

# **Cancer in Oklahoma: 2022 Annual Report**

**Community Outreach and  
Engagement Core**

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## **OVERVIEW**

The mission of the Stephenson Cancer Center (SCC) is to eliminate cancer in Oklahoma, the SCC's catchment area, and beyond. To advance this mission, the SCC fosters and supports research projects in the basic, clinical, behavioral and population sciences that specifically address cancers and cancer problems prevalent in Oklahoma.

Some SCC-sponsored intramural funding opportunities include a focus on catchment area Priority Cancers and relevant modifiable risk factors as a preference in the scoring criteria. The attached information is intended to help SCC members identify these high incidence and high mortality cancers and cancer problems.

Priority Cancers and Cancer Disparities: The list of Priority Cancers (pg. 4) is determined by the SCC's Community Outreach and Engagement (COE) Core, based on overall (all races) incidence and mortality rates for these cancers in the catchment area. However, it is important to note that Oklahoma's various race and ethnic groups experience disproportionate rates from many different cancers. The data found in the incidence (pgs. 10-14) and mortality tables (pgs. 15-19) in this report highlight these cancer disparities.

## **NCI-DESIGNATED CANCER CENTERS AND CATCHMENT AREA RELEVANT RESEARCH PROBLEMS**

The National Cancer Institute (NCI) is increasingly placing an emphasis on addressing cancer problems at the community level. In 2017, the NCI established Community Outreach and Engagement (COE) as a core component of the P30 Cancer Center Support Grant (CCSG). With the following language, even greater emphasis was put on COE in the most recent version of the CCSG guidelines (2020):

“NCI Designated Cancer Centers occupy a unique role in their communities. They are expected to perform research of particular relevance to their catchment area and engage the populations within their catchment area in the research they conduct. In order to facilitate this, Centers thoroughly analyze the demographics and cancer burden of their catchment area. In addition, Centers are expected to engage communities within their catchment area to decrease their cancer burden, particularly among minority and under-represented populations.

In addition to research questions of broader applicability, cancer center research programs should conduct research that addresses relevant cancer problems in the catchment area at a level appropriate to the type of program. This includes cancer problems affecting: racial and ethnic minorities, rural residents, women, children, elderly, sexual and gender minorities, persons of low socioeconomic status, cancer sites of high incidence / mortality, environmental exposures, behavioral factor, social determinants, and other relevant problems / issues.”

## **PRIORITY CANCERS IN OKLAHOMA**

The SCC's Community Outreach and Engagement (COE) Core uses a data-driven approach to determine Priority Cancers in Oklahoma (the SCC catchment area). Three categories are employed:

1. The top five age-adjusted cancers based on incidence rates per 100,000 for each race / ethnic group
2. The top five age-adjusted cancers based on death rates per 100,000 for each race / ethnic group
3. The top two cancers with the greatest incidence disparity rates between Oklahoma (all races) and the US (all races)

### **SCC Catchment Area: Priority Cancers List**

- Breast (female) High incidence cancer, high mortality cancer (OK, all races)
- Prostate High incidence cancer, high mortality cancer (OK, all races)
- Lung High incidence cancer, high mortality cancer (OK, all races)
- Colorectal High incidence cancer, high mortality cancer (OK, all races)
- Pancreas High mortality cancer (OK, all races)
- Uterus High incidence cancer (OK, all races)
- Cervix High disparity cancer (OK, all races vs. US, all races)
- Kidney & Renal High disparity cancer (OK, all races vs. US, all races)

See Table below and Incidence (pgs. 10-14) and Mortality (pgs. 15-19) Tables for more information

### **Priority Cancers in Oklahoma: Incidence and Mortality Ranking and Rates**

- Rank (#) among Race / Ethnicity
- Age-adjusted rate per 100,000 Residents

<b>Priority Cancers</b>	<b>Statistics</b>	<b>All Races (US)</b>	<b>All Races (OK)</b>	<b>White (OK)</b>	<b>American Indian (OK)</b>	<b>Black (OK)</b>	<b>Hispanic (OK)</b>
Breast (female)	Incidence	(1) 126.8	(1) 124.2	(1) 122.4	(1) 147.2	(2) 123.9	(1) 97.2
	Mortality	(2) 19.9	(2) 22.5	(2) 22.6	(3) 29.5	(3) 30.0	(2) 12.8
Prostate	Incidence	(2) 106.2	(2) 95.7	(2) 88.3	(2) 108.3	(1) 164.1	(2) 64.4
	Mortality	(3) 18.9	(3) 20.4	(3) 19.3	(2) 33.4	(2) 42.0	(3) 10.6

