







TABLE OF CONTENTS

Executive Summary	
Methods	5
Incidence and Mortality	7
Cancer Staging and Survival	23
Breast Cancer	28
Lung and Bronchus Cancer	32
Prostate Cancer	36
Colorectal Cancer	40
Cancer Screening	44
HPV Vaccine	47
Risk Factors	48
Pediatric Cancer	50
Appendix	59
List of Acronyms	69

RECOMMENDED CITATION

Watanabe-Galloway S, Ratnapradipa KL, Li L, Robinson T, Rohde J, Luma LL, Carritt N, Zhang X, Liu Y, Wang X, Napit K, Ranta, J. Cancer Burden in Nebraska (2022). University of Nebraska Medical Center.

EXECUTIVE SUMMARY

The University of Nebraska Medical Center's Fred and Pamela Buffett Cancer Center (BCC) is located in Omaha, Nebraska. It is the only cancer center in Nebraska designated by the National Cancer Institute (NCI). The service catchment area for BCC is the entire state of Nebraska.

BCC's Office of Community Outreach and Engagement (OCOE) was formed to conduct cancer prevention and control activities in collaboration with community partners "to reduce the cancer burden, promote health equity, and eliminate cancer health disparities in Nebraska." One such effort is a statewide Community Cancer Needs Assessment (CCNA). The CCNA results will guide the development and implementation of strategies to improve Nebraska's health as it relates to cancer. This report, *Cancer Burden in Nebraska*, is part of the overall CCNA.

OCOE partnered with the Nebraska Cancer Coalition (NC2) and the Nebraska Comprehensive Cancer Control Program (NE CCCP) to analyze existing data from several sources. The purpose of the report is to present the most recent statistics that show the burden of cancer in Nebraska, along with selected cancer screening and risk factor information. Our intent was to compile a comprehensive look at the most common types of cancer in the state in order to help set priorities and shape planning outreach, prevention, and control efforts. A second aim was to identify disparities in cancer and cancer risk factors by race/ethnicity and geography.

The main findings from the needs assessment are as follows:

Summary

- Nebraskans are at higher risk of developing cancer than the overall U.S. population. In 2022, more than 11,000 new cancer cases and more than 3,500 cancer deaths are expected among Nebraskans.
- The most common types of cancers in Nebraska are female breast, prostate, lung, and colorectal cancers. The most common cancer-related causes of death are lung, colorectal, and pancreatic cancers.

Incidence (New Cases) Comparison

The following cancer incidence rates are significantly higher in Nebraska compared to the United States:

- Brain and other nervous system cancer in females
- Breast cancer in females
- Colon and rectum cancer in males and females
- Kidney cancer in males
- Melanoma skin cancer in males and females
- Prostate cancer in males
- Thyroid cancer in females

Mortality Comparison

The following cancer mortality rates are significantly higher in Nebraska compared to the United States:

- Esophageal cancer in males
- Kidney cancer in males
- Leukemia in males

Cancer Disparities

Nebraskans experience cancer health disparities in the following areas:

- The breast cancer mortality rate was significantly higher among African American women compared to non-Hispanic White women in both Nebraska and the United States.
- The prostate cancer incidence and mortality rates were significantly higher among African American persons compared to non-Hispanic White persons in both Nebraska and the United States.
- In Nebraska, the proportion of Hispanic persons up to date on colorectal cancer screening (46.7%) was significantly lower than the proportion of non-Hispanic White persons who were up to date (74.7%).
- In Nebraska, the proportion of adults who currently smoke was significantly higher among African American persons (22.0%) and American Indian/Alaska Native persons (35.4%) compared to non-Hispanic White persons (14.9%).
- In Nebraska, the proportion of adults with obesity was significantly higher among African American persons (41.1%) and American Indian/Alaska Native persons (41.0%) compared to non-Hispanic White persons (33.1%).

Pediatric Cancer

- Pediatric cancer is defined as any cancer that is diagnosed in individuals ages 18 and younger. From 2009 to 2018, there were 966 cases of pediatric cancer in Nebraska. From 2008 to 2017, there were 153,789 cases of pediatric cancer in the United States.
- Among non-Hispanic White persons, the pediatric cancer mortality rate in Nebraska was significantly higher (3.1 deaths per 100,000 population) than the U.S. rate (2.4 deaths per 100,000 population).

METHODS

Data Sources

This report used the most recent data available through the American Cancer Society (ACS), NCI State Cancer Profile, Nebraska Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), and the Surveillance, Epidemiology, and End Results (SEER) Program.

For Behavioral Risk Factor Surveillance System (BRFSS) data, we used the following CDC tools:

- Prevalence and Trends Data: https://www.cdc.gov/brfss/brfssprevalence/index.html.
- Web Enabled Analysis Tool: https://nccd.cdc.gov/weat/#/analysis

Minimum Number for Reporting

In order to protect individuals' identities, information is not reported when the number of cancer cases or deaths is fewer than five. Prevalence estimates for BRFSS data are not available if the unweighted sample size for the denominator was < 50 or the Relative Standard Error (RSE) is > 0.3 or if the state did not collect data for that calendar year.

Definitions

1. Using a 95% confidence interval. Even with the best collection efforts, data can be missing or incorrect. Therefore, all reported statistics are considered to be "estimates" (best educated guesses). We use 95% confidence intervals to show the range of numbers that we are confident best reflects the most accurate data. For example, if the 95% confidence interval for the cancer incidence rate was 23 per 100,000 to 40 per 100,000, that means we are 95% confident that the truth is somewhere between those intervals.

You can find more information here: https://www.simplypsychology.org/confidence-interval.html

2. **Age-adjusted rate.** Different population groups have different age distributions. For example, the percentage of individuals who are 65 and older in California is smaller than in Nebraska (14.8% and 16.2%, respectively). Because the risk of developing and/or dying from cancer is higher among older individuals, when we compare cancer rates, it is necessary to "adjust" for age. By using age-adjusted rates, we can compare two populations with different age distributions.

You can find more information here: https://seer.cancer.gov/seerstat/tutorials/aarates/definition.html

3. Cancer incidence refers to new cases of cancer.

You can find more information here: https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section2.html 4. **Cancer incidence rate** is calculated by dividing the number of new cancer cases (incidence) by the number of individuals in that particular population. For example, the cancer incidence rate of 125 per 100,000 population means that out of 100,000 people, there were 125 new cancer cases.

You can find more information here: https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section2.html

5. Cancer mortality (death) rate is calculated by dividing the number of cancer deaths by the number of individuals in that particular population. It is often shown as a rate per 100,000 people. For example, a cancer mortality rate of 50 per 100,000 people means that out of 100,000 people, there were 50 cancer deaths.

You can find more information here: https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section3.html

6. Cancer relative survival describes the excess deaths among a group with cancer compared to a group without cancer. By comparing relative survival rates, the cancer relative survival rate accounts for other causes of death to see if cancer shortens life.

You can find more information here: https://www.sciencedirect.com/topics/medicine-and-dentistry/relative-survival

7. **Preclinical stage of a disease** is the period of time when an individual is not yet experiencing symptoms, but the disease is biologically present in the body.

You can find more information here: https://sk.sagepub.com/reference/epidemiology/n362.xml

8. **Statistical significance** is the "measure of probability of the null hypothesis being true compared to the acceptable level of uncertainty regarding the true answer."

You can find more information here: https://pubmed.ncbi.nlm.nih.gov/29083828/

INCIDENCE AND MORTALITY

Incidence: New Cases of Cancer

Figure 1 shows the expected number of new cancer cases in Nebraska in 2022 by cancer type, as projected by ACS. We expect a total of 11,280 new cancer cases among Nebraskans in 2022, of which breast, prostate, lung, and colorectal cancers are the most common.

Prostate 1,680 Female breast 1,600 Lung and bronchus 1,330 Colon and rectum 960 Melanoma (skin) 630 Urinary bladder Non-Hodgkin lymphoma 460 Kidney and renal pelvis Leukemia 380 Uterine corpus 360 Pancreas 330 Oral cavity and pharynx 330 Thyroid 240 Myeloma 160 Liver and intrahepatic bile duct 150 Brain and other nervous system 150 Esophagus 130 Stomach 120 Ovary 100 Uterine cervix Larynx 70 Testis 60 Hodgkin lymphoma 60 200 400 600 800 1,000 1,200 1.800 1,400 1,600

Figure 1. Estimated number of new cancer cases: Nebraska, 2022

Source: ACS, 2022. https://cancerstatisticscenter.cancer.org/#!/state/Nebraska

Mortality: Cancer Deaths

Figure 2 shows the expected number of cancer deaths in Nebraska in 2022 by cancer type projected by ACS. We expect 3,550 cancer deaths among Nebraskans in 2022. Deaths from lung, colorectal, pancreatic, and breast cancer are the most common.

Lung and bronchus 670 Colon and rectum 320 Pancreas 290 Female breast 250 Prostate Leukemia 170 Brain and other nervous system 120 Esophagus 120 Non-Hodgkin lymphoma 110 Kidney and renal pelvis 110 Urinary bladder 100 Liver and intrahepatic bile duct 100 Ovary 70 Oral cavity and pharynx Melanoma (skin) Uterine corpus 60 Myeloma Stomach 50 Thyroid 50 100 200 300 400 500 600 700 800

Figure 2. Estimated number of cancer deaths: Nebraska, 2022

Source: ACS, 2022. https://cancerstatisticscenter.cancer.org/#!/state/Nebraska

Cancer Incidence Rate: The Rate of New Cancer Cases

The cancer incidence rate, calculated by dividing the number of new cancer cases by the population size, is further adjusted to account for different age distributions across different population groups. For example, age-adjusted rates are used to compare the Nebraska incidence rate to the U.S. overall incidence rate.

Figures 3 and 4 show age-adjusted incidence rates in Nebraska and the United States among males and females. More detailed data can be found in Appendix Tables A.1 and A.2.

Overall Cancer Incidence Rates

- Nebraskans are at higher risk of developing cancer than the overall U.S. population.
- Males are at higher risk of developing cancer both in Nebraska and the United States.

Specific Cancer Incidence Rates

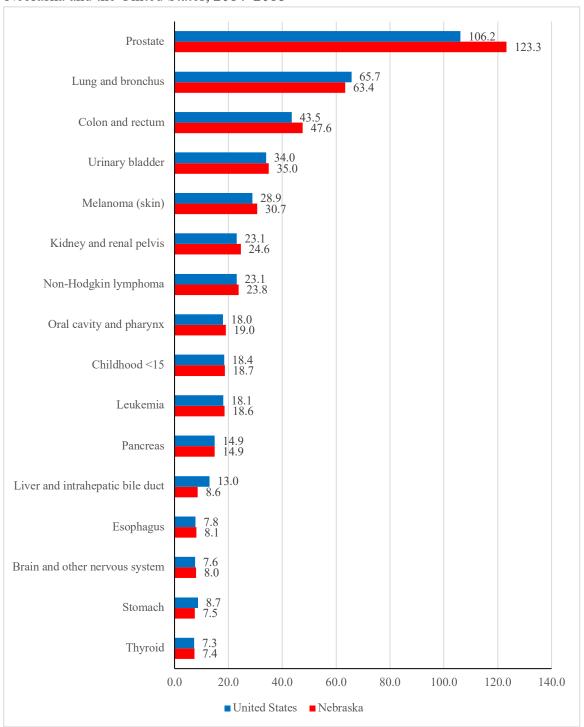
The following cancer incidence rates are significantly higher in Nebraska compared to the United States:

- Brain and other nervous system cancer in females
- Breast cancer in females
- Colon and rectum cancer in males and females
- Kidney cancer in males
- Melanoma skin cancer in males and females
- Prostate cancer in males
- Thyroid cancer in females

The following cancer incidence rates are significantly lower in Nebraska compared to the United States:

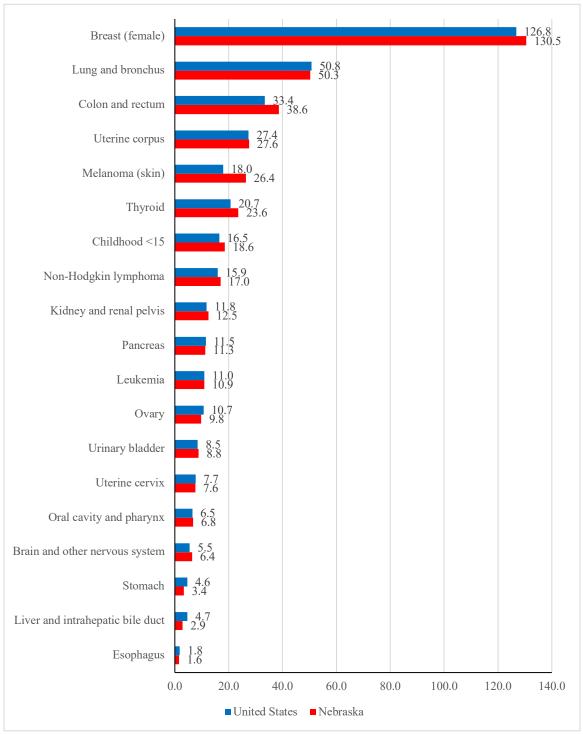
- Liver cancer in males and females
- Stomach cancer in males and females

Figure 3. Age-adjusted incidence rate per 100,000 population by cancer site for males: Nebraska and the United States, 2014–2018



Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 4. Age-adjusted incidence rate per 100,000 population by cancer site for females: Nebraska and the United States, 2014–2018



Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Cancer Mortality Rate: The Rate of Cancer Deaths

The cancer mortality rate, calculated by dividing the number of cancer deaths by the number of individuals in that particular population, is often shown as a rate per 100,000 people. The rate is further adjusted to account for different age distributions across different population groups. For example, age-adjusted rates are used to compare the Nebraska mortality rate to the U.S. overall mortality rate.

