

DEPT. OF HEALTH AND HUMAN SERVICES

CANCER INCIDENCE AND MORTALITY IN NEBRASKA APPENDIX TO 2014 REPORT

INCIDENCE AND MORTALITY STATISTICS, BY PLACE OF RESIDENCE, NEBRASKA, 2010-2014

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TABLE 1A: Cancer (All Sites) Incidence Number of Cases and Rates, by County of Residence Nebraska (2014 and 2010-2014) & US (2013 and 2009-2013)

	2014		2010-	2010-2014	
	# Cases	Rate	# Cases	Rate	
US	1,559,130	439.0	7,800,258	456.6	
NEBRASKA	9,514	444.9	47,020	454.4	
NEBRASKA COUNTY ADAMS ANTELOPE ARTHUR BANNER BLAINE BOONE BOX BUTTE BOYD BROWN BUFFALO BURT BUTLER CASS CEDAR CHASE CHERRY CHEYENNE CLAY COLFAX CUMING CUSTER DAKOTA DAWES DAWSON DEUEL DIXON DODGE DOUGLAS DUNDY FILLMORE FRANKLIN FRONTIER FURNAS GAGE	9,514 155 41 3 3 3 38 64 22 15 199 38 45 150 47 27 34 58 29 44 59 72 78 42 103 9 43 264 2,572 15 41 22 15 39 126	444.9 403.8 400.6 395.0 170.6 ▼ 391.1 488.5 427.5 643.5 306.1 406.3 368.4 366.7 467.0 341.2 460.5 411.2 470.3 332.0 384.4 447.1 481.5 358.9 365.5 365.6 ∇ 255.3 ∇ 504.5 559.6 ▲ 481.0 △ 416.8 461.4 352.5 432.3 490.4 381.7	912 204 10 12 18 194 305 82 101 1,014 254 254 717 240 125 161 263 200 228 281 332 437 198 549 62 193 1,235 12,421 80 210 95 69 175 714	454.4 482.8 418.8 283.2 154.6 ▼ 458.1 498.5 441.1 437.8 415.4 426.8 488.7 431.8 467.7 376.9 ▼ 434.3 381.5 ∇ 435.0 454.1 405.2 414.5 428.2 422.9 358.8 ▼ 401.9 ▼ 391.9 460.7 507.9 ▲ 484.5 ▲ 514.5 479.2 341.9 ▼ 356.5 ∇ 449.9 452.8	
GARDEN GARFIELD	21 17	621.0 506.1	80 89	456.7 515.8	
GOSPER	14	494.1	68	459.5	
GRANT GREELEY	4 15	433.8 424.3	12 84	232.7 ▼ 411.6	
HALL	292	424.7	1,613	488.6△	
HAMILTON	47	375.3	256	429.8	
HARLAN HAYES	23 *	390.9	141 24	499.0 310.2∇	
HITCHCOCK	15	423.2	98	449.0	
HOLT	61	424.6	333	438.3	
HOOKER	4 45	195.4∇	29 105	404.2 446.0	
HOWARD JEFFERSON	45 53	469.5 435.6	195 265	446.0	

TABLE 1A (continued): Cancer (All Sites) Incidence

	20) <u>14</u>	2010	-2014
	# Cases	Rate	# Cases	Rate
COUNTY				
JOHNSON	29	438.4	158	449.9
KEARNEY	47	574.6	217	504.0
KEITH	65	532.2	315	513.2
KEYA PAHA	5	293.1	24	370.8
KIMBALL	15	285.3▽	118	410.2
KNOX	51	366.7	280	413.9
LANCASTER	1,342	442.0	6,255	434.8▼
LINCOLN	223	478.3	1,099	487.3
LOGAN	4	474.3	31	636.9
LOUP	5	546.4	22	450.3
McPHERSON	*	*	8	195.6 ▼
MADISON	196	474.2	916	443.4
MERRICK	48	463.9	258	497.5
MORRILL	29	433.8	162	462.9
NANCE	25	495.5	119	435.4
NEMAHA	42	430.0	213	456.7
NUCKOLLS	32	489.6	179	519.6
OTOE	86	377.9	449	421.0
PAWNEE	27	572.6	127	544.8
PERKINS	11	241.6▼	85	374.3
PHELPS	62	490.9	259	427.5
PIERCE	44	484.3	220	458.2
PLATTE	179	456.3	867	454.0
POLK	30	377.8	173	440.5
RED WILLOW	61	403.2	325	429.5
RICHARDSON	66	500.7	315	485.6
ROCK	9	311.5	53	444.8
SALINE	83	522.4	409	505.2
SARPY	711	446.9	3,345	461.9
SAUNDERS	104	395.9	584	439.4
SCOTTS BLUFF	174	374.3∇	956	412.4 ▼
SEWARD	91	422.8	460	450.2
SHERIDAN	33	466.4	164	418.3
SHERMAN	33	683.8	120	488.6
SIOUX	7	346.5	32	309.3∇
STANTON	24	357.6	132	361.0 ▼
THAYER	41	472.5	211	477.4
THOMAS	5	679.0	34	691.6
THURSTON	22	322.7	133	397.6
VALLEY	25	361.7	131	387.2
WASHINGTON	124	479.6	610	492.0
WAYNE	58	589.7	236	479.3
WEBSTER	22	395.3	146	489.7
WHEELER	*	*	23	361.9
YORK	87	464.3	409	441.8

^{*}Number and rate are not shown if based on fewer than three cases Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

[▼] county rate is significantly lower than the state rate (99% confidence level)

[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 2A: Cancer (All Sites) Mortality Number of Deaths and Rates, by County of Residence Nebraska (2014 and 2010-2014) & US (2013 and 2009-2013)

	2014 2010		2014	
	# Deaths	<u>Rate</u>	# Deaths	Rate
US	584,881	163.2	2,886,566	168.9
NEBRASKA	3,443	158.2	17,205	162.6
DIXON DODGE DOUGLAS DUNDY FILLMORE FRANKLIN FRONTIER FURNAS GAGE GARDEN GARFIELD GOSPER GRANT GREELEY HALL HAMILTON HARLAN HAYES HITCHCOCK HOLT HOOKER HOWARD JEFFERSON	10 109 862 11 20 7 7 7 12 67 5 5 5 0 4 111 16 * * 9 19	117.6 209.1 △ 165.3 298.9 171.9 123.0 151.0 138.7 202.0 99.2 153.2 177.8 0.0 101.4 159.8 131.0 * 191.5 108.4 187.3 116.1 203.9	69 488 4,420 31 85 34 25 64 306 27 30 31 5 25 542 90 59 11 46 120 8 68 133	151.6 185.5 △ 177.5 ▲ 163.8 163.4 123.2 115.5 152.9 180.4 116.8 155.7 194.0 177.3 108.9 ▽ 159.5 143.3 188.1 125.8 193.0 139.1 109.8 147.3 203.2 △