Lung	Incidence	(3) 57.3	(3) 66.7	(3) 66.5	(3) 92.5	(3) 63.6	(4) 30.9
	Mortality	(1) 36.7	(1) 48.7	(1) 50.1	(1) 68.3	(1) 45.9	(1) 17.2
Colorectal	Incidence	(4) 38.0	(4) 41.2	(4) 39.3	(4) 64.0	(4) 41.9	(3) 33.9
	Mortality	(4) 13.4	(4) 16.5	(4) 16.2	(4) 28.0	(4) 21.6	(5) 8.5
Pancreas	Incidence	(13) 11.8	(14) 13.1	(14) 11.4	(15) 15.3	(8) 13.5	(12) 11.2
	Mortality	(5) 11.1	(5) 11.1	(5) 11.0	(5) 14.6	(5) 13.3	(4) 9.1
Uterus	Incidence	(5) 27.4	(5) 23.7	(6) 22.5	(6) 29.4	(5) 25.5	(5) 26.1
	Mortality	(10) 5.0	(11) 4.8	(13) 4.4	(10) 6.7	(6) 9.5	(7) 6.4
Cervix *	Incidence	(17) 7.7	(16) 9.5	(16) 8.8	(16) 14.2	(18) 6.9	(9) 12.1
	Mortality	(18) 2.2	(15) 3.5	(15) 3.5	(12) 5.7	(15) 3.9	(N/A) N/A
Kidney & Renal *	Incidence	(10) 17.1	(7) 20.4	(8) 19.0	(5) 39.4	(6) 19.1	(6) 18.1
	Mortality	(14) 3.6	(12) 4.7	(12) 4.6	(8) 8.6	(12) 4.3	(10) 3.7

\* Top two cancers with the greatest incidence disparity rate between Oklahoma (all races) and the US (all races)

Rank	Cancer Sites	OK Rate (all races)	US Rate (all races)	OK vs US Rate
1	Cervix	9.5	7.7	+23.4%
2	Kidney & Renal Pelvis	20.4	17.1	+19.3%

## **MODIFIABLE RISK FACTORS ASSOCIATED WITH PRIORITY CANCERS**

<b>Risk Factor</b>	<b>Rationale</b>
Tobacco Use / Smoking	<p>Tobacco use causes over 20% of all cancers and about 30% of all cancer deaths in the United States.</p> <p>Among all states in 2020, Oklahoma had the 43<sup>rd</sup> worst prevalence of current cigarette smoking. Oklahomans have high rates of tobacco-related cancers. In particular, lung cancer rates in Oklahoma remain much higher than the national average.</p>
Obesity	<p>The combined effects of excess body weight, physical inactivity, and an unhealthy diet, including excess alcohol, cause 18% of cancer cases and 16% of cancer deaths in the United States.</p> <p>Among all states in 2020, Oklahoma had the 42<sup>nd</sup> worst prevalence of obesity. Oklahomans have high rates of colorectal and other obesity/overweight-related cancers. In particular, colorectal cancer rates in Oklahoma remain much higher than the national average.</p>
Alcohol Use	<p>Drinking alcohol increases the risk of cancer of the mouth, throat, esophagus, larynx, liver, colon and rectum, breast, and other cancers. The risk increases dramatically those who drink alcohol and also use tobacco.</p>
Access to Health Care	<p>The ability to engage in cancer screening and treatment hinges on access to health care. Oklahoma currently ranks 48<sup>th</sup> worst among all states on this measure. Expansion of the state Medicaid program will improve this ranking, but Oklahoma will still rank lower than most states on this measure.</p>
Screening Behavior	<p>Among all states in 2020: Oklahoma ranked 45<sup>th</sup> worst on cervical cancer screening among women aged 21-65; 46<sup>th</sup> worst on breast cancer screening among women aged 50-74; 48<sup>th</sup> worst on colorectal cancer screening; and 39<sup>th</sup> worst on prostate cancer screening among men aged 40 and above. (Lung cancer screening data are not yet available)</p>
HPV Vaccination	<p>Among all states in 2021, Oklahoma ranked 46<sup>th</sup> worst on those aged 13-17 who received 2+ doses of HPV Vaccine.</p> <p>Oklahoma has a high rate of HPV-attributable cancer, including cervical and oropharyngeal cancer.</p>

Based on the identified Priority Cancers and the COE strategy, modifiable factors known to increase cancer risk were selected for SCC programs to address through research, education and community outreach. These risk factors are monitored, evaluated and prioritized in relation to ongoing and future SCC projects.