Figures 5 and 6 show age-adjusted mortality rates in Nebraska and the United States among males and females. More detailed data can be found in Appendix Tables A.3 and A.4.

Overall Cancer Mortality Rates

- There were no major differences in the age-adjusted cancer mortality rates between Nebraska and the United States.
- Males are at higher risk of dying from cancer both in Nebraska and the United States.

Specific Cancer Mortality Rates

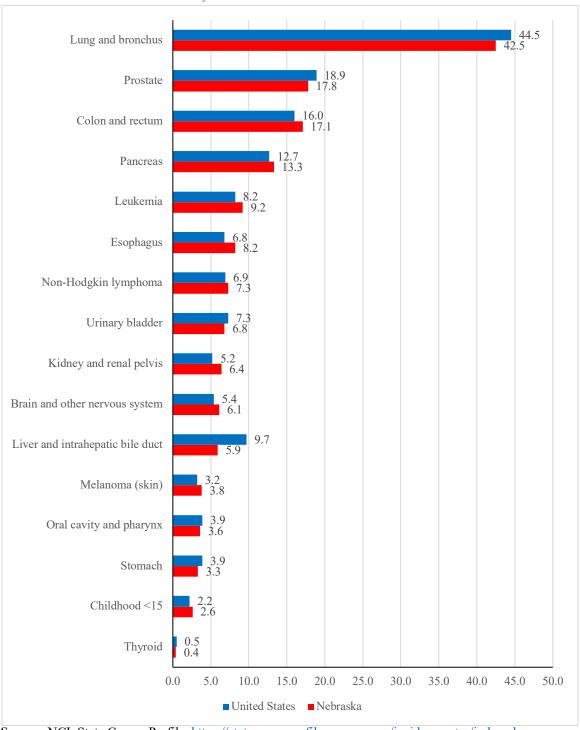
The following cancer mortality rates are significantly higher in Nebraska compared to the United States:

- Esophagus cancer in males
- Kidney cancer in males
- Leukemia in males

The following cancer incidence rates are significantly lower in Nebraska compared to the United States:

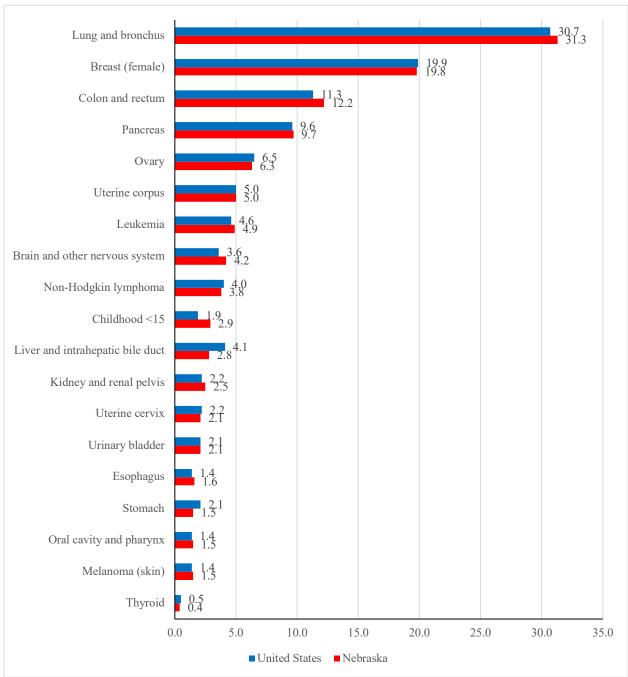
- Liver cancer in males and females
- Stomach cancer in females

Figure 5. Age-adjusted mortality rate per 100,000 population by cancer site for males: Nebraska and the United States, 2015–2019



Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 6. Age-adjusted mortality rate per 100,000 population by cancer site for females: Nebraska and the United States, 2015–2019

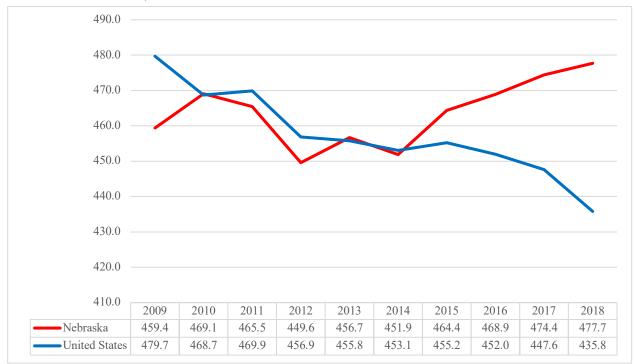


Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 7 shows the trends in the overall cancer incidence rate from 2009 to 2018 in Nebraska and the United States.

- Between 2009 and 2018, the overall cancer incidence rate in the United States significantly *decreased* from 479.7 to 435.8 cases per 100,000 population.
- Between 2009 and 2018, the overall cancer incidence rate in Nebraska significantly *increased* from 449.4 to 477.7 cases per 100,000 population.

Figure 7. Trend of age-adjusted cancer incidence rates per 100,000 population: Nebraska and the United States, 2009–2018



Age-adjusted to the 2000 U.S. standard population.

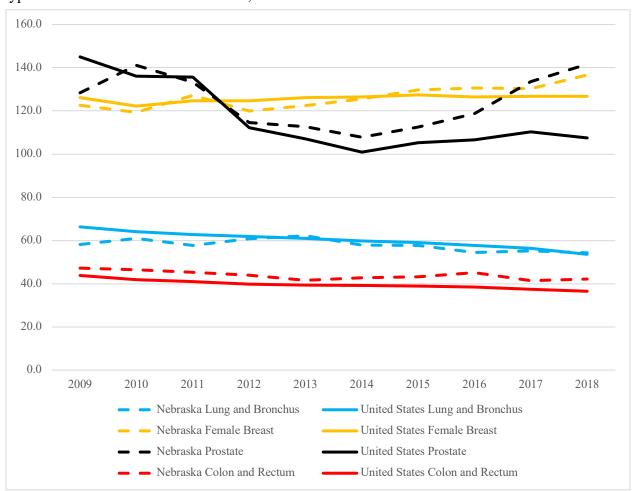
Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 8 shows the age-adjusted incidence rates in Nebraska and the United States from 2009 to 2018.

Prostate cancer is the most commonly diagnosed cancer among men. The incidence trends over time largely reflects changes in the use of screening with the prostate-specific antigen (PSA) test. The rapid drop from 2007 to 2014 (not shown in the figure below) reflects decreased PSA testing following recommendations against routine screening for men ages 75 and older in 2008 and all men in 2012 from the U.S. Preventive Services Task Force (USPSTF).

Breast cancer is the most commonly diagnosed cancer among women. Breast cancer incidence rates have been increasing since the mid-2000s, likely due to continued decline in fertility and increase in excess body weight.

Figure 8. Trend of age-adjusted cancer incidence rate per 100,000 population by cancer types: Nebraska and the United States, 2009–2018



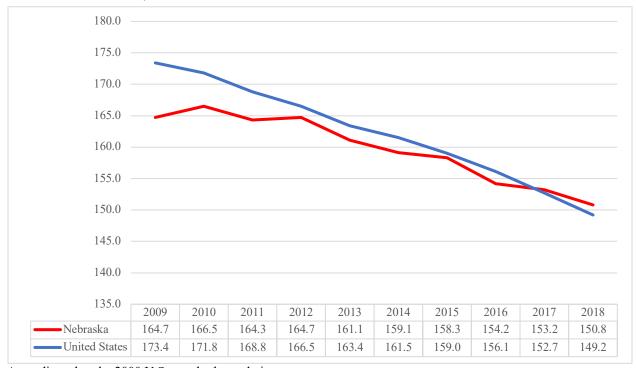
Age-adjusted to the 2000 U.S. standard population.

Source: CDC WONDER. http://wonder.cdc.gov/cancer-v2018.html

Figure 9 depicts the age-adjusted mortality rate of all cancers in Nebraska and the United States from 2009 to 2018.

- Between 2009 and 2018, the overall cancer mortality rate in the United States significantly *decreased* from 173.4 to 149.2 cases per 100,000 population.
- Similarly, between 2009 and 2018, the overall cancer mortality rate in Nebraska significantly *decreased* from 164.7 to 150.8 cases per 100,000 population.

Figure 9. Trend of age-adjusted cancer mortality rate per 100,000 population: Nebraska and the United States, 2009–2018

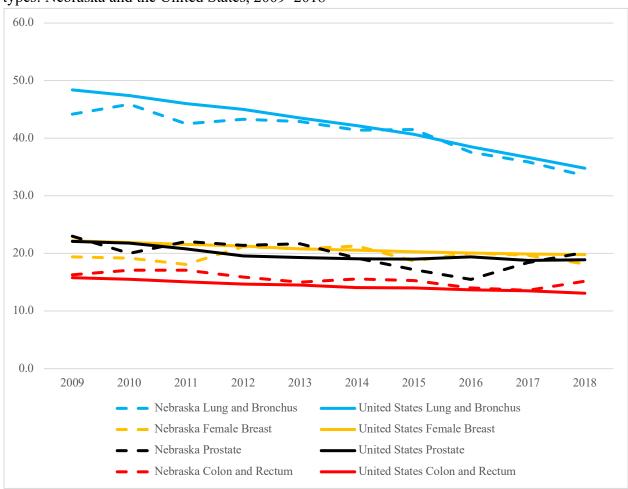


Age-adjusted to the 2000 U.S. standard population.

Source: CDC WONDER. http://wonder.cdc.gov/cancer-v2018.html

Figure 10 illustrates the age-adjusted mortality rates of lung, prostate, breast, and colorectal cancers from 2009 to 2018 in Nebraska and the United States. Lung cancer mortality has declined steeply since 1990. Breast cancer death rates decreased by 42% from the late 1980s to 2019 due to earlier detection and improved treatment.

Figure 10. Trend of age-adjusted cancer mortality rate per 100,000 population by cancer types: Nebraska and the United States, 2009–2018



Age-adjusted to the 2000 U.S. standard population.

 $\textbf{Source:} \ CDC \ WONDER. \ \underline{http://wonder.cdc.gov/cancer-v2018.html}$

Figure 11 shows the age-adjusted incidence rates of all cancers combined by county of residence in Nebraska from 2014 to 2018. The overall cancer incidence rate in the state from 2014 to 2018 was 468.0 cases per 100,000 population. The counties with the highest cancer incidence rates were Blaine, Boone, Dodge, Furnas, Garden, Grant, Greeley, Hitchcock, Logan, Richardson, and Sherman counties. The counties with the lowest cancer incidence rates were Arthur, Banner, Brown, Hayes, Hooker, Keya Paha, McPherson, Sioux, Stanton, and Wheeler counties.

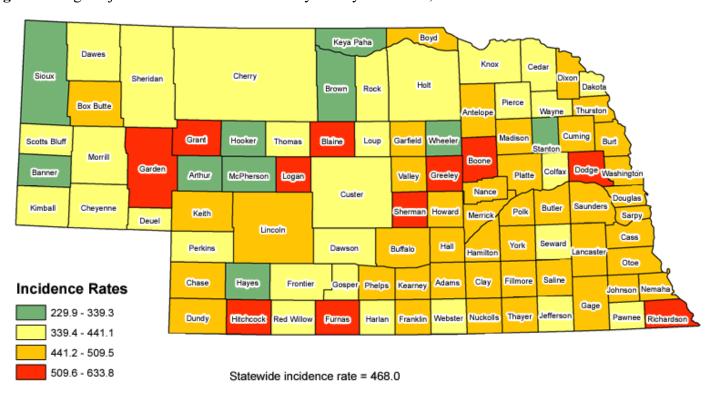


Figure 11. Age-adjusted cancer incidence rates by county: Nebraska, 2014–2018

Age-adjusted to the 2000 U.S. standard population.

Figure 12 shows the age-adjusted incidence rate of all cancers as well as lung, breast, prostate, and colorectal cancers from 2014 to 2018. The figure also indicates whether the person diagnosed with cancer was from a large urban area, small urban area, or rural area.*

- For overall cancer and lung cancer, the age-adjusted incidence rates were significantly lower in rural communities compared to urban large or urban small communities.
- The age-adjusted incidence rate of colorectal cancers was significantly higher in rural areas compared to urban large areas.