TABLE 2A (continued): Cancer Mortality

	20	14	<u>2010</u> -	-2014
	# Deaths	 Rate	# Deaths	Rate
COUNTY				
JOHNSON	12	161.4	69	179.8
KEARNEY	15	159.2	69	148.5
KEITH	21	165.8	111	170.5
KEYA PAHA	*	*	7	79.7▼
KIMBALL	7	107.1	62	197.4
KNOX	27	181.7	127	168.1
LANCASTER	453	151.1	2,184	154.7
LINCOLN	86	187.3	395	170.0
LOGAN	*	*	3	53.2▼
LOUP	0	0.0	3	53.8▼
McPHERSON	*	*	5	118.6
MADISON	75	168.8	340	156.4
MERRICK	18	169.1	92	168.1
MORRILL	20	301.1△	62	177.3
NANCE	11	179.6	45	149.3
NEMAHA	14	143.3	85	166.2
NUCKOLLS	10	109.0	62	137.7
OTOE	50	197.4	184	156.2
PAWNEE	11	218.4	48	186.6
PERKINS	3	50.7▼	35	135.0
PHELPS	12	90.0▽	108	163.8
PIERCE	15	135.3	80	153.7
PLATTE	70	172.9	317	161.4
POLK	15	175.1	82	188.0
RED WILLOW	23	134.8	135	162.3
RICHARDSON	26	188.1	135	187.6
ROCK	8	240.3	25	198.0
SALINE	30	184.7	157	184.2
SARPY	229	159.2	1,102	167.2
SAUNDERS	42	142.5	233	169.7
SCOTTS BLUFF	64	129.0	380	154.9
SEWARD	33	148.5	165	151.2
SHERIDAN	9	91.0▽	64	144.5
SHERMAN	8	182.5	41	160.0
SIOUX	*	*	11	102.2
STANTON	6	76.1∇	49	130.7
THAYER	16	136.8	65	114.4▼
THOMAS	3	256.0	4	65.3▼
THURSTON	17	242.7	71	211.7
VALLEY	14	182.2	58	150.3
WASHINGTON	44	164.6	197	157.5
WAYNE	14	130.1	75	145.8
WEBSTER	15	231.5	64	180.2
WHEELER	*	*	5	81.6▽
YORK	34	180.5	166	168.7

^{*}Number and rate are not shown if based on fewer than three deaths Rates are per 100,000 population and are age-adjusted to the 2000 US population

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TABLE 3A: Lung and Bronchus Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	Incid	ence	<u>Mort</u> :	ality
	# Cases	Rate	# Deaths	Rate
US	1,067,959	62.5	786,896	46.0
NEBRASKA	6,214	59.6	4,486	43.0
COUNTY ADAMS ANTELOPE ARTHUR	118 25 *	60.7 44.1 *	90 23 *	45.4 43.4 *
BANNER BLAINE	3	* 70.6	0 3	0.0 83.0
BOONE	18	45.8	10	21.3▼
BOX BUTTE	32	43.1	21	28.9∇
BOYD	18	88.0	12	55.7
BROWN	13	48.6	11	38.5
BUFFALO BURT	117 38	49.9 67.6	80 34	34.0 63.1
BUTLER	30	50.9	19	30.8
CASS	91	60.2	79	51.8
CEDAR	26	36.1▼	15	21.4▼
CHASE	20	66.8	17	55.8
CHERRY	16	36.4∇	13	26.4∇
CHEYENNE CLAY	36 25	56.1 55.5	31 17	47.4 38.5
COLFAX	23 23	55.5 40.4∇	17	30.8
CUMING	33	46.9	25	34.3
CUSTER	43	50.2	30	34.7
DAKOTA	68	65.4	48	46.9
DAWES	28	45.4	19	30.7
DAWSON	74	52.7	49	33.7
DEUEL DIXON	9 28	49.4 62.2	7 15	37.7 31.2
DODGE	180	69.8	131	49.4
DOUGLAS	1,729	69.3 ▲	1,227	49.9 ▲
DUNDY	6	30.9∇	5	22.1∇
FILLMORE	29	59.3	21	41.9
FRANKLIN	12	47.9	10	44.4
FRONTIER FURNAS	7 25	31.2∇ 60.6	8 14	40.0 34.1
GAGE	104	63.2	68	41.7
GARDEN	8	41.2	4	18.9∇
GARFIELD	11	56.2	8	40.4
GOSPER	7	49.4	9	56.3
GRANT	*	*	*	*
GREELEY	10	45.2 59.2	7	29.5
HALL HAMILTON	194 36	58.2 58.6	134 24	40.0 37.5
HARLAN	13	40.1	10	31.0
HAYES	6	65.4	3	33.3
HITCHCOCK	12	45.8	11	39.7
HOLT	39	45.0	31	38.1
HOOKER HOWARD	5	52.3	3	52.1
JEFFERSON	27 36	55.4 57.7	15 30	30.7 47.7
JEI I LINGUN	30	51.1	30	41.1

TABLE 3A (continued): Lung and Bronchus Cancer Incidence and Mortality

Incidence # Cases Rate # Deaths Rate
COUNTY JOHNSON 30 84.6 16 43.0 KEARNEY 29 63.2 20 43.1 KEITH 37 51.6 25 34.5 KEYA PAHA * * * * KIMBALL 16 49.5 14 43.0 KNOX 41 57.3 33 45.0
KEARNEY 29 63.2 20 43.1 KEITH 37 51.6 25 34.5 KEYA PAHA *
KEITH 37 51.6 25 34.5 KEYA PAHA *
KEYA PAHA *
KIMBALL 16 49.5 14 43.0 KNOX 41 57.3 33 45.0
KNOX 41 57.3 33 45.0
101001
LANCASTER 805 57.9 572 41.4
LINCOLN 150 66.2 110 48.2
LOGAN 4 76.6 0 0.0
LOUP 4 75.9 * *
MICHIERSON
MADISON 124 59.1 88 40.4
MERRICK 42 73.9 30 53.4
MORRILL 26 72.7 17 49.5
NANCE 16 53.7 15 51.4
NEMAHA 32 69.6 17 34.1
NUCKOLLS 24 58.9 16 39.5
OTOE 67 60.1 57 51.0
PAWNEE 21 82.0 12 45.2
PERKINS 11 43.7 8 34.3
PHELPS 32 46.8 23 35.2
PIERCE 30 60.5 23 44.6
PLATTE 107 54.7 81 41.8 POLK 33 78.2 23 52.5
RED WILLOW 47 61.3 37 45.9
RICHARDSON 50 69.4 29 39.4
ROCK 8 60.0 4 30.7
SALINE 56 68.0 42 52.0
SARPY 429 64.8 324 49.5
SAUNDERS 92 66.0 62 44.1
SCOTTS BLUFF 107 44.1▼ 90 36.6
SEWARD 43 40.9▼ 35 32.2
SHERIDAN 21 45.3 17 36.5
SHERMAN 12 47.8 12 43.4
SIOUX 3 25.1 ∇ 3 23.1
STANTON 15 41.9 11 30.2
THAYER 27 60.1 15 28.5
THOMAS 0 0.0 0 0.0
THURSTON 18 54.1 16 46.1
VALLEY 15 41.8 17 44.3
WASHINGTON 73 54.9 49 38.2
WAYNE 22 42.7 16 27.9
WEBSTER 21 61.5 15 40.6
WHEELER 0 0.0 0 0.0
YORK 37 38.8▼ 28 29.7√