## HIGH INCIDENCE AND HIGH MORTALITY CANCERS AND DISPARITY RATES IN OKLAHOMA

- Oklahoma Age-Adjusted Rates Compared to the US Population Rates for all Races by Cancer Site
- 5-Year Annual Average: Incidence (2014-2018), Death Rate (2015-2019)
- All Rates are per 100,000 people and adjusted to the 2000 US population

### 1. Highest Overall Incidence Cancers in Oklahoma:

OK Incidence Rank	Cancer Sites (all stages)	OK Rate (all races)	OK Cancer Cases	US Rate (all races)	US Cancer Cases	OK vs US Rate
1	Breast (Female) *	124.2	14,475	126.8	1,246,304	-2.1%
2	Prostate *	95.7	2,148	106.2	202,340	-10.1%
3	Lung & Bronchus	66.7	15,609	57.3	1,107,127	+16.4%
4	Colon & Rectum	41.2	9,146	38.0	719,002	+8.1%
5	Uterus *	23.7	2,855	27.4	282,795	-13.5%

\*sex-specific rate

### 2. Highest Overall Cancers by Death Rate in Oklahoma:

OK Mortality Rank	Cancer Sites (all stages)	OK Rate (all races)	OK Cancer Deaths	US Rate (all races)	US Cancer Deaths	OK vs US Rate
1	Lung & Bronchus	48.7	11,525	36.7	730,117	+32.7%
2	Breast (Female) *	22.5	2,776	19.9	290,755	+13.1
3	Prostate *	20.4	1,974	18.9	152,828	+7.9%
4	Colon & Rectum	16.5	3,779	13.4	261,288	+23.1%
5	Pancreas	11.1	2,606	11.1	219,182	---

\*sex-specific rate

### 3. Highest Disparities in Cancer Incidence Rate in OK Compared to US Rate (all races):

Rank	Cancer Sites	OK Rate (all races)	US Rate (all races)	OK vs US Rate
1	Cervix *	9.5	7.7	+23.4%
2	Kidney & Renal Pelvis	20.4	17.1	+19.3%
3	Lung & Bronchus	66.7	57.3	+16.4%
4	Colon & Rectum	41.2	38.0	+8.4%
5	Oral Cavity & Pharynx	12.5	11.9	+5.0%

\*sex-specific rate

**4. Highest Disparities in Cancer Death Rate in OK Compared to US Rate (all races):**

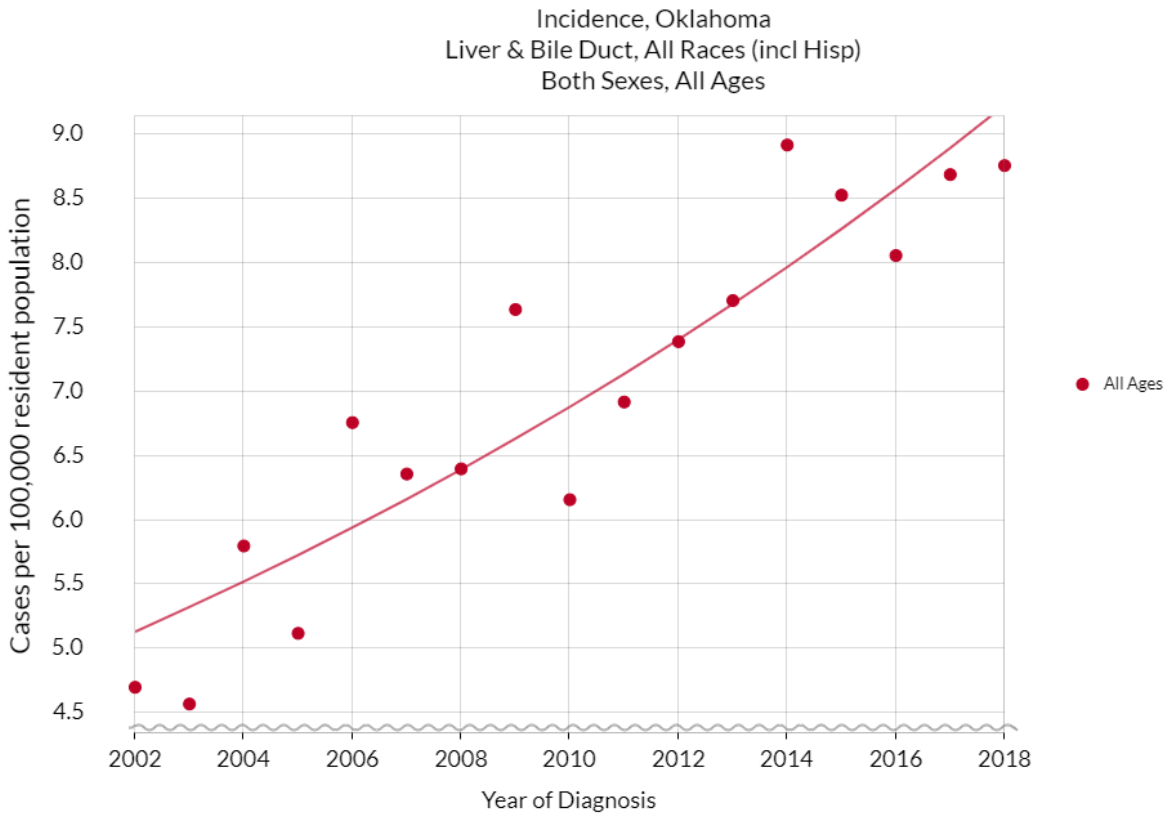
Rank	Cancer Sites	OK Rate (all races)	US Rate (all races)	OK vs US Rate
1	Cervix *	3.5	2.2	+59.1%
2	Lung & Bronchus	48.7	36.7	+32.7%
3	Kidney & Renal Pelvis	4.7	3.6	+30.6%
4	Colon & Rectum	16.5	13.4	+23.1%
5	Childhood (<20, All Sites)	2.7	2.2	+22.7%