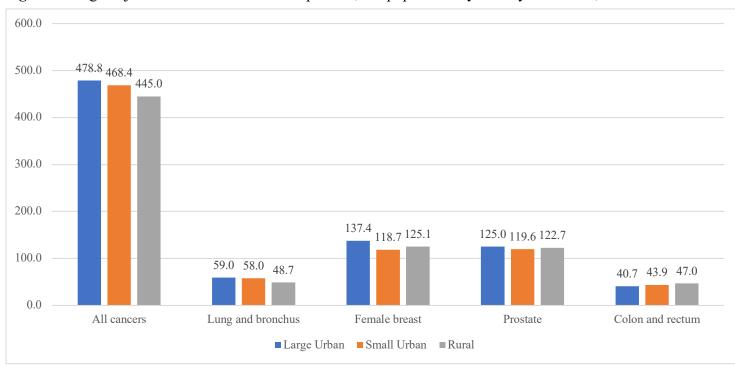


Figure 12. Age-adjusted cancer incidence rate per 100,000 population by rurality: Nebraska, 2014–2018

Age-adjusted to the 2000 U.S. standard population.

^{*} Each Nebraska county's rurality designation, as determined by Nebraska DHHS, can be found here (p. 29): $\underline{ \text{https://dhhs.ne.gov/Reports/Statewide\%20Health\%20Needs\%20Assessment\%20-\%202016.pdf}$

Figure 13 shows the age-adjusted mortality rates of all cancers combined by county of residence in Nebraska from 2014 to 2018. The overall cancer mortality rate in the state from 2014 to 2018 was 154.2 deaths per 100,000 population. Twenty-three counties had a mortality rate in the highest category of 169.0–219.3 deaths per 100,000 population. The counties with the highest mortality rates were primarily in the southern and eastern portions of the state.

Boyd Keya Paha Dawes Knox Cedar Sloux Cherry Dixon Sheridan Holt Rock Brown Dakota Pierce Box Butte Wayne Thurston Antelope Madison Cuming Grant Hooker Garfield Wheeler Scotts Bluff Thomas Blaine Loup Burt Stanton Morrill Boone Garden Dodge Washington Colfax Banner Arthur Valley Greeley Platte McPherson Logan Nance Custer Douglas Saunders Kimball Cheyenne Butler Polk Sherman Howard Keith Merrick Sarpy Deuel Lincoln Cass Hamilton Seward York Hall Perkins Dawson Buffalo Lancaster Otoe Clay Fillmore Saline Chase Hayes Adams Frontier Gosper Phelps Keamey Johnson Nemaha Mortality Rates Gage Thayer Jefferson 50.8 - 132.5 Franklin Webster Nuckolls Richardson Dundy Hitchcock Red Willow Furnas Harlan 132.6 - 153.2 153.3 - 168.9 Statewide mortality rate = 154.2 169.0 - 219.3

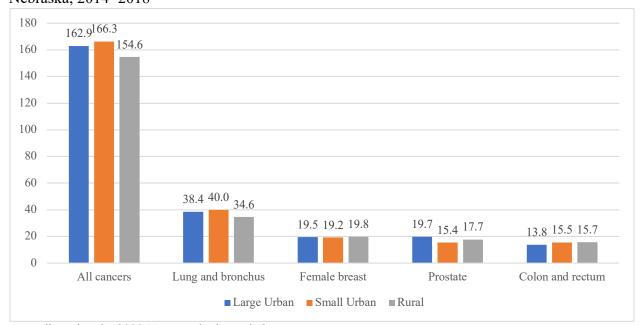
Figure 13. Age-adjusted cancer mortality rates by county, Nebraska: 2014–2018

Age-adjusted to the 2000 U.S. standard population.

Figure 14 shows the age-adjusted mortality rate of all cancers as well as lung, breast, prostate, and colorectal cancers from 2014 to 2018 in large urban areas, small urban areas, and rural areas.

- For overall cancer, the age-adjusted mortality rate was significantly lower in rural compared to large urban communities.
- For prostate cancer, the age-adjusted mortality rate was significantly lower in small urban communities compared to large urban communities.

Figure 14. Age-adjusted cancer mortality rate per 100,000 population by rurality: Nebraska, 2014–2018



Age-adjusted to the 2000 U.S. standard population.

CANCER STAGING AND SURVIVAL

Cancer Staging: The Stage at Which New Cancer Cases are Diagnosed

Figure 15 shows the proportion of lung, prostate, female breast, colorectal, and cervical cancers that are diagnosed at different stages: in situ/localized, regionalized, and distant.

- In situ/localized stage: Cancer is in the earliest stage and limited to the place where it started.
- Regional stage: Cancer has spread to nearby areas.
- Distant stage: Cancer has spread to parts of the body far away from where the cancer originated.

Screening tests (tests to detect cancer in people that are not yet known to have cancer) are available for these five types of cancer as mentioned below, so they can be diagnosed at earlier stages. There are many different screening guidelines; in this report, we include links to the USPSTF guidelines.

Lung Cancer Staging

USPSTF recommends lung cancer screening for higher-risk individuals (adults ages 50–80 who have 20 pack/year smoking history and currently smoke or who have quit within the last 15 years). Recommendation: Lung Cancer: Screening | United States Preventive Services Taskforce (uspreventiveservicestaskforce.org)

Many lung cancer cases are typically diagnosed at later stages. In Nebraska, 73% of lung cancer cases from 2014 to 2018 were diagnosed at either the regionalized or distant stages.

Prostate and Breast Cancer Staging

USPSTF recommends that men ages 55–69 consult with their healthcare providers to decide whether to get prostate cancer screening. <u>Recommendation: Prostate Cancer: Screening | United States Preventive Services Taskforce (uspreventiveservicestaskforce.org)</u>

For women ages 50–74, USPSTF recommends biennial screening mammography. Recommendation: Breast Cancer: Screening | United States Preventive Services Taskforce (uspreventiveservicestaskforce.org)

Prostate and breast cancers tend to be diagnosed early. More than 70% of prostate and breast cancers in Nebraska were diagnosed at the in situ/localized stage.

Colorectal and Cervical Cancer Staging

With cancer screening, colorectal and cervical cancers can be diagnosed at the preclinical stage (i.e., before the cancer actually develops).

USPSTF recommends adults ages 45–75 for colorectal cancer screening.

<u>Recommendation: Colorectal Cancer: Screening | United States Preventive Services Taskforce (uspreventiveservicestaskforce.org)</u>

USPSTF recommends the following cervical cancer screening procedures:

<u>Recommendation: Cervical Cancer: Screening | United States Preventive Services Taskforce (uspreventiveservicestaskforce.org)</u>

- Women ages 21–29: Cervical cytology alone every three years
- Women ages 30–65: Cervical cytology alone every three years, high-risk human papillomavirus (hrHPV) testing every five years, or hrHPV testing in combination with cytology every five years.

Between 2014 and 2018, only 40.7% of colorectal and 51.6% of cervical cancers were diagnosed at the in situ/localized stage, indicating a need to promote the use of screening tests for colorectal and cervical cancers in Nebraska.

100.0% 4.3% 7.1% 14.6% 90.0% 20.1% 16.7% 22.2% 80.0% 49.0% 70.0% 33.8% 60.0% 39.2% 50.0% 40.0% 24.0% 30.0% 20.0% 10.0% 0.0% Female Breast Colorectal Cervical Lung Prostate

■ In Situ/localized ■ Regionalized

■ Distant

Figure 15. Staging for lung, prostate, female breast, colorectal, and cervical cancer: Nebraska, 2014–2018

Relative Survival: Comparing Five-Year Survival Rates

Knowing the five-year relative survival rate allows comparison between the survival rate of people with cancer to those who do not have cancer five years after diagnosis. Relative survival rates take into account other causes of death to determine if cancer shortens life (i.e., if fewer people are alive after five years).

Figure 16 shows the five-year relative survival rate of the 10 most common cancers in the United States from 2011 to 2017. Thyroid and prostate cancer had the highest five-year relative survival, with 98% of patients still alive after five years. The lowest relative survival was seen with pancreatic cancer (11% five-year relative survival rate).

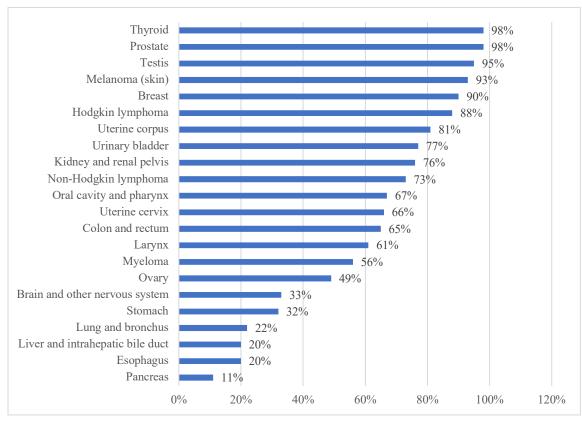


Figure 16. Five-year relative survival rate: United States, 2011–2017

Source: ACS, 2022. https://cancerstatisticscenter.cancer.org/?ga=2.69452816.142557360.1643863608-1263480752.1639612163#!/data-analysis/SurvivalByStage

Table 1 presents the number of new cases and age-adjusted incidence rates in Nebraska from 2009 to 2018 by race/ethnicity. For all cancers combined and for the four most common cancers, incidence rates were highest among African American persons and lowest among Hispanic persons. Kidney cancer was the fifth most commonly diagnosed cancer in African American persons and American Indians/Alaska Native persons, but it was the ninth most common among Whites. Liver cancer was ranked sixth among American Indian/Alaska Native persons and fifth among Asian and Pacific Islanders, but it was not ranked in the top 10 among Whites and African American persons.

Table 1. Cancer incidence and age-adjusted incidence rate by race/ethnicity, Nebraska: 2009–2018

	White			African American			American Indian/Alaska <u>Native</u>		Asian and Pacific Islander			<u>Hispanic</u>			
Rank	Site	Number	Rate	Site	Number	Rate	Site	Number	Rate	Site	Number	Rate	Site	Number	Rate
	All sites	92,286	461.1	All sites	3,457	509.0	All sites	572	410.7	All sites	817	298.7	All sites	2,394	285.4
1	Female breast	13,033	127.5	Prostate	644	201.9	Female breast	84	105.3	Female breast	116	64.6	Female breast	335	77.6
2	Prostate	11,958	120.7	Female breast	423	116.5	Prostate	41	72.2	Prostate	54	58.5	Prostate	243	74.4
3	Lung	11,779	57.3	Lung	480	75.9	Lung	76	68.0	Lung	91	40.4	Colorectal	222	28.5
4	Colorectal	8,727	43.3	Colorectal	350	53.8	Colorectal	59	44.1	Colorectal	83	33.8	Lung	164	26.7
5	Uterus	2,911	27.6	Kidney	190	27.8	Kidney	40	22.6	Liver	55	21.6	Uterus	77	15.2
6	Melanoma (skin)	4,592	24.4	Uterus	71	19.2	Liver	38	21.9	Thyroid	65	16.2	Non- Hodgkin lymphoma	119	15.1
7	Bladder	4,338	21.0	Pancreas	110	18.1	Uterus	17	17.9	Uterus	26	15.8	Kidney	124	14.4
8	Non- Hodgkin lymphoma	4,087	20.4	Non- Hodgkin lymphoma	116	16.3	Ovary	10	16.8*	Non- Hodgkin lymphoma	35	14.4	Thyroid	139	11.1
9	Kidney	3,442	17.3	Myeloma	99	15.5	Bladder	13	14.0*	Leukemia	34	10.9	Bladder	58	9.3
10	Thyroid	2,606	15.0	Bladder	84	14.4	Non- Hodgkin lymphoma	17	13.4	Oral cavity	32	9.6	Leukemia	116	9.2

Rates are per 100,000 population, excluding gender-specific sites that are per 100,000 male or female population, and age-adjusted to the 2000 U.S. standard population.

African American and American Indian/Alaska Native populations include Hispanics.

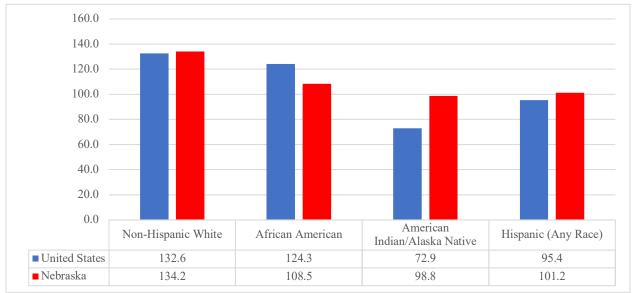
^{*} The age-adjusted rate might not be statistically reliable for any category with case counts less than 16.

BREAST CANCER

Figure 17 shows age-adjusted incidence rates of female breast cancer in Nebraska and the United States from 2014 to 2018 by race/ethnicity. See Appendix Table A.5 for 95% confidence intervals.

• In Nebraska, African American and Hispanic women have a significantly lower breast cancer incidence rate compared to non-Hispanic White women.

Figure 17. Age-adjusted female breast cancer incidence rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018



Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 18 shows the age-adjusted incidence rate of female breast cancer for each county in Nebraska from 2014 to 2018. The statewide incidence rate of breast cancer from 2014 to 2018 was 130.5 cases per 100,000 population. The counties with the highest age-adjusted incidence rate of female breast cancer (152.3–209.9 cases per 100,000 population) were Blaine, Boone, Clay, Furnas, Hitchcock, Garden, Johnson, Kearney, Knox, Logan, Otoe, Phelps, Pierce, Richardson, Thayer, Thurston, and Valley counties.