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

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TABLE 4A: Female Breast Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	In	<u>icidence</u>		Mortality
	# Cases	Rate	# Deaths	Rate
US	1,0117,483	123.4	204,618	21.6
NEBRASKA	6,547	122.0	1,168	20.0
COUNTY ADAMS ANTELOPE ARTHUR BANNER BLAINE BOONE BOX BUTTE	131 18 0 * * 35 39	134.1 80.5∇ 0.0 * 152.7 103.2	28 4 0 0 6 10	29.3 12.3 0.0 24.9 0.0 26.7 23.2
BOYD BROWN BUFFALO BURT BUTLER CASS CEDAR CHASE	11 11 164 25 43 97 34	178.3 85.5 132.5 114.1 150.0 122.5 107.4 114.1	* 27 10 6 22 5 3	* 19.5 35.7 22.6 25.5 9.4 \(\nabla\)
CHERRY CHEYENNE CLAY COLFAX CUMING CUSTER DAKOTA DAWES DAWSON	26 52 32 32 34 36 54 20 67	114.9 174.2△ 145.6 114.1 108.1 87.0▽ 100.1 79.6▽ 98.9	9 7 6 6 5 14 10 4 9	35.9 21.5 20.7 18.1 10.1 32.9 16.5 10.5
DEUEL DIXON DODGE DOUGLAS DUNDY FILLMORE	11 25 165 1,845 7 26	156.5 113.9 134.5 132.9 △ 70.8 108.3	* 4 29 309 * 3	* 15.5 20.7 21.9 * 9.5
FRANKLIN FRONTIER FURNAS GAGE GARDEN GARFIELD	19 10 23 102 10	145.7 115.4 125.6 121.1 113.2 45.0 ▼	4 20 3 *	15.2 21.7 17.4
GOSPER GRANT GREELEY HALL HAMILTON HARLAN	8 0 9 177 26 20	104.4 0.0 80.9 103.9∇ 84.1∇ 166.0	0 0 3 33 9 *	0.0 0.0 23.0 17.1 26.4
HAYES HITCHCOCK HOLT HOOKER HOWARD JEFFERSON	* 8 39 4 25 31	* 90.0 100.6 115.2 122.0 95.7	0 3 7 * 9 6	0.0 33.2 9.6∇ * 43.9 16.3

TABLE 4A (continued): Female Breast Cancer Incidence and Mortality

	Incid	<u>lence</u>	<u>Morta</u>	alitv
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	18	107.8	5	19.2
KEARNEY	22	100.8	*	*
KEITH	52	188.0△	10	30.0
KEYA PAHA	4	112.0	0	0.0
KIMBALL	15	114.7	*	*
KNOX	37	117.2	6	18.5
LANCASTER	956	125.9	133	16.4
LINCOLN	106	89.9▼	34 *	26.9
LOGAN LOUP	*	*	0	
	*	*	· *	0.0
McPHERSON MADISON	119	111.1	20	15.6
MERRICK	35	140.7	10	32.7
MORRILL	16	94.8	*	32. <i>1</i> *
NANCE	16	121.6	*	*
NEMAHA	22	104.8	*	*
NUCKOLLS	18	100.7	*	*
OTOE	70	124.1	3	5.0▼
PAWNEE	14	125.2	*	*
PERKINS	8	60.7▼	3	14.8
PHELPS	39	117.9	9	27.8
PIERCE	25	103.0	*	*
PLATTE	112	114.7	20	20.4
POLK	29	134.6	8	36.0
RED WILLOW	39	105.1	13	28.2
RICHARDSON	38	123.0	6	13.1
ROCK	3	52.2▽	0	0.0
SALINE	49	120.0	14	29.2
SARPY	533	132.8	85	22.4
SAUNDERS	66	99.6	16	20.8
SCOTTS BLUFF	121	98.5▽	25	17.7
SEWARD	58	111.1	12	20.1
SHERIDAN	23	134.7	6	28.7
SHERMAN	15	149.3	6	57.2
SIOUX	7	160.4	*	*
STANTON	24	125.3	6	30.6
THAYER	21	86.2	5	18.6
THOMAS	5	204.7	0	0.0
THURSTON	24	134.8	9	52.4
VALLEY	19	111.7	3	14.0
WASHINGTON	90	136.7	16	22.8
WAYNE	35	151.9	3	15.1
WEBSTER	17	109.2	3	19.0
WHEELER	*	*	0	0.0
YORK	45	92.2▽	15	25.7

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 female population and are age-adjusted to the 2000 US population

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[△]county rate is significantly higher than the state rate (95% confidence level)

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TABLE 5A: Colon & Rectum (Colorectal) Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	Inc	<u>cidence</u>	Mort	alitv
	# Cases	<u>Rate</u>	# Deaths	Rate
US	692,122	40.6	259,012	15.1
NEBRASKA	4,550	43.7	1,714	16.1
COUNTY ADAMS ANTELOPE ARTHUR	93 29 0	46.0 61.8 0.0	* 31 10 *	* 15.5 15.9 *
BANNER	0	0.0	0	0.0
BLAINE BOONE BOX BUTTE BOYD	3 17 27 11	89.9 44.8 42.3 53.5	* 9 16 *	21.2 24.3
BROWN	13	47.3	7	23.1
BUFFALO BURT	104 19	43.7 33.3	37 10	16.0 13.8
BUTLER CASS	26 66	39.2 42.1	9 32	12.8 20.2
CEDAR	29 10	41.8	12	13.8 21.1
CHASE CHERRY	22	38.7 45.1	7 7	13.0
CHEYENNE	20	31.0	10	14.6
CLAY	14	28.7	6	11.8
COLFAX	16	26.9∇	5	8.6
CUMING	38	55.4 40.4	11	13.5
CUSTER DAKOTA	32 44	40.1 43.3	10 17	10.2 18.3
DAWES	18	33.6	8	12.9
DAWSON	73	52.4	28	20.3
DEUEL	3	17.6▽	*	*
DIXON DODGE	24 118	60.2	8 52	17.6
DOUGLAS	1,060	47.0 42.2	383	19.9 15.3
DUNDY	11	64.0	5	24.0
FILLMORE	20	46.7	3	7.4
FRANKLIN	13	42.7	5	15.9
FRONTIER	10	48.5	*	*
FURNAS GAGE	23 69	57.3 41.7	11 41	24.3 23.0
GARDEN	9	56.5	3	23.0 14.1
GARFIELD	11	79.8	4	16.6
GOSPER	4	24.5	4	24.9
GRANT	*	*	*	*
GREELEY HALL	7 169	31.2 49.8	53	15.3
HAMILTON	23	49.6 34.5	55 7	9.8
HARLAN	15	50.2	12	41.5∆
HAYES	*	*	0	0.0
HITCHCOCK	10	43.3	3	10.1
HOLT	41	53.1	14	15.4
HOOKER HOWARD	3 16	36.4 35.7	0 5	0.0 10.3
JEFFERSON	26	43.6	13	21.4

TABLE 5A (continued): Colon & Rectum (Colorectal) Cancer Incidence and Mortality

	Incid	lence	Morta	alitv
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	21	56.0	9	24.0
KEARNEY	30	69.6	6	9.5
KEITH	35	55.3	15	25.2
KEYA PAHA	3	44.3	*	*
KIMBALL	9	27.8	4	12.0
KNOX	20	26.8∇	11	13.6
LANCASTER	585	41.2	203	14.5
LINCOLN	90	38.4	30	12.4
LOGAN	*	*	0	0.0
LOUP			0	0.0
McPHERSON	0	0.0		
MADISON	112	53.7	47	22.3
MERRICK	17	32.0	11	18.9
MORRILL	16	46.8	8	23.6
NANCE	18 18	58.4	8 5	24.1
NEMAHA		35.8		10.1
NUCKOLLS OTOE	24 49	77.5∆ 44.5	12 16	24.8 13.9
PAWNEE	49 12	44.5 46.2	4	13.9
PERKINS	11	50.4	4	14.8
PHELPS	31	49.7	13	19.2
PIERCE	35	69.7△	9	14.9
PLATTE	97	51.2	46	23.8
POLK	24	64.3	11	24.1
RED WILLOW	30	38.5	12	12.8
RICHARDSON	36	50.8	16	24.4
ROCK	11	88.9	*	*
SALINE	60	72.0 ▲	20	23.6
SARPY	293	42.8	97	15.2
SAUNDERS	47	34.3	15	11.1
SCOTTS BLUFF	99	42.3	50	20.4
SEWARD	49	46.7	14	13.2
SHERIDAN	20	54.8	8	20.6
SHERMAN	12	44.6	*	*
SIOUX	3	27.0	*	*
STANTON	11	29.3	4	10.5
THAYER	29	60.0	6	8.6
THOMAS	*	*	0	0.0
THURSTON	23	70.3	8	24.0
VALLEY	22	60.7	8	23.7
WASHINGTON	53	44.1	19	14.9
WAYNE	27	48.6	7	11.7
WEBSTER	15	41.6	12	31.5
WHEELER	5	82.5	0	0.0
YORK	29	29.4∇	20	21.2