\*sex-specific rate

**5. Cancers Most Rapidly Increasing in Incidence in Oklahoma**

Estimated % annual change from 2014-2018, All Races

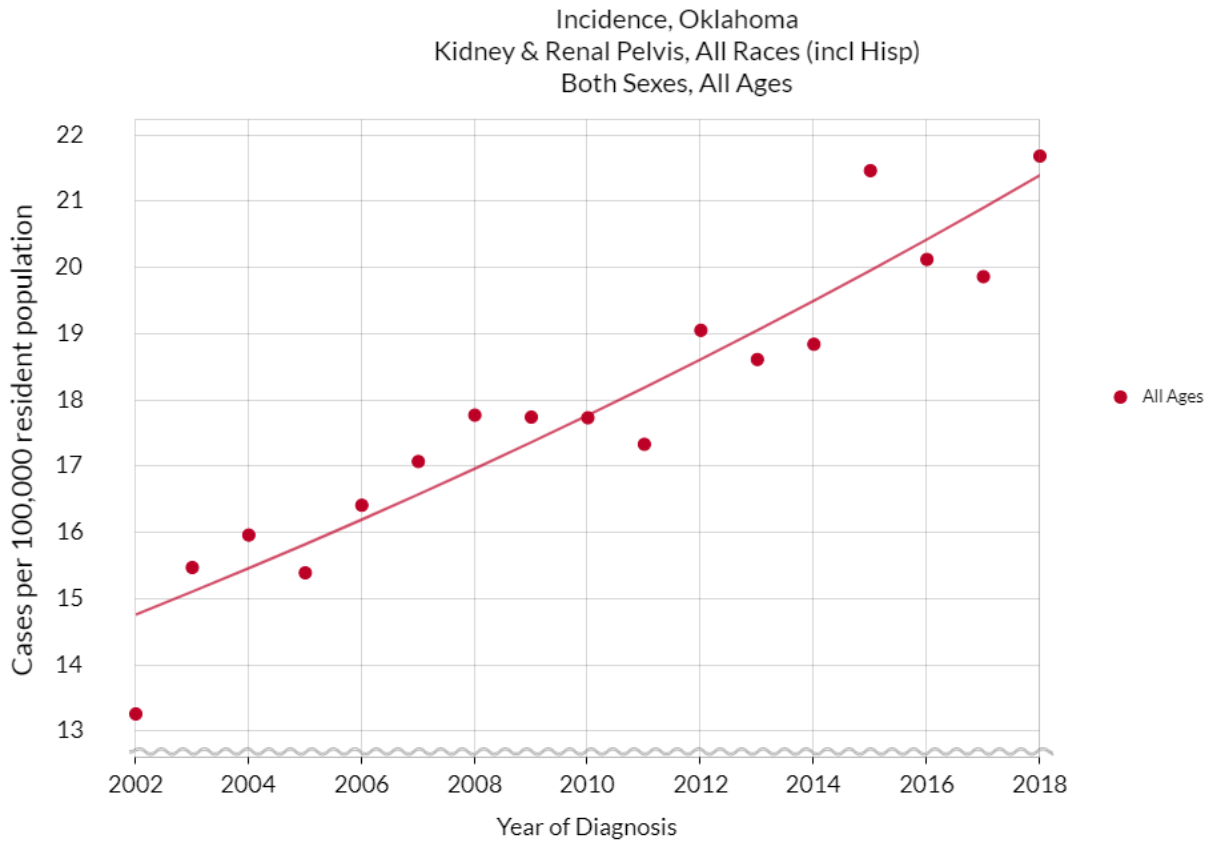
**I. Liver & Bile Duct: +3.7% annual increase (95% CI: 2.8, 4.7)**



Notes:  
Created by statecancerprofiles.cancer.gov on 10/12/2022 3:41 pm.  
Regression lines calculated using the Joinpoint Regression Program (Version 4.8.0.0)



II. Kidney & Renal Pelvis: +2.3% annual increase (95% CI: 1.9, 2.8)



Notes:  
Created by statecancerprofiles.cancer.gov on 10/12/2022 3:49 pm.  
Regression lines calculated using the Joinpoint Regression Program (Version 4.8.0.0)

## **CANCER INCIDENCE IN OKLAHOMA**

Race / Ethnicity Populations in Oklahoma Rate vs. US Rate (all races)  
 Age-Adjusted Incidence Rates per 100,000  
 5-Yr Annual Average (2014 - 2018)

