

CANCER IN SOUTH DAKOTA

A preliminary report of cancer among South Dakotans in 2023

April 2025



Photo by Travel South Dakota

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Overview

This report offers numbers and rates of newly diagnosed malignant cancer cases among South Dakota residents during 2023. The data in this report is considered preliminary and is current as of March 11, 2025. After the majority of the 2023 cancer cases are reported, the South Dakota Cancer Registry (SDCR) will release the final annual cancer report. The final report will present more complete data on cancer incidence among South Dakotans. The report will be posted at <https://www.getscreenedsd.org/sdcr>. Data on South Dakota cancer deaths for 2023 is also available in the *South Dakota Vital Statistics: State and County Comparison of Leading Health Indicators, 2023*.

On the following pages, Table 1 shows the number of newly diagnosed cases and the age-adjusted incidence rates for all cancers combined, by primary site, and sex for the year 2023. During that year, there has been a total of 3,924 invasive cancers and *in situ* bladder cancers diagnosed among South Dakota residents. The age-adjusted rate for these cases is 349.3 per 100,000 population.

By primary site, cancers of the female breast, lung, prostate, colorectal (colon and rectum), and melanoma accounted for 2,285 diagnoses, more than half (58.2%) of all new malignancies. By sex, female breast cancer was the most frequently diagnosed cancer. It accounted for 34.4% of all new cases among females, followed by lung cancer and colorectal cancer. Among males, cancer of the prostate occurred most frequently, accounting for 23.3% of newly diagnosed malignancies, followed by lung cancer and colorectal cancer.

Table 2 presents the number of cases diagnosed in 2023 by the Surveillance, Epidemiology, and End Results Program (SEER) Summary Stage. This table reflects *in situ* cases that are not used to calculate incidence rates but are collected by the SDCR. Summary staging categorizes how far a cancer has spread from its point of origin. Summary staging uses all information available in the medical record by using a combination of the most precise clinical and pathological documentation based on the extent of the disease.

Table 1: Age-Adjusted Incidence Rates by Site and Sex
South Dakota, 2023 (Preliminary)

	TOTAL		MALE		FEMALE	
	Cases	Age-Adjusted Rate	Cases	Age-Adjusted Rate	Cases	Age-Adjusted Rate
All Sites	3,924	349.3	1,978	353.5	1,946	353.6
Bladder	145	11.8	110	19.1	35	5.7
Kidney and Renal Pelvis	173	15.3	114	20.1	59	10.3
Ureter	7	0.6	4	0.7	3	0.6
Other Urinary Organs	8	0.7	5	0.8	3	0.5
Bones and Joints	7	0.7	3	0.6	4	0.9
Soft Tissue (Including Heart)	18	1.6	10	1.9	8	1.5
Brain and Nervous System	54	5.6	31	6.6	23	4.4
Eye and Orbit	0	0.0	0	0.0	0	0.0
Breast, Female	669	123.6			669	123.6
Cervix Uteri	19	3.8			19	3.8
Corpus and Uterus, NOS	119	20.6			119	20.6
Ovary	34	6.1			34	6.1
Vagina	2	0.4			2	0.4
Vulva	13	2.2			13	2.2
Other Female Genital Organs	4	0.7			4	0.7
Breast, Male	9	1.7	9	1.7		
Penis	6	1.1	6	1.1		
Prostate	461	72.3	461	72.3		
Testis	25	6.1	25	6.1		
Oral Cavity and Pharynx	94	8.2	67	11.2	27	5.1
Anus, Anal Canal and Anorectum	14	1.2	2	0.2	12	2.1
Colorectal	403	36.9	222	41.8	181	32.3
Esophagus	50	4.1	44	7.4	6	0.9
Gallbladder	6	0.5	2	0.4	4	0.6
Liver and Bile Ducts	55	5.2	36	6.8	19	3.8
Other Biliary	12	0.9	6	1.0	6	0.8
Pancreas	115	9.1	60	9.6	55	8.8
Peritoneum, Omentum and Mesentery	8	0.8	0	0.0	8	1.5
Retroperitoneum	8	0.7	4	0.8	4	0.6
Small Intestine	16	1.3	8	1.4	8	1.2
Stomach	38	3.3	25	4.5	13	2.2
Larynx	17	1.4	13	2.2	4	0.6
Lung and Bronchus	476	38.3	235	41.2	241	36.9
Mesothelioma	9	0.9	7	1.6	2	0.4
Nose, Nasal Cavity and Middle Ear	5	0.4	4	0.6	1	0.3
Melanoma of the Skin	276	25.2	156	27.9	120	23.1
Other Skin	13	1.0	8	1.3	5	0.7
Hodgkin's Lymphoma	12	1.4	7	1.5	5	1.2
Non-Hodgkin's Lymphoma	162	13.9	105	19.0	57	9.3
Leukemia	120	10.6	72	13.2	48	8.3
Myeloma	70	5.8	42	7.5	28	4.5
Myeloproliferative and Myelodysplastic	35	2.7	25	4.6	10	1.4
Thyroid	89	9.9	24	4.4	65	15.9
Other Endocrine	8	0.8	4	0.7	4	0.8
Other Sites	40	3.4	22	4.5	18	2.7

Rates are per 100,000 persons and are age-adjusted to the 2000 US standard population and the 2023 SD estimated population.