Boyd Keya Paha Dawes Knax Cedar Sioux Cherry Sheridan Dixon Holt Dakota Rock Brown Pierce Box Butte Wayne Thurston Antelope Cuming Madison Grant Hooker Blaine Loup Garfield Wheeler Scotts Bluff Thomas Burt Stanton Morrill Boone Garden Dodge Washington Banner Arthur Greeley Platte McPherson Logan Valley Nance Custer Douglas Kimball Cheyenne Saunders Butler Sherman Polk Keith Howard Merrick Sarpy Deuel Lincoln Cass Seward Hamilton Hall York Perkins Dawson Buffalo Lancaster Otoe Incidence Rates Clay Fillmore Saline Chase Hayes Adams Frontier Gosper Phelps Kearney Johnson Nemaha 0.0 Gage 0.1 - 99.8Thayer Jefferson Richardson Nuckolls Dundy Hitchcock Red Willow Furnas Harlan Franklin Webster Pawnee 99.9 - 123.5 123.6 - 152.2 152.3 - 209.9 Statewide incidence rate = 130.5

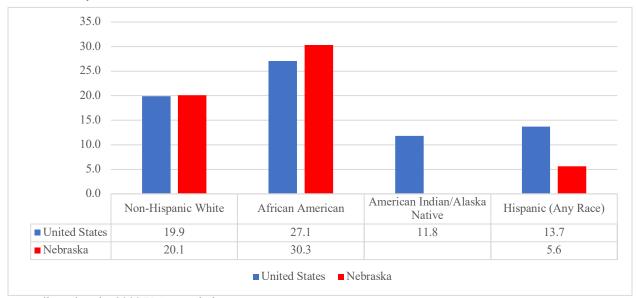
Figure 18. Age-adjusted female breast cancer incidence rate per 100,000 population: Nebraska, 2014–2018

Age-adjusted to the 2000 U.S. standard population.

Figure 19 shows age-adjusted mortality rates of female breast cancer in Nebraska and the United States from 2015 to 2019 by race/ethnicity. See Appendix Table A.6 for 95% confidence intervals.

• The breast cancer mortality rate was significantly higher among African American women compared to non-Hispanic white women in both Nebraska and the United States.

Figure 19. Age-adjusted female breast cancer mortality rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019



Age-adjusted to the 2000 U.S. population.

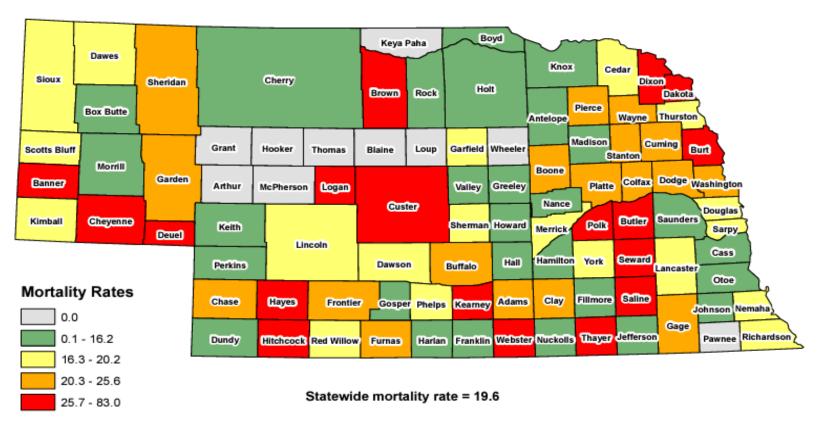
African American and American Indian/Alaska Native populations include Hispanics.

Data for American Indian/Alaska population in Nebraska is suppressed due to small case count.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 20 shows the age-adjusted mortality rate of female breast cancer for each county in Nebraska from 2014 to 2018. The statewide mortality rate of female breast cancer from 2014 to 2018 was 19.6 deaths per 100,000 population. The counties with the highest age-adjusted mortality rate of breast cancer (25.7–83.0 deaths per 100,000 population) were Banner, Brown, Burt, Butler, Cheyenne, Custer, Dakota, Deuel, Dixon, Hayes, Hitchcock, Kearney, Logan, Polk, Saline, Seward, Thayer, and Webster counties.

Figure 20. Age-adjusted female breast cancer mortality rate per 100,000 population: Nebraska, 2014–2018



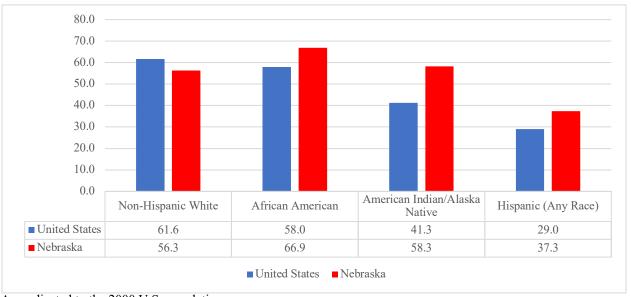
Age-adjusted to the 2000 U.S. standard population.

LUNG AND BRONCHUS CANCER

Figure 21 shows age-adjusted incidence rates of lung and bronchus cancer in Nebraska and the United States from 2014 to 2018 by race/ethnicity. See Appendix Table A.7 for 95% confidence intervals.

• In Nebraska, there was no statistically significant difference in the lung cancer incidence rate among different racial/ethnic groups.

Figure 21. Age-adjusted lung cancer incidence rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018



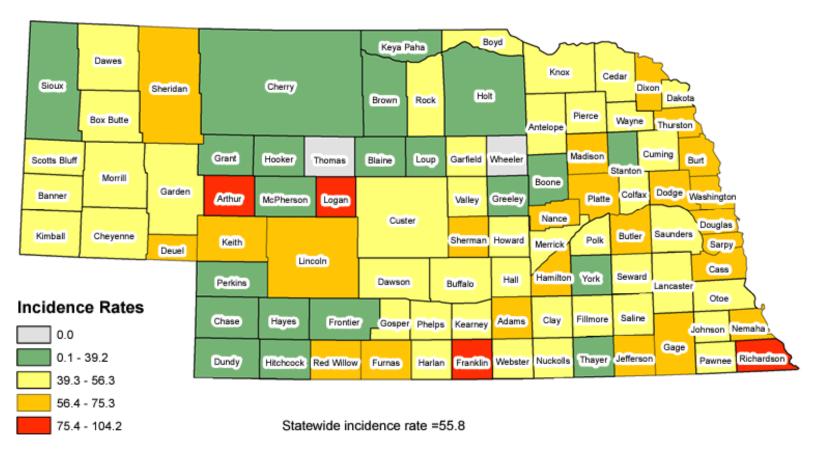
Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 22 shows the age-adjusted incidence rate of lung cancer for each county in Nebraska from 2014 to 2018. The statewide incidence rate of lung cancer from 2014 to 2018 was 55.8 cases per 100,000 population. The counties with the highest incidence rates were Arthur, Franklin, Logan, and Richardson counties. Higher incidence rates of lung cancer were seen mostly in the eastern and southern regions of the state.

Figure 22. Lung cancer age-adjusted incidence rate per 100,000 population: Nebraska, 2014–2018

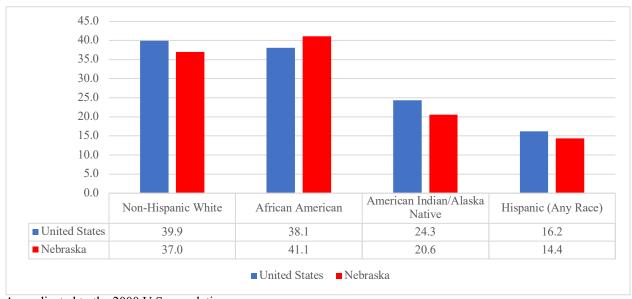


Age-adjusted to the 2000 U.S. standard population.

Figure 23 shows age-adjusted mortality rates of lung and bronchus cancer in Nebraska and the United States from 2015 to 2019 by race/ethnicity. See Appendix Table A.8 for 95% confidence intervals.

• In Nebraska, American Indian/Alaska Native persons and Hispanic persons had a significantly lower lung cancer mortality rate compared to non-Hispanic White persons.

Figure 23. Age-adjusted lung cancer mortality rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019



Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 24 shows the age-adjusted mortality rate of lung cancer for each county in Nebraska from 2014 to 2018. The statewide mortality rate of lung cancer from 2014 to 2018 was 37.6 deaths per 100,000 population. Counties with the highest age-adjusted mortality rate from lung cancer include Arthur, Burt, Cass, Dodge, Gage, Harlan, Hooker, Logan, Merrick, Nance, Nemaha, Otoe, Pawnee, Red Willow, Richardson, Rock, Saline, and Valley counties. These counties are primarily in the southeastern portion of the state.

Boyd Keya Paha Dawes Knox Cedar Sloux Cherry Sheridan Dixon Holt Brown Rock Dakota Pierce Box Butte Thurston Wayne Antelope Madison Cuming Grant Hooker Blaine Loup Garfield Wheeler Scotts Bluff Thomas Burt Stanton Morrill Boone Garden Dodge Washington Banner Colfax Arthur Valley Platte McPherson Logan Greeley Nance Custer Douglas Saunders Kimball Cheyenne Butler Sherman Howard Polk Keith Merrick Sarpy Deuel Lincoln Cass Seward Hall Hamilton York Dawson Perkins Buffalo Lancaster Otoe **Mortality Rates** Saline Fillmore Chase Hayes Adams Clay Frontier Gosper Phelps Keamey Johnson Nemaha Gage Pawnee Richardson Thayer Jefferson 0.1 - 32.9Franklin Webster Nuckolls Dundy Hitchcock Red Willow Harlan 33.0 - 39.2 39.3 - 45.2 Statewide mortality rate = 37.6 45.3 - 65.9

Figure 24. Lung cancer age-adjusted mortality rate per 100,000 population: Nebraska, 2014–2018

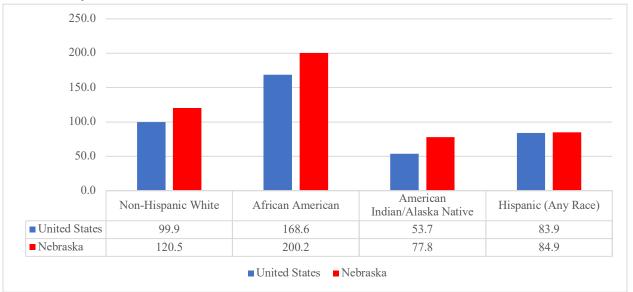
Age-adjusted to the 2000 U.S. standard population.

PROSTATE CANCER

Figure 25 shows age-adjusted incidence rates of prostate cancer in Nebraska and the United States from 2014 to 2018 by race/ethnicity. See Appendix Table A.9 for 95% confidence intervals.

 The prostate cancer incidence rate was significantly higher among African American persons compared to non-Hispanic White persons in both Nebraska and the United States.

Figure 25. Age-adjusted prostate cancer incidence rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018



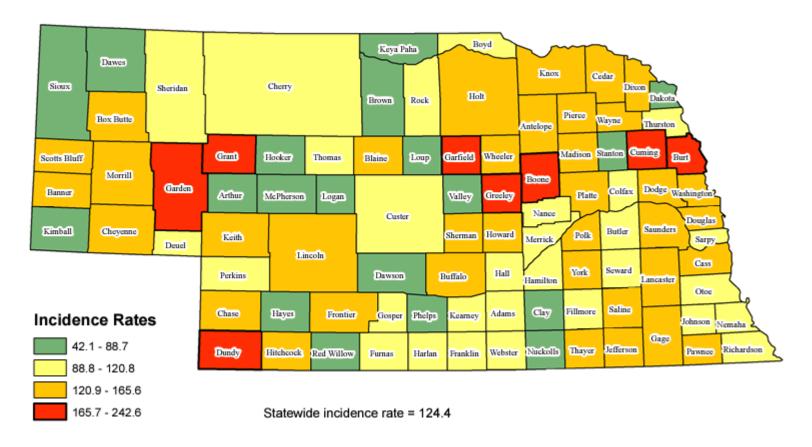
Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 26 shows the age-adjusted incidence rate of prostate cancer for each county in Nebraska from 2014 to 2018. The statewide incidence rate of prostate cancer from 2014 to 2018 was 124.4 cases per 100,000 population. The counties with the highest incidence rates were Boone, Burt, Cuming, Dundy, Garden, Garfield, Grant, and Greeley counties.

Figure 26. Prostate cancer age-adjusted incidence rate per 100,000 population: Nebraska, 2014–2018

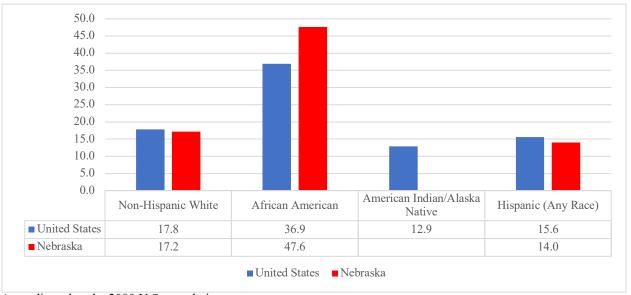


Age-adjusted to the 2000 U.S. standard population.