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

[▼] county rate is significantly lower than the state rate (99% confidence level)

[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 6A: Prostate Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence

Nebraska (2010-2014) & US (2009-2013)

	Incide	ence	Morta	alitv
	# Cases	Rate	# Deaths	Rate
US	1,009,595	123.2	139,546	20.6
NEBRASKA	5,981	119.7	914	20.8
COUNTY ADAMS ANTELOPE	105 33	115.7 133.0	14 7	16.1 27.6
ARTHUR BANNER	* 0	* 0.0	0 0	0.0 0.0
BLAINE	*	*	0	0.0
BOONE BOX BUTTE BOYD BROWN	33 46 10 18	158.0 124.6 100.8 138.9	4 10 *	18.3 35.1
BUFFALO	121	106.5	11	11.7▽
BURT	45	168.7	4	14.7
BUTLER	42	141.4	9	28.8
CASS	95	118.0	13	21.1
CEDAR CHASE	29 20	87.8 145.2	6 3	17.0 19.4
CHERRY	20	95.6	*	*
CHEYENNE	43	138.8	4	14.0
CLAY	30	127.7	6	28.0
COLFAX	27	98.5	4	16.0
CUMING CUSTER	45 36	135.6 89.4	3 13	7.7∇ 34.0
DAKOTA	61	122.4	11	30.0
DAWES	23	83.0∇	7	24.0
DAWSON	68	103.9	17	27.9
DEUEL	10	120.8	*	*
DIXON	32	150.0	*	*
DODGE DOUGLAS	180 1,454	153.1∆ 123.2	25 212	21.0 22.4
DUNDY	7	86.3	× ×	22. 4 *
FILLMORE	21	101.0	*	*
FRANKLIN	10	70.3▽	5	36.1
FRONTIER	9	87.3	*	*
FURNAS	13	64.7▼	*	*
GAGE GARDEN	81 11	105.2 115.9	18 *	23.6
GARFIELD	12	133.7	*	*
GOSPER	9	120.6	*	*
GRANT	3	123.8	0	0.0
GREELEY	15	139.8	0	0.0
HALL	238	148.1△	28	19.7
HAMILTON HARLAN	31 24	108.4 155.8	6 5	22.4 32.7
HAYES	4	102.6	*	*
HITCHCOCK	8	69.0∇	3	25.8
HOLT	61	160.1	8	20.3
HOOKER	*	*	0	0.0
HOWARD JEFFERSON	32 28	142.5 102.0	5 6	23.0 19.8

TABLE 6A (continued): Prostate Cancer Incidence and Mortality

	Incid	<u>dence</u>	<u>Morta</u>	alitv
	# Cases	Rate	# Deaths	Rate
COUNTY		<u> </u>	<u></u>	
JOHNSON	15	83.4	8	49.8
KEARNEY	23	105.6	4	19.7
KEITH	40	124.1	6	18.9
KEYA PAHA	3	77.1	*	*
KIMBALL	14	92.4	3	21.9
KNOX	40	122.0	5	14.8
LANCASTER	746	107.7▽	125	22.0
LINCOLN	134	123.9	17	16.9
LOGAN	7	256.2	*	*
LOUP	3	114.3	0	0.0
McPHERSON	0	0.0	0	0.0
MADISON	156	159.7 ▲	19	19.8
MERRICK	48	181.7△	*	*
MORRILL	23	136.4	3	18.7
NANCE	12	90.7	*	*
NEMAHA	26	115.1	10	46.5
NUCKOLLS	33	171.7	6	21.9
OTOE	54	104.0	16	30.1
PAWNEE	20	168.6	6	49.8
PERKINS	12	106.8	3	28.8
PHELPS	24	78.4∇	9	27.3
PIERCE	31	129.7	3	12.5
PLATTE	124	133.6	15	16.5
POLK	18	92.7	*	*
RED WILLOW	39	108.3	7	19.2
RICHARDSON	34	104.7	11	31.6
ROCK	8	135.6	3	49.8
SALINE	48	121.3	8	20.1
SARPY	383	107.2	53	22.7
SAUNDERS	90	132.2	14	24.9
SCOTTS BLUFF	117	104.8	9	8.7▼
SEWARD	72	142.4	6	12.4
SHERIDAN	31	145.2	7	31.7
SHERMAN	14	112.6	4	26.3
SIOUX	6	110.8	0	0.0
STANTON	23	129.2	4	21.1
THAYER	33	152.1	4	13.6
THOMAS	9	324.5	*	*
THURSTON	10	63.8▼	3	21.4
VALLEY	19	108.4	*	*
WASHINGTON	78	123.1	11	22.6
WAYNE	38	151.8	5	21.4
WEBSTER	19	129.9	0	0.0
WHEELER	5	162.0	0	0.0
YORK	54	120.0	8	18.5

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 male population and are age-adjusted to the 2000 US population

∇ county rate is significantly lower than the state rate (95% confidence level)

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[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 7A: Urinary Bladder Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	lı	ncidence	Mort	ality
	# Cases	<u>Rate</u>	# Deaths	Rate
US	350,378	20.7	74,949	4.4
NEBRASKA	2,190	20.9	435	4.0
COUNTY ADAMS ANTELOPE ARTHUR	34 6 *	16.9 10.1∇ *	5 0 *	2.4 0.0 *
BANNER BLAINE BOONE BOX BUTTE	0 * 5 19	0.0 * 10.5∇ 26.1	0 0 3 4	0.0 0.0 7.0 4.5
BOYD BROWN BUFFALO	3 3 56	14.3 8.3∇ 23.7	* 3 8	8.4 3.6
BURT BUTLER CASS	14 21 38	26.3 32.2 23.8	* 4 8 *	6.0 5.1
CEDAR CHASE CHERRY CHEYENNE	11 11 8 8	18.8 30.9 17.2 12.5	* 5 * *	* 14.8 *
CLAY COLFAX CUMING	7 10 7	12.3 14.9 17.2 9.4 ▼	* *	* *
CUSTER DAKOTA DAWES	20 12 15	23.8 11.1 ▼ 24.9	7 5 0	7.2 4.7 0.0
DAWSON DEUEL DIXON	35 * 3	24.6 * 6.3 ▼	7 * 0	4.5 * 0.0
DODGE DOUGLAS DUNDY FILLMORE	55 574 4 8	21.0 23.7 22.1 15.1	6 109 * *	2.0∇ 4.6 *
FRANKLIN FRONTIER FURNAS	6 * 13	19.6 * 29.6	0 * 4	0.0 * 9.6
GAGE GARDEN GARFIELD	40 4 5	23.4 14.7 24.7	12 0 *	6.6 0.0 *
GOSPER GRANT GREELEY HALL	5 0 5 69	29.6 0.0 19.6 20.0	0 0 20	0.0 0.0 6.0
HAMILTON HARLAN HAYES	22 3 *	35.4 9.0∇ *	* * O *	* * 0.0 *
HITCHCOCK HOLT HOOKER HOWARD JEFFERSON	15 4 7 13	18.3 52.2 14.1 20.4	* 0 * 4	* 0.0 * 5.3
JEFFERSON	13	20.4	4	ა.ა

