | Saline | Colon & rectum |
| Dakota | Urinary bladder | | |
| Dawes | Kidney & renal pelvis | | |
| Dixon | Urinary bladder | | |
| Furnas | Prostate | | |
| Garfield | Female breast | | |
| Lancaster | Non-Hodgkin lymphoma (NHL) | | |
| Lincoln | Female breast | | |
| Madison | Urinary bladder | | |
| Morrill | NHL | | |
| Perkins | Female breast | | |
| Scotts Bluff | Lung & bronchus | | |
| Seward | Lung & bronchus | | |
| Sheridan | Urinary bladder | | |
| Thurston | Prostate | | |
| Otoe | Melanoma of the skin | | |
| York | Lung & bronchus | | |

- **Annual Report Special Topic:** The special topic for this report is cancer of the pancreas. The pancreas is an organ about six inches long located behind the stomach, and secretes insulin into the bloodstream to control blood sugar and pancreatic juice into the intestine to help digest food. Tobacco use, obesity, exposure to certain chemicals, as well as diabetes, chronic pancreatitis, liver cirrhosis, and infection with the *Helicobacter pylori* bacteria are known risk factors for cancer of the pancreas. During the past five years (2010-2014), pancreatic cancer accounted for 1,252 new cases and 1,111 deaths among Nebraska residents, making it the fourth leading cause of cancer deaths in Nebraska during this time.

INTRODUCTION

This publication represents the 28th annual statistical summary of the Nebraska Cancer Registry (NCR) since it began collecting data in 1987. The purpose of this report is to present the registry's most recent data to the citizens of the State of Nebraska. The majority of the data covers cancer diagnoses and cancer deaths that occurred between January 1, 2014 and December 31, 2014, as well as during the past five years (January 1, 2010-December 31, 2014).

The NCR was founded in 1986, when the Nebraska Unicameral authorized funding for a state cancer registry using a portion of funds generated by the state's cigarette tax. The establishment of the registry successfully combined the efforts of many Nebraska physicians, legislators, concerned citizens, and the Nebraska Medical Foundation, all of whom had worked for years toward this goal. The Nebraska Medical Foundation also helped establish the registry with financial assistance. Since 1994, the NCR has received additional funding from the Centers for Disease Control and Prevention (CDC).

The NCR is managed by the Nebraska Department of Health and Human Services (DHHS) in Lincoln. However, registry data is collected and edited by NCR staff in Omaha, under contract to the Nebraska Medical Foundation. Analysis of registry data and preparation of the annual statistical report are the responsibility of DHHS.

The purpose of the registry is to gather data that describes how many Nebraska residents are diagnosed with cancer, what types of cancer they have, how far the disease has advanced at the time of diagnosis, what types of treatment they receive, and how long they survive after diagnosis. These data are put to a variety of uses both inside and outside of DHHS. Within DHHS, they are used to identify geographic patterns and long-term trends, to compare Nebraska's cancer experience with the rest of the nation, to investigate reports of possible cancer clusters, and to help plan and evaluate cancer control programs. Outside of DHHS, the registry has furnished data to many individuals, institutions, and organizations, including the North American Association of Central Cancer Registries (NAACCR), the National Cancer Institute (NCI), the American Cancer Society (ACS), the CDC, and the University of Nebraska Medical Center. The NCR also contributes its data to several national cancer incidence databases (see page 5). In recognition of the accuracy and completeness of the data that it has collected, NAACCR has awarded the NCR its gold standard certificate of data quality for 19 consecutive years, from 1995 to 2013.

All individual records in the cancer registry are kept in strict confidence as prescribed by both state and federal law. The NCR follows all of the privacy safeguards in the Health Insurance Portability and Accountability Act (HIPAA), although some of the procedural requirements do not apply to the registry.

DHHS welcomes inquiries about cancer from the public for aggregate statistics or general information from the registry. To obtain cancer data or information about the registry not included in this report, please refer to the instructions provided inside the front cover.

An electronic copy of this report is available on the DHHS website at http://dhhs.ne.gov/publichealth/Pages/ced_cancer_index.aspx

METHODOLOGY

Data Collection and Management

The NCR gathers data on Nebraska residents diagnosed and treated for invasive and in situ tumors. The registry does not include benign tumors (except for benign brain and other nervous system tumors, which became reportable as of January 1, 2004), benign polyps, and basal cell and squamous cell carcinomas of the skin. Information gathered from each case includes the patient's name, address, birth date, race, gender, and Social Security number; date of diagnosis; primary site of the cancer (coded according to the International Classification of Diseases for Oncology, 3rd edition [ICD-O-3]); stage of disease at diagnosis; facility where the initial diagnosis was made; basis of staging; method of diagnostic confirmation; histological type (also classified according to the ICD-O-3); and initial treatment. The registry does not actively collect follow-up information on registered cases, but many facilities provide it, and it includes the date of last contact with the patient, status of disease, type of additional treatment, and quality of survival. The registry collects information from every hospital in the state where cancer patients are diagnosed and/or treated on an inpatient basis. The registry also includes Nebraska residents who are diagnosed with and/or treated for cancer out of state, as well as cases identified through pathology laboratories, outpatient treatment facilities, physician offices, and death certificates. Death of registered cases is ascertained using death certificates available at DHHS and from the National Death Index.

Nebraska cancer mortality data are obtained from death certificates on file with DHHS. Mortality data are available for every Nebraska resident who dies from cancer, whether death occurs in or outside of Nebraska. The mortality data presented in this report is limited to those deaths where cancer is listed as the underlying (i.e., primary) cause of death. Causes of death are coded according to the Tenth Edition of the International Classification of Disease (ICD-10).

The US cancer incidence data presented in this report was compiled by CDC's National Program of Cancer Registries (NPCR) and NCI's Surveillance, Epidemiology, and End Results (SEER) Program. NPCR provides support for cancer registries in 45 states (including Nebraska), the District of Columbia, and some US territories, and covers 96% of the total US population. The mortality data presented in this report was compiled by the National Center for Health Statistics (NCHS) and include all US resident cancer deaths. Incidence data from NPCR and mortality data from NCHS are available through 2013.

Confidentiality

All data obtained by the NCR, from the medical records of individual patients, is held in strict confidence by DHHS. As specified in state statute, researchers may obtain case-specific and/or patient-identifiable information from the registry by submitting a written application that describes how the data will be used for scientific study. In situations where contact with a patient or patient's family is proposed, the applicant must substantiate the need for any such contact and submit approval from an Institutional Review Board. In addition, before any individual's name can be given to a researcher, the registry will obtain permission from the individual that they are willing to be a research subject. Upon favorable review by DHHS, the applicant must also agree to maintain the confidentiality

and security of the data throughout the course of the study, to destroy or return the registry data at the end of the study and to present material to the registry prior to publication to assure that no identifiable information is released.

Aggregate data (i.e., statistical information) from the registry are considered open to the public and are available upon request. Details on how to obtain such data are provided inside the front cover of this report.

Quality Assurance

The NCR and reporting facilities spend a great deal of time and energy to ensure that the information they gather is both accurate and complete, and these efforts have met with consistent success. For 19 consecutive years (1995-2013), the NCR has met all of the criteria necessary to earn the gold standard certificate of data quality awarded by NAACCR, which is the accrediting body for all US and Canadian central cancer registries. These criteria include:

- 1) Completeness of case ascertainment—The registry must find at least 95% of the total number of cases that are estimated to have occurred.
- 2) Completeness of information—The proportion of registry cases missing information on age at diagnosis, gender, and county of residence must be no more than 2%, and the proportion missing information on race must be no more than 3%.
- 3) Data accuracy—Error rates based on edit checks of selected data items must be no greater than 1%.
- 4) Timeliness—All data for a single calendar year must be submitted to NAACCR for review no more than 23 months after the year has ended.

Gold standard certification also requires that all cases pass strict edits and that the proportion of registry cases found solely through a review of death certificates must be no more than 3% and that the proportion of duplicate cases in the registry must be no more than one per 1,000.

Since the NCR has achieved the highest quality standards, its data are included in several national cancer incidence databases. These databases compile information from cancer registries throughout the United States and Canada that meet the same data quality standards as the NCR. These databases include:

- 1) *Cancer in North America* (<http://www.naaccr.org>)
- 2) *United States Cancer Statistics* (<https://nccd.cdc.gov/uscs/>)
- 3) *Cancer Facts & Statistics* (<http://www.cancer.org/research/cancerfactsstatistics/index>)
- 4) *Cancer Control PLANET* (<http://cancercontrolplanet.cancer.gov/>)

Definitions

Several technical terms are used in presenting the information in this report. The following definitions are provided here to assist the reader.

Incidence rate

Incidence rate is the number of new cases of a disease that occur within a specific population during a given time period, divided by the size of the population. For example, if 10 residents of a county with 20,000 residents are diagnosed with colorectal cancer during a single year, then the incidence rate for that county for that year is .0005. Since cancer incidence rates are usually expressed per 100,000 population, this figure is then multiplied by 100,000 to yield a rate of 50 per 100,000 per year.

Mortality rate

Mortality rate is the number of deaths that occur within a specific population during a given time period, divided by the size of the population. Like incidence rates, mortality rates are usually expressed as the number of deaths per 100,000 population per year.

Age-adjusted rate

Age-adjustment is a simple mathematical procedure that makes it possible to compare rates between populations that have different age distributions, and to compare rates within a single population over time. All of the incidence and mortality rates in this report are age-adjusted using the US population in 2000 as the standard. Statewide and national rates are age-adjusted using 19 age groups (<1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85+ years), while county and regional rates are age-adjusted using 11 age groups (<1, 1-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+ years).

Stage of Disease at Diagnosis

In situ

Tumors diagnosed as in situ consist of invasive cells that are growing in place. In situ tumors are confined to the cell group of origin, and have not penetrated the supporting structure of the organ on which they arose.

Invasive

Tumors diagnosed as invasive have spread beyond the cell group of the organ where they began, and may have spread further. The organ where a malignancy began is also known as the primary site. Invasive tumors are subdivided into three categories:

Localized--A localized invasive tumor has not spread beyond the organ where it started.

Regional--A regional invasive tumor has spread beyond the organ where it began, by direct extension to immediately adjacent organs or tissues and/or by spread to regional lymph nodes.

Distant--A distant invasive tumor has spread beyond the primary site to distant parts of the body.

Data Analysis

All of the rates presented in this report were calculated using Vintage 2015 bridged-race population estimates developed by the US Census Bureau and the National Center for Health Statistics. Incidence and mortality rates for multiple years (2010-2014) (see Tables 1, 2, 5, 6, 9-20) were calculated using population estimates for the years 2010-2014 combined, while rates for 2005-2014 (see Tables 3 and 7) were calculated using population estimates for the years 2005-2014 combined. Rates that are based on more than one year of data should be interpreted as an average annual rate.

All of the data presented in this report are current through December 31, 2016. However, because some cases diagnosed during or even before 2014 may not yet have been reported to the registry, the incidence data presented in this report should be considered subject to change. **In addition, the incidence data reported in previous editions of this report should no longer be considered complete.**

Internet users should also be aware that the cancer statistics for Nebraska that are published in this report and those that are posted on non-DHHS websites (see page 5) may differ. Some discrepancies may be the result of differences in the dates at which the data were compiled. As noted above, Nebraska incidence data published in this report include all cases reported to the registry through December 31, 2016; Nebraska data available on the CDC/NPCR website include cases that were reported through November 30, 2013.

With the exception of bladder cancer, in situ female breast cancer, and benign brain tumors, all of the site-specific incidence rates in this report were calculated with invasive cases only, to maintain comparability with statistics from the NPCR and other cancer registries throughout the United States. For bladder cancer, incidence rates were calculated with invasive and in situ cases combined. All incidence and mortality rates in this report were calculated per 100,000 population, and were age-adjusted according to the age distribution of the population of the United States in 2000. Statewide rates were also calculated for males and females separately, and for both sexes combined. The number of cases for any county with fewer than three cases is not shown in order to reduce the possibility of identifying a specific person.

To evaluate the statistical significance of the differences between rates, confidence intervals for rates were calculated using the formula $CI = r \pm (RC \times SE)$, where CI = confidence interval, r = rate, RC = 1.96 (for 95% confidence intervals) or 2.58 (for 99% confidence intervals), and SE = standard error. The standard error for a rate was determined by dividing the rate by the square root of the number of events (cancer diagnoses or deaths). A statistically significant difference exists and is indicated in those instances where the confidence intervals of a pair of rates being compared to each other do not overlap.

CANCER INCIDENCE IN NEBRASKA

The Nebraska Cancer Registry recorded 9,514 diagnoses of cancer among Nebraska residents in 2014, an increase from the 9,476 diagnoses recorded in 2013. The 2014 number translates into an incidence rate of 444.9 cases per 100,000 population. By primary site, cancers of the lung, breast, prostate, colon and rectum occurred most frequently, accounting for about half (48.7%) of all diagnoses. Recent registry experience suggests that as the registry continues to record cases, the final count for 2014 will probably increase by 100 to 300 cases.

Table 1 presents the number and rate of cancers diagnosed among Nebraska residents during 2014 and 2010-2014, for all sites combined and for cancers of specific sites. The most current estimates of US cancer incidence, which cover the years 2009-2013, are also included. Comparison of the most recent state and national incidence rates for the past five years shows significant differences ($p < .01$) for cancers of the stomach, liver, lung, prostate, and in situ female breast (Nebraska rates lower than the US) and for cancers of the endometrium and testes (Nebraska rates higher than the US). Table 2 presents the number of cancers diagnosed in Nebraska during 2010-2014 by age at diagnosis. Table 3 presents Nebraska incidence data by race and ethnicity for the years 2005-2014.

Maps on pages 13-14 present cancer incidence rates for 2014 and 2010-2014 by county of residence; county-specific numbers of cases and incidence rates are also found in an appendix to this report ([Table 1A](#)). The graph below presents the annual incidence rates for all cancers for Nebraska and the United States since 2004.

Cancer (All Sites)

Incidence Rates, Nebraska & US (2004-2014)

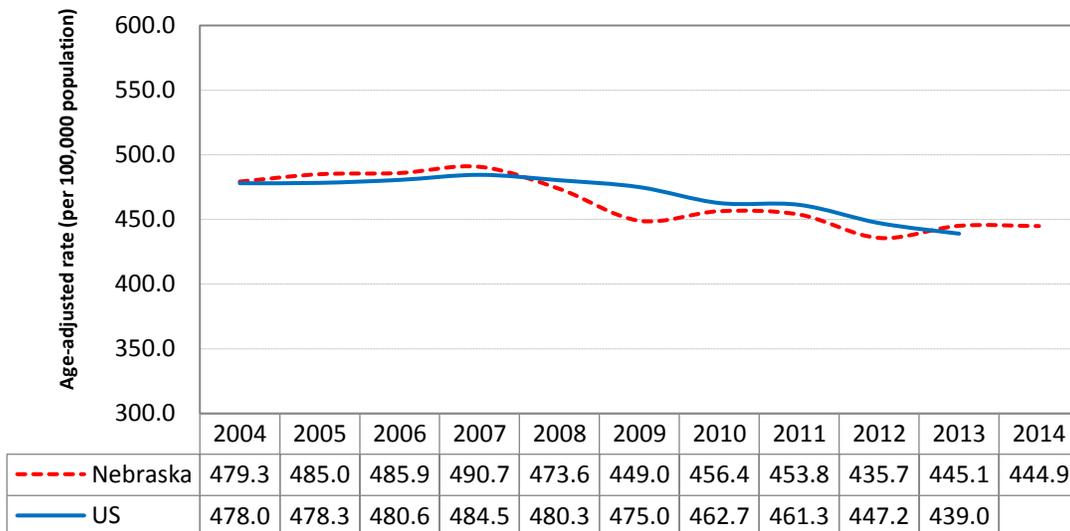


TABLE 1: Cancer Incidence
Number of Cases and Rates, by Selected Primary Site and Gender
 Nebraska (2014 and 2010-2014) & US (2009-2013)

| Site | NEBRASKA 2014 | | | | | | NEBRASKA 2010-2014 | | | | | | US 2009-2013 | | |
|---------------------------------|------------------|-------|--------|-------|-------|-------|-----------------------|-------|--------|-------|--------|-------|-----------------|--------|-------|
| | Male | | Female | | Total | | Male | | Female | | Total | | Male | Female | Total |
| | No. | Rate | No. | Rate | No. | Rate | No. | Rate | No. | Rate | No. | Rate | Rate | Rate | Rate |
| All Sites | 4,899 | 488.5 | 4,615 | 415.2 | 9,514 | 444.9 | 24,354 | 508.2 | 22,664 | 416.6 | 47,020 | 454.4 | 511.3 | 418.2 | 461.9 |
| Oral Cavity & Pharynx | 192 | 18.6 | 64 | 6.0 | 256 | 12.0 | 844 | 17.0 | 360 | 6.5 | 1,204 | 11.5 | 17.1 | 6.3 | 11.4 |
| Esophagus | 80 | 7.7 | 21 | 1.8 | 101 | 4.5 | 421 | 8.6 | 97 | 1.7 | 518 | 4.8 | 8.1 | 1.8 | 4.7 |
| Stomach | 72 | 7.2 | 33 | 3.0 | 105 | 4.9 | 368 | 7.9 | 168 | 2.9 | 536 | 5.2 | 9.2 | 4.6 | 6.7 |
| Small Intestine | 33 | 3.5 | 17 | 1.6 | 50 | 2.5 | 149 | 3.1 | 85 | 1.6 | 234 | 2.3 | 2.6 | 2.0 | 2.3 |
| Colon & Rectum (Colorectal) | 505 | 49.9 | 412 | 35.5 | 917 | 42.3 | 2,379 | 50.0 | 2,171 | 38.2 | 4,550 | 43.7 | 46.8 | 35.5 | 40.6 |
| Liver & Intrahepatic Bile Ducts | 71 | 6.9 | 31 | 2.5 | 102 | 4.6 | 420 | 8.4 | 168 | 3.0 | 589 | 5.5 | 11.7 | 4.0 | 7.6 |
| Pancreas | 134 | 14.0 | 125 | 10.8 | 259 | 12.2 | 654 | 13.8 | 598 | 10.4 | 1,252 | 12.0 | 14.1 | 10.9 | 12.4 |
| Larynx | 45 | 4.4 | 17 | 1.5 | 62 | 2.9 | 266 | 5.3 | 73 | 1.3 | 339 | 3.2 | 6.2 | 1.4 | 3.5 |
| Lung & Bronchus | 669 | 68.3 | 557 | 48.5 | 1,226 | 57.0 | 3,376 | 71.9 | 2,837 | 50.3 | 6,214 | 59.6 | 74.6 | 53.4 | 62.5 |
| Soft Tissue | 50 | 5.1 | 23 | 2.1 | 73 | 3.5 | 196 | 4.2 | 134 | 2.5 | 330 | 3.3 | 3.9 | 2.8 | 3.3 |
| Melanoma of the Skin | 254 | 25.0 | 232 | 23.3 | 486 | 23.5 | 1,123 | 23.5 | 941 | 18.8 | 2,064 | 20.6 | 26.0 | 16.2 | 20.3 |
| Breast (invasive cases only) | 15 | 1.4 | 1,373 | 124.3 | 1,388 | 65.6 | 69 | 1.5 | 6,547 | 122.0 | 6,616 | 64.7 | 1.3 | 123.4 | 66.3 |
| Uterine Cervix | --- | --- | 80 | 8.7 | --- | --- | --- | --- | 328 | 7.3 | --- | --- | --- | 7.6 | --- |
| Uterine Corpus & Unspecified | --- | --- | 299 | 26.6 | --- | --- | --- | --- | 1,471 | 26.6 | --- | --- | --- | 24.8 | --- |