Figure 27 shows age-adjusted mortality rates of prostate cancer in Nebraska and the United States from 2015 to 2019 by race/ethnicity. See Appendix Table A.10 for 95% confidence intervals.

• The prostate cancer mortality rate was significantly higher among African American persons compared to non-Hispanic white persons in both Nebraska and the United States.

Figure 27. Age-adjusted prostate cancer mortality rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019



Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Data for the American Indian/Alaska Native population are suppressed due to the small case count.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 28 shows the age-adjusted mortality rate of prostate cancer for each county in Nebraska from 2014 to 2018. The statewide mortality rate of prostate cancer from 2014 to 2018 was 18.0 deaths per 100,000 population. Counties with the highest age-adjusted mortality rate of prostate cancer (22.4–57.4 deaths per 100,000 population) include Box Butte, Butler, Cass, Chase, Dundy, Grant, Hitchcock, Jefferson, Johnson, Kimball, Keya Paha, Logan, McPherson, Morrill, Richardson, Sheridan, Sioux, and Thomas counties. These counties are primarily in the western portion of the state.

Boyd Keya Paha Dawes Knox Cedar Sioux Cherry Sheridan Dixon Holt Brown Rock Dakota Pierce Box Butte Thurston Antelope Wayne Madison Cuming Grant Scotts Bluff Hooker Thomas Blaine Loup Garfield Wheeler Burt Stanton Morrill Boone Garden Dodge Washington Colfax Banner Arthur McPherson Logan Valley Greeley Nance Custer Douglas Saunders Kimball Butler Cheyenne Polk Keith Sherman Howard Merrick Sarpy Deuel Lincoln Cass Hall Hamilton York Seward Dawson Perkins Buffalo Lancaster Otoe **Mortality Rates** Saline Fillmore Chase Clay Hayes Frontier Gosper Phelps Adams Keamey Johnson Nemaha 0.0 Gage Pawnee Richardson Thayer Jefferson 0.1 - 15.3 Dundy Franklin Webster Nuckolls Hitchcock Red Willow Furnas Harlan 15.4 - 18.5 18.6 - 22.3 Statewide mortality rate = 18.0 22.4 - 57.4

Figure 28. Prostate cancer age-adjusted mortality rate per 100,000 population: Nebraska, 2014–2018

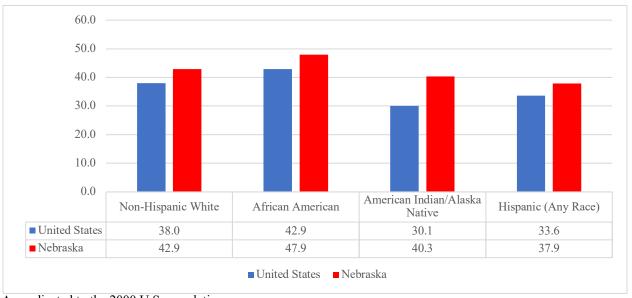
Age-adjusted to the 2000 U.S. standard population.

COLORECTAL CANCER

Figure 29 shows age-adjusted incidence rates of colorectal cancer in Nebraska and the United States from 2014 to 2018 by race/ethnicity. See Appendix Table A.11 for 95% confidence intervals.

• In Nebraska, there is no statistically significant difference in the colorectal cancer incidence rate across different racial/ethnic groups.

Figure 29. Age-adjusted colorectal cancer incidence rates per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018



Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 30 shows the age-adjusted incidence rate of colorectal cancer for each county in Nebraska from 2014 to 2018. The statewide incidence rate of colorectal cancer from 2014 to 2018 was 43.0 cases per 100,000 population. The highest incidence rate was seen in Blaine County.

Boyd Keya Paha Dawes Knax Cedar Sioux Cherry Sheridan Dixon Holt Dakota Rock Brown Pierce Box Butte Thurston Wayne Antelope Cuming Madison Scotts Bluff Grant Hooker Blaine Loup Garfield Wheeler Thomas Burt Stanton Morrill Boone Garden Dodge Banner Colfax Arthur Platte Washington McPherson Logan Valley Greeley Nance Custer Douglas Saunders Kimball Cheyenne Butler Keith Sherman Howard Merrick Sarpy Deuel Lincoln Cass Seward York Hall Perkins Dawson Buffalo Hamilton Lancaster Otoe Incidence Rates Saline Adams Clay Fillmore Chase Hayes Frontier Gosper Phelps Kearney 0.0 Johnson Nemaha Gage 0.1 - 43.0 Jefferson Thayer Dundy Red Willow Harlan Franklin Webster Nuckolls Hitchcock Furnas Richardson 43.1 - 60.4 60.5 - 89.7 89.8 - 206.0 Statewide incidence rate = 43.0

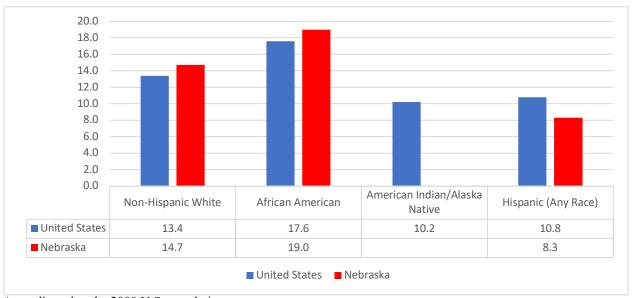
Figure 30. Colorectal cancer age-adjusted incidence rate per 100,000 population: Nebraska, 2014–2018

Age-adjusted to the 2000 U.S. standard population.

Figure 31 shows age-adjusted mortality rates of colorectal cancer in Nebraska and the United States from 2014 to 2018 by race/ethnicity. See Appendix Table A.12 for 95% confidence intervals.

- Compared to the United States, the mortality rate of colorectal cancer in Nebraska was significantly higher among non-Hispanic White persons (10% higher).
- Compared to non-Hispanic White persons in Nebraska, the mortality rate among Hispanic persons in Nebraska was 44% lower.

Figure 31. Age-adjusted colorectal cancer mortality rates per 100,000 by race/ethnicity: Nebraska and the United States, 2015–2019



Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Data for the American Indian/Alaska Native population are suppressed due to the small case count.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Figure 32 shows the age-adjusted mortality rate of colorectal cancer for each county in Nebraska from 2014 to 2018. The statewide mortality rate of colorectal cancer from 2014 to 2018 was 14.7 deaths per 100,000 population. The highest incidence were seen in 18 counties.

Boyd Keya Paha Dawes Knox Cedar Sioux Cherry Dixon Sheridan Holt Brown Rock Dakota Pierce Box Butte Thurston Antelope Madison Cuming Blaine Grant Hooker Loup Garfield Wheeler Burt Scotts Bluff Thomas Stanton Morrill Boone Garden Dodge Washington Colfax Banner Valley Platte Arthur Greeley McPherson Logan Nance Custer Douglas Saunders Kimball Cheyenne Butler Sherman Howard Polk Keith Merrick Sarpy Deuel Lincoln Cass Seward Hamilton Hall York Dawson Perkins Buffalo Lancaster Otoe **Mortality Rates** Saline Fillmore Clay Chase Hayes Frontier Keamey Adams Gosper Phelps Johnson Nemaha 0.0 Gage 0.1 - 13.2 Thayer Jefferson Richardson Franklin Webster Nuckolls Pawnee Dundy Hitchcock Red Willow Harlan Furnas 13.3 - 16.6 16.7 - 21.1 Statewide mortality rate = 14.7 21.2 - 36.9

Figure 32. Colorectal cancer age-adjusted mortality rate per 100,000 population: Nebraska, 2014–2018

Age-adjusted to the 2000 U.S. standard population.

CANCER SCREENING

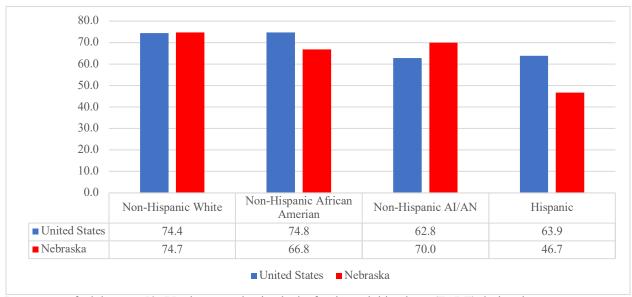
Cancer Screening: Detecting Cancer Before Symptoms Are Present

Screening tests are used to detect cancer in people who are not showing symptoms of disease. The USPSTF provides recommendations for cancer screenings by type of cancer. Recommendations for screening may be specific to certain age groups or sexes. The following data describe the percentage of the eligible population (based on age and sex) that are up to date on various cancer screenings.

Figure 33 shows the proportion of individuals ages 50–75 who are up to date on colorectal cancer screening in 2020 in Nebraska and the United States by race/ethnicity, according to data from the Behavioral Risk Factor Surveillance System (BRFSS). See Appendix Table A.13 for 95% confidence intervals.

• In Nebraska, the proportion of Hispanic persons up to date on colorectal cancer screening (46.7%) was significantly lower than the proportion of non-Hispanic White persons who were up to date (74.7%).

Figure 33. Up to date on colorectal cancer screening rate, ages 50–75, by race/ethnicity: Nebraska and the United States, 2020



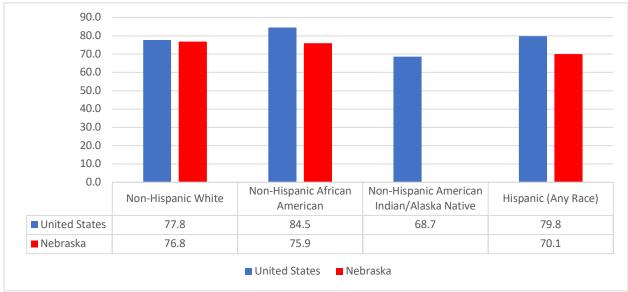
Percentage of adults ages 50–75 who report having had a fecal occult blood test (FOBT) during the past year, or a sigmoidoscopy during the past 5 years and an FOBT during the past 3 years, or a colonoscopy during the past 10 years.

Source: CDC BRFSS

Figure 34 shows the proportion of women ages 50–74 in Nebraska and the United States who reported having a mammogram in the last two years, according to the 2020 BRFSS. See Appendix Table A.14 for 95% confidence intervals.

• In Nebraska, there was no statistically significant difference in the mammogram rate across different racial/ethnic groups.

Figure 34. Mammogram rate among women ages 50–74 by race/ethnicity: Nebraska and the United States, 2020

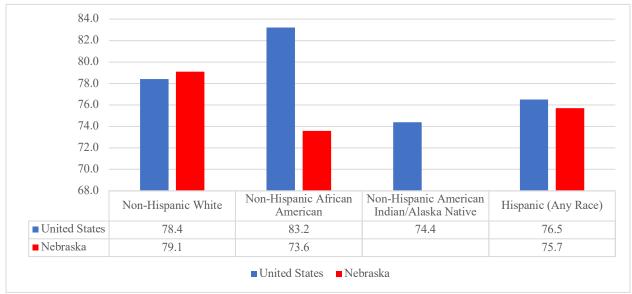


Data for the American Indian/Alaska Native population are suppressed (see methods section for further details). **Source:** CDC BRFSS

Figure 35 shows the proportion of women ages 21–65 who have not had a hysterectomy and are up to date on cervical cancer screening based on 2020 BRFSS data. To be considered up to date on this screening, women must have had a Pap test within the last three years. See Appendix Table A.15 for 95% confidence intervals.

• In Nebraska, there was no statistically significant difference in the use of cervical cancer screening across different racial/ethnic groups.

Figure 35. Up to date on cervical cancer screening rate, ages 21–65, by race/ethnicity: Nebraska and the United States, 2020



Data for the American Indian/Alaska Native population are suppressed due to the small case count.

Source: CDC BRFSS

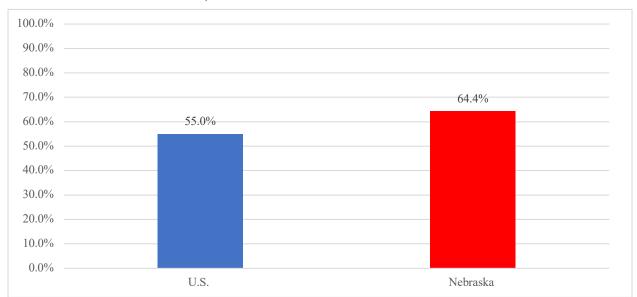
HPV VACCINE

HPV Vaccine: Prevention of Cervical and Other Cancers

The HPV vaccine can decrease the risk for an individual to develop cancer of the cervix, back of the throat, anus, penis, vagina, or vulva. A two-dose schedule is recommended for people who receive the first dose before turning 15 years of age.

Figure 36 shows the proportion of individuals ages 13–17 who received two or more doses of the human papillomavirus (HPV) vaccine. Use of the HPV vaccine was higher in Nebraska (64.4%) compared to the United States (55.0%), although these differences were statistically not significant.