TABLE 7A (continued): Urinary Bladder Cancer Incidence and Mortality

	Incid	<u>lence</u>	<u>Morta</u>	lity
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	5	13.7	0	0.0
KEARNEY	5	9.5▽	3	5.9
KEITH	17 *	25.3 *	4	6.1 *
KEYA PAHA			*	*
KIMBALL KNOX	10 19	30.6 23.7	*	*
LANCASTER	255	23.7 18.2	59	4.4
LINCOLN	71	30.3△	10	4.4
LOGAN	*	*	0	0.0
LOUP	3	53.3	Õ	0.0
McPHERSON	0	0.0	*	*
MADISON	26	12.3▼	5	2.1
MERRICK	11	21.0	0	0.0
MORRILL	9	24.9	3	8.4
NANCE	3	8.0 🗸	0	0.0
NEMAHA	14	27.4	3	4.8
NUCKOLLS	10	24.7	*	*
OTOE	25	21.6	5	3.7
PAWNEE	8	27.2	*	*
PERKINS	11	41.9	*	*
PHELPS	5	9.3∇	4	5.9
PIERCE	10	19.6	*	*
PLATTE	46	23.1	7	3.1
POLK	6	14.0		
RED WILLOW	14	15.9	4	5.0 *
RICHARDSON	15	20.1 22.6		
ROCK SALINE	3 17	22.6 21.0	0 3	0.0 4.0
SARPY	17 141	21.0	3 28	4.0 4.7
SAUNDERS	27	20.6	6	4.7
SCOTTS BLUFF	56	22.2	11	4.4
SEWARD	32	30.2	4	3.5
SHERIDAN	3	6.2▼	0	0.0
SHERMAN	8	23.8	Ö	0.0
SIOUX	*	*	Ö	0.0
STANTON	11	29.6	*	*
THAYER	9	17.0	4	6.4
THOMAS	*	*	0	0.0
THURSTON	5	15.0	*	*
VALLEY	5	15.7	*	*
WASHINGTON	27	21.5	*	*
WAYNE	10	21.6	*	*
WEBSTER	8	23.1	3	8.2
WHEELER	*	*	0	0.0
YORK	19	19.4	5	4.9

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

∇ county rate is significantly lower than the state rate (95% confidence level)

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[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 8A: Non-Hodgkin Lymphoma Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	Inc	<u>idence</u>	<u>Mort</u>	ality
	# Cases	<u>Rate</u>	# Deaths	Rate
US	321,620	19.1	101,502	6.0
NEBRASKA	2,112	20.5	645	6.1
COUNTY ADAMS ANTELOPE	40 10	21.1 19.5	12 5	5.4 8.1
ARTHUR BANNER	0	0.0 12.5	0 0	0.0
BLAINE	*	32.1	0	0.0 0.0
BOONE	7	20.4	*	*
BOX BUTTE	18	24.4	4	6.3
BOYD	6	22.1	0	0.0
BROWN	6	20.8	3	10.1
BUFFALO BURT	47 8	19.8 14.2	12 3	5.0 4.5
BUTLER	9	13.9	4	4.5 5.3
CASS	33	21.5	12	8.2
CEDAR	10	12.4	4	4.2
CHASE	*	6.7	3	8.7
CHERRY	9	25.9	3	6.4
CHEYENNE	13	21.4	4	5.7
CLAY	14	32.7	4	8.4
COLFAX	11 16	20.0	6	11.5
CUMING CUSTER	14	22.0 16.3	4 7	5.0 8.6
DAKOTA	13	12.6▽	*	*
DAWES	10	17.3	3	4.4
DAWSON	21	15.9	*	*
DEUEL	4	26.8	0	0.0
DIXON	10	23.4	6	12.0
DODGE	47	18.1	16	5.9
DOUGLAS DUNDY	545 3	21.5 31.7	148 *	6.1 *
FILLMORE	9	22.7	5	8.6
FRANKLIN	4	12.8	*	*
FRONTIER	5	23.0	*	*
FURNAS	9	26.0	3	6.1
GAGE	37	22.3	12	6.7
GARDEN	4	30.3	*	*
GARFIELD GOSPER	9 4	42.7 28.7	3 0	14.6 0.0
GRANT	*	35.7	0	0.0
GREELEY	4	28.3	3	11.6
HALL	80	24.4	17	4.8
HAMILTON	14	25.1	8	14.5
HARLAN	4	14.4	4	14.2
HAYES	*	17.9	0	0.0
HITCHCOCK	5 12	22.2 16.1		
HOLT HOOKER	I∠ *	20.5	9 0	9.8 0.0
HOWARD	10	23.8	3	5.9
JEFFERSON	8	14.9	-	3.1

TABLE 8A (continued): Non-Hodgkin Lymphoma Incidence and Mortality

	Incid	ence	<u>Morta</u>	lity
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	12	31.3	6	13.3
KEARNEY	15	31.7	3	6.3
KEITH	23	38.3△	4	5.7
KEYA PAHA	*	11.7	*	*
KIMBALL	4	14.7	*	*
KNOX	14	17.2	7	7.5
LANCASTER	233	16.5▼	70	4.9
LINCOLN	65	28.7△	14	5.4
LOGAN	*	35.4	0	0.0
LOUP	0	0.0	0	0.0
McPHERSON	*	23.4	0	0.0
MADISON	37	17.3	15	7.1
MERRICK	11	21.5	*	*
MORRILL	3	7.6▼	*	*
NANCE	8	26.9	0	0.0
NEMAHA	14	30.6	4	8.4
NUCKOLLS	7	25.4	5	10.8
OTOE	17	14.7	10	7.5
PAWNEE	4	16.1	*	*
PERKINS	5	20.3	0	0.0
PHELPS	15	21.1	4	4.8
PIERCE	7	16.3	4	7.4
PLATTE	44	24.3	9	4.2
POLK	13	35.8	5	12.3
RED WILLOW	17	21.8	5	6.0
RICHARDSON	19	25.5	7	8.3
ROCK	*	9.6	*	*
SALINE	23	26.9	6	6.2
SARPY	146	19.9	43	6.8
SAUNDERS	23	18.1	8	5.9
SCOTTS BLUFF	45	20.0	21	8.3
SEWARD	23	22.8	9	8.4
SHERIDAN	12	26.1	0	0.0
SHERMAN	6	21.6	3	9.2
SIOUX	*	9.7	0	0.0
STANTON	*	5.9	0	0.0
THAYER	10	18.4	3	5.2
THOMAS	4	68.8	0	0.0
THURSTON	4	10.7	*	*
VALLEY	7	16.9	*	*
WASHINGTON	29	23.6	10	7.8
WAYNE	14	26.4	3	5.2
WEBSTER	8	27.1	3	9.4
WHEELER	0	0.0	0	0.0
YORK	11	11.1▽	5	5.1