Source: South Dakota Department of Health

**Table 2: Incidence Counts by SEER Summary Stage and Primary Site
South Dakota, 2023 (Preliminary)**

Primary Site	<i>In Situ</i>	Localized	Regional	Distant	Unstaged/ Unknown	Total
Total	608	1,958	897	939	53	4,455
Bladder	77	52	10	6	0	145
Kidney and Renal Pelvis	2	108	32	31	2	175
Ureter	1	6	0	1	0	8
Other Urinary Organs	2	1	2	5	0	10
Bones and Joints	0	1	4	2	0	7
Soft Tissue (Including Heart)	0	11	3	3	1	18
Brain and Nervous System	0	41	10	2	1	54
Eye and Orbit	0	0	0	0	0	0
Breast, Female	164	478	162	28	1	833
Cervix Uteri	0	2	11	6	0	19
Corpus and Uterus, NOS	5	94	15	8	2	124
Ovary	3	14	7	12	1	37
Vagina	2	0	2	0	0	4
Vulva	25	12	1	0	0	38
Other Female Genital Organs	0	1	0	3	0	4
Breast, Male	1	3	6	0	0	10
Penis	2	3	3	0	0	8
Prostate	0	318	90	49	4	461
Testis	0	15	3	6	1	25
Oral Cavity & Pharynx	12	29	57	6	2	106
Anus, Anal Canal and Anorectum	4	5	8	1	0	18
Colorectal	14	120	196	83	4	417
Esophagus	1	9	26	14	1	51
Gallbladder	0	0	2	4	0	6
Liver and Bile Ducts	0	29	11	15	0	55
Other Biliary	0	3	6	1	2	12
Pancreas	0	25	28	62	0	115
Peritoneum, Omentum and Mesentery	0	2	1	5	0	8
Retroperitoneum	0	4	1	3	0	8
Small Intestine	0	7	5	4	0	16
Stomach	0	17	8	13	0	38
Larynx	2	7	9	1	0	19
Lung and Bronchus	0	175	102	197	2	476
Mesothelioma	0	2	2	4	1	9
Nose, Nasal Cavity and Middle Ear	0	2	2	1	0	5
Melanomas of the Skin	291	243	21	10	2	567
Other Skin	0	10	1	1	1	13
Hodgkin's Lymphoma	0	2	2	8	0	12
Non-Hodgkin's Lymphoma	0	41	19	98	4	162
Leukemia	0	0	0	120	0	120
Multiple Myeloma	0	2	0	68	0	70
Myeloproliferative and Myelodysplastic	0	0	0	35	0	35
Thyroid	0	60	26	3	0	89
Other Endocrine	0	4	3	1	0	8
Other Sites	0	0	0	19	21	40

Source: South Dakota Department of Health

Appendix A: SEER Incidence Site Analysis Categories

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	Recode
Oral Cavity and Pharynx			
Lip	C000-C009	excluding 9050-9055, 9140, 9590-9992	20010
Tongue	C019-C029		20020
Salivary Gland	C079-C089		20030
Floor of Mouth	C040-C049		20040
Gum and Other Mouth	C030-C039, C050-C059, C060-C069		20050
Nasopharynx	C110-C119		20060
Tonsil	C090-C099		20070
Oropharynx	C100-C109		20080
Hypopharynx	C129, C130-C139		20090
Other Oral Cavity and Pharynx	C140, C142-C148		20100
Digestive System			
Esophagus	C150-C159	excluding 9050-9055, 9140, 9590-9992	21010
Stomach	C160-C169		21020
Small Intestine	C170-C179		21030
Colon and Rectum			
Colon Excluding Rectum			
Cecum	C180	excluding 9050-9055, 9140, 9590-9992	21041
Appendix	C181		21042
Ascending Colon	C182		21043
Hepatic Flexure	C183		21044
Transverse Colon	C184		21045
Splenic Flexure	C185		21046
Descending Colon	C186		21047
Sigmoid Colon	C187		21048
Large Intestine, NOS	C188-C189, C260		21049
Rectum and Rectosigmoid Junction			
Rectosigmoid Junction	C199	excluding 9050-9055, 9140, 9590-9992	21051
Rectum	C209		21052
Anus, Anal Canal and Anorectum	C210-C212, C218		21060
Liver and Intrahepatic Bile Duct			
Liver	C220	excluding 9050-9055, 9140, 9590-9992	21071
Intrahepatic Bile Duct	C221		21072
Gallbladder	C239		21080
Other Biliary	C240-C249		21090
Pancreas	C250-C259		21100
Retroperitoneum	C480		21110
Peritoneum, Omentum and Mesentery	C481-C482		21120
Other Digestive Organs	C268-C269, C488		21130
Respiratory System			
Nose, Nasal Cavity and Middle Ear	C300-C301, C310-C319	excluding 9050-9055, 9140, 9590-9992	22010
Larynx	C320-C329		22020
Lung and Bronchus	C340-C349		22030
Pleura	C384		22050
Trachea, Mediastinum and Other Respiratory Organs	C339, C381-C383, C388, C390, C398, C399		22060