<b>Cancer Incidence: All Races</b>				
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (all races)</b>	<b>US (all races)</b>	<b>OK (all races) vs US (all races)</b>	<b>OK Ranking by Incidence</b>
<b>All Cancer Sites</b>	<b>450.2</b>	<b>448.6</b>	<b>0.4%</b>	<b>---</b>
Bladder	18.6	19.7	-5.6%	8
Brain & ONS	6.5	6.5	0.0%	18
Breast (Female) *	124.2	126.8	-2.1%	1
Cervix *	9.5	7.7	+23.4%	16
Childhood (<20, All Sites)	17.0	19.1	-11.0%	10
Colon & Rectum	41.2	38.0	+8.4%	4
Esophagus	4.4	4.5	-2.2%	21
Kidney & Renal Pelvis	20.4	17.1	+19.3%	7
Leukemia	14.1	14.2	-0.7%	11
Liver & Bile Duct	8.6	8.6	0.0%	17
Lung & Bronchus	66.7	57.3	+16.4%	3
Melanoma (Skin)	22.5	22.6	-0.4%	6
Myeloma	6.3	7.0	-10.0%	19
Non-Hodgkin Lymphoma	17.8	19.1	-6.8%	9
Oral Cavity & Pharynx	12.5	11.9	+5.0%	13
Ovary *	11.1	10.7	+3.7%	15
Pancreas	11.8	13.1	-9.9%	14
Prostate *	95.7	106.2	-9.9%	2
Stomach	5.7	6.5	-12.3%	20
Thyroid	12.6	14.1	-10.6%	12
Uterus *	23.7	27.4	-13.5%	5

\*sex-specific rate

<b>Cancer Incidence: White, Non-Hispanic (NHW)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (NHW)</b>	<b>US (NHW)</b>	<b>US (all races)</b>	<b>OK (NHW) vs US (all races)</b>	<b>OK Ranking by Incidence</b>
<b>All Cancer Sites</b>	<b>439.9</b>	<b>466.2</b>	<b>448.6</b>	<b>-1.9%</b>	<b>---</b>
Bladder	19.3	22.2	19.7	-2.0%	7
Brain & ONS	6.9	7.4	6.5	+6.2%	18
Breast (Female) *	122.4	132.6	126.8	-3.5%	1
Cervix *	8.8	7.3	7.7	+14.3%	16
Childhood (<20, All Sites)	16.7	20.3	19.1	-12.6%	10
Colon & Rectum	39.3	38.0	38.0	+3.4%	4
Esophagus	4.6	5.0	4.5	+2.2%	21
Kidney & Renal Pelvis	19.0	17.3	17.1	+11.1%	8
Leukemia	13.8	15.0	14.2	-2.8%	11
Liver & Bile Duct	7.3	7.2	8.6	-15.1%	17
Lung & Bronchus	66.5	61.6	57.3	+16.1%	3
Melanoma (Skin)	24.5	29.4	22.6	+8.4%	5
Myeloma	5.5	6.1	7.0	-21.4%	19
Non-Hodgkin Lymphoma	17.7	20.2	19.1	-7.3%	9
Oral Cavity & Pharynx	12.7	13.2	11.9	+6.7%	12
Ovary *	10.6	11.1	10.7	-0.9%	15
Pancreas	11.4	13.0	13.1	-13.0%	14
Prostate *	88.3	99.9	106.2	-16.9%	2
Stomach	4.9	5.3	6.5	-24.6%	20
Thyroid	12.7	15.1	14.1	-9.9%	12
Uterus *	22.5	27.8	27.4	-17.9%	6

\*sex-specific rate

<b>Cancer Incidence: American Indian / Alaskan Native (includes Hispanic)</b>				
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (AI/AN)</b>	<b>US (all races)</b>	<b>OK (AI/AN) vs US (all races)</b>	<b>OK Ranking by Incidence</b>
<b>All Cancer Sites</b>	<b>593.9</b>	<b>448.6</b>	<b>+32.4%</b>	<b>---</b>
Bladder	19.9	19.7	+1.0%	9
Brain & ONS	7.6	6.5	+16.9%	20
Breast (Female) *	147.2	126.8	+16.1%	1
Cervix *	14.2	7.7	+84.4%	16
Childhood (<20, All Sites)	21.8	19.1	+14.1%	8
Colon & Rectum	64.0	38.0	+68.4%	4
Esophagus	6.2	4.5	+37.8%	21
Kidney & Renal Pelvis	39.4	17.1	+130.4%	5
Leukemia	16.4	14.2	+15.5%	12
Liver & Bile Duct	19.4	8.6	+125.6%	10
Lung & Bronchus	92.5	57.3	+61.4%	3
Melanoma (Skin)	17.6	22.6	-22.1%	11
Myeloma	10.0	7.0	+42.9%	18
Non-Hodgkin Lymphoma	22.6	19.1	+18.3%	7
Oral Cavity & Pharynx	15.7	11.9	+31.9%	14
Ovary *	14.0	10.7	+30.8%	17
Pancreas	15.3	13.1	+16.8%	15
Prostate *	108.3	106.2	+2.0%	2
Stomach	9.1	6.5	+40.0%	19
Thyroid	15.9	14.1	+12.8%	13
Uterus *	29.4	27.4	+7.3%	6