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

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[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 9A: Leukemia Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	ı	ncidence		Mortality
	# Cases	Rate	# Deaths	Rate
US	224,976	13.5	114,853	6.9
NEBRASKA	1,486	14.5	738	7.0
NEBRASKA COUNTY ADAMS ANTELOPE ARTHUR BANNER BLAINE BOONE BOX BUTTE BOYD BROWN BUFFALO BURT BUTLER CASS CEDAR CHASE CHERRY CHEYENNE CLAY COLFAX	1,486 33 8 3 0 0 5 4 * 26 13 7 26 6 7 3 4 4 11	14.5 16.9 12.4 84.5 0.0 0.0 14.0 9.5 15.2 9.1 10.6 23.0 13.5 18.7 9.7 29.8 6.6 7.5 9.1 20.9	738 15 3 0 0 0 3 * 0 0 17 11 * 10 7 * * * 0 6	7.0 7.0 4.4 0.0 0.0 0.0 6.1 * 0.0 0.0 7.1 18.6 * 6.5 8.8 * * 0.0 10.5
CUMING CUSTER	10 11	15.2 14.7	* 5	* 5.2
DAKOTA DAWES	15 *	14.2 3.4	10	9.9
DAWSON DEUEL DIXON DODGE DOUGLAS DUNDY FILLMORE	13 0 6 45 379 3 10	9.8 0.0 17.2 19.2 14.7 14.7 22.9	6 0 4 27 165 0 *	4.2 0.0 9.3 9.4 6.7 0.0
FRANKLIN FRONTIER	4 5	12.4 26.7	*	*
FURNAS GAGE GARDEN GARFIELD GOSPER GRANT GREELEY HALL HAMILTON HARLAN HAYES HITCHCOCK	6 27 * 4 3 0 6 59 12 4 0 4	11.8 17.4 11.7 19.7 22.7 0.0 26.5 18.1 20.0 14.2 0.0 17.3	5 10 0 * * * * 23 4 * 0 3	11.2 6.2 0.0 * * * 6.8 7.0 * 0.0 22.6
HOLT HOOKER HOWARD JEFFERSON	9 0 8 9	14.7 0.0 16.3 12.2	7 0 4 5	10.6 0.0 8.3 6.3

TABLE 9A (continued): Leukemia Incidence and Mortality

	Incid	<u>ence</u>	<u>Morta</u>	litv
	# Cases	Rate	# Deaths	Rate
COUNTY				· <u></u>
JOHNSON	3	10.1	*	*
KEARNEY	6	14.0	*	*
KEITH	14	19.4	4	7.3
KEYA PAHA	*	22.8	0	0.0
KIMBALL	*	3.3	4	11.9
KNOX	8	14.0	10	14.3
LANCASTER	206	14.6	113	8.1
LINCOLN	41	18.8	21	8.7
LOGAN	0	0.0	0	0.0
LOUP	0	0.0	0	0.0
McPHERSON	*	24.8	*	*
MADISON	21	9.7	7	3.3▽
MERRICK	11	21.8	3	7.2
MORRILL	5	12.3	3	7.5
NANCE	3	9.5	*	*
NEMAHA	9	21.7	4	7.6
NUCKOLLS	4	13.4	3	6.1
OTOE	9	8.3▽	7	6.5
PAWNEE	3	12.0	*	*
PERKINS	*	7.9	0	0.0
PHELPS	8	14.8	7	11.7
PIERCE	6	11.8	*	*
PLATTE	22	12.2	13	7.3
POLK	6	18.0	3	7.6
RED WILLOW	15	19.7	8	10.4
RICHARDSON	9	13.1	4	5.1
ROCK	*	9.6	*	*
SALINE	10	12.5	7	7.8
SARPY	82	11.6	42	6.4
SAUNDERS	27	20.9	13	9.8
SCOTTS BLUFF	39	15.8	30	11.5
SEWARD	18	16.8	7	6.6
SHERIDAN	5	19.9	3	6.5
SHERMAN	4	17.7	*	*
SIOUX	0	0.0	*	*
STANTON	0	0.0	*	*
THAYER	7	15.1	*	*
THOMAS	3	70.8	*	*
THURSTON	4	11.1	3	8.6
VALLEY	8	26.1	3	10.2
WASHINGTON	21	19.1	11	9.5
WAYNE	6	15.8	4	9.6
WEBSTER	5	16.1	3	8.2
WHEELER	0	0.0	*	*
YORK	13	15.1	9	8.9

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

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[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 10A: Kidney and Renal Pelvis Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	Incid	<u>dence</u>	Morta	ality
	# Cases	<u>Rate</u>	# Deaths	Rate
US	274,334	16.0	67,197	3.9
NEBRASKA	1,730	16.7	474	4.4
COUNTY	24	40.67	44	0.0
ADAMS ANTELOPE	21 8	10.6∇ 14.6	11 3	6.0 5.4
ARTHUR	0	0.0	*	*
BANNER BLAINE	0	0.0	0	0.0
BOONE	6	13.3	*	*
BOX BUTTE	11	16.1	4	5.7
BOYD BROWN	3	18.9 *	*	*
BUFFALO	33	14.4	10	4.3
BURT	11	27.2	5	10.3
BUTLER CASS	11 27	19.3 17.7	4 11	6.9 7.0
CEDAR	9	13.4	4	5.2
CHASE	*	*	0	0.0
CHERRY CHEYENNE	3 7	6.6∇ 11.6	*	*
CLAY	4	8.7	0	0.0
COLFAX	11	20.2	*	*
CUMING CUSTER	15 13	26.2 17.4	4 *	6.0
DAKOTA	22	21.1	*	*
DAWES	4	6.3▼	*	*
DAWSON DEUEL	22 *	16.4 *	4	2.8
DIXON	3	6.3∇	0	0.0
DODGE	51	21.5	19	7.3
DOUGLAS DUNDY	475 4	18.4 25.1	119 *	4.8
FILLMORE	10	22.0	5	9.5
FRANKLIN	4	16.6	*	*
FRONTIER FURNAS	3 7	12.9 18.8	0	0.0
GAGE	32	21.2	11	6.5
GARDEN	*	*	0	0.0
GARFIELD GOSPER	3	19.6 *	0	0.0
GRANT	0	0.0	0	0.0
GREELEY	*	*	0	0.0
HALL HAMILTON	59 14	18.6 21.1	18 *	5.5 *
HARLAN	4	11.9	*	*
HAYES	*	*	0	0.0
HITCHCOCK HOLT	3 8	11.3 9.7	3	3.8
HOOKER	*	*	0	0.0
HOWARD	6	14.5	3	6.2
JEFFERSON	13	26.1		1.5

TABLE 10A (continued): Kidney and Renal Pelvis Cancer Incidence and Mortality

	Incid	<u>lence</u>	<u>Morta</u>	litv
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON		2.9	0	0.0
KEARNEY	7	15.1	0	0.0
KEITH	11	17.8	5	6.8
KEYA PAHA	*	*	0	0.0
KIMBALL	3	9.5	*	*
KNOX	9	12.1	*	*
LANCASTER	230	15.6	69	4.9
LINCOLN	46	20.5	14	5.8
LOGAN	*	*	0	0.0
LOUP	0	0.0	0	0.0
McPHERSON	*	*	0	0.0
MADISON	26	12.7	9	3.8
MERRICK	12	21.3	5	8.5
MORRILL	6	16.7	3	7.5
NANCE	6	26.9	*	*
NEMAHA	9	20.2	3	5.5
NUCKOLLS	5	18.8	0	0.0
OTOE	17	14.6	5	3.6
PAWNEE	8	38.5	*	*
PERKINS	*	*	*	*
PHELPS	13	21.3	4	6.7
PIERCE	7	13.1	0	0.0
PLATTE	27	13.9	6	3.0
POLK	5	10.1	5	9.6
RED WILLOW	8	9.7	*	*
RICHARDSON	12	16.7	3	4.2
ROCK	*	*	*	*
SALINE	12	16.5	3	2.9
SARPY	127	16.7	22	2.8▽
SAUNDERS	24	18.0	6	4.3
SCOTTS BLUFF	38	17.2	6	2.3
SEWARD	13	11.1	6	4.6
SHERIDAN	9	20.9	0	0.0
SHERMAN	6	26.4	*	*
SIOUX	*	*	0	0.0
STANTON	3	8.9	*	*
THAYER	7	14.7	*	*
THOMAS	0	0.0	0	0.0
THURSTON	7	21.8	5	13.6
VALLEY	3	12.2	0	0.0
WASHINGTON	17	14.5	6	5.1
WAYNE	8	15.4	*	*
WEBSTER	5	17.4	0	0.0
WHEELER	*	*	0	0.0
YORK	19	21.1	7	6.7