TABLE 1 (continued): Cancer Incidence

| Site | NEBRASKA 2014 | | | | | | NEBRASKA 2010-2014 | | | | | | US 2009-2013 | | |
|---|------------------|--------------|---------------|----------------|--------------|---------------|-----------------------|--------------|---------------|----------------|--------------|---------------|-----------------|----------------|---------------|
| | Male No. | Male Rate | Female No. | Female Rate | Total No. | Total Rate | Male No. | Male Rate | Female No. | Female Rate | Total No. | Total Rate | Male Rate | Female Rate | Total Rate |
| Ovary | --- | --- | 131 | 11.5 | --- | --- | --- | --- | 587 | 10.8 | --- | --- | --- | 11.6 | --- |
| Prostate | 1,106 | 104.4 | --- | --- | --- | --- | 5,981 | 119.7 | --- | --- | --- | --- | 123.2 | --- | --- |
| Testis | 73 | 8.2 | --- | --- | --- | --- | 317 | 7.1 | --- | --- | --- | --- | 5.5 | --- | --- |
| Urinary Bladder | 323 | 33.9 | 102 | 8.0 | 425 | 19.5 | 1,704 | 37.1 | 486 | 8.2 | 2,190 | 20.9 | 36.1 | 8.9 | 20.7 |
| Kidney & Renal Pelvis | 244 | 24.0 | 128 | 11.1 | 372 | 17.3 | 1,114 | 22.8 | 616 | 11.4 | 1,730 | 16.7 | 21.6 | 11.3 | 16.0 |
| Brain & Central Nervous System (invasive cases only) | 79 | 7.8 | 61 | 6.0 | 140 | 6.8 | 400 | 8.5 | 318 | 6.1 | 718 | 7.3 | 7.8 | 5.6 | 6.6 |
| Thyroid Gland | 59 | 6.0 | 187 | 19.9 | 246 | 12.9 | 319 | 6.7 | 975 | 21.0 | 1,294 | 13.8 | 7.0 | 20.8 | 14.0 |
| Hodgkin Lymphoma | 34 | 3.5 | 22 | 2.2 | 56 | 2.8 | 145 | 3.1 | 122 | 2.6 | 267 | 2.8 | 3.1 | 2.4 | 2.7 |
| Non-Hodgkin Lymphoma | 240 | 25.3 | 156 | 13.3 | 396 | 18.7 | 1,161 | 24.9 | 951 | 17.0 | 2,112 | 20.5 | 23.0 | 15.9 | 19.1 |
| Myeloma | 81 | 8.5 | 57 | 4.7 | 138 | 6.4 | 383 | 8.1 | 278 | 4.8 | 661 | 6.2 | 7.9 | 5.2 | 6.4 |
| Leukemia | 177 | 18.2 | 130 | 11.5 | 307 | 14.5 | 882 | 19.0 | 604 | 10.8 | 1,486 | 14.5 | 17.3 | 10.6 | 13.5 |
| Brain & Central Nervous System (benign & uncertain cases only) | 73 | 7.6 | 125 | 12.1 | 198 | 9.9 | 346 | 7.3 | 650 | 12.7 | 996 | 10.1 | 8.3 | 14.6 | 11.8 |
| Breast (in situ cases only) | --- | --- | 268 | 24.7 | --- | --- | --- | --- | 1,376 | 26.4 | --- | --- | 0.2 | 30.9 | 16.3 |

Total rates are per 100,000 population and are age-adjusted to the 2000 US population

Gender-specific rates are per 100,000 male or female population and are age-adjusted to the 2000 US population

TABLE 2: Cancer Incidence
Number of Cases and Percentage Distribution, by Selected Primary Site and Age at Diagnosis
 Nebraska (2010-2014)

| | <u>0-17 Yrs.</u> | | <u>18-44 Yrs.</u> | | <u>45-64 Yrs.</u> | | <u>65+ Yrs.</u> | | <u>TOTAL</u> | |
|---|------------------|----------|-------------------|----------|-------------------|----------|-----------------|----------|---------------|----------|
| | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> |
| All Sites | 455 | 1.0 | 3,328 | 7.1 | 16,935 | 36.0 | 26,302 | 55.9 | 47,020 | 100.0 |
| Oral Cavity & Pharynx | 3 | 0.2 | 75 | 6.2 | 552 | 45.8 | 574 | 47.7 | 1,204 | 100.0 |
| Esophagus | 0 | 0.0 | 13 | 2.5 | 199 | 38.4 | 306 | 59.1 | 518 | 100.0 |
| Stomach | 0 | 0.0 | 27 | 5.0 | 173 | 32.3 | 336 | 62.7 | 536 | 100.0 |
| Small Intestine | 0 | 0.0 | 17 | 7.3 | 102 | 43.6 | 115 | 49.1 | 234 | 100.0 |
| Colon & Rectum (Colorectal) | 6 | 0.1 | 202 | 4.4 | 1,484 | 32.6 | 2,858 | 62.8 | 4,550 | 100.0 |
| Liver & Intrahepatic Bile Ducts | 6 | 1.0 | 18 | 3.1 | 281 | 47.7 | 284 | 48.2 | 589 | 100.0 |
| Pancreas | 0 | 0.0 | 32 | 2.6 | 367 | 29.3 | 853 | 68.1 | 1,252 | 100.0 |
| Larynx | 0 | 0.0 | 8 | 2.4 | 152 | 44.8 | 179 | 52.8 | 339 | 100.0 |
| Lung & Bronchus | 0 | 0.0 | 66 | 1.1 | 1,750 | 28.2 | 4,398 | 70.8 | 6,214 | 100.0 |
| Soft Tissue | 18 | 5.5 | 62 | 18.8 | 113 | 34.2 | 137 | 41.5 | 330 | 100.0 |
| Melanoma of the Skin | 2 | 0.1 | 334 | 16.2 | 835 | 40.5 | 893 | 43.3 | 2,064 | 100.0 |
| Female Breast (invasive cases only) | 0 | 0.0 | 547 | 8.4 | 2,981 | 45.5 | 3,019 | 46.1 | 6,547 | 100.0 |
| Uterine Cervix | 1 | 0.3 | 137 | 41.8 | 136 | 41.5 | 54 | 16.5 | 328 | 100.0 |
| Uterine Corpus & Unspecified | 0 | 0.0 | 99 | 6.7 | 786 | 53.4 | 586 | 39.8 | 1,471 | 100.0 |
| Ovary | 5 | 0.9 | 64 | 10.9 | 243 | 41.4 | 275 | 46.8 | 587 | 100.0 |
| Prostate | 0 | 0.0 | 23 | 0.4 | 2,459 | 41.1 | 3,499 | 58.5 | 5,981 | 100.0 |
| Testis | 10 | 3.2 | 235 | 74.1 | 61 | 19.2 | 11 | 3.5 | 317 | 100.0 |
| Urinary Bladder | 0 | 0.0 | 36 | 1.6 | 489 | 22.3 | 1,665 | 76.0 | 2,190 | 100.0 |
| Kidney & Renal Pelvis | 16 | 0.9 | 114 | 6.6 | 731 | 42.3 | 869 | 50.2 | 1,730 | 100.0 |
| Brain & Central Nervous System (invasive cases only) | 99 | 13.8 | 111 | 15.5 | 211 | 29.4 | 297 | 41.4 | 718 | 100.0 |
| Thyroid Gland | 19 | 1.5 | 477 | 36.9 | 532 | 41.1 | 266 | 20.6 | 1,294 | 100.0 |
| Hodgkin Lymphoma | 35 | 13.1 | 112 | 41.9 | 76 | 28.5 | 44 | 16.5 | 267 | 100.0 |
| Non-Hodgkin Lymphoma | 27 | 1.3 | 162 | 7.7 | 662 | 31.3 | 1,261 | 59.7 | 2,112 | 100.0 |
| Myeloma | 0 | 0.0 | 16 | 2.4 | 229 | 34.6 | 416 | 62.9 | 661 | 100.0 |
| Leukemia | 112 | 7.5 | 135 | 9.1 | 394 | 26.5 | 845 | 56.9 | 1,486 | 100.0 |
| Brain & Central Nervous System (benign & uncertain cases) | 52 | 5.2 | 172 | 17.3 | 393 | 39.5 | 379 | 38.1 | 996 | 100.0 |
| Female Breast (in situ cases only) | 0 | 0.0 | 117 | 8.5 | 734 | 53.3 | 525 | 38.2 | 1,376 | 100.0 |

NOTE: Due to rounding, percentages may not sum to 100.0.

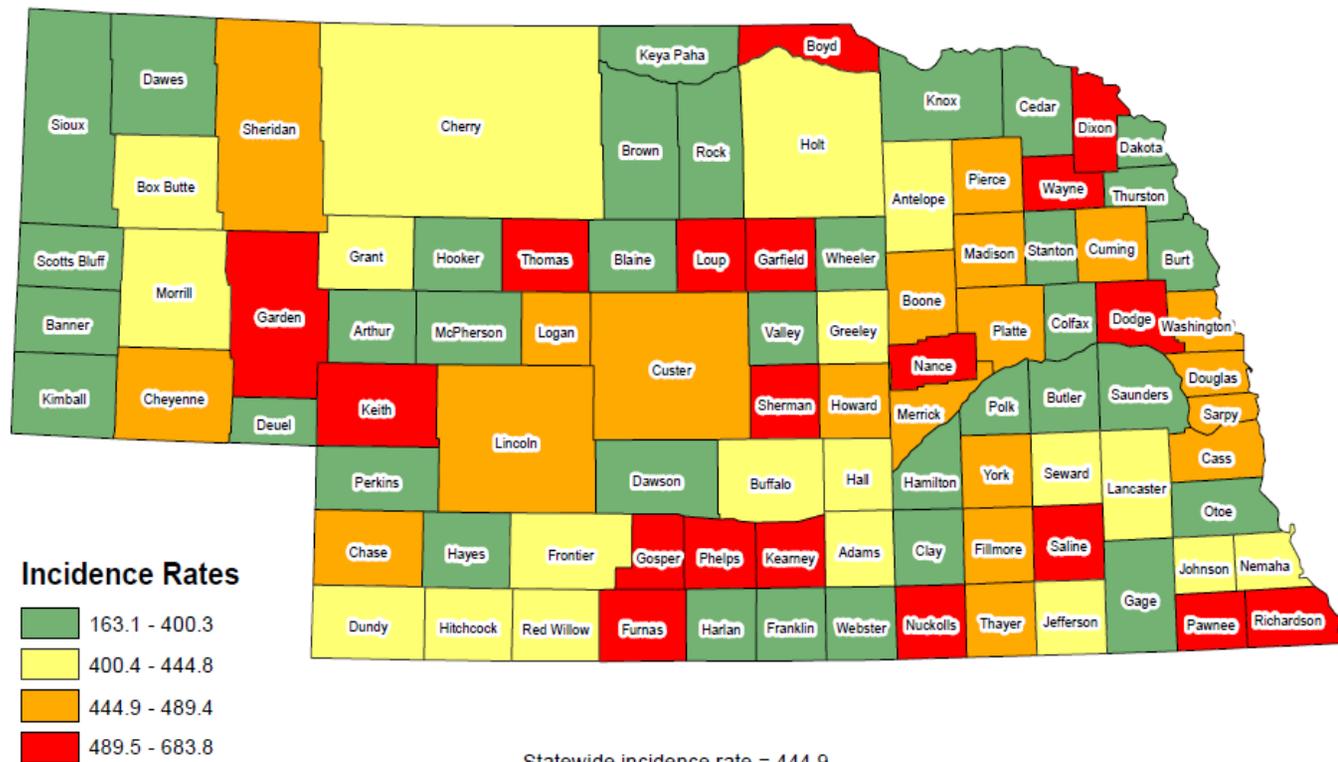
TABLE 3: Cancer Incidence
Number of Cases and Rates, All Sites and Top Ten Primary Sites, by Race and Ethnicity
 Nebraska (2005-2014)

| Rank | White | | | African-American | | | Native American | | | Asian/Pacific Islander | | | Hispanic | | |
|------|------------------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|
| | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate |
| | All Sites | 87,944 | 463.3 | All Sites | 3,044 | 515.0 | All Sites | 471 | 414.4 | All Sites | 624 | 281.9 | All Sites | 1,826 | 275.9 |
| 1 | Female Breast | 12,210 | 124.0 | Prostate | 559 | 206.0 | Female Breast | 71 | 101.4 | Female Breast | 85 | 62.0 | Female Breast | 229 | 66.7 |
| 2 | Prostate | 11,848 | 132.0 | Lung & Bronchus | 433 | 78.6 | Lung & Bronchus | 69 | 82.2 | Colon & Rectum | 76 | 37.7 | Prostate | 175 | 69.8 |
| 3 | Lung & Bronchus | 11,685 | 60.8 | Female Breast | 397 | 122.4 | Colon & Rectum | 52 | 47.3 | Lung & Bronchus | 75 | 39.1 | Colon & Rectum | 155 | 26.1 |
| 4 | Colon & Rectum | 9,288 | 48.0 | Colon & Rectum | 345 | 63.8 | Kidney & Renal Pelvis | 35 | 25.2 | Prostate | 46 | 60.0 | Lung & Bronchus | 136 | 28.9 |
| 5 | Urinary Bladder | 4,100 | 21.1 | Kidney & Renal Pelvis | 141 | 24.2 | Prostate | 33 | 72.1 | Thyroid | 44 | 13.4 | Kidney & Renal Pelvis | 107 | 16.2 |
| 6 | Non-Hodgkin Lymphoma | 3,934 | 20.8 | Non-Hodgkin Lymphoma | 98 | 16.0 | Non-Hodgkin Lymphoma | 22 | 15.6 | Liver & Intrahepatic Bile Ducts | 41 | 18.5 | Non-Hodgkin Lymphoma | 101 | 15.3 |
| 7 | Melanoma | 3,435 | 18.9 | Pancreas | 95 | 17.7 | Liver & Intrahepatic Bile Ducts | 20 | 14.5 | Oral Cavity & Pharynx | 30 | 11.5 | Thyroid | 98 | 10.1 |
| 8 | Kidney & Renal Pelvis | 3,138 | 16.5 | Liver & Intrahepatic Bile Ducts | 87 | 13.0 | Leukemia | 17 | 12.2 | Non-Hodgkin Lymphoma | 26 | 11.9 | Leukemia | 90 | 8.6 |
| 9 | Leukemia | 2,763 | 14.7 | Myeloma | 79 | 13.6 | Oral Cavity & Pharynx | 13 | 10.1 | Leukemia | 22 | 8.2 | Liver & Intrahepatic Bile Ducts | 60 | 10.5 |
| 10 | Uterine Corpus & Unspecified | 2,684 | 26.6 | Urinary Bladder | 71 | 13.4 | Uterine Corpus & Unspecified | 12 | 14.3 | Uterine Corpus & Unspecified | 17 | 11.9 | Stomach | 52 | 7.8 |

Rates are per 100,000 population, excluding gender-specific sites (prostate, female breast, uterine corpus), which are per 100,000 male or female population. All rates are age-adjusted to the 2000 US population.

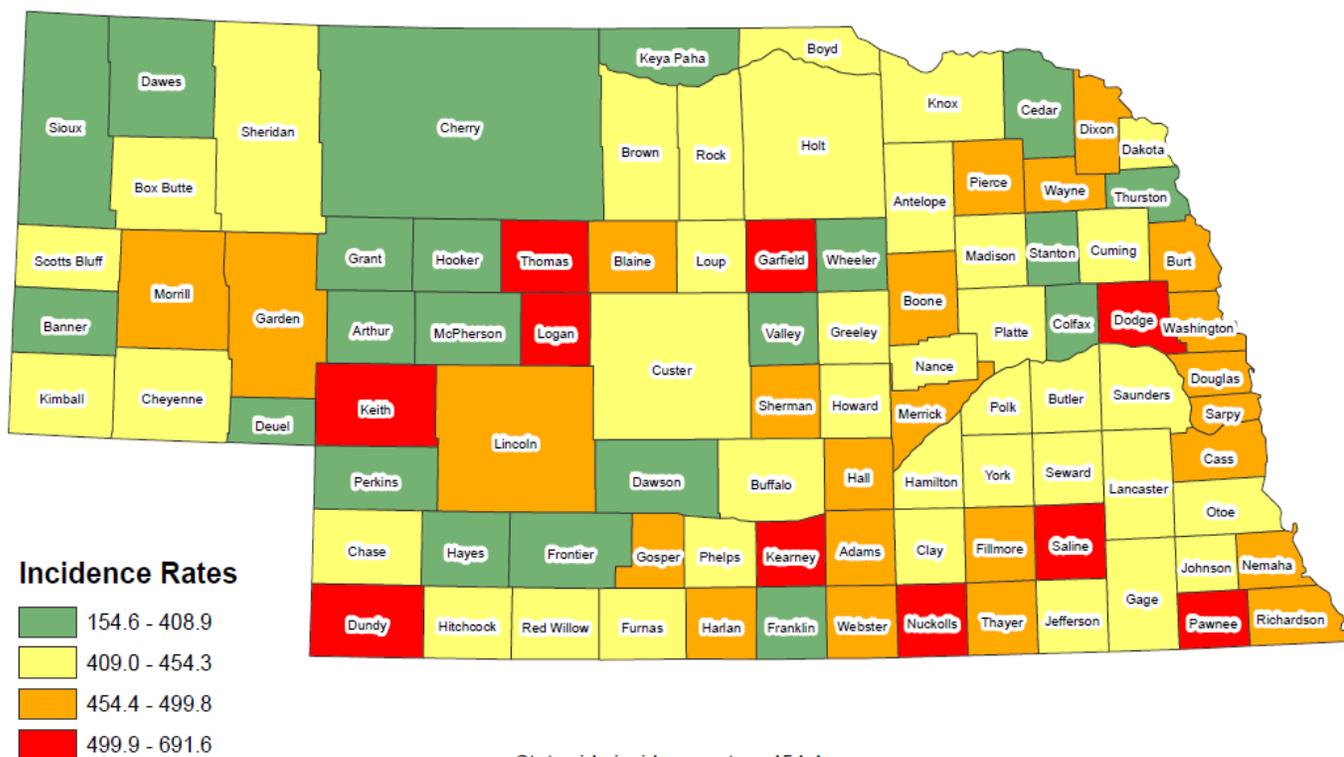
Cancer (all sites) Diagnoses in Nebraska, 2014 Incidence Rates by County of Residence

Rates are expressed as the number of new cases per 100,000 population, and are age-adjusted to the 2000 US population



Cancer (all sites) Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

Rates are expressed as the average annual number of new cases per 100,000 population, and are age-adjusted to the 2000 US population



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CANCER MORTALITY IN NEBRASKA

In 2014, 3,443 Nebraska residents died from cancer, a number that translates into a rate of 158.2 cancer deaths per 100,000 population. These figures represent an increase from the state's 2013 figures of 3,458 (cancer deaths) and 163.0 (cancer mortality rate). For the sixth consecutive year, cancer was the leading cause of mortality among Nebraska residents in 2014, surpassing heart disease by 153 deaths. By primary site, cancers of the lung, breast, prostate, colon and rectum accounted for just under half (47.8%) of Nebraska's cancer deaths in 2014.

Table 4 presents the number and rate of cancer deaths that occurred among Nebraska residents during 2014 and 2010-2014, for all sites combined and for specific sites. The most recent US cancer mortality rates, which cover the years 2009 through 2013, are also included. Comparison of the most recent state and national mortality rates for the past five years shows significant differences ($p < .01$) for cancers of the stomach, lung, liver, ovary, and female breast (Nebraska rates lower than the US) and for brain and central nervous system tumors (Nebraska rates higher than the US). Table 5 presents the number of Nebraska cancer deaths during 2010-2014 by age at death. Table 6 presents Nebraska cancer mortality data by race and ethnicity for the years 2005-2014.