Figure 36. The percentage of individuals ages 13–17 who received 2+ doses of HPV vaccine: Nebraska and the United States, 2018



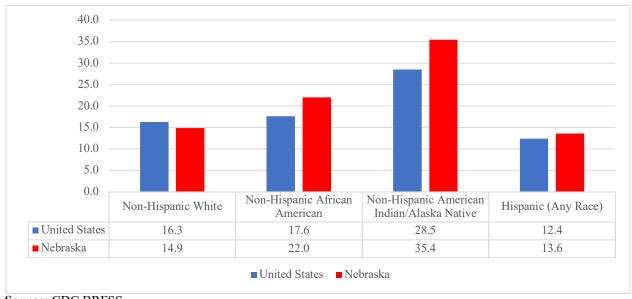
RISK FACTORS

Risk factors are anything that increases a person's likelihood of developing cancer, such as smoking or obesity. Identifying risk factors and their prevalence in a population helps to understand some of the burden of cancer in that population and identify potential opportunities for prevention.

Figure 37 shows the proportion of adults ages 18 and older who reported being current smokers in the 2016–2020 BRFSS by race/ethnicity. See Appendix Table A.16 for 95% confidence intervals.

• In Nebraska, the proportion of adults who currently smoke was significantly higher among African American persons (22.0%) and American Indian/Alaska Native persons (35.4%) compared to non-Hispanic White persons (14.9%).

Figure 37. Percentage of individuals ages 18+ who are current smokers by race/ethnicity: Nebraska and the United States, 2016–2020

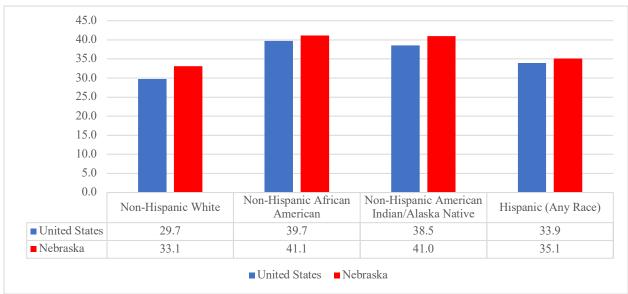


Source: CDC BRFSS

Figure 38 shows the prevalence of obesity among adults ages 18 and older as reported in the 2016–2020 BRFSS by race/ethnicity. See Appendix Table A.17 for 95% confidence intervals. Obesity is defined as a body mass index (BMI) of 30 or higher.

- Among all racial/ethnic groups, the prevalence of obesity was higher in Nebraska compared to the United States.
- Within Nebraska, the proportion of adults with obesity was significantly higher among African American persons and American Indian/Alaska Native persons compared to non-Hispanic White persons.

Figure 38. Percentage of individuals ages 18+ who are obese (BMI 30+) by race/ethnicity: Nebraska and the United States, 2016–2020



Source: CDC BRFSS

PEDIATRIC CANCER

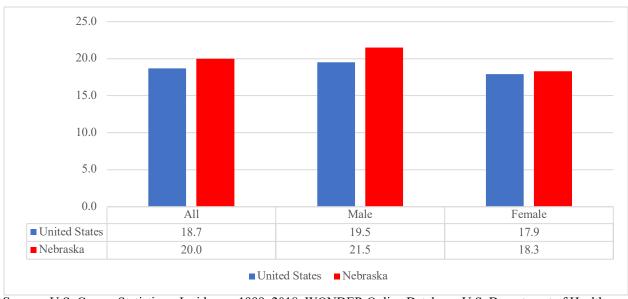
Pediatric cancer is defined as any cancer that was diagnosed in individuals ages 18 and younger. From 2009 to 2018, there were 966 cases of pediatric cancer in Nebraska. From 2008 to 2017, there were 153,789 cases of pediatric cancer in the United States.

Figure 39 shows the overall pediatric cancer incidence rate in Nebraska and in the United States from 2009 to 2018 by sex. See Appendix Table A.18 for 95% confidence intervals.

- From 2009 to 2018, the overall pediatric cancer incidence rate was 20.0 cases per 100,000 population in Nebraska. From 2009 to 2018, the pediatric cancer incidence rate was 18.7 cases per 100,000 population in the United States.
- The pediatric cancer incidence rates were slightly higher in males compared to females in both Nebraska and the United States, but the difference was not statistically significant in Nebraska.

Figure 39. Age-adjusted incidence rate per 100,000 population of pediatric cancer by sex: Nebraska and the United States, 2009–2018

Age-adjusted to the 2000 standard population.

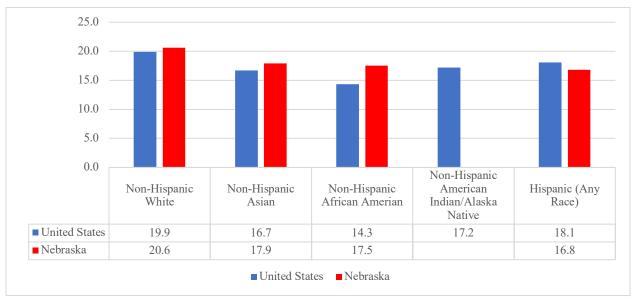


Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figure 40 shows the overall pediatric cancer incidence rate in Nebraska and the United States from 2009 to 2018 by race/ethnicity. See Appendix Table A.19 for 95% confidence intervals.

• Compared to the United States, the incidence rate in Nebraska was significantly lower among Hispanic persons.

Figure 40. Age-adjusted incidence rate per 100,000 population of pediatric cancer by race/ethnicity: Nebraska and the United States, 2009–2018



Age-adjusted to the 2000 standard population.

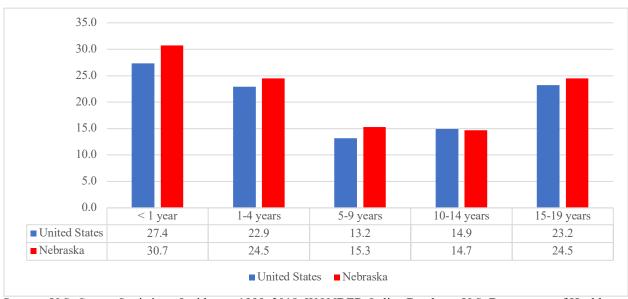
Data for the Nebraska non-Hispanic American Indian/Alaska Native population are suppressed due to the small case count.

Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figure 41 shows the overall pediatric cancer incidence rate in Nebraska and the United States from 2009 to 2018 by age group. See Appendix Table A.20 for 95% confidence intervals.

• In both Nebraska and the United States, the incidence rate was significantly lower in children ages 5–9 and ages 10–14 compared to the other age groups.

Figure 41. Age-adjusted incidence rate per 100,000 population of pediatric cancer by age group: Nebraska and the United States, 2009–2018

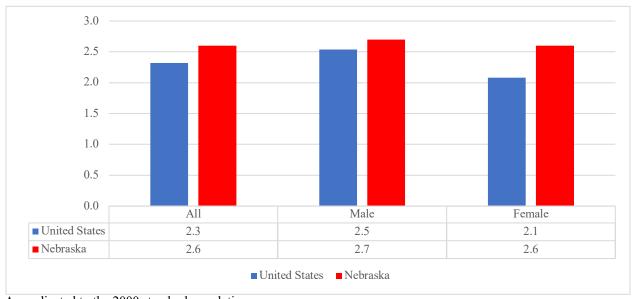


Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figure 42 shows the overall pediatric cancer mortality rate in Nebraska and the United States from 2009 to 2018 by sex. See Appendix Table A.21 for 95% confidence intervals. From 2009 to 2018, there were 138 pediatric cancer deaths in Nebraska. From 2009 to 2018, there were 18,970 pediatric cancer deaths in the United States.

- Overall, the mortality rate was higher in Nebraska (2.6 deaths per 100,000 population) compared to the United States (2.3 deaths per 100,000 population), but the difference was not statistically significant.
- The mortality rate was significantly higher among males than females in the United States.

Figure 42. Age-adjusted mortality rate per 100,000 population of pediatric cancer by sex: Nebraska and the United States, 2009–2018



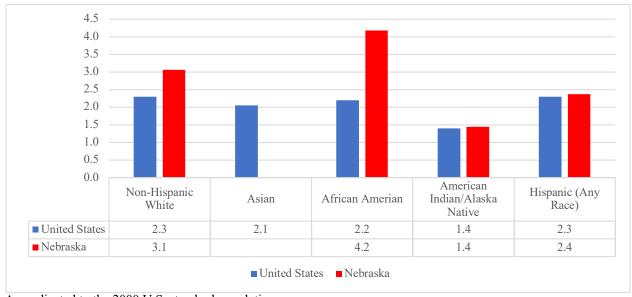
Age-adjusted to the 2000 standard population.

Source: U.S. Cancer Statistics – Mortality: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figure 43 shows the overall pediatric cancer mortality rate in Nebraska and the United States from 2009 to 2018 by race/ethnicity. See Appendix Table A.22 for 95% confidence intervals.

• Among non-Hispanic White persons, the pediatric cancer mortality rate was significantly higher in Nebraska (3.1 deaths per 100,000 population) than the United States (2.4 deaths per 100,000 population).

Figure 43. Age-adjusted mortality rate per 100,000 population of pediatric cancer by race/ethnicity: Nebraska and the United States, 2009–2018



Age-adjusted to the 2000 U.S. standard population.

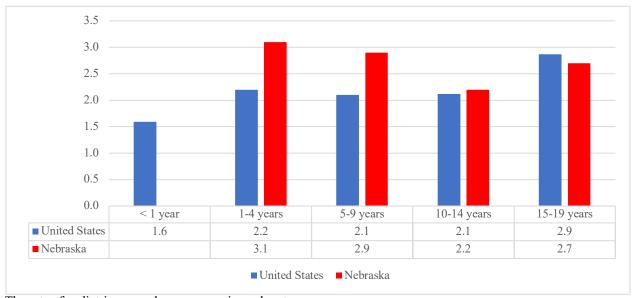
Asian, African American, and American Indian/Alaska Native populations include Hispanics.

Sources: Nebraska data: Nebraska DHHS; U.S. data: WONDER Online Database. U.S. Department of Health and Human Services, CDC; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figure 44 shows the overall pediatric cancer mortality rate in Nebraska and the United States from 2009 to 2018 by age group. See Appendix Table A.23 for 95% confidence intervals.

- In the United States, the mortality rate increased with increasing age. In Nebraska, the mortality rate decreased with increasing age.
- The overall pediatric cancer mortality rate was higher in Nebraska (3.1 deaths per 100,000 population) compared to the United States (2.2 deaths per 100,000 population) for children ages 1–4. But the difference was not statistically significant.
- The overall pediatric cancer mortality rate was higher in Nebraska (2.9 deaths per 100,000 population) compared to the United States (2.1 deaths per 100,000 population) for children ages 5–9. But the difference was not statistically significant.

Figure 44. Age-adjusted mortality rate per 100,000 population of pediatric cancer by age group: Nebraska and the United States, 2009–2018



The rate of pediatric cancer by age group is crude rate.

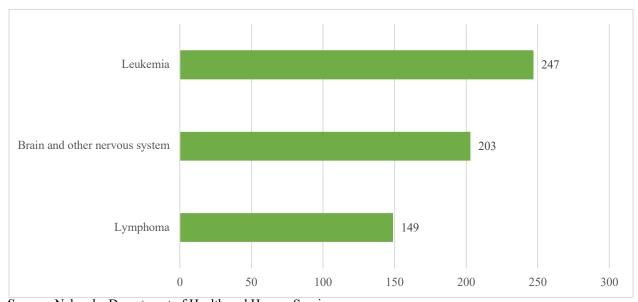
Data for <1-year group was suppressed (see methods section for further details).

Source: U.S. Cancer Statistics – Mortality: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Figures 45 and 46 show the number of new cases of pediatric cancer and number of pediatric cancer deaths in Nebraska from 2009 to 2018.

- The most common cancers were leukemia (247 cases), brain and other central nervous system (CNS) cancers (203 cases), and lymphoma (149 cases).
- The highest number of deaths was seen with brain and other CNS cancers (45 deaths).

Figure 45. Top three types of pediatric cancer based on number of incidence cases: Nebraska, 2009–2018



Source: Nebraska Department of Health and Human Services

Figure 46. Top three types of pediatric cancer based on number of deaths: Nebraska, 2009–2018

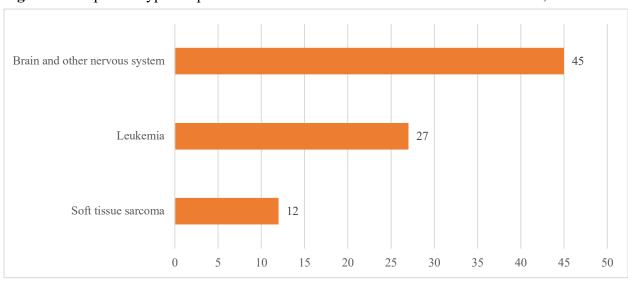


Figure 47 shows the pediatric (ages 0–18) cancer incidence rates per 100,000 population in each local health department district in Nebraska from 1999 to 2018. The statewide pediatric cancer incidence rate from 1999 to 2018 was 21.3 cases per 100,000 population. The districts with the highest pediatric cancer incidence rates were the East Central, Sarpy/Cass, and South Heartland districts.