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

[▼] county rate is significantly lower than the state rate (99% confidence level)

[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 11A: Melanoma of the Skin Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska (2010-2014) & US (2009-2013)

	Ir	ncidence	N	<u>//ortality</u>
	# Cases	Rate	# Deaths	Rate
US	340,070	20.3	46,126	2.7
NEBRASKA	2,064	20.6	300	2.9
COUNTY				
ADAMS ANTELOPE	46 11	27.9 27.4	13	7.1
ARTHUR	0	0.0	0	0.0
BANNER BLAINE	*	*	0 0	0.0
BOONE	0 8	0.0 27.0	0	0.0 0.0
BOX BUTTE	13	20.6	*	*
BOYD	*	*	0	0.0
BROWN	5	28.3	0 9	0.0
BUFFALO BURT	38 10	16.2 27.4	*	3.9
BUTLER	8	14.3	3	5.2
CASS	38	25.9	4	2.3
CEDAR	10	17.6	*	*
CHASE	3	9.9	0	0.0
CHERRY CHEYENNE	3 10	5.9 ▼ 17.9	0 0	0.0 0.0
CLAY	7	17.9	*	*
COLFAX	14	25.4	*	*
CUMING	11	16.7	*	*
CUSTER	15	19.4	0	0.0
DAKOTA	22	22.1	8	8.5 *
DAWES DAWSON	14 17	30.1 12.1∇	*	*
DEUEL	*	*	*	*
DIXON	10	27.2	*	*
DODGE	43	19.1	6	2.0
DOUGLAS	579 10	22.5	80	3.2
DUNDY FILLMORE	10 8	70.7∆ 25.6	0 3	0.0 9.1
FRANKLIN	*	*	0	0.0
FRONTIER	*	*	0	0.0
FURNAS	7	17.2	0	0.0
GAGE	21	14.2	3	1.8
GARDEN GARFIELD	4 3	20.6 13.1	0	0.0
GOSPER	*	*	0	0.0
GRANT	*	*	0	0.0
GREELEY	3	13.9	0	0.0
HALL	68	20.9	7	2.1
HAMILTON HARLAN	9 9	18.7 30.1	0	0.0
HAYES	*	30.1 *	0	0.0
HITCHCOCK	8	33.0	*	*
HOLT	10	18.4	3	4.2
HOOKER	*	*	0	0.0
HOWARD	6	12.4	*	*
JEFFERSON	13	24.6	4	5.3