Maps on pages 21-22 present cancer mortality rates for 2014 and 2010-2014 by county of residence; county-specific numbers of deaths and mortality rates are also found in an appendix to this report ([Table 2A](#)). The graph below shows annual mortality rates for cancer for Nebraska and the US since 2004.

Cancer (All Sites)

Mortality Rates, Nebraska & US (2004-2014)

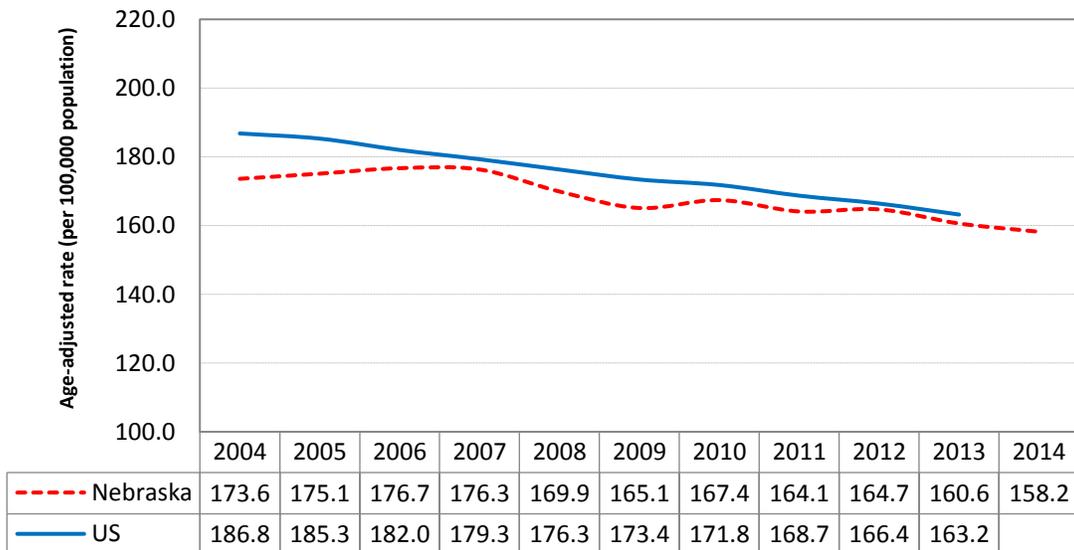


TABLE 4: Cancer Mortality
Number of Deaths and Rates, by Selected Primary Site and Gender
 Nebraska (2014 and 2010-2014) & US (2009-2013)

| Site | NEBRASKA 2014 | | | | | | NEBRASKA 2010-2014 | | | | | | US 2009-2013 | | |
|---------------------------------|------------------|-------|---------------|-------|--------------|-------|-----------------------|-------|---------------|-------|--------------|-------|-----------------|----------------|---------------|
| | Male No. | Rate | Female No. | Rate | Total No. | Rate | Male No. | Rate | Female No. | Rate | Total No. | Rate | Male Rate | Female Rate | Total Rate |
| All Sites | 1,851 | 192.8 | 1,592 | 132.5 | 3,443 | 158.2 | 9,091 | 196.6 | 8,114 | 138.1 | 17,205 | 162.6 | 204.0 | 143.9 | 168.9 |
| Oral Cavity & Pharynx | 32 | 3.1 | 18 | 1.5 | 50 | 2.2 | 164 | 3.3 | 82 | 1.3 | 246 | 2.2 | 3.8 | 1.3 | 2.4 |
| Esophagus | 82 | 8.5 | 12 | 0.9 | 94 | 4.3 | 402 | 8.4 | 84 | 1.4 | 486 | 4.6 | 7.4 | 1.5 | 4.1 |
| Stomach | 27 | 2.8 | 12 | 0.9 | 39 | 1.8 | 128 | 2.7 | 77 | 1.3 | 205 | 1.9 | 4.5 | 2.4 | 3.3 |
| Colon & Rectum (Colorectal) | 173 | 17.8 | 164 | 13.4 | 337 | 15.5 | 854 | 18.4 | 860 | 14.2 | 1,714 | 16.1 | 18.1 | 12.8 | 15.1 |
| Liver & Intrahepatic Bile Ducts | 67 | 6.7 | 33 | 2.8 | 100 | 4.6 | 347 | 7.1 | 165 | 3.0 | 512 | 4.8 | 9.1 | 3.7 | 6.2 |
| Pancreas | 119 | 12.2 | 102 | 8.6 | 221 | 10.2 | 587 | 12.5 | 524 | 8.9 | 1,111 | 10.5 | 12.6 | 9.6 | 10.9 |
| Larynx | 27 | 2.6 | 6 | 0.5 | 33 | 1.5 | 88 | 1.9 | 18 | 0.3 | 106 | 1.0 | 1.9 | 0.4 | 1.1 |
| Lung & Bronchus | 504 | 52.6 | 378 | 32.2 | 882 | 41.2 | 2,502 | 54.2 | 1,984 | 34.5 | 4,486 | 43.0 | 57.7 | 37.1 | 46.0 |
| Melanoma of the Skin | 37 | 3.7 | 16 | 1.4 | 53 | 2.4 | 190 | 4.1 | 110 | 2.0 | 300 | 2.9 | 4.1 | 1.7 | 2.7 |
| Breast | 1 | 0.1 | 251 | 21.3 | 252 | 11.6 | 11 | 0.2 | 1,168 | 20.0 | 1,179 | 11.1 | 0.3 | 21.6 | 12.0 |
| Uterine Cervix | --- | --- | 25 | 2.2 | --- | --- | --- | --- | 112 | 2.2 | --- | --- | --- | 2.3 | --- |

TABLE 4 (continued): Cancer Mortality

| Site | NEBRASKA 2014 | | | | | | NEBRASKA 2010-2014 | | | | | | US 2009-2013 | | |
|------------------------------|------------------|--------------|---------------|----------------|--------------|---------------|-----------------------|--------------|---------------|----------------|--------------|---------------|-----------------|----------------|---------------|
| | Male No. | Male Rate | Female No. | Female Rate | Total No. | Total Rate | Male No. | Male Rate | Female No. | Female Rate | Total No. | Total Rate | Male Rate | Female Rate | Total Rate |
| Uterine Corpus & Unspecified | --- | --- | 46 | 4.0 | --- | --- | --- | --- | 256 | 4.4 | --- | --- | --- | 4.5 | --- |
| Ovary | --- | --- | 78 | 6.3 | --- | --- | --- | --- | 387 | 6.7 | --- | --- | --- | 7.6 | --- |
| Prostate | 174 | 18.9 | --- | --- | --- | --- | 914 | 20.8 | --- | --- | --- | --- | 20.6 | --- | --- |
| Kidney & Renal Pelvis | 69 | 6.8 | 32 | 2.6 | 101 | 4.6 | 314 | 6.5 | 160 | 2.6 | 474 | 4.4 | 5.7 | 2.5 | 3.9 |
| Urinary Bladder | 54 | 5.8 | 27 | 1.9 | 81 | 3.6 | 303 | 6.8 | 132 | 2.1 | 435 | 4.0 | 7.7 | 2.2 | 4.4 |
| Brain & Other Nervous System | 59 | 5.9 | 45 | 4.0 | 104 | 4.9 | 287 | 6.2 | 228 | 4.1 | 515 | 5.1 | 59 | 5.9 | 45 |
| Thyroid | 8 | 0.8 | 6 | 0.5 | 14 | 0.7 | 32 | 0.7 | 35 | 0.5 | 67 | 0.6 | 8 | 0.8 | 6 |
| Hodgkin Lymphoma | 3 | 0.3 | 2 | 0.2 | 5 | 0.2 | 21 | 0.5 | 11 | 0.2 | 32 | 0.3 | 3 | 0.3 | 2 |
| Non-Hodgkin Lymphoma | 61 | 6.5 | 63 | 4.9 | 124 | 5.6 | 329 | 7.2 | 316 | 5.1 | 645 | 6.1 | 61 | 6.5 | 63 |
| Leukemia | 92 | 9.9 | 64 | 5.1 | 156 | 7.1 | 413 | 9.2 | 325 | 5.4 | 738 | 7.0 | 9.2 | 5.1 | 6.9 |
| Myeloma | 45 | 4.9 | 22 | 1.7 | 67 | 3.1 | 201 | 4.3 | 154 | 2.5 | 355 | 3.3 | 4.4 | 2.8 | 3.5 |

Total rates are per 100,000 population and are age-adjusted to the 2000 US population
 Gender-specific rates are per 100,000 male or female population and are age-adjusted to the 2000 US population

TABLE 5: Cancer Mortality
Number of Deaths and Percentage Distribution, by Selected Primary Site and Age at Death
 Nebraska (2010-2014)

| | <u>0-17 Yrs.</u> | | <u>18-44 Yrs.</u> | | <u>45-64 Yrs.</u> | | <u>65+ Yrs</u> | | <u>TOTAL</u> | |
|---------------------------------|------------------|----------|-------------------|----------|-------------------|----------|----------------|----------|---------------|----------|
| | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> |
| All Sites | 68 | 0.4 | 435 | 2.5 | 4,231 | 24.6 | 12,471 | 72.5 | 17,205 | 100.0 |
| Oral Cavity & Pharynx | 0 | 0.0 | 3 | 1.2 | 86 | 35.0 | 157 | 63.8 | 246 | 100.0 |
| Esophagus | 0 | 0.0 | 12 | 2.5 | 146 | 30.0 | 328 | 67.5 | 486 | 100.0 |
| Stomach | 0 | 0.0 | 12 | 5.9 | 63 | 30.7 | 130 | 63.4 | 205 | 100.0 |
| Colon & Rectum (Colorectal) | 0 | 0.0 | 42 | 2.5 | 401 | 23.4 | 1,271 | 74.2 | 1,714 | 100.0 |
| Liver & Intrahepatic Bile Ducts | 1 | 0.2 | 16 | 3.1 | 195 | 38.1 | 300 | 58.6 | 512 | 100.0 |
| Pancreas | 0 | 0.0 | 14 | 1.3 | 280 | 25.2 | 817 | 73.5 | 1,111 | 100.0 |
| Lung & Bronchus | 0 | 0.0 | 34 | 0.8 | 1,105 | 24.6 | 3,347 | 74.6 | 4,486 | 100.0 |
| Melanoma of the Skin | 0 | 0.0 | 21 | 7.0 | 101 | 33.7 | 178 | 59.3 | 300 | 100.0 |
| Female Breast | 0 | 0.0 | 63 | 5.4 | 357 | 30.6 | 748 | 64.0 | 1,168 | 100.0 |
| Uterine Cervix | 0 | 0.0 | 24 | 21.4 | 59 | 52.7 | 29 | 25.9 | 112 | 100.0 |
| Uterine Corpus & Unspecified | 0 | 0.0 | 6 | 2.3 | 73 | 28.4 | 178 | 69.3 | 257 | 100.0 |
| Ovary | 0 | 0.0 | 9 | 2.3 | 126 | 32.6 | 252 | 65.1 | 387 | 100.0 |
| Prostate | 0 | 0.0 | 1 | 0.1 | 76 | 8.3 | 837 | 91.6 | 914 | 100.0 |
| Kidney & Renal Pelvis | 2 | 0.4 | 6 | 1.3 | 158 | 33.3 | 308 | 65.0 | 474 | 100.0 |
| Urinary Bladder | 0 | 0.0 | 1 | 0.2 | 63 | 14.5 | 371 | 85.3 | 435 | 100.0 |
| Brain & Central Nervous System | 27 | 5.2 | 44 | 8.5 | 159 | 30.9 | 285 | 55.3 | 515 | 100.0 |
| Thyroid | 0 | 0.0 | 0 | 0.0 | 15 | 22.4 | 52 | 77.6 | 67 | 100.0 |
| Hodgkin Lymphoma | 0 | 0.0 | 4 | 12.5 | 15 | 46.9 | 13 | 40.6 | 32 | 100.0 |
| Non-Hodgkin Lymphoma | 5 | 0.8 | 21 | 3.3 | 104 | 16.1 | 515 | 79.8 | 645 | 100.0 |
| Leukemia | 10 | 1.4 | 28 | 3.8 | 126 | 17.1 | 574 | 77.8 | 738 | 100.0 |
| Myeloma | 0 | 0.0 | 2 | 0.6 | 70 | 19.7 | 283 | 79.7 | 355 | 100.0 |

NOTE: Due to rounding, percentages may not sum to 100.0.

TABLE 6: Cancer Mortality
Number of Deaths and Rates, All Sites and Top Ten Primary Sites, by Race and Ethnicity
 Nebraska (2005-2014)

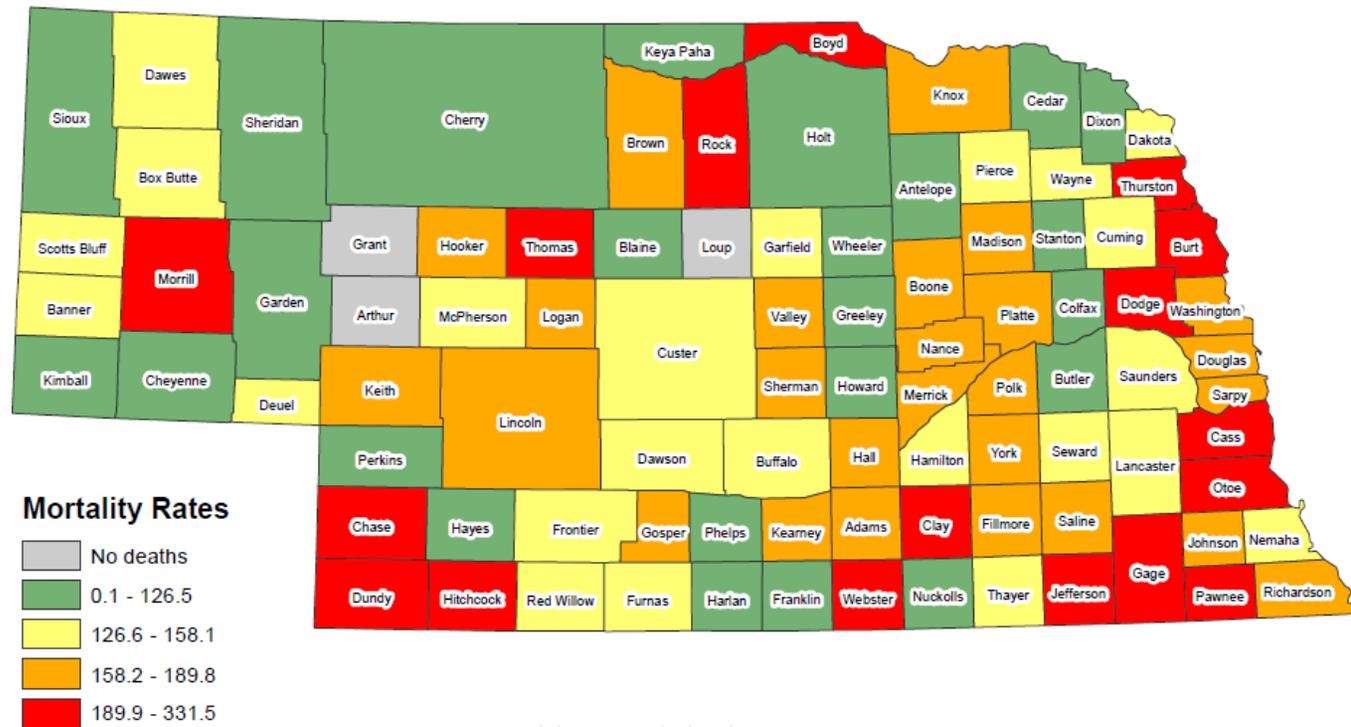
| Rank | White | | | African-American | | | Native American | | | Asian/Pacific Islander | | | Hispanic | | |
|------|-----------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|---------------------------------|--------|-------|
| | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate | Site | Number | Rate |
| | All Sites | 32,582 | 165.9 | All Sites | 1,117 | 214.0 | All Sites | 160 | 169.1 | All Sites | 199 | 105.8 | All Sites | 531 | 102.6 |
| 1 | Lung & Bronchus | 8,575 | 44.3 | Lung & Bronchus | 314 | 61.4 | Lung & Bronchus | 47 | 58.6 | Lung & Bronchus | 43 | 22.6 | Lung & Bronchus | 83 | 18.2 |
| 2 | Colon & Rectum | 3,354 | 16.8 | Colon & Rectum | 130 | 27.6 | Colon & Rectum | 20 | 16.2 | Liver & Intrahepatic Bile Ducts | 34 | 15.4 | Female Breast | 42 | 13.9 |
| 3 | Female Breast | 2,211 | 20.4 | Female Breast | 80 | 25.8 | Female Breast | 11 | 17.2 | Colon & Rectum | 19 | 10.3 | Liver & Intrahepatic Bile Ducts | 41 | 8.2 |
| 4 | Pancreas | 2,053 | 10.4 | Pancreas | 77 | 15.0 | Kidney & Renal Pelvis | 8 | 8.5 | Non-Hodgkin Lymphoma | 13 | 7.7 | Colon & Rectum | 41 | 7.9 |
| 5 | Prostate | 1,804 | 8.8 | Prostate | 63 | 13.6 | Liver & Intrahepatic Bile Ducts | 7 | 4.9 | Pancreas | 12 | 6.4 | Prostate | 28 | 8.3 |
| 6 | Leukemia | 1,384 | 7.0 | Liver & Intrahepatic Bile Ducts | 51 | 7.9 | Pancreas | 6 | 3.9 | Female Breast | 10 | 8.9 | Leukemia | 27 | 4.1 |
| 7 | Non-Hodgkin Lymphoma | 1,308 | 6.5 | Myeloma | 39 | 7.7 | Prostate | 6 | 13.5 | Leukemia | 8 | 4.0 | Non-Hodgkin Lymphoma | 25 | 5.6 |
| 8 | Brain & CNS | 956 | 5.2 | Esophagus | 34 | 6.0 | Stomach | 6 | 5.7 | Stomach | 8 | 2.9 | Kidney & Renal Pelvis | 24 | 4.0 |
| 9 | Kidney & Renal Pelvis | 863 | 4.4 | Leukemia | 28 | 4.8 | Leukemia | 5 | 4.3 | Brain & CNS | 7 | 2.9 | Stomach | 24 | 3.5 |
| 10 | Esophagus | 859 | 4.4 | Stomach | 25 | 4.7 | Oral Cavity & Pharynx | 5 | 8.0 | Ovary | 6 | 5.6 | Brain & CNS | 22 | 2.6 |

Rates are per 100,000 population, excluding gender-specific sites (prostate, female breast, ovary), which are per 100,000 male or female population. All rates are age-adjusted to the 2000 US population.