Figure 47. Pediatric cancer incidence rates per 100,000 population in Nebraska, ages 0–18, by local health department district

Pediatric Cancer Incidence in Nebraska (Age 0-18), 1999-2018 Incidence Rates by Local Health Department Region

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

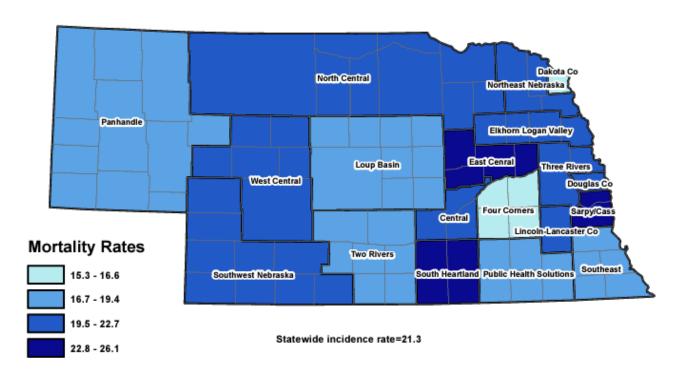
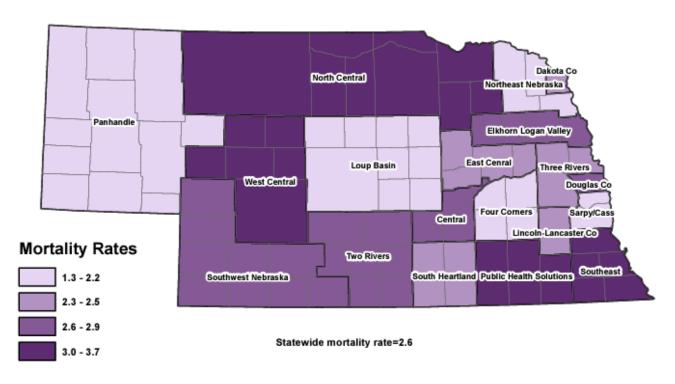


Figure 48 shows the pediatric (ages 0–18) cancer mortality rates per 100,000 population in each local health department district in Nebraska from 1999 to 2018. The statewide pediatric cancer mortality rate from 1999 to 2018 was 2.6 deaths per 100,000 population. The districts with the highest pediatric cancer mortality rates were the North Central, Public Health Solutions, Southeast, and West Central districts.

Figure 48. Pediatric cancer mortality rates per 100,000 population in Nebraska, ages 0–18, by local health department district

Pediatric Cancer Deaths in Nebraska (Age 0-18), 1999-2018 Mortality Rates by Local Health Department Region

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



APPENDIX

Table A.1. Age-adjusted incidence rate per 100,000 population by cancer site and region for

males: Nebraska and the United States, 2014–2018

mates. Neoraska and the Officer S			Males		
Cancer Site		Nebraska	Un	ited States	Risk
	Rate	95% CI	Rate	95% CI	Ratio
All cancers	508.7	(502.4, 515.0)	487.4	(486.9, 487.8)	1.04*
Bladder	35.0	(33.4, 36.7)	34.0	(33.9, 34.2)	1.03
Brain and other nervous system	8.0	(7.2, 8.8)	7.6	(7.5, 7.7)	1.05
Childhood < 15	18.7	(16.1, 21.5)	18.4	(18.2, 18.6)	1.02
Colon and rectum	47.6	(45.7, 49.6)	43.5	(43.3, 43.6)	1.09*
Esophagus	8.1	(7.3, 8.9)	7.8	(7.8, 7.9)	1.04
Kidney and renal pelvis	24.6	(23.3, 26.1)	23.1	(23.0, 23.2)	1.06*
Leukemia	18.6	(17.4, 19.9)	18.1	(18.0, 18.2)	1.03
Liver and intrahepatic bile duct	8.6	(7.8, 9.4)	13.0	(13.0, 13.1)	0.66*
Lung and bronchus	63.4	(61.2, 65.7)	65.7	(65.5, 65.9)	0.96
Melanoma (skin)	30.7	(29.1, 32.3)	28.9	(28.8, 29.0)	1.06*
Non-Hodgkin lymphoma	23.8	(22.5, 25.3)	23.1	(23.0, 23.2)	1.03
Oral cavity and pharynx	19.0	(17.9, 20.3)	18.0	(18.0, 18.1)	1.06
Pancreas	14.9	(13.8, 16.0)	14.9	(14.8, 15.0)	1.00
Prostate	123.3	(120.3, 126.3)	106.2	(106.0, 106.4)	1.16*
Stomach	7.5	(6.7, 8.3)	8.7	(8.6, 8.8)	0.86*
Thyroid	7.4	(6.7, 8.3)	7.3	(7.2, 7.3)	1.01

* Indicates a statistically significant difference between Nebraska and U.S. rates.

Source: NCI State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.2. Age-adjusted incidence rate per 100,000 population by cancer site and region for females: Nebraska and the United States, 2014–2018

			Females	S	
Cancer Site	1	Nebraska	Uı	nited States	Risk
	Rate	95% CI	Rate	95% CI	Ratio
All cancers	440.3	(434.6, 446.0)	422.7	(422.3, 423.2)	1.04*
Bladder	8.8	(8.0, 9.6)	8.5	(8.4, 8.5)	1.04
Brain and other nervous system	6.4	(5.7, 7.1)	5.5	(5.4, 5.5)	1.16*
Breast (female)	130.5	(127.4, 133.7)	126.8	(126.6, 127.0)	1.03*
Cervix	7.6	(6.8, 8.5)	7.7	(7.6, 7.8)	0.99
Childhood <15	18.6	(16.0, 21.6)	16.5	(16.3, 16.7)	1.13
Colon and rectum	38.6	(36.9, 40.2)	33.4	(33.3, 33.5)	1.16*
Esophagus	1.6	(1.3, 2.0)	1.8	(1.7, 1.8)	0.89
Kidney and renal pelvis	12.5	(11.6, 13.5)	11.8	(11.8, 11.9)	1.06
Leukemia	10.9	(10.1, 11.9)	11.0	(11.0, 11.1)	0.99
Liver and intrahepatic bile duct	2.9	(2.5, 3.4)	4.7	(4.6, 4.7)	0.62*
Lung and bronchus	50.3	(48.5, 52.1)	50.8	(50.7, 50.9)	0.99
Melanoma (skin)	26.4	(24.9, 27.9)	18.0	(17.9, 18.1)	1.47*
Non-Hodgkin lymphoma	17.0	(15.9, 18.1)	15.9	(15.8, 16.0)	1.07
Oral cavity and pharynx	6.8	(6.2, 7.6)	6.5	(6.4, 6.5)	1.05
Ovary	9.8	(8.9, 10.7)	10.7	(10.6, 10.8)	0.92
Pancreas	11.3	(10.5, 12.2)	11.5	(11.5, 11.6)	0.98
Stomach	3.4	(2.9, 3.9)	4.6	(4.6, 4.7)	0.74*
Thyroid	23.6	(22.2, 25.0)	20.7	(20.6, 20.8)	1.14*
Uterus	27.6	(26.2, 29.0)	27.4	(27.3, 27.5)	1.01

^{*} Indicates a statistically significant difference between Nebraska and U.S. rates.

Source: NCI State Cancer Profile. https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.3. Age-adjusted mortality rate per 100,000 population by cancer site and region for males: Nebraska and the United States, 2015–2019

			Males		
Cancer Site	1	Nebraska	U:	nited States	Risk
	Rate	95% CI	Rate	95% CI	Ratio
All cancers	179.3	(175.6, 183.1)	181.4	(181.1, 181.7)	0.99
Bladder	6.8	(6.1, 7.6)	7.3	(7.2, 7.3)	0.93
Brain and ONS	6.1	(5.4, 6.8)	5.4	(5.3, 5.4)	1.13
Childhood <15	2.6	(1.7, 3.8)	2.2	(2.1, 2.2)	1.18
Colon and rectum	17.1	(16.0, 18.3)	16.0	(15.9, 16.1)	1.07
Esophagus	8.2	(7.5, 9.1)	6.8	(6.8, 6.9)	1.21*
Kidney and renal pelvis	6.4	(5.8, 7.2)	5.2	(5.2, 5.3)	1.23*
Leukemia	9.2	(8.4, 10.1)	8.2	(8.1, 8.2)	1.12*
Liver and intrahepatic bile duct	5.9	(5.3, 6.6)	9.7	(9.6, 9.7)	0.61*
Lung and bronchus	42.5	(40.8, 44.4)	44.5	(44.4, 44.7)	0.96
Melanoma (skin)	3.8	(3.2, 4.3)	3.2	(3.1, 3.2)	1.19
Non-Hodgkin lymphoma	7.3	(6.6, 8.1)	6.9	(6.8, 6.9)	1.06
Oral cavity and pharynx	3.6	(3.1, 4.2)	3.9	(3.9, 4.0)	0.92
Pancreas	13.3	(12.3, 14.4)	12.7	(12.7, 12.8)	1.05
Prostate	17.8	(16.6, 19.0)	18.9	(18.8, 19.0)	0.94
Stomach	3.3	(2.8, 3.9)	3.9	(3.8, 3.9)	0.85
Thyroid	0.4	(0.3, 0.6)	0.5	(0.5, 0.5)	0.80

* Indicates a statistically significant difference between Nebraska and U.S. rates.

Source: NCI State Cancer Profile. https://statecancerprofiles.cancer.gov/deathrates/index.php

Table A.4. Age-adjusted mortality rate per 100,000 population by cancer site and region for females: Nebraska and the United States, 2015–2019

			Females	S	
Cancer Site	1	Nebraska	U	nited States	Risk
	Rate	95% CI	Rate	95% CI	Ratio
All cancers	133.0	(130.1, 136.0)	131.1	(130.9, 131.3)	1.01
Bladder	2.1	(1.8, 2.5)	2.1	(2.1, 2.1)	1.00
Brain and other nervous system	4.2	(3.6, 4.8)	3.6	(3.5, 3.6)	1.17
Breast (female)	19.8	(18.7, 21.0)	19.9	(19.8, 20.0)	0.99
Cervix	2.1	(1.7, 2.5)	2.2	(2.2, 2.2)	0.95
Childhood <15	2.9	(1.9, 4.2)	1.9	(1.8, 2.0)	1.53
Colon and rectum	12.2	(11.3, 13.1)	11.3	(11.2, 11.4)	1.08
Esophagus	1.6	(1.3, 1.9)	1.4	(1.4, 1.4)	1.14
Kidney and renal pelvis	2.5	(2.2, 3.0)	2.2	(2.2, 2.3)	1.14
Leukemia	4.9	(4.4, 5.5)	4.6	(4.5, 4.6)	1.07
Liver and intrahepatic bile duct	2.8	(2.4, 3.3)	4.1	(4.0, 4.1)	0.68*
Lung and bronchus	31.3	(29.9, 32.8)	30.7	(30.6, 30.8)	1.02
Melanoma (skin)	1.5	(1.2, 1.8)	1.4	(1.3, 1.4)	1.07
Non-Hodgkin lymphoma	3.8	(3.4, 4.4)	4.0	(4.0, 4.0)	0.95
Oral cavity and pharynx	1.5	(1.2, 1.8)	1.4	(1.3, 1.4)	1.07
Ovary	6.3	(5.6, 7.0)	6.5	(6.4, 6.5)	0.97
Pancreas	9.7	(8.9, 10.5)	9.6	(9.6, 9.7)	1.01
Stomach	1.5	(1.2, 1.9)	2.1	(2.1, 2.2)	0.71*
Thyroid	0.4	(0.3, 0.6)	0.5	(0.5, 0.5)	0.80
Uterus	5.0	(4.5, 5.6)	5.0	(4.9, 5.0)	1.00

^{*} Indicates a statistically significant difference between Nebraska and U.S. rates.

Source: NCI State Cancer Profile. https://statecancerprofiles.cancer.gov/deathrates/index.php

Table A.5. Age-adjusted female breast cancer incidence rates with 95% confidence interval (CI) per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018

	Non-Hispanic White		e African American		_	rican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	132.6	(132.3, 132.9)	124.3	(123.7, 125.0)	72.9	(71.2, 74.7)	95.4	(94.8, 96.0)	
Nebraska	134.2	(130.8, 137.6)	108.5	(94.1, 124.4)	98.8	(69.2, 136.0)	101.2	(88.0, 115.7)	

Age-adjusted to the 2000 U.S. standard population

African American and American Indian/Alaska Native populations include Hispanic women.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.6. Age-adjusted female breast cancer mortality rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019

Location	Non-Hispanic White		African American		American Indian/ Alaska Native		Hispanic	
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
United States	19.9	(19.8, 20.0)	27.1	(26.8, 27.4)	11.8	(11.1, 12.5)	13.7	(13.5, 14.0)
Nebraska	20.1	(18.9, 21.3)	30.3	(22.8, 39.5)	*	*	5.6	(3.0, 9.6)

Age-adjusted to the 2000 U.S. standard population.