\*sex-specific rate

<b>Cancer Incidence: Black (includes Hispanic)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (Black)</b>	<b>US (Black)</b>	<b>US (all races)</b>	<b>OK (Black) vs US (all races)</b>	<b>OK Ranking by Incidence</b>
<b>All Cancer Sites</b>	<b>437.5</b>	<b>444.9</b>	<b>448.6</b>	<b>-2.5%</b>	<b>---</b>
Bladder	12.9	11.5	19.7	-34.5%	9
Brain & ONS	3.1	4.0	6.5	-52.3%	19
Breast (Female) *	123.9	124.3	126.8	-2.3%	2
Cervix *	6.9	8.7	7.7	-10.4%	18
Childhood (<20, All Sites)	10.2	13.7	19.1	-46.6%	12
Colon & Rectum	41.9	42.9	38.0	+10.3%	4
Esophagus	2.8	3.7	4.5	-37.8%	20
Kidney & Renal Pelvis	19.1	18.4	17.1	+11.7%	6
Leukemia	12.1	10.7	14.2	-14.8%	11
Liver & Bile Duct	9.2	10.7	8.6	+7.0%	14
Lung & Bronchus	63.6	58.0	57.3	+11.0%	3
Melanoma (Skin)	N/A	1.0	22.6	N/A	N/A
Myeloma	14.2	13.7	7.0	+102.9%	7
Non-Hodgkin Lymphoma	12.8	14.2	19.1	-33.0%	10
Oral Cavity & Pharynx	7.0	8.6	11.9	-41.2%	17
Ovary *	8.9	8.6	10.7	-16.8%	15
Pancreas	13.5	15.9	13.1	+3.1%	8
Prostate *	164.1	168.6	106.2	+54.5%	1
Stomach	9.7	9.6	6.5	+49.2%	13
Thyroid	7.9	8.7	14.1	-44.0%	16
Uterus *	25.5	27.6	27.4	-6.9%	5

\*sex-specific rate

<b>Cancer Incidence: Hispanic (any race)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (Hispanic)</b>	<b>US (Hispanic)</b>	<b>US (all races)</b>	<b>OK (Hispanic) vs US (all races)</b>	<b>OK Ranking by Incidence</b>
<b>All Cancer Sites</b>	<b>335.2</b>	<b>345.0</b>	<b>448.6</b>	<b>-25.3%</b>	<b>---</b>
Bladder	11.2	10.6	19.7	-43.1%	12
Brain & ONS	5.1	5.1	6.5	-21.5%	20
Breast (Female) *	97.2	95.4	126.8	-23.3%	1
Cervix *	12.1	9.5	7.7	+57.1%	9
Childhood (<20, All Sites)	14.4	18.5	19.1	-24.6%	8
Colon & Rectum	33.9	33.6	38.0	-10.8%	3
Esophagus	3.0	2.7	4.5	-33.3%	21
Kidney & Renal Pelvis	18.1	16.9	17.1	+5.8%	6
Leukemia	11.3	11.2	14.2	-20.4%	11
Liver & Bile Duct	10.7	13.7	8.6	+24.4%	14
Lung & Bronchus	30.9	29.0	57.3	-46.1%	4
Melanoma (Skin)	8.3	4.6	22.6	-63.3%	16
Myeloma	5.4	6.6	7.0	-22.9%	19
Non-Hodgkin Lymphoma	16.1	17.4	19.1	-15.7%	7
Oral Cavity & Pharynx	6.8	7.0	11.9	-42.9%	18
Ovary *	12.1	9.9	10.7	+13.1%	9
Pancreas	11.2	11.5	13.1	-14.5%	12
Prostate *	64.4	83.9	106.2	-39.4%	2
Stomach	7.6	9.5	6.5	+16.9%	17
Thyroid	10.5	13.4	14.1	-25.5%	15
Uterus *	26.1	24.2	27.4	-4.7%	5

\*sex-specific rate

## CANCER DEATH RATES IN OKLAHOMA

Race / Ethnicity Populations in Oklahoma Rate vs. US Rate (all races)  
 Age-Adjusted Death Rates per 100,000  
 5-Yr Annual Average (2015 - 2019)