Abbreviation: CNS, central nervous system

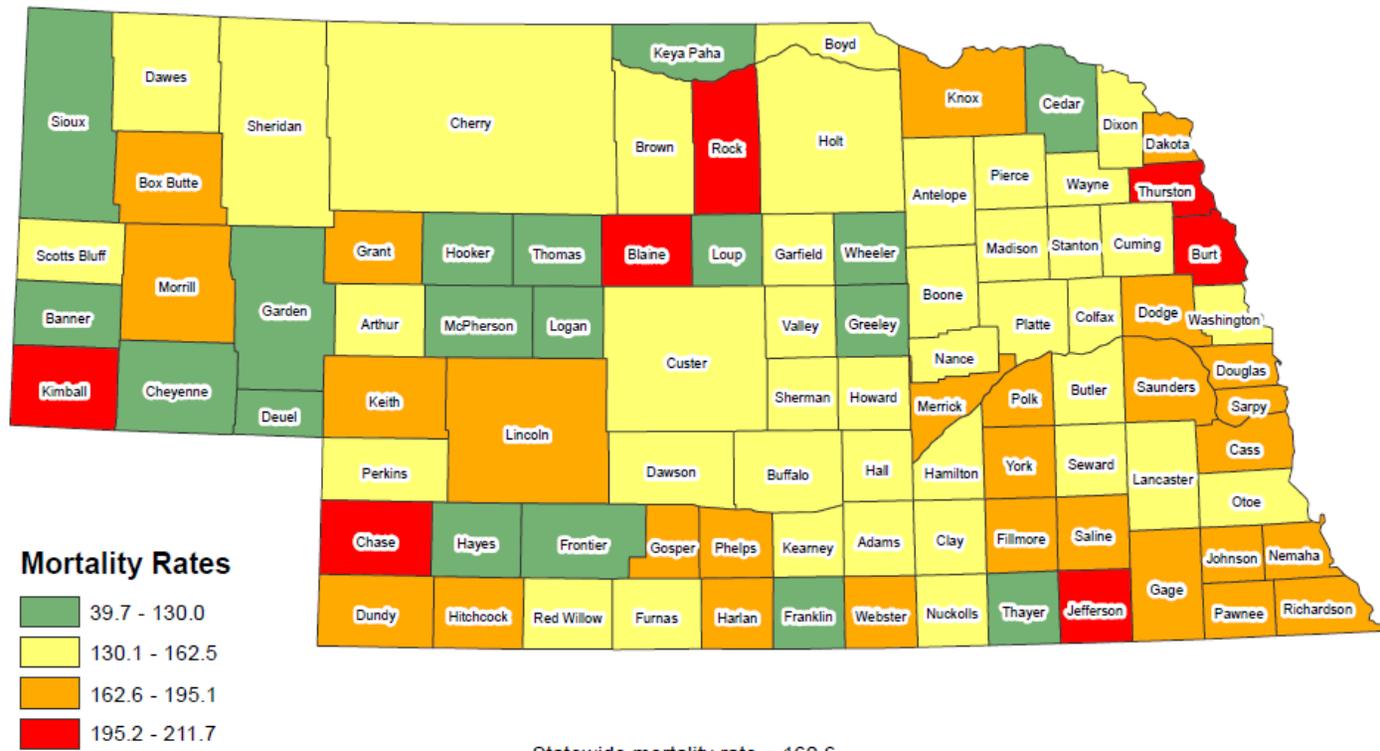
Cancer (all sites) Deaths in Nebraska, 2014 Mortality Rates by County of Residence

Rates are expressed as the number of deaths per 100,000 population, and are age-adjusted to the 2000 US population



Cancer (all sites) Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 population, and are age-adjusted to the 2000 US population



INCIDENCE AND MORTALITY FOR SELECTED PRIMARY SITES

Lung and Bronchus

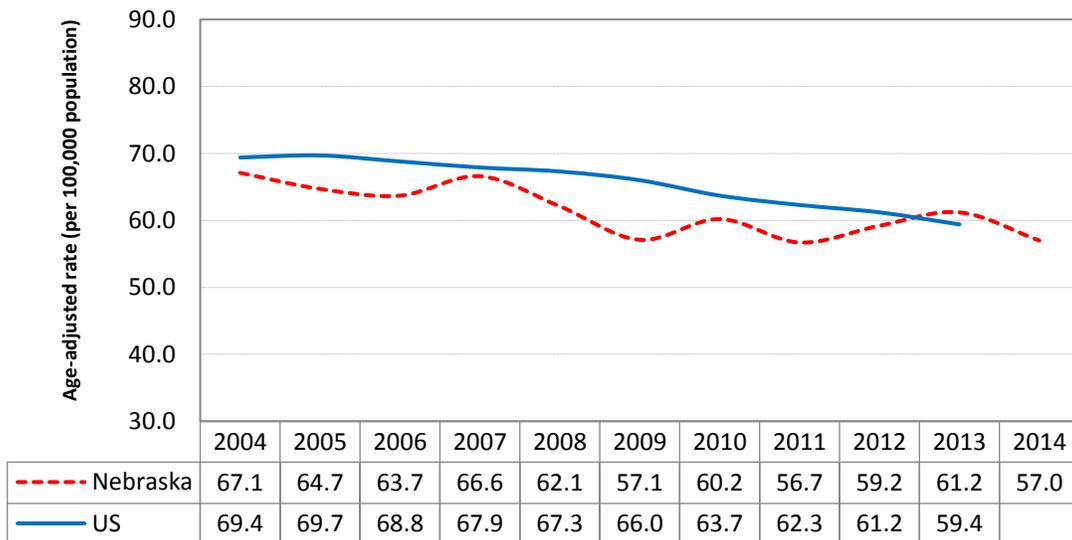
Although lung cancer was only the second most frequently diagnosed cancer among Nebraska residents in 2014, it was the year's leading cause of cancer mortality, accounting for 26% of the state's cancer deaths. During the past five years (2010-2014), lung cancer has averaged over 1,200 diagnoses and 900 deaths in Nebraska per year. Although lung cancer is more likely to strike men than women, the lung cancer death rate for Nebraska men has fallen by over 30% since 1990, while remaining almost unchanged for Nebraska women. Due to the small number of cases that are detected at an early stage of the disease, the 5-year relative survival rate for people diagnosed with lung cancer is less than 20%.

Cigarette smoking is the major risk factor for lung cancer and causes about 85% of lung cancer deaths. People who smoke two or more packs of cigarettes per day are 15 to 25 times more likely to die from lung cancer than non-smokers. Quitting smoking reduces the risk of lung cancer, although it takes 10-15 years for an ex-smoker's risk to drop to the level of a lifelong non-smoker. The US Preventive Services Task Force (USPSTF) and ACS have both endorsed screening for lung cancer, using low-dose helical computed tomography, but only for people 55-74 years of age (the USPSTF recommendation includes people 55-80) who currently smoke or who have quit within the past 15 years, are in good health, and have at least a 30 pack-year smoking history.

Maps on pages 45-46 present lung & bronchus cancer incidence and mortality rates by county of residence; county-specific statistics are also found in an appendix to this report ([Table 3A](#)).

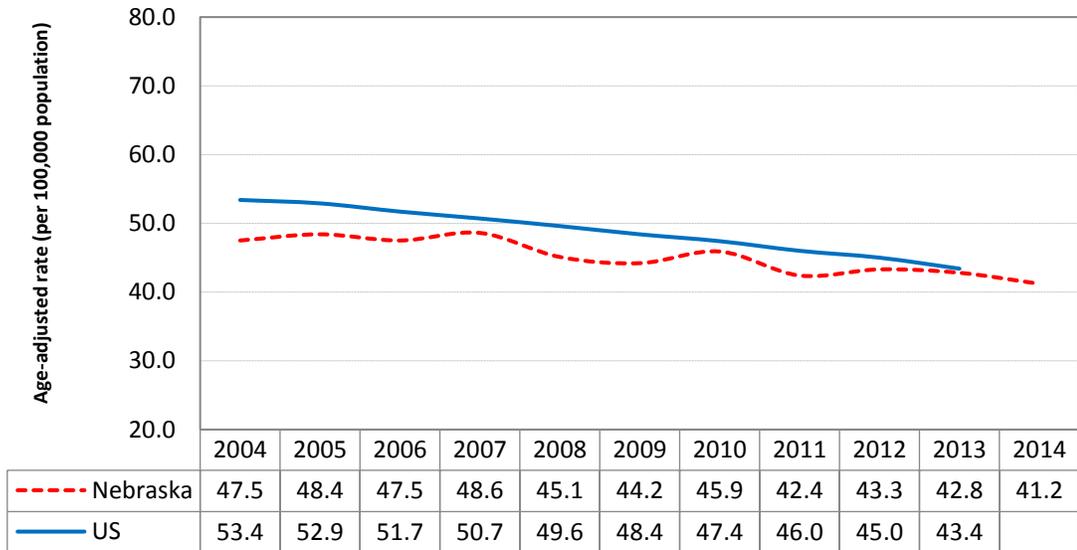
Lung and Bronchus Cancer

Incidence Rates, Nebraska & US (2004-2014)



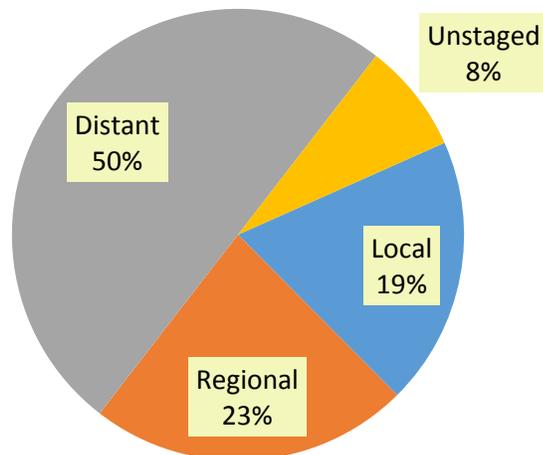
Lung and Bronchus Cancer

Mortality Rates, Nebraska & US (2004-2014)



Lung and Bronchus Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Breast (Female only)

Breast cancer is the most common type of cancer among women and the second most frequent cause of female cancer deaths. Between 2010 and 2014, 6,547 Nebraska women were diagnosed with invasive breast cancer (and another 1,376 were diagnosed with in situ breast cancer) and 1,168 women died from breast cancer. Since 1990, the rate of breast cancer deaths in Nebraska and the US has declined significantly. Recent declines in the rate of breast cancer diagnoses have been attributed to the decreasing use of post-menopausal hormone replacement therapy.

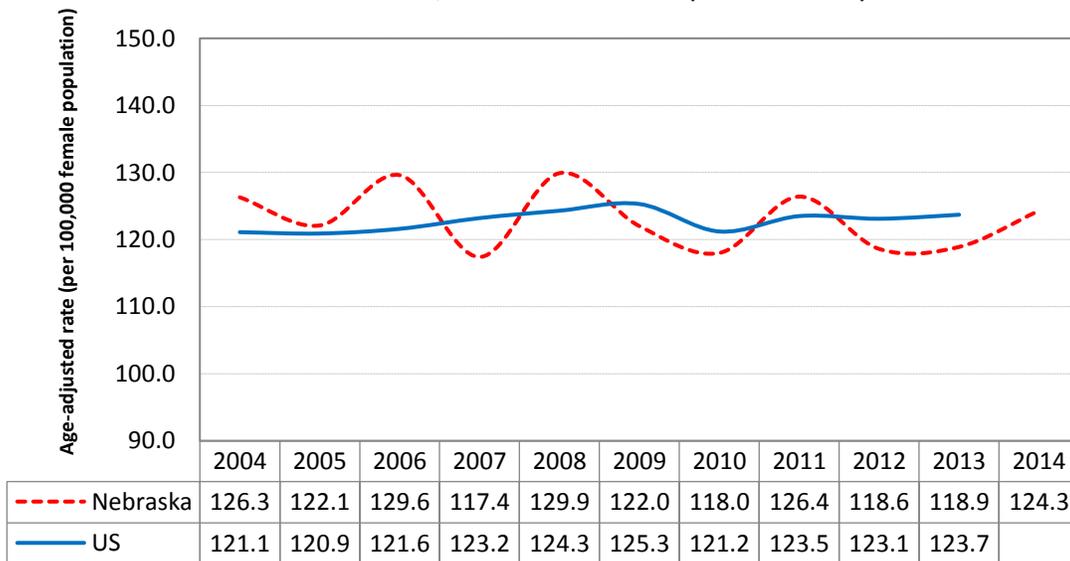
Age is an important risk factor for breast cancer, with 80% of all cases occurring among women age 50 and older. Other risk factors include genetic mutations, a personal or family history of breast cancer, some forms of benign breast disease, early menstruation, late menopause, never having children or having a first child after age 30, and for post-menopausal women, obesity and long-term hormone replacement therapy.

Screening for breast cancer is known to save lives, although opinion varies on how and when to screen. USPSTF guidelines recommend mammography for women 50-74 on an every other year schedule. However, ACS guidelines recommend that women 40-44 have the choice for annual mammography; women 45-54 have annual mammography; and women 55 and older have the choice to continue annual mammography or to have it on an every other year schedule, continuing as long as their overall health is good and life expectancy is 10 or more years. For some women who have an increased risk of breast cancer, the ACS recommends annual magnetic resonance imaging (MRI) in addition to mammography, usually starting at age 30.

Maps on pages 47-48 present female breast cancer incidence and mortality rates by county of residence; county-specific statistics are also found in an appendix to this report ([Table 4A](#)).

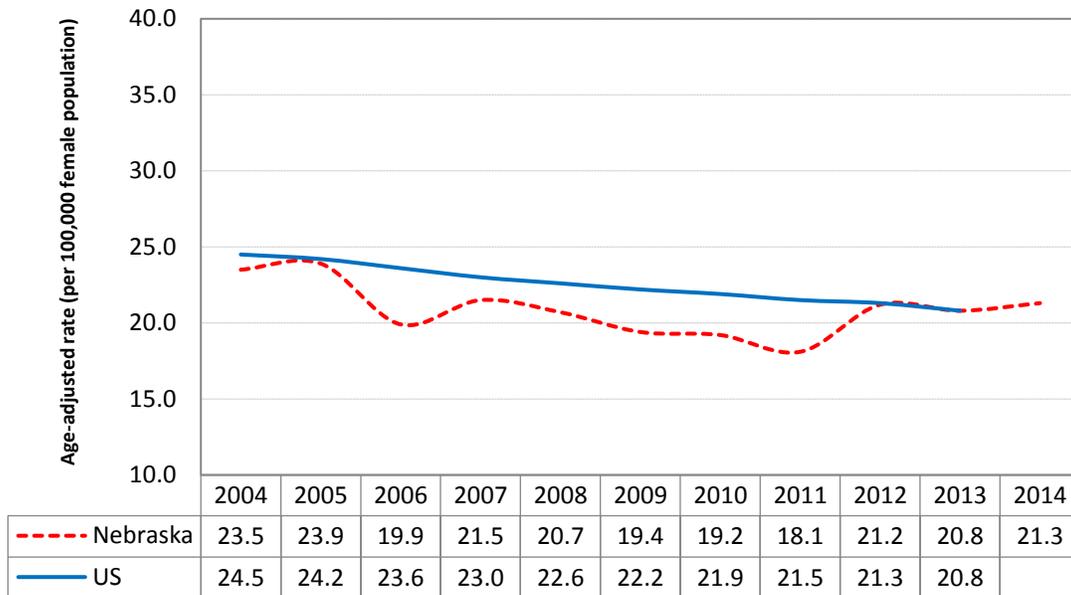
Female Breast Cancer

Incidence Rates, Nebraska & US (2004-2014)



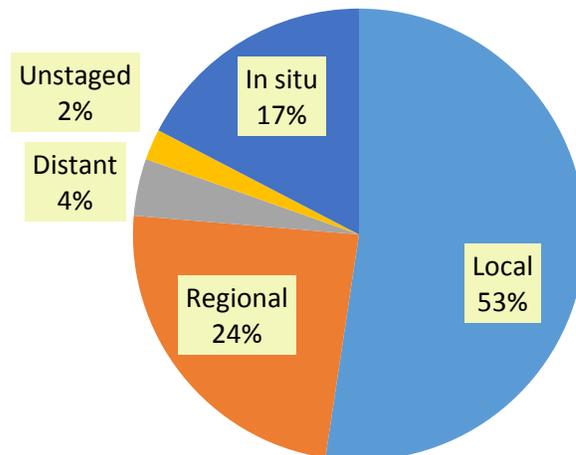
Female Breast Cancer

Mortality Rates, Nebraska & US (2004-2014)



Female Breast Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Colon and Rectum (Colorectal)

In 2014, colorectal cancer was the fourth most frequently diagnosed cancer among Nebraska residents, accounting for 917 new cases. It was also the second leading cause of cancer mortality in the state, accounting for 337 deaths.

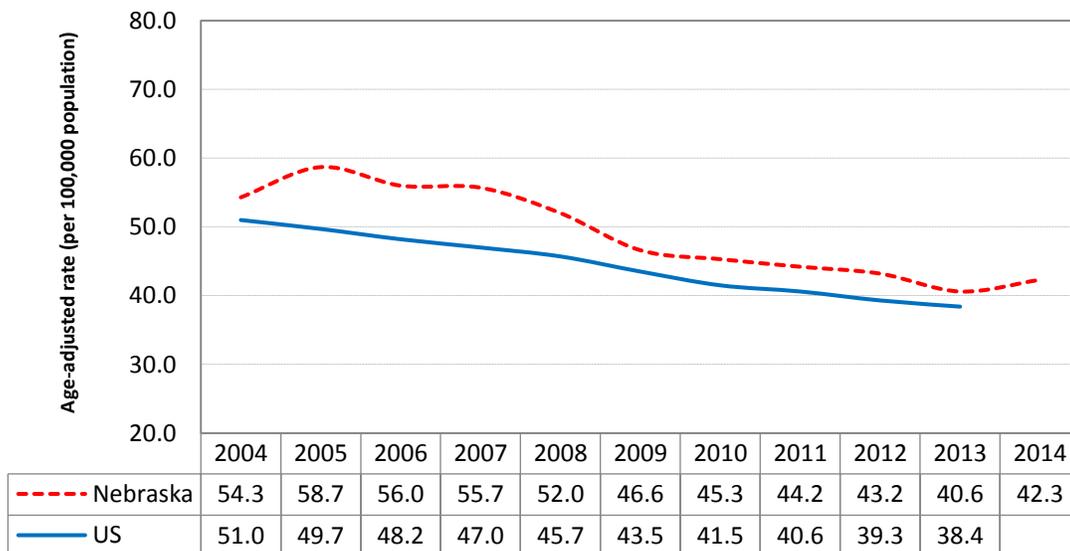
The risk of developing colorectal cancer increases with age. Almost two-thirds (62.8%) of all colorectal cancer cases that occurred in Nebraska during 2010-2014 were 65 or older at diagnosis. Other risk factors include a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, and certain hereditary colorectal cancer syndromes. Modifiable risk factors include physical inactivity, obesity, smoking, a high-fat diet (especially fat from animal sources), and heavy alcohol use.

Screening for asymptomatic polyps and tumors is known to prevent colorectal cancer cases and deaths, and there are a number of recommended test options. Among them include several types of stool tests, flexible sigmoidoscopy, colonoscopy, CT colonography (virtual colonoscopy), and double-contrast barium enema. Recommended frequency varies by type of test. For people of average risk without symptoms, the USPSTF recommends screening for those 50-75 years of age, while the ACS recommends screening for anyone 50 and older. However, people at increased risk (i.e., a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, or a family history of hereditary colorectal cancer syndromes) may be advised to begin screening before age 50 and/or be screened more often.

Maps on pages 49-50 present incidence and mortality rates for cancers of the colon & rectum by county of residence; county-specific statistics are also found in an appendix to this report ([Table 5A](#)).