African American and American Indian/Alaska Native populations include Hispanic women.

* 95% CI data for American Indian/Alaska Native population are suppressed due to small case count.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/deathrates/index.php

Table A.7. Age-adjusted lung cancer incidence rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018

Location	Non-Hispanic White		African American		American Indian/ Alaska Native		Hispanic	
2000001	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
United States	61.6	(61.5, 61.8)	58.0	(57.7, 58.4)	41.3	(40.3, 42.4)	29.0	(28.7, 29.3)
Nebraska	56.3	(54.9, 57.8)	66.9	(58.1, 76.6)	58.3	(39.6, 81.9)	37.3	(30.7, 44.7)

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.8. Age-adjusted lung cancer mortality rates with 95% CI per 100,000 population

by race/ethnicity: Nebraska and the United States, 2015-2019

Location	Non-Hi	Non-Hispanic White		African American		American Indian/ Alaska Native		Hispanic	
Locution	Rate	95% CI	Race	95% CI	Rate	95% CI	Rate	95% CI	
United States	39.9	(39.7, 40.0)	38.1	(37.8, 38.4)	24.3	(23.5, 25.1)	16.2	(16.0, 16.4)	
Nebraska	37.0	(35.8, 38.2)	41.1	(34.3, 48.8)	20.6	(10.8, 34.9)	14.4	(10.5, 19.2)	

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/deathrates/index.php

Table A.9. Age-adjusted prostate cancer incidence rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018

Location	Non-Hispanic White		Afric	African American		American Indian/ Alaska Native		Hispanic	
2000001	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	99.9	(99.7, 100.2)	168.6	(167.7, 169.5)	53.7	(52.0, 55.4)	83.9	(83.3, 84.6)	
Nebraska	120.5	(117.4, 123.7)	200.2	(178.1, 224.1)	77.8	(48.2, 117.5)	84.9	(71.1, 100.4)	

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.10. Age-adjusted prostate cancer mortality rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019

Location	Non-Hispanic White		Africa	African American		American Indian/ Alaska Native		Hispanic	
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	17.8	(17.7, 17.9)	36.9	(36.5, 37.4)	12.9	(12.0, 13.9)	15.6	(15.3, 15.9)	
Nebraska	17.2	(16.0, 18.5)	47.6	(35.1, 62.4)	0.0	*	14.0	(8.0, 22.0)	

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/deathrates/index.php

^{* 95%} CI data for the Nebraska American Indian/Alaska Native population are suppressed due to the small case count.

Table A.11. Age-adjusted colorectal cancer incidence rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2014–2018

Location	Non-Hispanic White		African American		American Indian/ Alaska Native		Hispanic	
Locuiton	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
United States	38.0	(37.9, 38.1)	42.9	(42.6, 43.2)	30.1	(29.3, 31.0)	33.6	(33.4, 33.9)
Nebraska	42.9	(41.6, 44.3)	47.9	(40.7, 56.0)	40.3	(26.1, 58.8)	37.9	(31.8, 44.8)

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/incidencerates/index.php

Table A.12. Age-adjusted colorectal cancer mortality rates with 95% CI per 100,000 population by race/ethnicity: Nebraska and the United States, 2015–2019

Location	Non-Hispanic White		Africa	African American		American Indian/ Alaska Native		Hispanic	
2000000	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	13.4	(13.3, 13.4)	17.6	(17.4, 17.7)	10.2	(9.7, 10.7)	10.8	(10.7, 11.0)	
Nebraska	14.7	(13.9, 15.5)	19.0	(14.4, 24.5)	*	*	8.3	(5.4, 12.0)	

Age-adjusted to the 2000 U.S. population.

African American and American Indian/Alaska Native populations include Hispanics.

Source: NCI, State Cancer Profile, https://statecancerprofiles.cancer.gov/deathrates/index.php

Table A.13. Up to date on colorectal cancer screening rate with 95% CI, ages 50–75, by race/ethnicity: Nebraska and the United States, 2020

Location	Non-Hispanic White			-Hispanic n American	Amer	-Hispanic ican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate 95% CI		Rate	95% CI	Rate	95% CI	
United States	74.4	(73.9 - 74.9)	74.8	(73.0 - 76.6)	62.8	(58.0 - 67.6)	63.9	(61.5 - 66.3)	
Nebraska	74.7	(73.1 - 76.2)	66.8	(55.5 - 78.1)	70.0	(52.6 - 87.5)	46.7	(37.9 - 55.5)	

Percentage of adults ages 50-75 who report having had a fecal occult blood test (FOBT) during the past year, or a sigmoidoscopy during the past 5 years and an FOBT during the past 3 years, or a colonoscopy during the past 10 years.

Source: CDC BRFSS

^{*} Data for the Nebraska American Indian/Alaska Native population are suppressed due to the small case count.

Table A.14. Mammogram rate with 95% CI among women ages 50–74 by race/ethnicity: Nebraska and the United States, 2020

Location	Non-Hi	spanic White		-Hispanic n American	Amer	-Hispanic ican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate 95% CI		Rate	95% CI	Rate	95% CI	
United States	77.8	(77.1 - 78.4)	84.5	(82.6 - 86.5)	68.7	(61.8 - 75.5)	79.8	(77.2 - 82.5)	
Nebraska	76.8	(74.8 - 78.8)	75.9	(64.0 - 87.8)	*	*	70.1	(58.5 - 81.7)	

^{*} Data for the Nebraska American Indian/Alaska Native population are suppressed (see methods section for further details).

Source: CDC BRFSS

Table A15. Up to date on cervical cancer screening rate with 95% CI, ages 21–65, by race/ethnicity: Nebraska and the United States, 2020

Location	Non-Hispanic White			-Hispanic n American	Amer	-Hispanic ican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	78.4	(77.8 - 79.0)	83.2	(81.4 - 84.9)	74.4	(69.3 - 79.4)	76.5	(74.7 - 78.3)	
Nebraska	79.1	(77.0 - 81.2)	73.6	(59.7 - 87.5)		*	75.7	(69.0 - 82.4)	

Percentage of females ages 21-65 without hysterectomy who had a Pap test within the past 3 years.

Source: CDC BRFSS

Table A.16. Percentage of individuals ages 18+ who are current smokers with 95% CI by race/ethnicity: Nebraska and the United States, 2016–2020

Location	Non-Hi	spanic White		-Hispanic an American	Amer	-Hispanic ican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate 95% CI		Rate	95% CI	Rate	95% CI	
United States	16.3	(16.2 - 16.5)	17.6	(17.3 - 18.0)	28.5	(27.5 - 29.6)	12.4	(12.1 - 12.7)	
Nebraska	14.9	(14.5 - 15.4)	22.0	(19.0 - 25.0)	35.4	(30.0 - 40.9)	13.6	(12.2 - 15.0)	

Source: CDC BRFSS

Table A.17. Percentage of individuals ages 18+ who are obese (BMI 30+) with 95% CI by race/ethnicity: Nebraska and the United States, 2016–2020

Location	Non-Hi	spanic White		-Hispanic n American	Amer	-Hispanic ican Indian/ ska Native	Hispanic		
	Rate	95% CI	Rate 95% CI		Rate	95% CI	Rate	95% CI	
United States	29.7	(29.6 - 29.8)	39.7	(39.2 - 40.1)	38.5	(37.3 - 39.6)	33.9	(33.4 - 34.3)	
Nebraska	33.1	(32.5 - 33.6)	41.1	(37.5 - 44.6)	41.0	(35.5 - 46.6)	35.1	(33.0 - 37.1)	

Source: CDC BRFSS

^{*} Data for the Nebraska American Indian/Alaska Native population are suppressed (see methods section for further details).

Table A.18. Age-adjusted incidence rate with 95% CI per 100,000 population of pediatric cancer by sex: Nebraska and the United States, 2009–2018

Location		All		Male	Female		
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	18.7	(18.6 - 18.8)	19.5	(19.3 - 19.6)	17.9	(17.8 - 18.1)	
Nebraska	20.0	(18.8 - 21.2)	21.5	(19.8 - 23.4)	18.3	(16.7 - 20.0)	

Age-adjusted to the 2000 standard population.

Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Table A.19. Age-adjusted incidence rate with 95% CI per 100,000 population of pediatric cancer by race/ethnicity: Nebraska and the United States, 2009–2018

Location	Non-H	Non-Hispanic White		Hispanic White Non-Hispanic Asian		Non-Hispanic African American		Non-Hispanic American Indian/ Alaska Native		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	19.9	(19.8 - 20.1)	16.7	(16.3 - 17.1)	14.3	(14.1 - 14.5)	17.2	(16.3 - 18.1)	18.1	(17.9 - 18.3)	
Nebraska	20.6	(19.2 - 22.1)	17.9	(11.4 - 26.6)	17.5	(13.5 - 22.2)	*	*	16.8	(14.1 - 19.8)	

Age-adjusted to the 2000 standard population.

Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Table A.20. Age-adjusted incidence rate and 95% CI per 100,000 population of pediatric cancer by age group: Nebraska and the United States, 2009–2018

Location	<1 year		1-	4 years	5-	9 years	10-14 years 15-		-19 years	
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
United States	27.4	(26.8 - 27.9)	22.9	(22.7 - 23.2)	13.2	(13.1 - 13.4)	14.9	(14.8 - 15.1)	23.2	(23.0 - 23.4)
Nebraska	30.7	(24.4 - 38.2)	24.5	(21.6 - 27.6)	15.3	(13.2 - 17.5)	14.7	(12.7 - 16.9)	24.5	(21.9 - 27.3)

Source: U.S. Cancer Statistics – Incidence: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

^{*} Data for the American Indian/Alaska Native population are suppressed due to the small case count.

Table A.21. Age-adjusted mortality rate with 95% CI per 100,000 population of pediatric cancer by sex: Nebraska and the United States, 2009–2018

Landin		All		Male	Female		
Location	Rate 95% CI		Rate 95% CI		Rate 95% CI		
United States	2.3	(2.3 - 2.3)	2.5	(2.5 - 2.6)	2.1	(2.0 - 2.1)	
Nebraska	2.6	(2.2 - 3.1)	2.7	(2.1 - 3.4)	2.6	(2.0 - 3.3)	

Age-adjusted to the 2000 standard population.

Source: U.S. Cancer Statistics – Mortality: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC and NCI; 2021. Accessed at https://wonder.cdc.gov/cancermort-v2018.HTM

Table A.22. Age-adjusted mortality rate with 95% CI per 100,000 population of pediatric cancer by race/ethnicity: Nebraska and the United States, 2009–2018

	Non-Hispanic White		Non-Hispanic White Asian		Afric	an American	_	can Indian/ ka Native		Hispanic	
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	2.3	(2.2 - 2.3)	2.1	(1.9 - 2.2)	2.2	(2.1 - 2.3)	1.4	(1.2 - 1.6)	2.3	(2.3 - 2.3)	
Nebraska	3.1	(2.54 - 3.58)	*	*	4.2	(2.19 - 6.17)	1.4	*	2.4	(1.33 - 3.41)	

Age-adjusted to the 2000 U.S. standard population.

Asian, African American, and American Indian/Alaska Native populations include Hispanics.

Sources: Nebraska data: Nebraska DHHS; U.S. data: WONDER Online Database. U.S. Department of Health and Human Services, CDC; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

Table A.23. Age-adjusted mortality rate with 95% CI per 100,000 population of pediatric cancer by age group: Nebraska and the United States, 2009–2018

Landing	<1 year		1-4 years		5-9 years		10-14 years		15-19 years		
Location	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	
United States	1.6	(1.4 - 1.7)	2.2	(2.1 - 2.2)	2.1	(2.1 - 2.2)	2.1	(2.1 - 2.2)	2.9	(2.8 - 2.9)	
Nebraska	*	*	3.1	(2.2 - 4.4)	2.9	(2.0 - 4.0)	2.2	(1.5 - 3.2)	2.7	(1.9 - 3.8)	

The rate of pediatric cancer by age group is crude rate.

Source: U.S. Cancer Statistics – Mortality: 1999–2018, WONDER Online Database. U.S. Department of Health and Human Services, CDC; 2021. Accessed at https://wonder.cdc.gov/cancer-v2018.html

^{* 95%} CI data for the Nebraska Asian and American Indian/Alaska Native populations are suppressed due to the small case count.

^{* 95%} CI data for the Nebraska <1-year group was suppressed due to the small case count.

LIST OF ACRONYMS

The following is a list of acronyms used in this document.

ACS	American Cancer Society
BCC	University of Nebraska Medical Center's Fred and Pamela Buffett Cancer Center
BMI	Body mass index
BRFSS	Behavioral Risk Factor Surveillance System
CCNA	Community Cancer Needs Assessment
CNS	Central nervous system
NC2	Nebraska Cancer Coalition
NCI	National Cancer Institute
NE CCCP	Nebraska Comprehensive Cancer Control Program
OCOE	BCC's Office of Community Outreach and Engagement
PSA test	Prostate-specific antigen test
SEER Program	Surveillance, Epidemiology, and End Results Program
USPSTF	U.S. Preventative Services Task Force