Appendix A: SEER Incidence Site Analysis Categories (continued)

Bones and Joints	C400-C419	excluding 9050-9055, 9140, 9590-9992	23000
Soft Tissue Including Heart	C380, C470-C479, C490-C499	excluding 9050-9055, 9140, 9590-9992	24000
Skin Excluding Basal And Squamous			
Melanoma of the Skin	C440-C449	8720-8790	25010
Other Non-Epithelial Skin	C440-C449	excluding 8000-8005, 8010-8046, 8050-8084, 8090-8110, 8720-8790, 9050-9055, 9140, 9590-9992	25020
Breast	C500-C509	excluding 9050-9055, 9140, 9590-9992	26000
Female Genital System			
Cervix Uteri	C530-C539	excluding 9050-9055, 9140, 9590-9992	27010
Corpus and Uterus, NOS			
Corpus Uteri	C540-C549	excluding 9050-9055, 9140, 9590-9992	27020
Uterus, NOS	C559		27030
Ovary	C569		27040
Vagina	C529		27050
Vulva	C510-C519		27060
Other Female Genital Organs	C570-C589		27070
Male Genital System			
Prostate	C619	excluding 9050-9055, 9140, 9590-9992	28010
Testis	C620-C629		28020
Penis	C600-C609		28030
Other Male Genital Organs	C630-C639		28040
Urinary System			
Urinary Bladder	C670-C679	excluding 9050-9055, 9140, 9590-9992	29010
Kidney and Renal Pelvis	C649, C659		29020
Ureter	C669		29030
Other Urinary Organs	C680-C689		29040
Eye and Orbit	C690-C699	excluding 9050-9055, 9140, 9590-9992	30000
Brain and Other Nervous System			
Brain	C710-C719	excluding 9050-9055, 9140, 9590-9992	31010
Cranial Nerves Other Nervous System	C710-C719	9530-9539	31040
	C700-C709, C720-C729	excluding 9050-9055, 9140, 9590-9992	
Endocrine System			
Thyroid	C739	excluding 9050-9055, 9140, 9590-9992	32010
Other Endocrine Including Thymus	C379, C740-C749, C750-C759		32020

Appendix A: SEER Incidence Site Analysis Categories (continued)

Lymphoma			
Hodgkin's Lymphoma			
Hodgkin's - Nodal	C024, C098-C099, C111, C142, C379, C422, C770-C779	9650-9667	33011
Hodgkin's - Extranodal	All other sites		33012
Non-Hodgkin's Lymphoma (NHL)			
NHL - Nodal	C024, C098,C099, C111,C142, C379,C422, C770-C779	9590-9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687-9691, 9695, 9698-9702, 9705, 9708-9709, 9712, 9714-9719, 9724-9729, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837	33041
NHL - Extranodal	All sites except C024, C098-C099, C111, C142, C379, C422, C770-C779	9590-9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687, 9688, 9689-9691, 9695, 9698-9702, 9705, 9708-9709, 9712, 9714-9719, 9724-9729, 9735, 9737, 9738	33042
	All sites except C024, C098-C099, C111, C142, C379, C420-C422, C424, C770-C779	9811-9818, 9823, 9827, 9837	
Myeloma		9731-9132, 9734	34000
Leukemia			
Lymphocytic Leukemia			
Acute Lymphocytic Leukemia	C420, C421, C424	9826, 9835-9836 9811-9818, 9837	35011
Chronic Lymphocytic Leukemia	C420, C421, C424	9823	35012
Other Lymphocytic Leukemia		9820, 9832-9834, 9940	35013
Myeloid and Monocytic Leukemia			
Acute Myeloid Leukemia		9840, 9861, 9865-9867, 9869, 9871-9874, 9895-9897, 9898, 9910-9911, 9920	35021
Acute Monocytic Leukemia		9891	35031
Chronic Myeloid Leukemia		9863, 9875, 9876, 9945, 9946	35022
Other Myeloid/Monocytic Leukemia		9860, 9930	35023
Other Leukemia			
Other Acute Leukemia		9801, 9805-9809, 9931	35041
Aleukemic, Subleukemic and NOS		9733, 9742, 9800, 9831, 9870, 9948, 9963, 9964	35043
	C420, C421, C424	9827	
Mesothelioma		9050-9055	36010
Kaposi Sarcoma		9140	36020
Miscellaneous		9740-9741, 9750-9769, 9950, 9960-9962, 9965-9967, 9970-9971, 9975, 9980, 9982-9987, 9989, 9991-9992	37000
	C760-C768, C809	excluding 9050-9055, 9140, 9590-9992	
	C420-C424		
	C770-C779		
Invalid	Site or histology code not within valid range or site code not found in this table.		99999

Source: <http://seer.cancer.gov/siterecode>