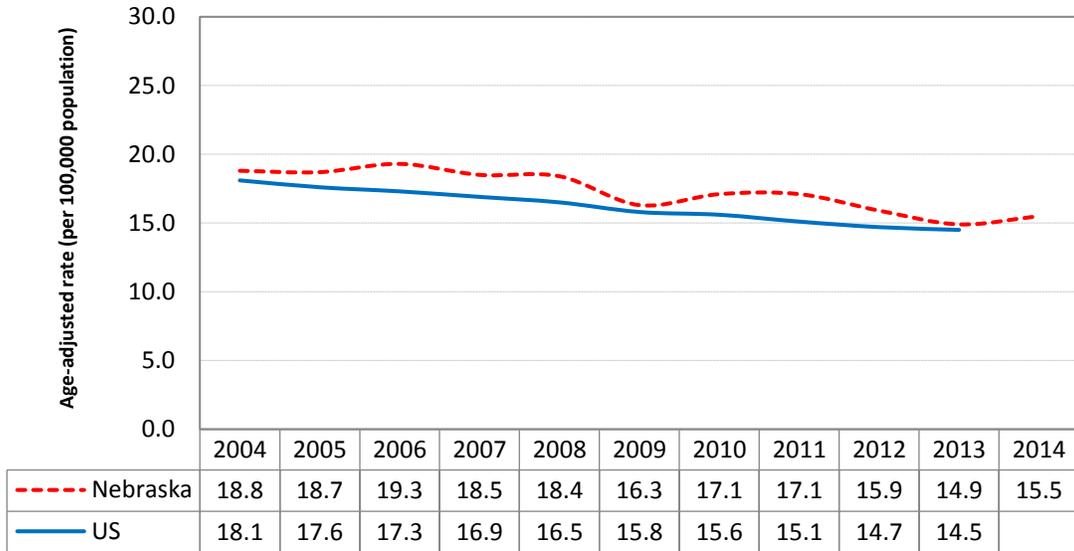
Colon and Rectum (Colorectal) Cancer

Incidence Rates, Nebraska & US (2004-2014)



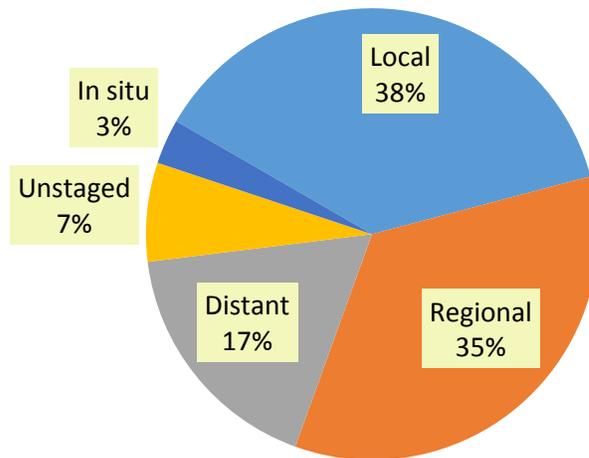
Colon and Rectum (Colorectal) Cancer

Mortality Rates, Nebraska & US (2004-2014)



Colon and Rectum (Colorectal) Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Prostate

With 1,106 diagnoses in 2014, prostate cancer was the most common cancer among Nebraska men, accounting for over 22% of all new cancers. During the past five years (2010-2014), it has also been the second leading cause of cancer deaths among Nebraska men, accounting for 914 deaths. Since the mid-1990s, prostate cancer death rates have declined substantially, both in Nebraska and throughout the United States.

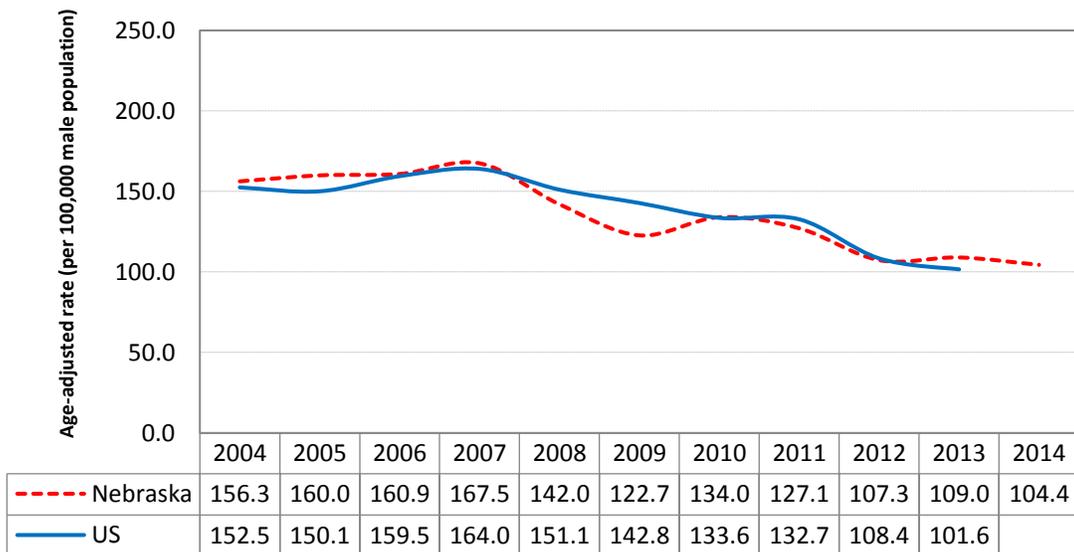
Little is known about what causes prostate cancer. Risk increases with age (about 59% of Nebraska men diagnosed with prostate cancer during 2010-2014 were 65 or older) and is significantly greater among African-Americans. During the past decade (2005-2014), the incidence of prostate cancer among African-American men in Nebraska has been 36% higher than among whites. Men with a close relative (father, brother, or son) who have had prostate cancer, especially at a young age, are also at increased risk.

Current ACS guidelines recommend that men make an informed decision with their health care provider about whether to be screened for prostate cancer. This discussion should begin at age 50 for men who are at average risk of prostate cancer and have a life expectancy of at least 10 years. This discussion should begin at age 45 for men at high risk (African-Americans and men with a father, brother, or son diagnosed with prostate cancer before age 65) and at age 40 for men of even higher risk (men with several first-degree relatives diagnosed before age 65). For men who choose to be screened, the ACS recommends the prostate-specific antigen (PSA) test with or without a digital rectal exam. By contrast, the USPSTF does not recommend screening for prostate cancer.

Maps on pages 51-52 present incidence and mortality rates for prostate cancer by county of residence; county-specific statistics are also found in an appendix to this report ([Table 6A](#)).

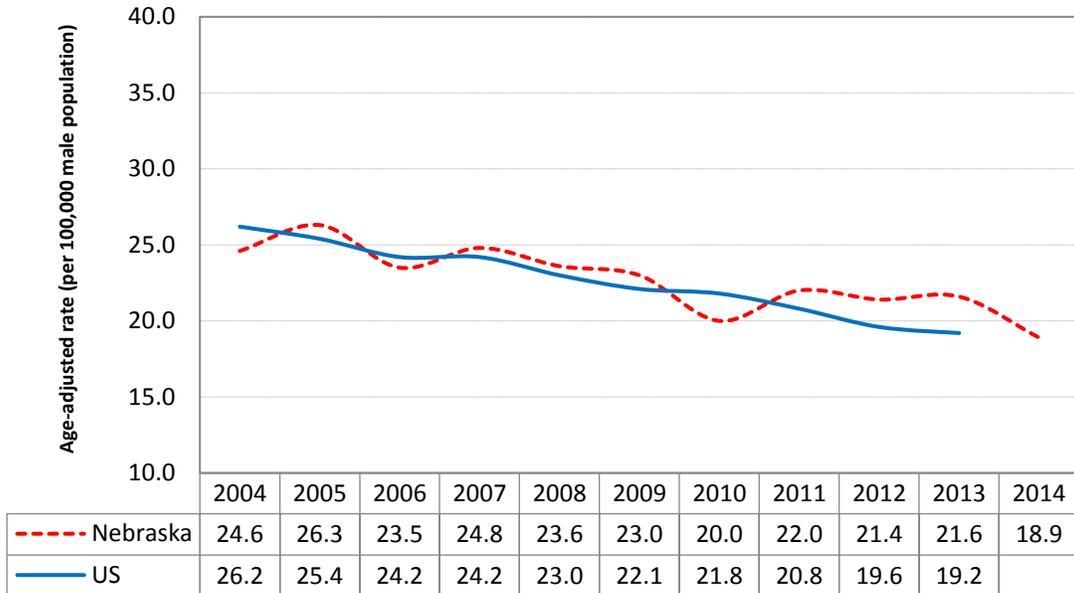
Prostate Cancer

Incidence Rates, Nebraska & US (2004-2014)



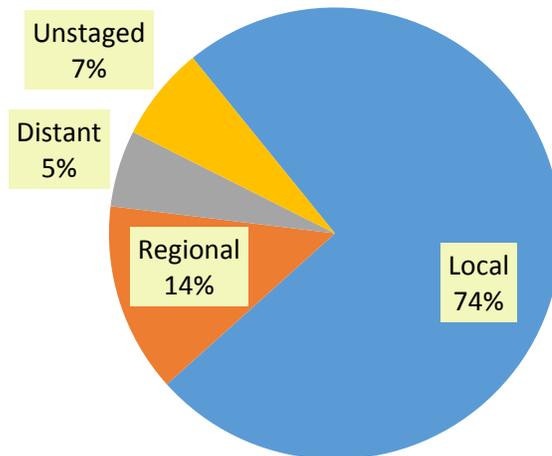
Prostate Cancer

Mortality Rates, Nebraska & US (2004-2014)



Prostate Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Urinary Bladder

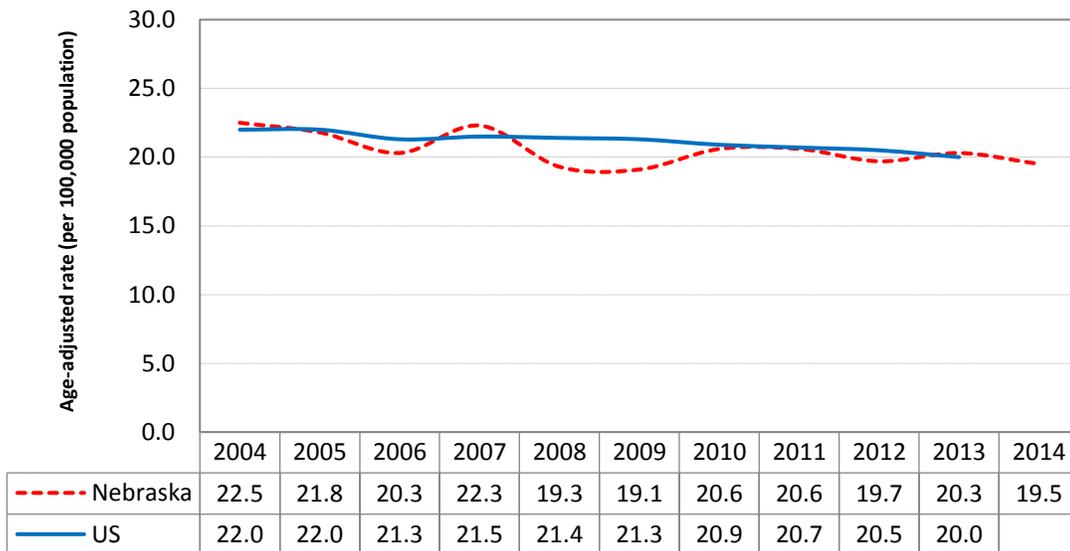
Between 2010 and 2014, 2,190 Nebraska residents were diagnosed with bladder cancer. Bladder cancer occurs much more frequently among men than women (by about a 3-to-1 ratio), and it now ranks as the fourth most common site of cancer diagnoses among Nebraska men. However, deaths from bladder cancer occur far less often (435 Nebraska residents died from it during 2010-2014), which is the result of a high percentage of early-stage diagnoses and the existence of effective treatments. Survival prospects have improved considerably in recent decades, to the point where the most current national data show that the five-year relative survival rate for all bladder cancer patients is about 80%.

Cigarette smoking is the most important known risk factor for bladder cancer. Smokers develop bladder cancer two to three times more often than non-smokers, and about one-third of all cases are attributable to smoking. Risk factors also include occupational exposures to certain chemicals used to make dyes (benzidine and beta-naphthylamine), as well as working in the manufacture of rubber and leather. Like most cancers, the risk of bladder cancer increases with age: 76% of the cases that occurred in Nebraska during 2010-2014 were at least 65 years old when diagnosed.

Maps on pages 53-54 present incidence and mortality rates for urinary bladder cancer by county of residence; county-specific statistics are also found in an appendix to this report ([Table 7A](#)).

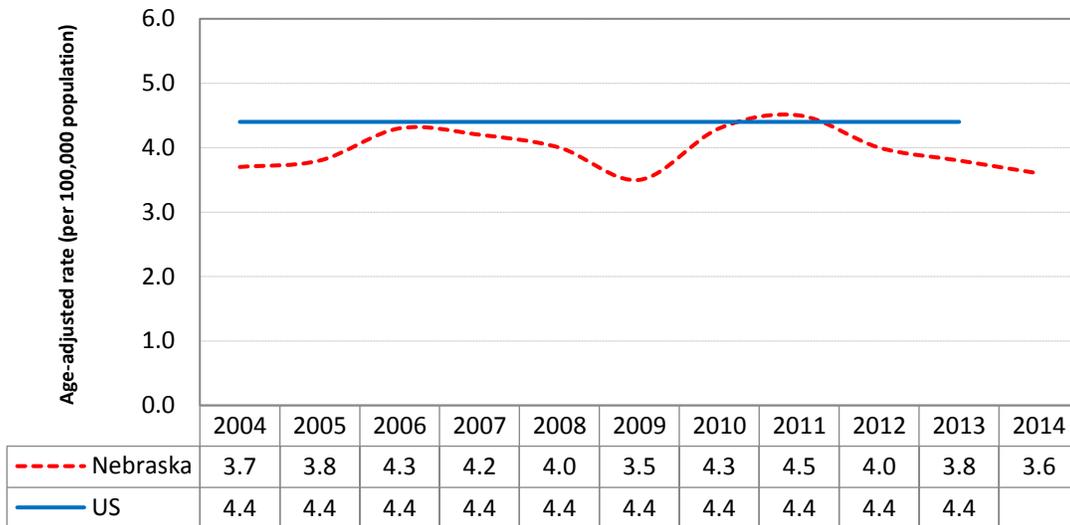
Urinary Bladder Cancer

Incidence Rates, Nebraska & US (2004-2014)



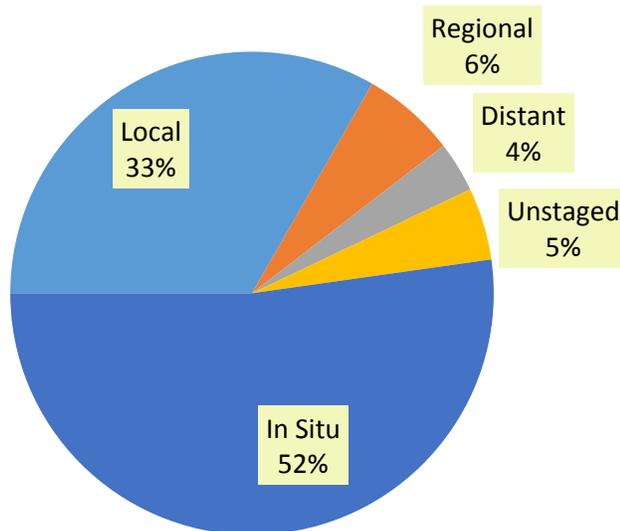
Urinary Bladder Cancer

Mortality Rates, Nebraska & US (2004-2014)



Urinary Bladder Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Non-Hodgkin Lymphoma

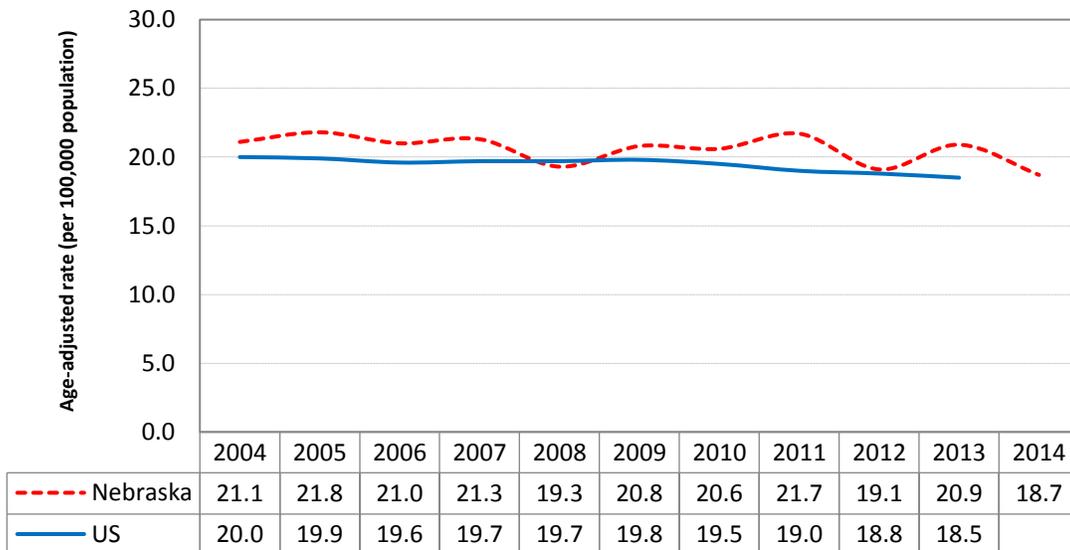
Lymphomas are cancers that affect the white blood cells of the immune system, and are usually classified as either Hodgkin or Non-Hodgkin lymphoma. Non-Hodgkin lymphoma is by far the more common disorder of the two, accounting for 2,112 diagnoses and 645 deaths among Nebraska residents between 2010 and 2014 (for Hodgkin lymphoma, the comparable figures are 267 diagnoses and 32 deaths). National statistics indicate that the incidence rate for Non-Hodgkin lymphoma has increased by about 80% since the mid-1970s, and some of this increase is related to the appearance of AIDS. However, both state and national data show that Non-Hodgkin lymphoma deaths have been increasing since at least 1950, which indicates that factors other than AIDS are also responsible.

The causes of Non-Hodgkin lymphoma are unknown, although there is evidence that viral exposures and reduced immune function are associated with the disease. People whose immune systems have been suppressed by drugs, particularly those who have received an organ transplant, are at high risk of Non-Hodgkin lymphoma, and it also occurs more frequently among people with congenital and acquired immunologic disorders, including AIDS. The increased incidence of the disease among people with congenital disorders of the immune system suggests that hereditary factors may increase risk. Some studies have found that occupational exposure to certain herbicides is a risk factor as well.

Maps on pages 55-56 present incidence and mortality rates for Non-Hodgkin lymphoma by county of residence; county-specific statistics are also found in an appendix to this report ([Table 8A](#)).