<b>Cancer Death Rates: All Races</b>				
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (all races)</b>	<b>US (all races)</b>	<b>OK vs US (all races)</b>	<b>OK Ranking by Death Rate</b>
<b>All Cancer Sites</b>	<b>178.0</b>	<b>152.4</b>	<b>+16.8%</b>	---
Bladder	4.7	4.2	+11.9%	12 (tie)
Brain & ONS	5.0	4.4	+13.6%	10
Breast (Female) *	22.5	19.9	+13.1%	2
Cervix *	3.5	2.2	+59.1%	15
Childhood (<20, All Sites)	2.7	2.2	+22.7%	18
Colon & Rectum	16.5	13.4	+23.1%	4
Esophagus	4.0	3.9	+2.6%	14
Kidney & Renal Pelvis	4.7	3.6	+30.6%	12 (tie)
Leukemia	7.3	6.1	+19.7%	6 (tie)
Liver & Bile Duct	7.3	6.6	+10.6%	6 (tie)
Lung & Bronchus	48.7	36.7	+32.7%	1
Melanoma (Skin)	2.6	2.2	+18.2%	19 (tie)
Myeloma	3.3	3.2	+3.1%	16
Non-Hodgkin Lymphoma	6.1	5.3	+15.1%	9
Oral Cavity & Pharynx	2.9	2.5	+16.0%	17
Ovary *	7.2	6.5	+10.8%	8
Pancreas	11.1	11.1	0.0%	5
Prostate *	20.4	18.9	+7.9%	3
Stomach	2.6	2.9	-10.3%	19 (tie)
Thyroid	0.5	0.5	0.0%	21
Uterus *	4.8	5.0	-4.0%	11

\*sex-specific rate

<b>Cancer Death Rates: White, Non-Hispanic (NHW)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (NHW)</b>	<b>US (NHW)</b>	<b>US (all races)</b>	<b>OK (NHW) vs US (all races)</b>	<b>OK Ranking by Rate</b>
<b>All Cancer Sites</b>	<b>179.5</b>	<b>157.2</b>	<b>152.4</b>	<b>+17.8%</b>	<b>---</b>
Bladder	5.0	4.7	4.2	+19.0%	11
Brain & ONS	5.5	5.1	4.4	+25.0%	10
Breast (Female) *	22.6	19.9	19.9	+13.6%	2
Cervix *	3.5	2.0	2.2	+59.1%	15
Childhood (<20, All Sites)	2.6	2.2	2.2	+18.2%	19
Colon & Rectum	16.2	13.4	13.4	+20.9%	4
Esophagus	4.3	4.4	3.9	+10.3%	14
Kidney & Renal Pelvis	4.6	3.7	3.6	+27.8%	12
Leukemia	7.5	6.5	6.1	+23.0%	6
Liver & Bile Duct	6.6	5.9	6.6	0.0%	8
Lung & Bronchus	50.1	39.9	36.7	+36.5%	1
Melanoma (Skin)	3.0	2.8	2.2	+36.4%	18
Myeloma	3.1	2.9	3.2	-3.1%	16 (tie)
Non-Hodgkin Lymphoma	6.3	5.5	5.3	+18.9%	9
Oral Cavity & Pharynx	3.1	2.7	2.5	+24.0%	16 (tie)
Ovary *	7.4	6.9	6.5	+13.8%	7
Pancreas	11.0	11.2	11.1	-0.9%	5
Prostate *	19.3	17.8	18.9	+2.1%	3
Stomach	2.4	2.2	2.9	-17.2%	20
Thyroid	0.5	0.5	0.5	0.0%	21
Uterus *	4.4	4.6	5.0	-12.0%	13

\*sex-specific rate



<b>Cancer Death Rates: American Indian / Alaskan Native (includes Hispanic)</b>				
<b>Cancer Sites (all stages)</b>	<b>OK (AI/AN)†</b>	<b>US (all races)</b>	<b>OK (AI/AN) vs US (all races)</b>	<b>OK Ranking by Death Rate</b>
<b>All Cancer Sites</b>	<b>254.6</b>	<b>152.4</b>	<b>+67.1%</b>	<b>---</b>
Bladder	4.8	4.2	+14.3%	16
Brain & ONS	5.0	4.4	+13.6%	15
Breast (Female) *	29.5	19.9	+48.2%	3
Cervix *	5.7	2.2	+159.1%	12
Childhood (<20, All Sites)	2.9	2.2	+31.8%	19
Colon & Rectum	28.0	13.4	+109.0%	4
Esophagus	5.4	3.9	+38.5%	14
Kidney & Renal Pelvis	8.6	3.6	+138.9%	8
Leukemia	6.7	6.1	+9.8%	10 (tie)
Liver & Bile Duct	14.6	6.6	+121.2%	5 (tie)
Lung & Bronchus	68.3	36.7	+86.1%	1
Melanoma (Skin)	2.2	2.2	0.0%	20
Myeloma	5.5	3.2	+71.9%	13
Non-Hodgkin Lymphoma	7.9	5.3	+49.1%	9
Oral Cavity & Pharynx	3.0	2.5	+20.0%	18
Ovary *	9.6	6.5	+47.7%	7
Pancreas	14.6	11.1	+31.5%	5 (tie)
Prostate *	33.4	18.9	+76.7%	2
Stomach	4.6	2.9	+58.6%	17
Thyroid	0.5	0.5	0.0%	21
Uterus *	6.7	5.0	+34.0%	10 (tie)

\*sex-specific rate

†AI/AN death rates in OK are Indian Health Services (IHS) linked due to racial misclassification in this population. Rates obtained from the Oklahoma Central Cancer Registry and Center for Health Statistics Vital Statistics.