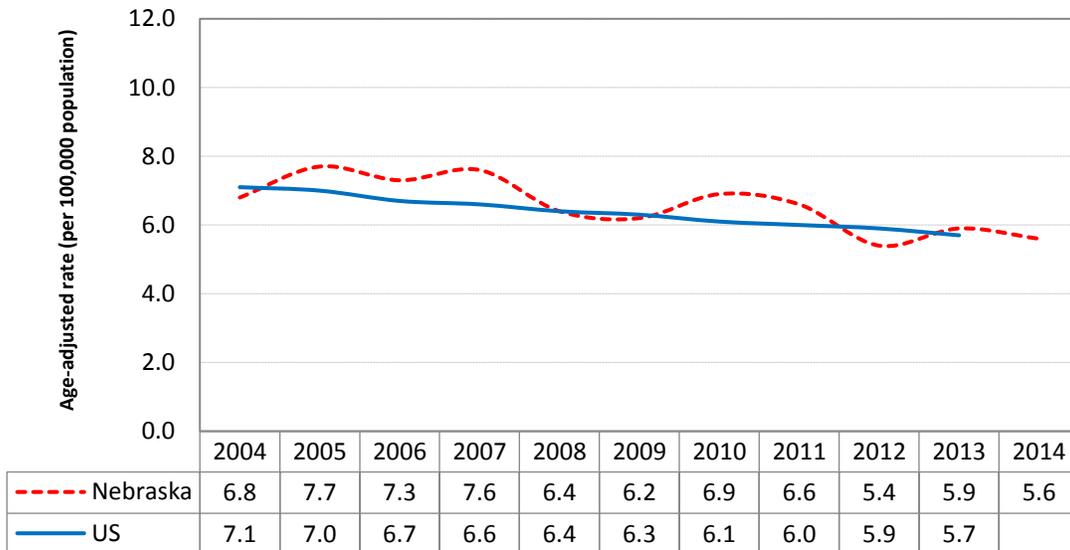
Non-Hodgkin Lymphoma

Incidence Rates, Nebraska & US (2004-2014)



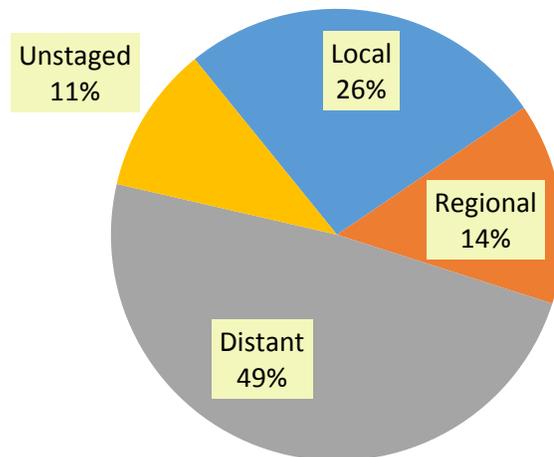
Non-Hodgkin Lymphoma

Mortality Rates, Nebraska & US (2004-2014)



Non-Hodgkin Lymphoma

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Leukemia

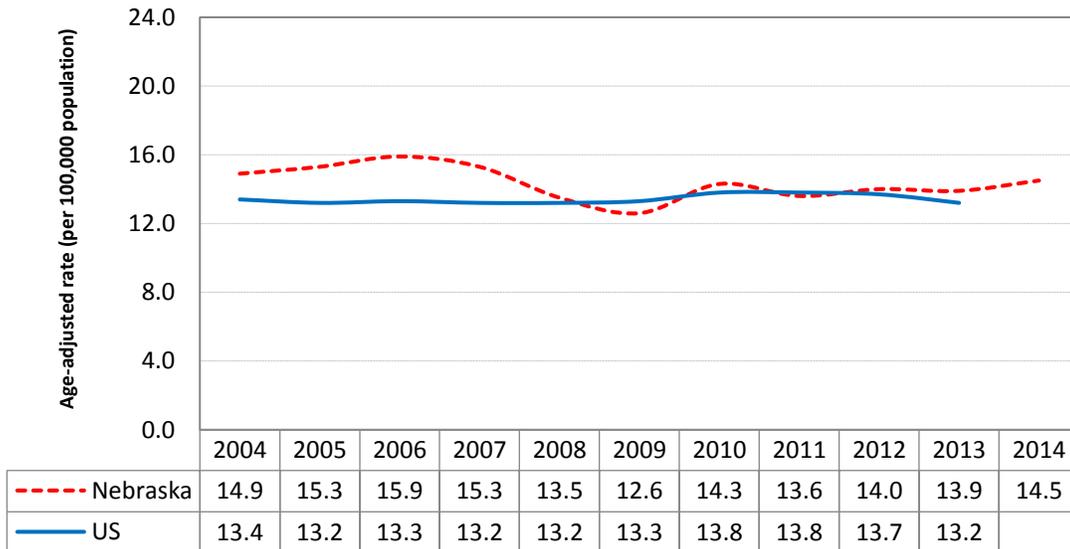
Between 2010 and 2014, leukemia accounted for 1,486 diagnoses and 738 deaths among Nebraska residents. Although leukemia is one of the most common types of cancer diagnosed among children and adolescents, over half (60%) of the leukemia cases that occurred in Nebraska between 2010 and 2014 were 65 years of age or older at diagnosis. There are many different types of leukemia: acute lymphocytic leukemia is the most frequently diagnosed among children, while acute myeloid and chronic lymphocytic are the most common types among adults. Survival times vary widely by type: overall, the relative five-year survival rate for all leukemia patients in the United States is over 60%.

The major causes of most types of leukemia are unknown. Nevertheless, several risk factors have been identified, and include genetic abnormalities (such as Down's syndrome), exposure to ionizing radiation, and workplace exposure to benzene and other related solvents. Adult T-cell leukemia is strongly associated with infection by a retrovirus, the human T-cell lymphotropic virus, type I (HTLV-I). Cigarette smoking is a risk factor for acute myeloid leukemia, while people who have a family history of chronic lymphocytic leukemia carry an increased risk of the disease themselves.

Maps on pages 57-58 present incidence and mortality rates for leukemia by county of residence; county-specific statistics are also found in an appendix to this report ([Table 9A](#)).

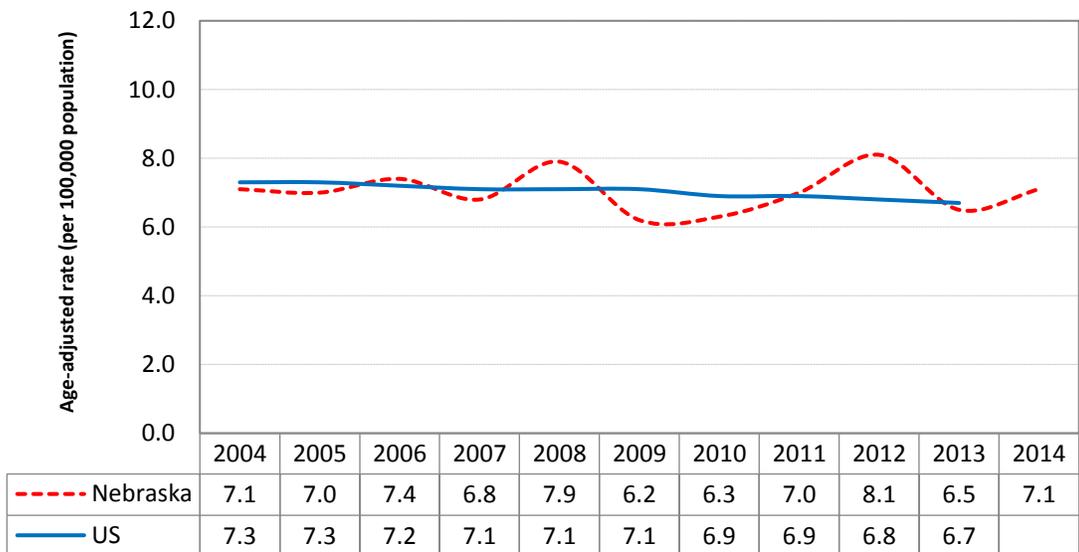
Leukemia

Incidence Rates, Nebraska & US (2004-2014)



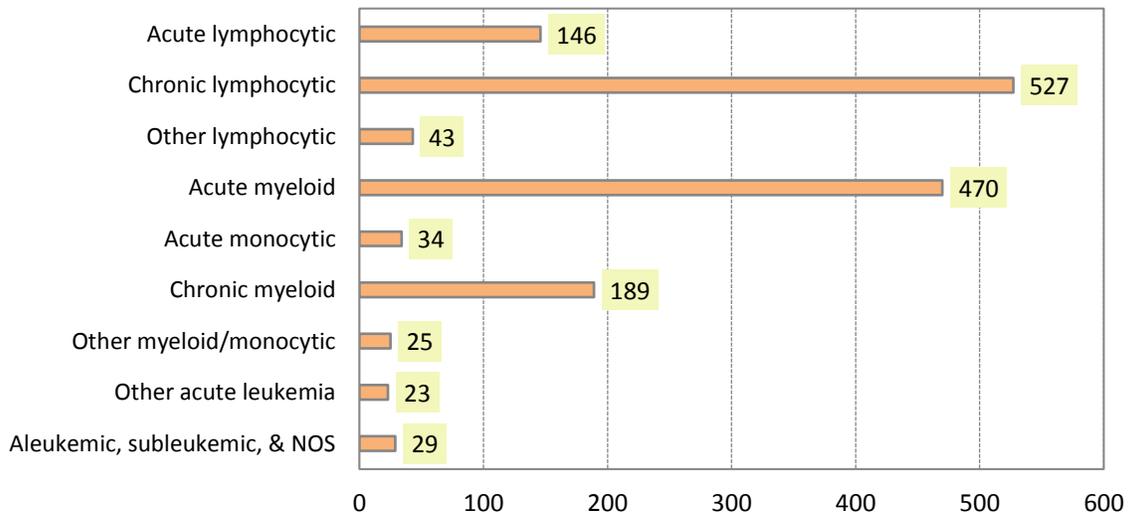
Leukemia

Mortality Rates, Nebraska & US (2004-2014)



Leukemia

Number of Cases by Histologic Type, Nebraska, 2010-2014



Abbreviation: NOS, not otherwise specified

Kidney and Renal Pelvis

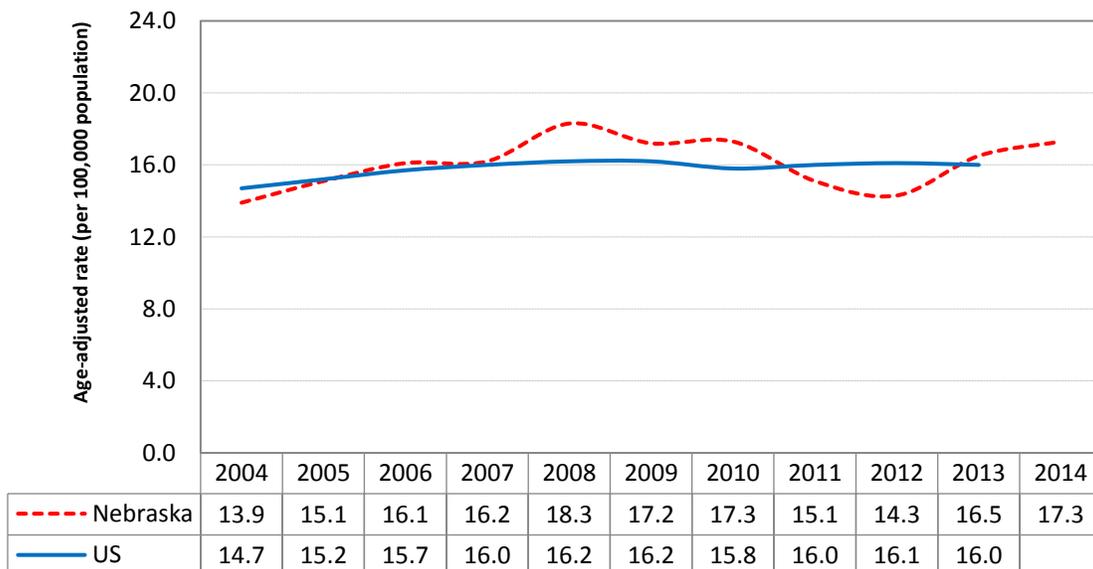
Cancers of the kidney and renal pelvis accounted for 1,730 diagnoses in Nebraska between 2010 and 2014, and also accounted for 474 deaths in Nebraska during the same years. State and national trends since 1990 show a significant increase in the rate of diagnosis of these cancers, but little change in the mortality rate. The chances of survival for people with kidney cancer are relatively high, with the most current national statistics showing that the five-year relative survival rate for cancers of the kidney and renal pelvis is now over 70%.

Preventable risk factors for cancer of the kidney include cigarette smoking and obesity. Current estimates indicate that cigarette smoking is responsible for about one-third of all kidney cancer deaths. Kidney cancer is more likely to strike at younger ages than most other types; in Nebraska, almost half (49.8%) of all cases that were diagnosed during 2010-2014 were under the age of 65. Other non-preventable risk factors for cancer of the kidney include a family history of kidney cancer and high blood pressure. However, since people with high blood pressure are often treated with drugs, it is unclear whether their increased risk is related to their high blood pressure or the drugs. Nevertheless, people who need drugs to lower their blood pressure should take them.

Maps on pages 59-60 present incidence and mortality rates for cancers of the kidney & renal pelvis by county of residence; county-specific statistics are also found in an appendix to this report ([Table 10A](#)).

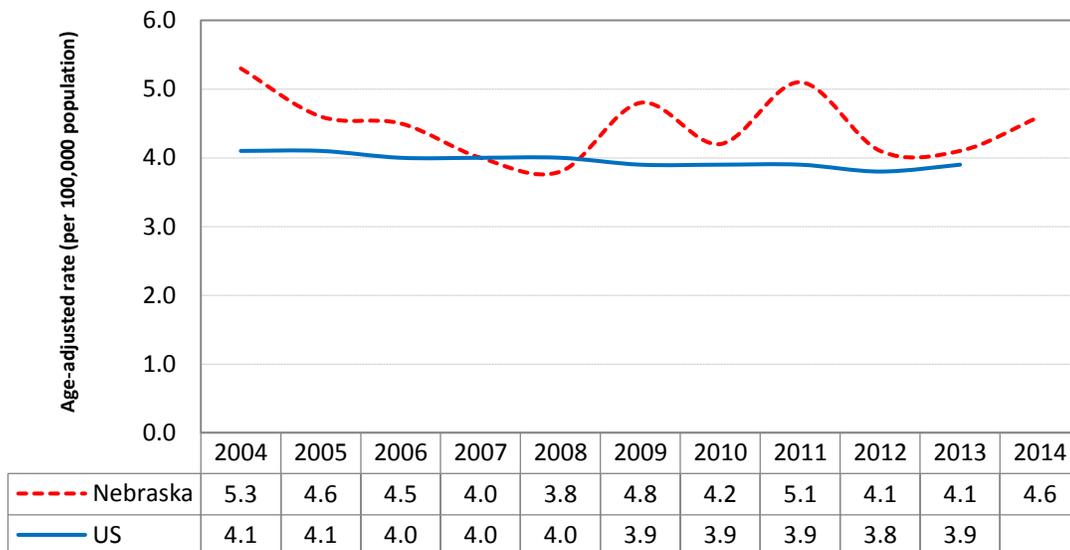
Kidney and Renal Pelvis Cancer

Incidence Rates, Nebraska & US (2004-2014)



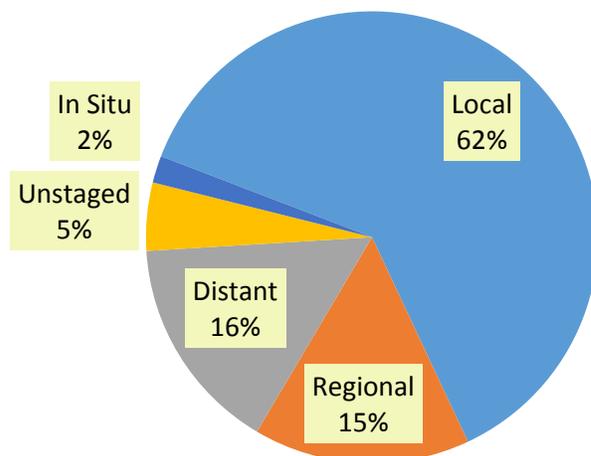
Kidney and Renal Pelvis Cancer

Mortality Rates, Nebraska & US (2004-2014)



Kidney and Renal Pelvis Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Melanoma of the Skin

There are several different types of skin cancer, but melanomas are the most serious. Nationally, melanomas comprise only about 5% of all skin cancer diagnoses but about 80% of all skin cancer deaths. In Nebraska, melanomas of the skin accounted for 2,064 diagnoses and 300 deaths between 2010 and 2014. The incidence of melanoma continues to increase significantly in Nebraska and throughout the United States. Because most melanomas are discovered early in their development and can be surgically removed, the relative five-year survival rate is now over 90%.

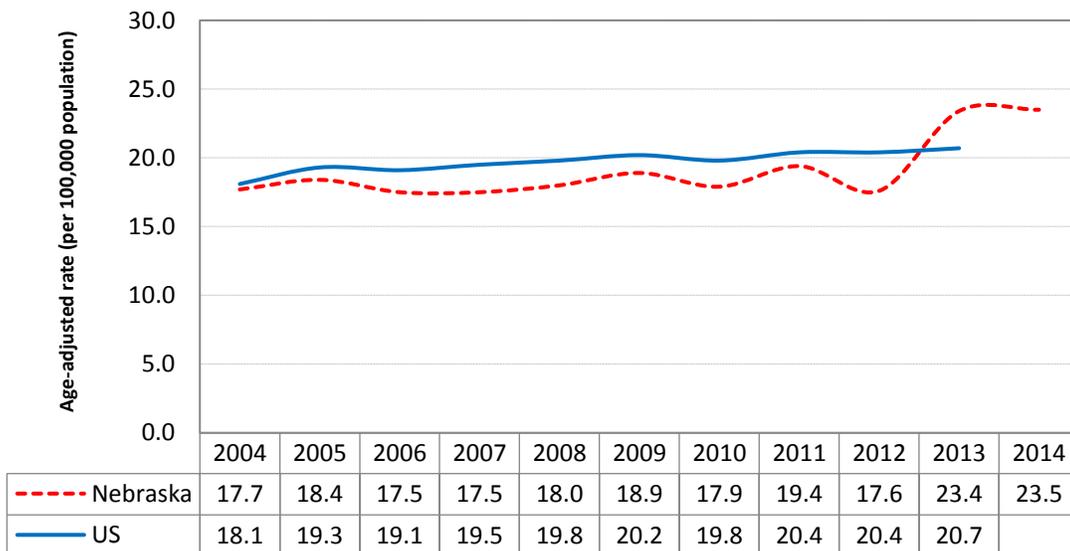
Melanoma is related to exposure to ultraviolet radiation (most of which comes from the sun), particularly exposures during childhood that resulted in severe sunburns. The risk of developing melanoma is particularly high among people with light skin. Sun exposure is not the only risk factor. Family history of melanoma and the presence of numerous dysplastic nevi (large moles with irregular coloration and shape) also increase a person's risk of the disease.

Skin melanomas are among the most preventable and treatable of all cancers. Wearing protective clothing and using sunscreen are the best methods for preventing the disease, and children in particular should have such protection. In addition, early detection can greatly reduce the risk of melanoma mortality. Recognition of changes in skin growths or the appearance of new growths is the best way to find melanomas early in their development. The ACS suggests that adults practice skin self-examination on a monthly basis, and that suspicious lesions should be evaluated promptly by a physician.

Maps on pages 61-62 present incidence and mortality rates for melanoma of the skin by county of residence; county-specific statistics are also found in an appendix to this report ([Table 11A](#)).

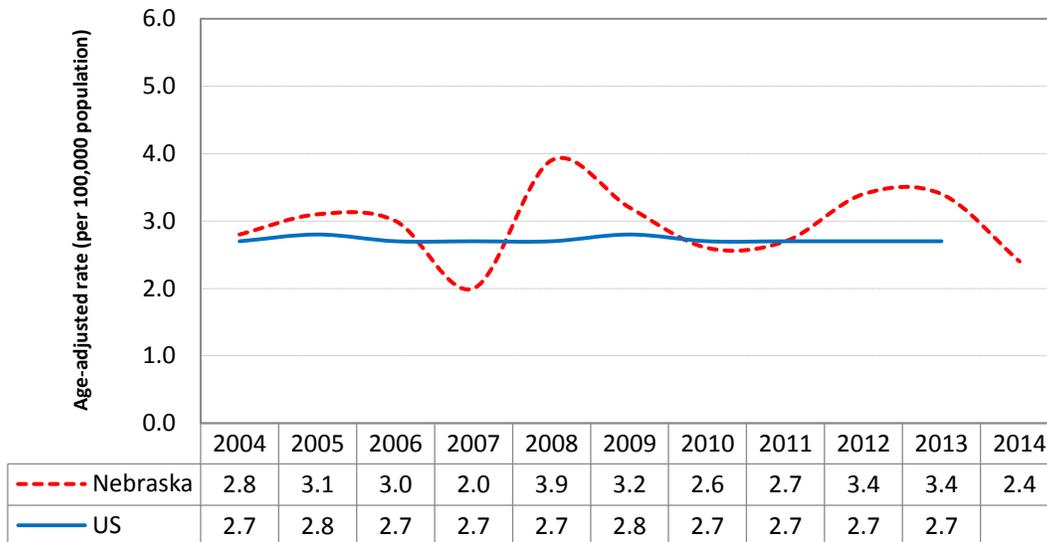
Melanoma of the Skin

Incidence Rates, Nebraska & US (2004-2014)



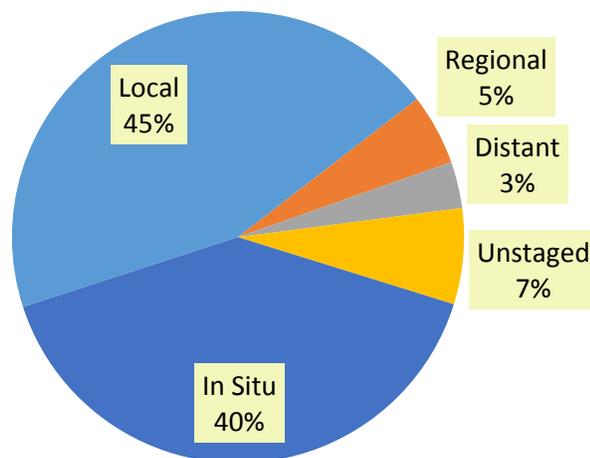
Melanoma of the Skin

Mortality Rates, Nebraska & US (2004-2014)



Melanoma of the Skin

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



Pancreas

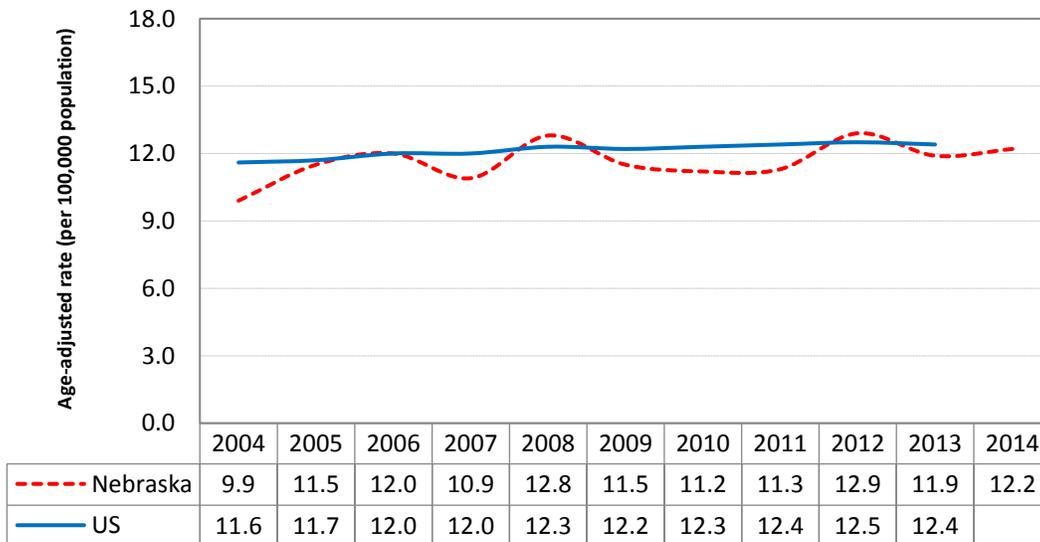
Between 2010 and 2014, cancer of the pancreas accounted for 1,252 diagnoses and 1,111 deaths among Nebraska residents. Risk for pancreatic cancer increases with age, and over two-thirds (68%) of Nebraskans diagnosed with the disease during 2010-2014 were 65 years of age or older. Both statewide and nationally, cancer of the pancreas is the fourth-leading cause of cancer deaths. Since it is most commonly diagnosed at an advanced stage, the survival rate is extremely poor compared to that of most other cancer types.

Preventable risk factors for cancer of the pancreas include cigarette smoking, which accounts for 20-30% of new cases, along with obesity and workplace exposure to certain chemicals used in the metalworking and dry cleaning industries. Non-preventable risk factors for cancer of the pancreas include certain inherited genetic syndromes, a family history of the disease, and health conditions that include diabetes, chronic pancreatitis, cirrhosis of the liver, and stomach infection caused by the bacteria *Helicobacter pylori*. Since the pancreas is deep inside the body and tumors are difficult to find early, there are no recommendations from the USPSTF, ACS, or any other medical professional organizations for routine screening for pancreatic cancer.

Maps on pages 63-64 present incidence and mortality rates for cancers of the pancreas by county of residence; county-specific statistics are also found in an appendix to this report ([Table 12A](#)).

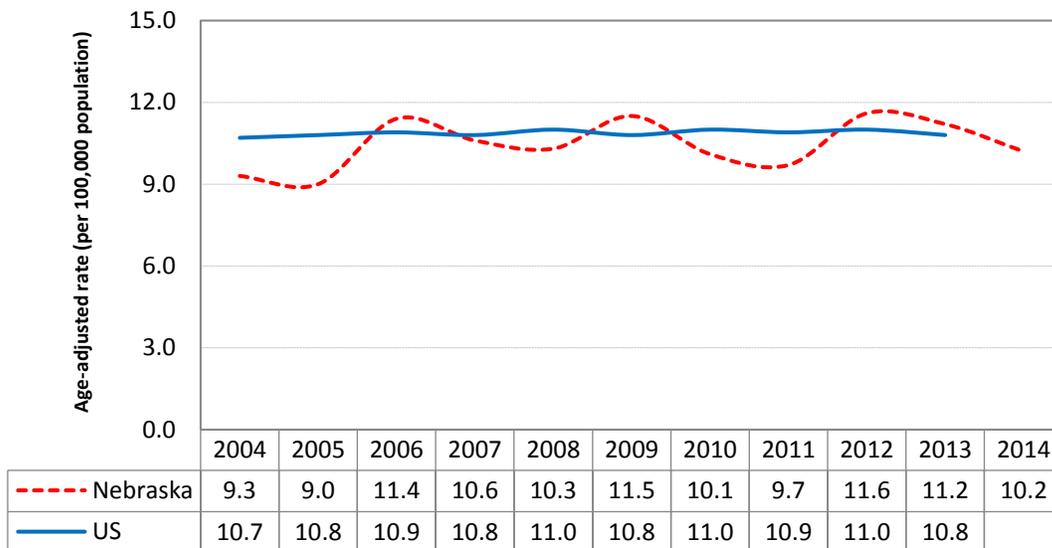
Pancreatic Cancer

Incidence Rates, Nebraska & US (2004-2014)



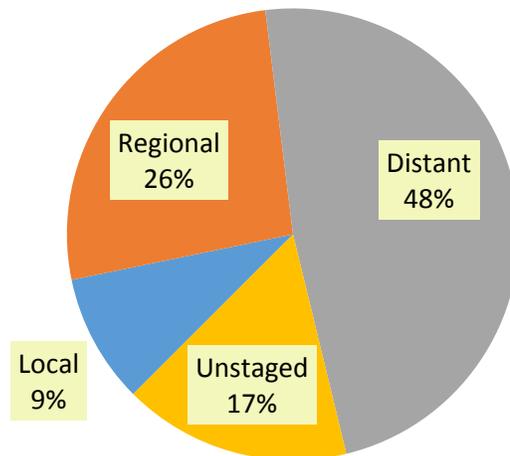
Pancreatic Cancer

Mortality Rates, Nebraska & US (2004-2014)



Pancreatic Cancer

Percentage of Cases, by Stage of Disease at Diagnosis
Nebraska, 2010-2014



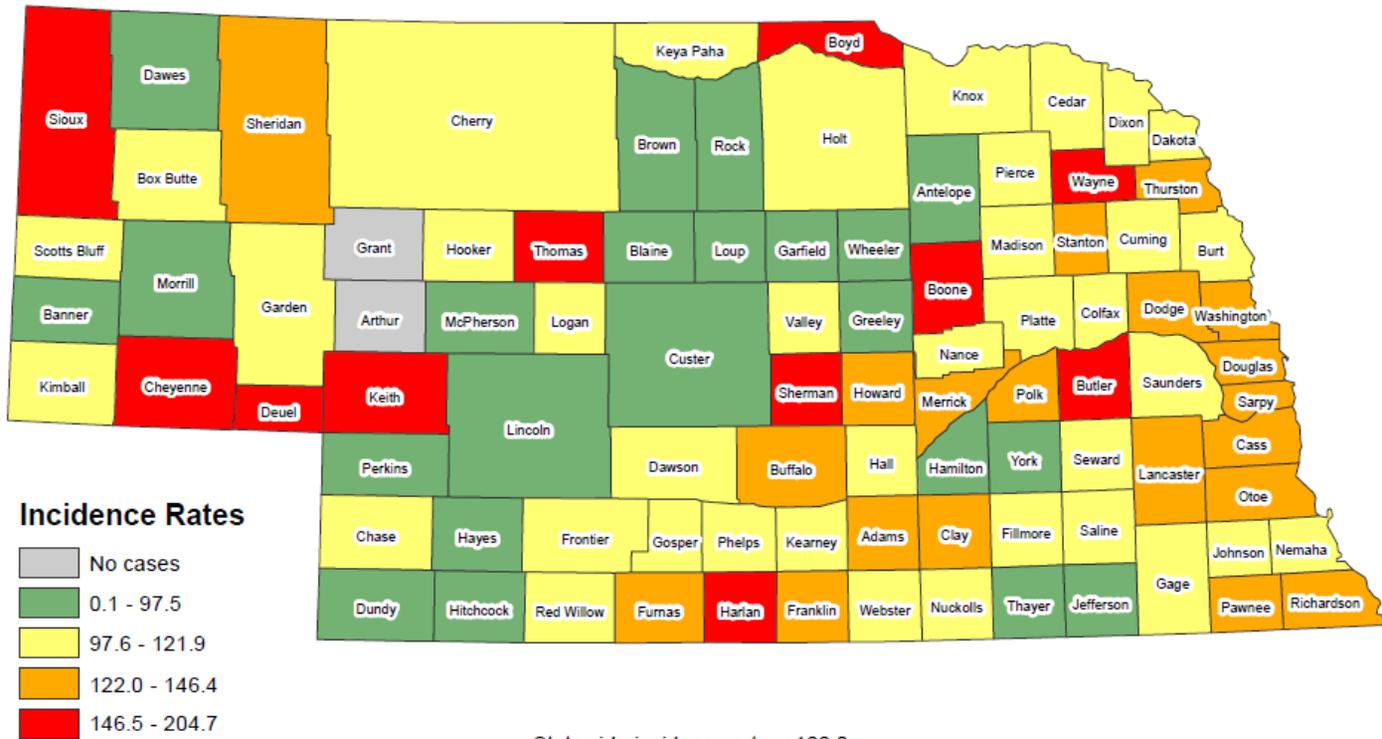
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INCIDENCE & MORTALITY RATE MAPS, FOR SELECTED PRIMARY SITES

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| Female breast | Incidence Mortality | 47 48 |
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| Prostate | Incidence Mortality | 51 52 |
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| Non-Hodgkin lymphoma | Incidence Mortality | 55 56 |
| Leukemia | Incidence Mortality | 57 58 |
| Kidney & renal pelvis | Incidence Mortality | 59 60 |
| Melanoma of the skin | Incidence Mortality | 61 62 |
| Pancreas | Incidence Mortality | 63 64 |

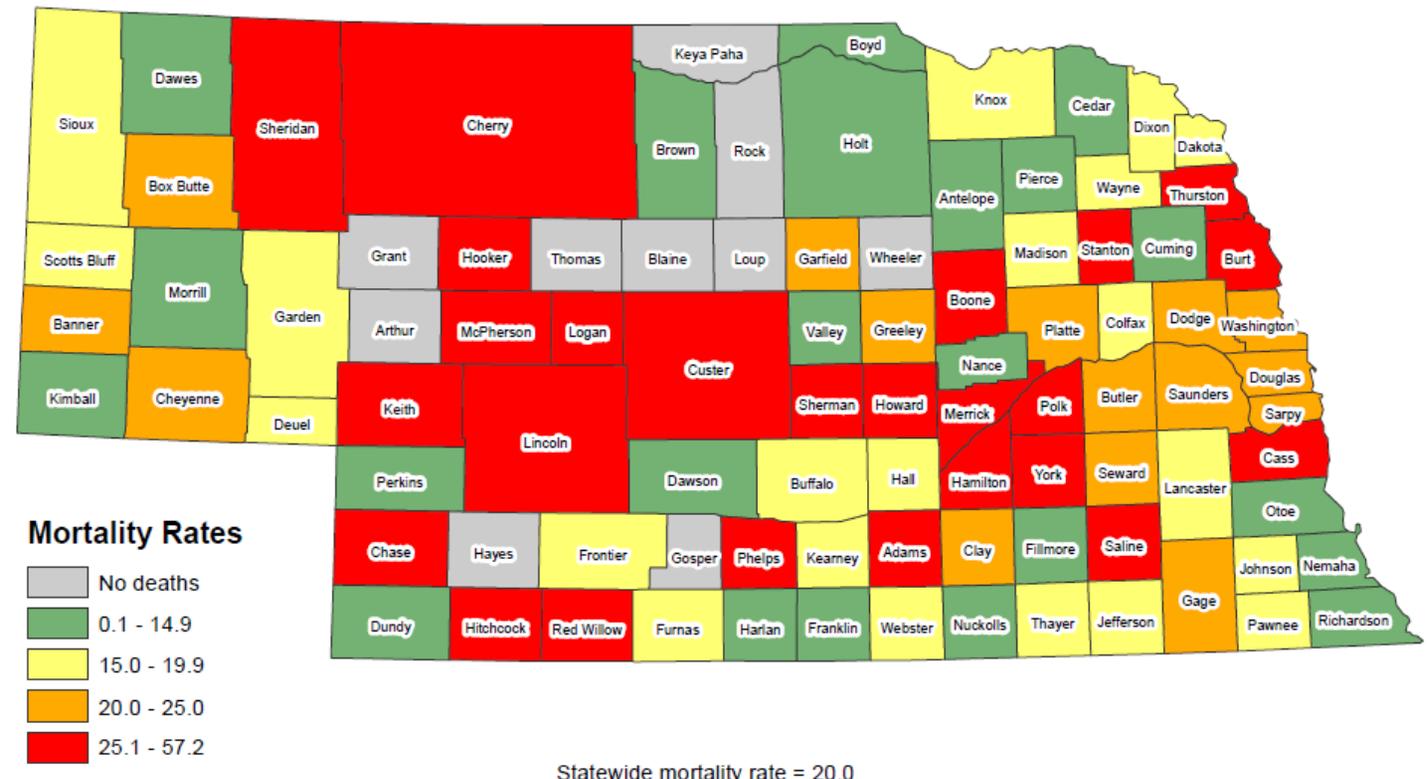
Female Breast Cancer Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

Rates are expressed as the average annual number of new cases per 100,000 female population, and are age-adjusted to the 2000 US population



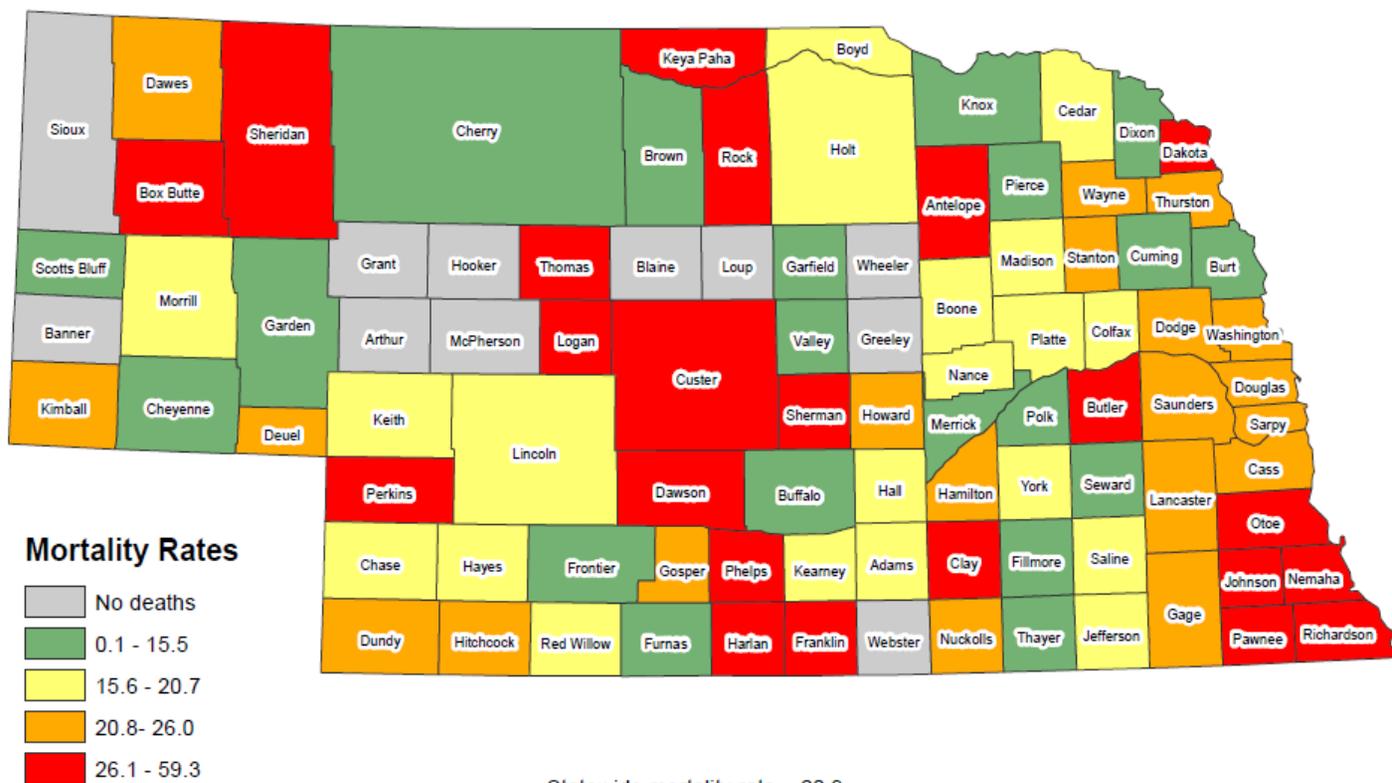
Female Breast Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 female population, and are age-adjusted to the 2000 US population



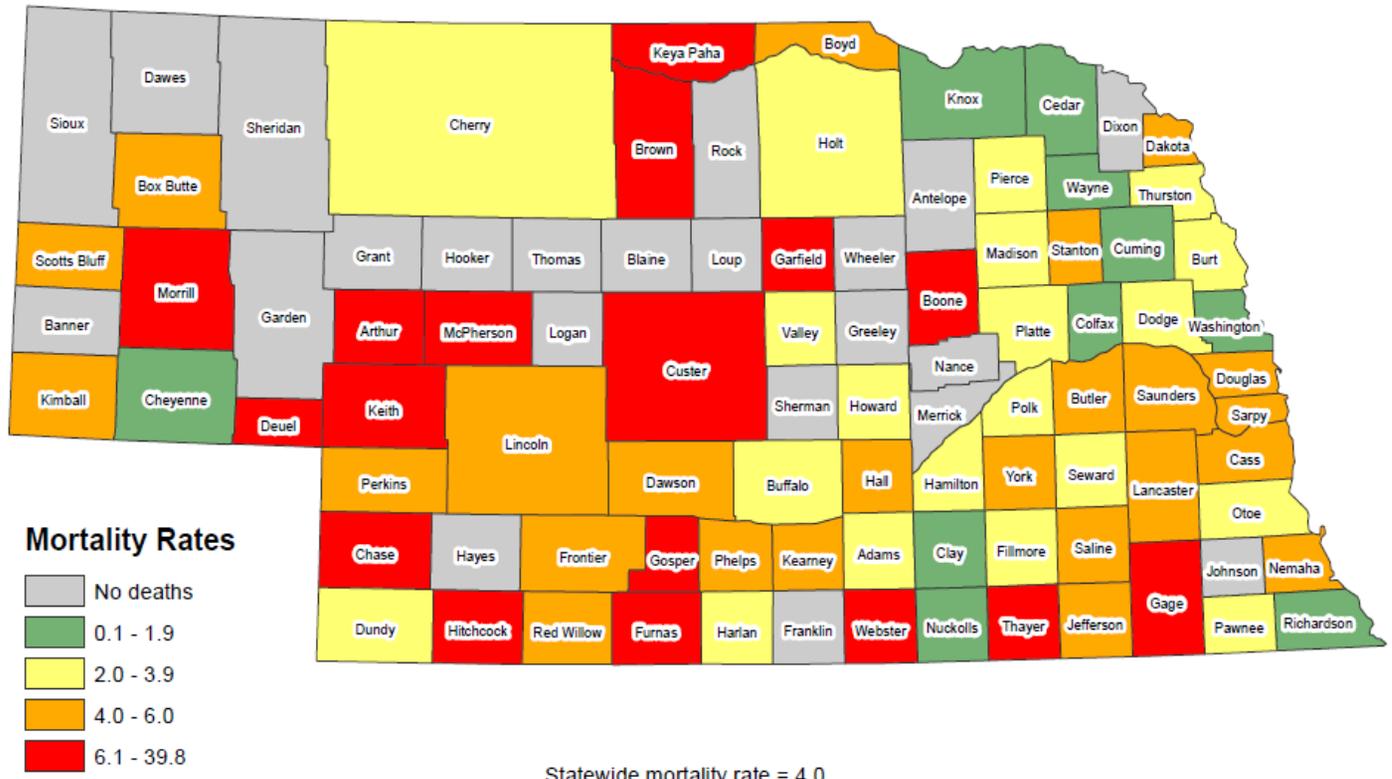
Prostate Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 male population, and are age-adjusted to the 2000 US population