<b>Cancer Death Rates: Black (includes Hispanic)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (Black)</b>	<b>US (Black)</b>	<b>US (all races)</b>	<b>OK (Black) vs US (all races)</b>	<b>OK Ranking by Rate</b>
<b>All Cancer Sites</b>	<b>193.8</b>	<b>173.6</b>	<b>152.4</b>	<b>+27.2%</b>	<b>---</b>
Bladder	4.2	3.4	4.2	0.0%	13 (tie)
Brain & ONS	3.3	2.7	4.4	-25.0%	16
Breast (Female) *	30.0	27.1	19.9	+50.8%	3
Cervix *	3.9	3.2	2.2	+77.3%	15
Childhood (<20, All Sites)	N/A	2.2	2.2	N/A	N/A
Colon & Rectum	21.6	17.6	13.4	+61.2%	4
Esophagus	3.1	2.9	3.9	-20.5%	17
Kidney & Renal Pelvis	4.3	3.4	3.6	+19.4%	12
Leukemia	6.6	5.2	6.1	+8.2%	8
Liver & Bile Duct	7.4	8.3	6.6	+12.1%	7
Lung & Bronchus	45.9	38.1	36.7	+25.1%	1
Melanoma (Skin)	N/A	0.3	2.2	N/A	N/A
Myeloma	6.5	5.8	3.2	+103.1%	9
Non-Hodgkin Lymphoma	4.2	3.9	5.3	-20.8%	13 (tie)
Oral Cavity & Pharynx	2.7	2.5	2.5	+8.0%	18
Ovary *	6.0	5.7	6.5	-7.7%	10
Pancreas	13.3	13.3	11.1	+19.8%	5
Prostate *	42.0	36.9	18.9	+122.2%	2
Stomach	4.4	5.0	2.9	+51.7%	11
Thyroid	N/A	0.5	0.5	N/A	N/A
Uterus *	9.5	8.8	5.0	+90.0%	6

\*sex-specific rate

<b>Cancer Death Rates: Hispanic (any race)</b>					
<b>Cancer Sites (all stages)</b>	<b>Oklahoma (Hispanic)</b>	<b>US (Hispanic)</b>	<b>US (all races)</b>	<b>OK (Hispanic) vs US (all races)</b>	<b>OK Ranking by Rate</b>
<b>All Cancer Sites</b>	<b>100.3</b>	<b>109.7</b>	<b>152.4</b>	<b>-34.2%</b>	<b>---</b>
Bladder	N/A	2.4	4.2	N/A	N/A
Brain & ONS	1.7	3.1	4.4	-61.4%	15
Breast (Female) *	12.8	13.7	19.9	-35.7%	2
Cervix *	N/A	2.5	2.2	N/A	N/A
Childhood (<20, All Sites)	2.9	2.3	2.2	+31.8%	13
Colon & Rectum	8.5	10.8	13.4	-36.6%	5
Esophagus	N/A	2.0	3.9	N/A	N/A
Kidney & Renal Pelvis	3.7	3.4	3.6	+2.8%	10
Leukemia	4.3	4.4	6.1	-29.5%	9
Liver & Bile Duct	7.5	9.3	6.6	+13.6%	6
Lung & Bronchus	17.2	16.2	36.7	-53.1%	1
Melanoma (Skin)	N/A	0.6	2.2	N/A	N/A
Myeloma	3.0	2.7	3.2	-6.3%	12
Non-Hodgkin Lymphoma	3.2	4.5	5.3	-39.6%	11
Oral Cavity & Pharynx	N/A	1.5	2.5	N/A	N/A
Ovary *	5.4	5.0	6.5	-16.9%	8
Pancreas	9.1	8.7	11.1	-18.0%	4
Prostate *	10.6	15.6	18.9	-43.9%	3
Stomach	2.7	4.8	2.9	-6.9%	14
Thyroid	N/A	0.7	0.5	N/A	N/A
Uterus *	6.4	4.2	5.0	+28.0%	7

\*sex-specific rate

**Data Sources:**

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics (2015-2019), on Oklahoma Statistics on Health Available for Everyone (OK2SHARE).  
<https://www.health.state.ok.us/stats/Registries/cancer/Final/mortality.shtml>

Surveillance, Epidemiology, and End Results (SEER) Program ([www.seer.cancer.gov](http://www.seer.cancer.gov)) SEER\*Stat Database: U.S. Population (1990-2019). National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released June 2022. Incidence data from SEER and NPCR, and underlying mortality data provided by NCHS.

U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2019): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; [www.cdc.gov/cancer/dataviz](http://www.cdc.gov/cancer/dataviz).

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