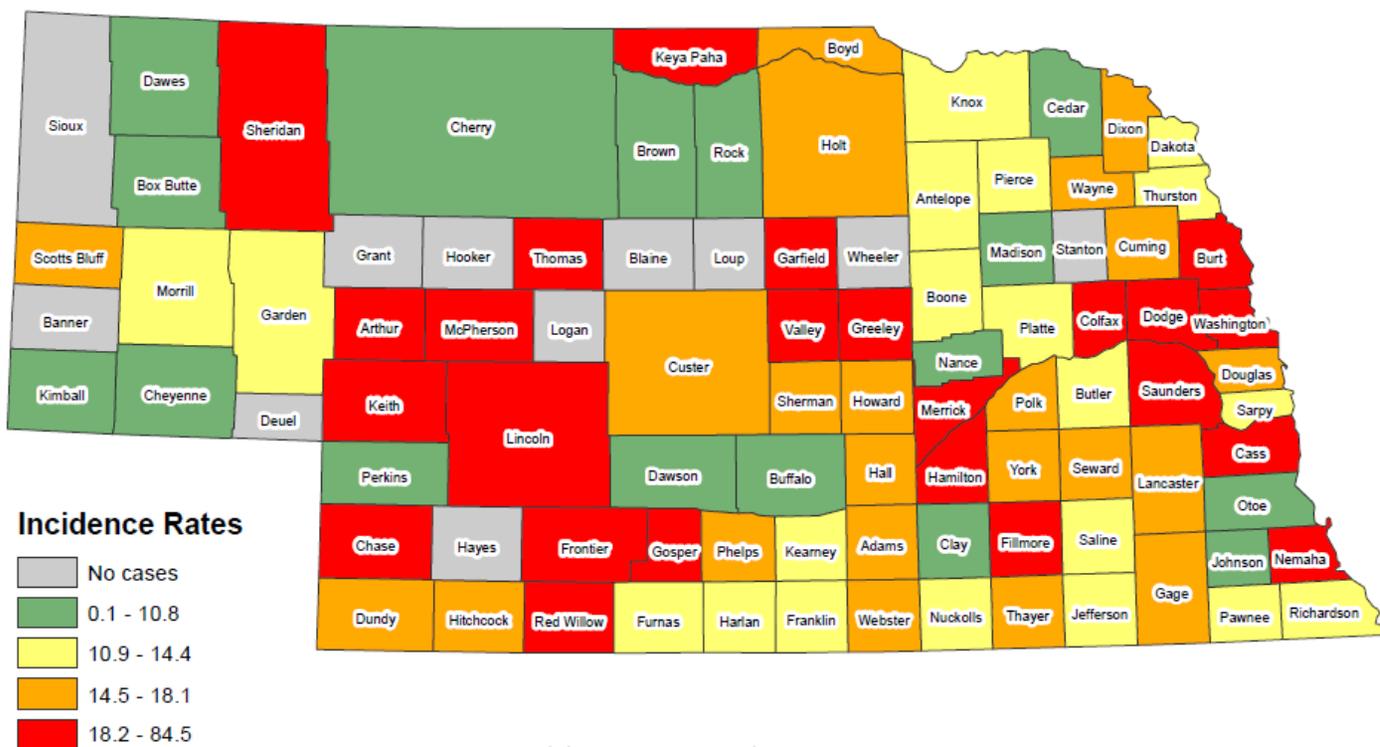
Urinary Bladder Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 population, and are age-adjusted to the 2000 US population



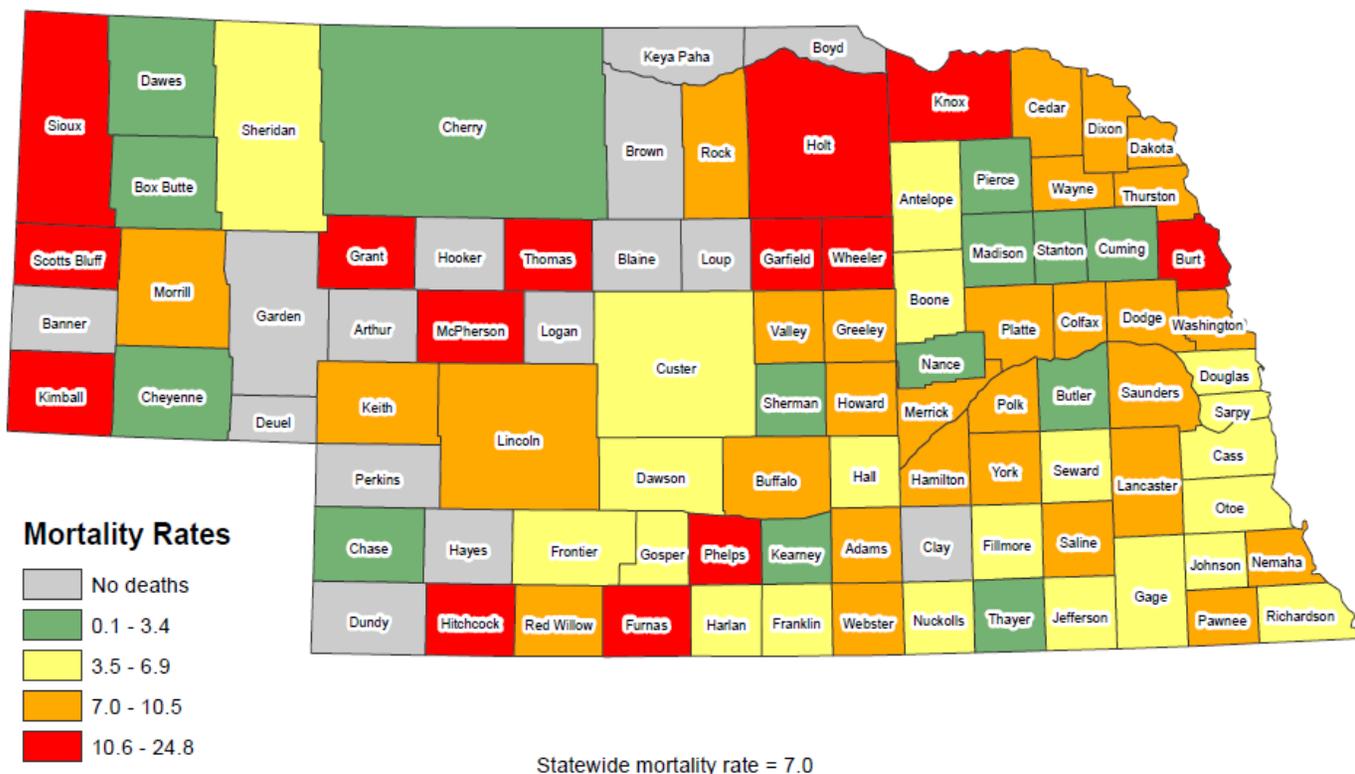
Leukemia Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

Rates are expressed as the average annual number of new cases per 100,000 population, and are age-adjusted to the 2000 US population



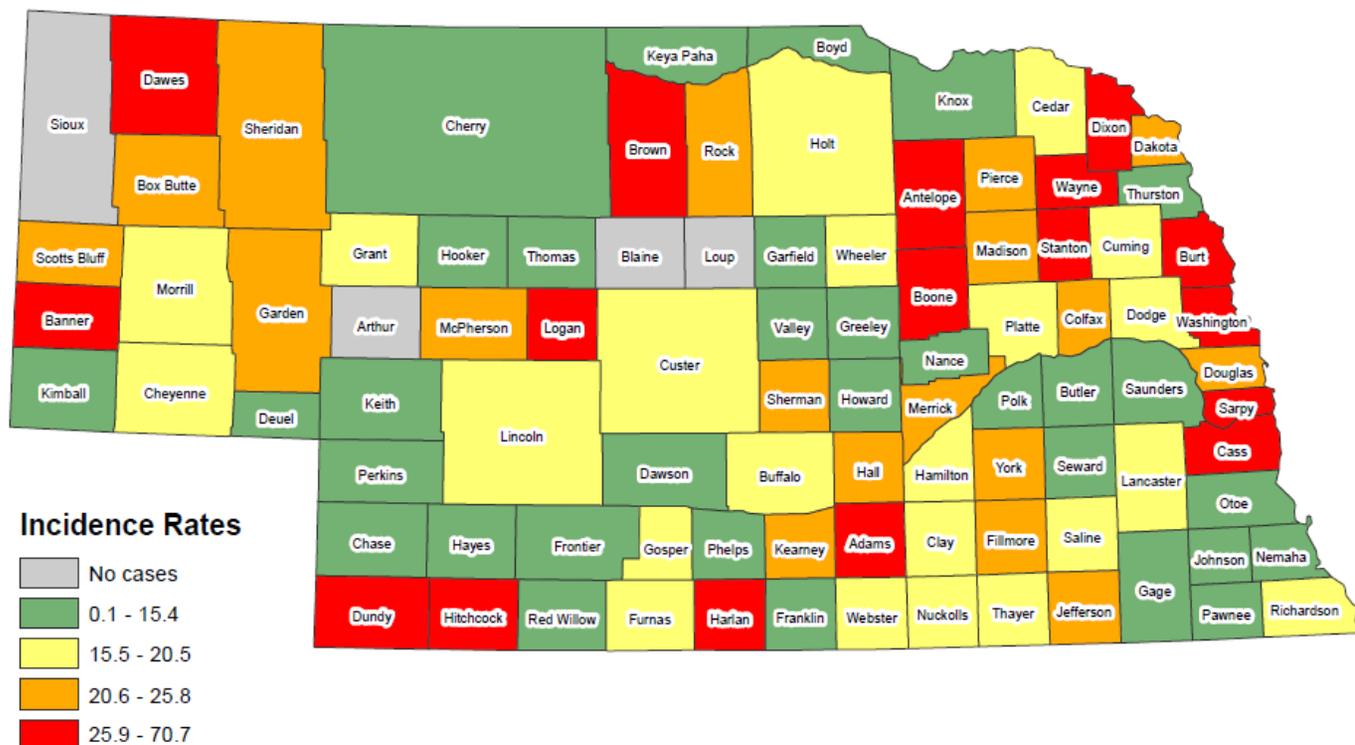
Leukemia Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 population, and are age-adjusted to the 2000 US population



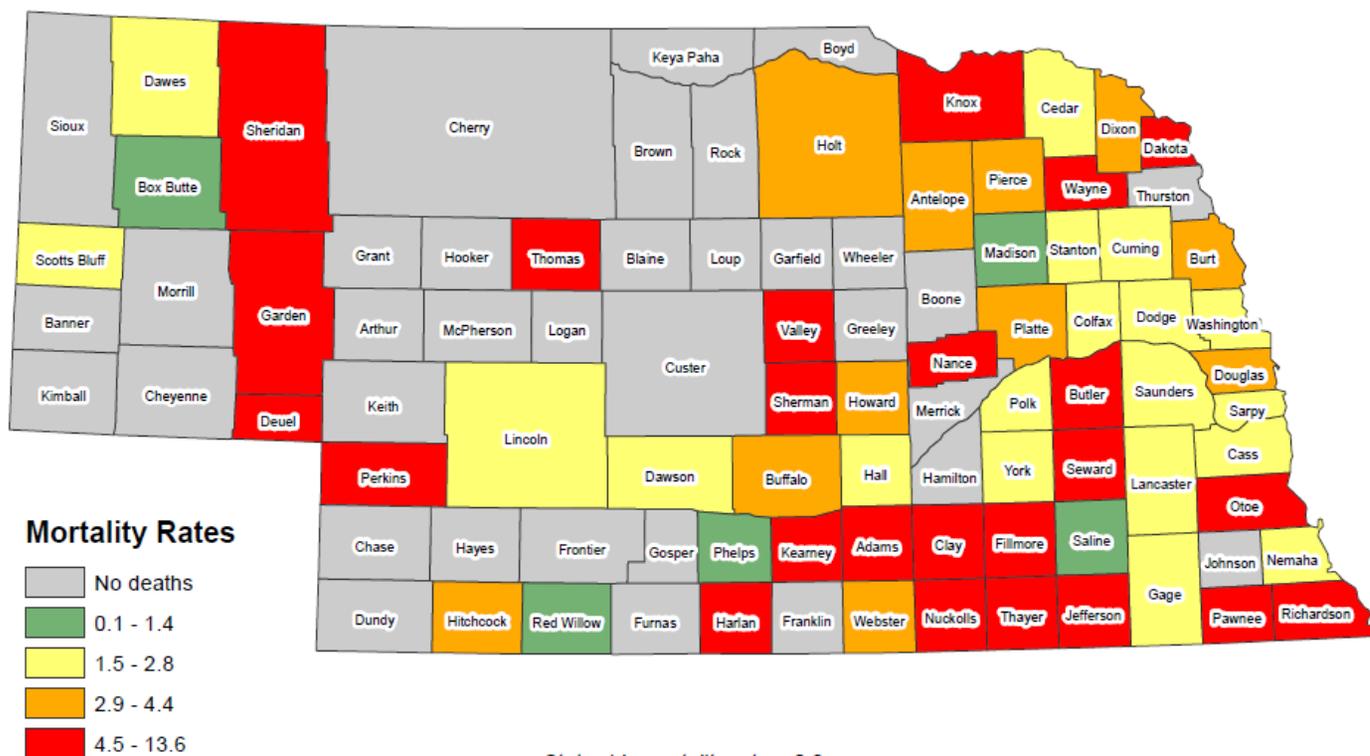
Melanoma of the Skin Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

Rates are expressed as the average annual number of new cases per 100,000 population, and are age-adjusted to the 2000 US population



Melanoma of the Skin Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

Rates are expressed as the average annual number of deaths per 100,000 population, and are age-adjusted to the 2000 US population



Statewide mortality rate = 2.9

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REPORTING FACILITIES

Ainsworth--Brown County Hospital
Albion--Boone County Health Center
Alliance--Box Butte General Hospital
Alma--Harlan County Health System
Atkinson--West Holt Memorial Hospital, Inc.
Auburn--Nemaha County Hospital
Aurora--Memorial Hospital
Bassett--Rock County Hospital
Beatrice--Beatrice Community Hospital & Health Center, Inc.
Benkelman--Dundy County Hospital
Blair--Memorial Community Hospital
Bridgeport--Morrill County Community Hospital
Broken Bow--Jennie Melham Memorial Medical Ctr.
Callaway--Callaway District Hospital
Cambridge--Tri Valley Health System
Central City--Litzenberg Memorial County Hospital
Chadron--Chadron Community Hospital & Health Services
Columbus--Columbus Community Hospital, Inc.
Cozad--Cozad Community Hospital
Creighton--Creighton Area Health Services
Crete--Crete Area Medical Center
David City--Butler County Health Care Center
Fairbury--Jefferson Community Health Center, Inc.
Falls City--Community Medical Center, Inc.
Franklin--Franklin County Memorial Hospital
Fremont--Fremont Area Medical Center
Friend--Warren Memorial Hospital
Geneva--Fillmore County Hospital
Genoa--Genoa Community Hospital/LTC
Gordon--Gordon Memorial Hospital District
Gothenburg--Gothenburg Memorial Hospital
Grand Island--CHI Health St. Francis
Grant--Perkins County Health Services
Hastings--Mary Lanning Memorial Hospital
Hebron--Thayer County Health Services
Henderson--Henderson Health Care Services
Holdrege--Phelps Memorial Health Center
Imperial--Chase County Community Hospital
Kearney--CHI Health Good Samaritan
Kearney--CHI Health Good Samaritan Pathology
Kimball--Kimball Health Services & Hospital
Lexington--Tri-County Area Hospital District
Lincoln--Bryan-LGH Medical Center East & West
Lincoln--CHI Health Saint Elizabeth
Lincoln--Pathology Medical Services
Lincoln--Williamsburg Radiation Center
Lincoln--CHI Health Nebraska Heart
Lincoln--UNMC College of Dentistry
Lynch--Niobrara Valley Hospital Corp.
McCook--Community Hospital
Minden--Kearney County Health Services
Nebraska City--CHI Health St. Mary's
Neligh--Antelope Memorial Hospital

Norfolk--Faith Regional Health Services East & West
North Platte--Great Plains Regional Medical Center
North Platte--Pathology Services
Oakland--Oakland Memorial Hospital
Ogallala--Ogallala Community Hospital
Omaha--CHI Health Bergan Mercy
Omaha--CHI Health Immanuel
Omaha--Children's Hospital
Omaha--VA Nebraska-Western Iowa Health Care System
Omaha--Methodist Hospital Pathology Center
Omaha--Nebraska Medical Center
Omaha--Nebraska Methodist Hospital
Omaha--CHI Health Creighton University Med. Ctr.
Omaha--Boys Town National Research Hospital
Omaha--CHI Health Lakeside
Omaha--CHI Health Bergan Mercy Pathology
Omaha--Bishop Clarkson Hospital Pathology
Omaha--Creighton Pathology Associates
Omaha--Physicians Lab
O'Neill--Avera St. Anthony's Hospital
Ord--Valley County Hospital
Osceola--Annie Jeffrey Memorial County Health Ctr.
Oshkosh--Garden County Health Services
Osmond--Osmond General Hospital
Papillion--CHI Health Midlands
Pawnee City--Pawnee County Memorial Hospital
Pender--Pender Community Hospital
Plainview--CHI Health Plainview
Red Cloud--Webster County Community Hospital
Schuyler--CHI Health Schuyler
Scottsbluff--Regional West Medical Center
Scottsbluff--Western Pathology Consultants
Seward--Memorial Hospital
Sidney--Memorial Health Center
St. Paul--Howard County Community Hospital
Superior--Brodstone Memorial Hospital
Syracuse--Community Memorial Hospital
Tecumseh--Johnson County Hospital
Tilden--Tilden Community Hospital
Valentine--Cherry County Hospital
Wahoo--Saunders County Health Services
Wayne--Providence Medical Center
West Point--St. Francis Memorial Hospital
Winnebago--USPHS Indian Hospital
York--York General Hospital

Other States:

Sioux City, IA--Mercy Medical Center

State cancer registries participating in the National Interstate Data Exchange Agreement, and the state cancer registries of Arizona, Illinois, Iowa, Kansas, Minnesota, Missouri, and South Dakota.

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