TABLE 11A (continued): Melanoma of the Skin Incidence and Mortality

COUNTY Gate # Deaths Rate JOHNSON 5.5 0 0.0 KEARNEY 9 24.1 3 5.6 KEITH * * 0 0.0 KEYA PAHA * * 0 0.0 KIMBALL * * 0 0.0 KNOX 7 12.2 5 8.5 LANCASTER 273 19.0 34 2.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 LOUP 0 0.0 0 0.0 MOPHERSON * * 0 0.0 MADISON 50 24.4 3 12 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 *		Incid	<u>lence</u>	<u>Morta</u>	lity
JOHNSON 5.5 0 0.0 KEARNEY 9 24.1 3 5.6 KEITH * * 0 0.0 KEYA PAHA * * 0 0.0 KIMBALL * * 0 0.0 KIMOX 7 12.2 5 8.5 LANCASTER 273 19.0 34 2.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 LOUP 0 0.0 0 0.0 MCPHERSON * * * 0 0.0 MCPHERSON * 10 0.0					
KEARNEY 9 24.1 3 5.6 KEITH * * 0 0.0 KEYA PAHA * * 0 0.0 KIMBALL * * 0 0.0 KNOX 7 12.2 5 8.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 LOUP 0 0.0 0 0.0 MCPHERSON * * 0 0.0 MERRICK 10 23.4 0 0.0 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * NUCKOLLS 7 18.4 * * NUCKOLLS 7 1	COUNTY				
KEITH * * 0 0.0 KEYA PAHA * * 0 0.0 KIMBALL * * 0 0.0 KNOX 7 12.2 5 8.5 LANCASTER 273 19.0 34 2.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 MCPHERSON * * 0 0.0 MCPHERSON * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 MONRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NUCKOLLS 7 18.4 * * NUCKOLLS 7 18.4 * * OTOE 10	JOHNSON		5.5		0.0
KEYA PAHAA	KEARNEY		24.1	3	5.6
KIMBALL	KEITH		*	0	0.0
KNOX 7 12.2 5 8.5 LANCASTER 273 19.0 34 2.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0.0 LOUP 0 0 0.0 0 0 0.0 McPHERSON * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 MORRILL 6 17.2 0 0.0 MANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * 0 TOOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * PHELPS 7 11.4 * * PIERCE 9 21.9 * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * RED WILLOW 10 12.0 * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.1 * * SARPY 198 26.6 △ 19 5.4 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERIDAN 6 23.1 * * THURSTON * * THURSTON * * THURSTON * * THURSTON * * WASHINGTON 36 31.4 3 2.2	KEYA PAHA	*			0.0
LANCASTER 273 19.0 34 2.5 LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 0.0 LOUP 0 0.0 0.0 0.0 0.0 McPHERSON * * * 0 0.0 McPHERSON 50 24.4 3 1.2 McRRICK 10 23.4 0 0.0 McRILL 6 17.2 0 0.0 McRILL 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	KIMBALL	*	*		0.0
LINCOLN 40 18.2 7 2.7 LOGAN 3 59.3 0 0.0 LOUP 0 0 0.0 0 0 0.0 MCPHERSON * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * 0 OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * PHELPS 7 11.4 * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * RED WILLOW 10 12.0 ▼ * RED WILLOW 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.1 * SEWARD 16 14.9 5 4.7 SHERMAN 6 23.1 * SEWARD 16 14.9 5 4.7 SHERMAN 6 23.1 * SHERMAN 6 23.1 * THOMAS * * THURSTON * * THURSTON * * WASHINGTON 36 31.4 3 2.2	KNOX	7	12.2	5	8.5
LOGAN 3 59.3 0 0.0 LOUP 0 0.0 0.0 0.0 MCPHERSON * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 MORRILL 6 17.2 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * * NUCKOLLS 7 18.4 *	LANCASTER	273	19.0	34	2.5
LOUP 0 0.0 0 0.0 MADISON * * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * * PIERCE 9 21.9 * * * PLATTE 36 20.5 7 3.9 * PLATTE 36 20.5 7 3.9 * * PLATTE 36 20.5	LINCOLN	40	18.2	7	2.7
McPHERSON * * 0 0.0 MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * NUCKOLLS 10 8.5 ¥ * \$ PERKINS	LOGAN	3	59.3	0	0.0
MADISON 50 24.4 3 1.2 MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * * NEMAHA 5 10.6 * * * NUCKOLLS 7 18.4 * * OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * PIERCE 9 21.9 * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * * RED WILLOW 10 12.0 ∇ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * * SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SHERMAN 6 23.1 * * SHERMAN 6 23.1 * * THAYER 6 16.1 3 5.1 THOMAS * * THAYER 6 16.1 3 5.1 THOMAS * * THURSTON * * WASHINGTON 36 31.4 3 2.2			0.0		0.0
MERRICK 10 23.4 0 0.0 MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * * PHECE 9 21.9 * * * PLATTE 36 20.5 7 3.9 * POLK 4 14.2 * * * RED WILLOW 10 12.0 ∇ * * * RICHARDSON 11 18.0 3 5.1 * ROCK 3 25.2 0 0.0 0.0 SALINE 16 20.3 * * * SARPY 198 26.6 Δ	McPHERSON		*		0.0
MORRILL 6 17.2 0 0.0 NANCE 3 11.1 * * NEMAHA 5 10.6 * * NUCKOLLS 7 18.4 * * OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PERKINS 3 15.4 * * PERKINS 3 15.4 * * PHELPS 7 11.4 * * PLATTE 36 20.5 7 3.9 PLATTE 36 20.5	MADISON	50		3	1.2
NANCE 3 11.1 * * * * * NEMAHA 5 10.6 * * * * * * * * * * * * * * * * * * *	MERRICK	10	23.4	0	0.0
NEMAHA NUCKOLLS 7 18.4 * * * * * * * * * * * * *	MORRILL		17.2	0	0.0
NUCKOLLS 7 OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * * * * * * * * * * * * * * * * * *	NANCE		11.1	*	*
OTOE 10 8.5 ▼ 5 5.0 PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHERS 7 11.4 * * * PIERCE 9 21.9 * * * * PLATTE 36 20.5 7 3.9 *	NEMAHA		10.6	*	*
PAWNEE 3 12.2 3 12.5 PERKINS 3 15.4 * * PHELPS 7 11.4 * * PIERCE 9 21.9 * * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * * RED WILLOW 10 12.0∇ * * * RICHARDSON 11 18.0 3 5.1 * ROCK 3 25.2 0 0.0 * SALINE 16 20.3 * * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SHERMAN 6 10.0 0 <td< td=""><td>NUCKOLLS</td><td></td><td>_</td><td>*</td><td>*</td></td<>	NUCKOLLS		_	*	*
PERKINS 3 15.4 * * PHELPS 7 11.4 * * PIERCE 9 21.9 * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * RED WILLOW 10 12.0∇ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3	OTOE		8.5▼		5.0
PHELPS 7 11.4 * * PIERCE 9 21.9 * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * RED WILLOW 10 12.0∇ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SHERMAN 6 23.1 * * SHOUX 0 0.0 0.0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 <td>PAWNEE</td> <td></td> <td>12.2</td> <td>3</td> <td>12.5</td>	PAWNEE		12.2	3	12.5
PIERCE 9 21.9 * * PLATTE 36 20.5 7 3.9 POLK 4 14.2 * * RED WILLOW 10 12.0∇ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0.0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THOMAS * * *	PERKINS		15.4	*	*
PLATTE 36 20.5 7 3.9 POLK 4 14.2 * RED WILLOW 10 12.0∇ * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 18. SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * SHERIDAN 7 21.9 * SHERMAN 6 23.1 * SIOUX 0 0.0 0.0 STANTON 11 29.2 * THAYER 6 16.1 3 5.1 THOMAS * THURSTON * WASHINGTON 36 31.4 3 2.2	PHELPS	7	11.4		
POLK 4 14.2 * * RED WILLOW 10 12.0∇ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6 Δ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 <td>PIERCE</td> <td>9</td> <td>21.9</td> <td>*</td> <td>*</td>	PIERCE	9	21.9	*	*
RED WILLOW 10 12.0♥ * * RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	PLATTE	36		7	3.9
RICHARDSON 11 18.0 3 5.1 ROCK 3 25.2 0 0.0 SALINE 16 20.3 * SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * SHERMAN 6 23.1 * SIOUX 0 0.0 0.0 0 0.0 STANTON 11 29.2 * THAYER 6 16.1 3 5.1 THOMAS * THURSTON * WASHINGTON 36 31.4 3 2.2	_				*
ROCK 3 25.2 0 0.0 SALINE 16 20.3 * * SARPY 198 26.6△ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	RED WILLOW	10	12.0▽		*
SALINE 16 20.3 * * SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	RICHARDSON		18.0		5.1
SALINE 10 20.5 SARPY 198 26.6 △ 19 2.6 SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	ROCK	3	25.2		
SAUNDERS 18 15.1 3 2.7 SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2		16		*	*
SCOTTS BLUFF 53 23.3 4 1.8 SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	-	198			
SEWARD 16 14.9 5 4.7 SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2		_	-		2.7
SHERIDAN 7 21.9 * * SHERMAN 6 23.1 * * SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * * THAYER 6 16.1 3 5.1 THOMAS * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2		53			
SHERMAN 6 23.1 * * * * * SIOUX 0 0.0 0.0 0 0.0 STANTON 11 29.2 * * * * * * * * * * * * * * * * * * *	-				
SIOUX 0 0.0 0 0.0 STANTON 11 29.2 * * * THAYER 6 16.1 3 5.1 THOMAS * * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	-				
STANTON 11 29.2 * * THAYER 6 16.1 3 5.1 THOMAS * * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	-		-		*
THAYER 6 16.1 3 5.1 THOMAS * * * * * THURSTON * * 0 0.0 VALLEY 5 13.7 * WASHINGTON 36 31.4 3 2.2		0			0.0
THOMAS * <td></td> <td></td> <td></td> <td></td> <td>*</td>					*
THURSTON * * 0 0.0 VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2					5.1
VALLEY 5 13.7 * * WASHINGTON 36 31.4 3 2.2	THOMAS				*
WASHINGTON 36 31.4 3 2.2					
WASHINGTON 36 31.4 3 2.2					
			-	3	
	WAYNE	16	34.0	3	5.4
WEBSTER 6 19.3 * *	_				*
WHEELER * * 0 0.0					
YORK 21 24.9 3 2.7	YORK	21	24.9	3	2.7

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

∇ county rate is significantly lower than the state rate (95% confidence level)

[▼] county rate is significantly lower than the state rate (99% confidence level)

[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 12A: Pancreatic Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence

Nebraska (2010-2014) & US (2009-2013)

	Inci	dence	<u>Mortality</u>				
	# Cases	Rate	# Deaths	Rate			
US	212,021	12.4	187,653	10.9			
NEBRASKA	1,252	12.0	1111	10.5			
COUNTY							
ADAMS	25	12.8	23	10.9			
ANTELOPE	4	8.4	3	4.8			
ARTHUR	0	0.0	0	0.0			
BANNER	0	0.0		14.8			
BLAINE			0	0.0			
BOONE	4	8.3	4	12.6			
BOX BUTTE	7	9.4	6	8.8			
BOYD	0	0.0	*	4.7			
BROWN				3.5			
BUFFALO	25	10.2	21	8.5			
BURT	6	8.9	8	11.6			
BUTLER	6	8.5	9	13.1			
CASS	20	12.3	21	13.1			
CEDAR	6	8.0	7	8.8			
CHASE	6	24.0	5 *	17.3			
CHERRY	4	11.4		4.2			
CHEYENNE	8	12.8	6	10.1			
CLAY COLFAX	6 9	13.5	4	8.9 13.5			
	9 10	16.0	8				
CUMING CUSTER	8	13.5 9.1	8 8	10.3 9.0			
DAKOTA	16	15.6	10	9.0			
DAWES	8	12.5	10	9.o 15.8			
DAWSON	6 12	9.0	12	8.8			
DEUEL	1 Z *	9.U *	1 <i>Z</i> *	3.9			
DIXON	7	18.6	6	15.2			
DODGE	38	15.5	35	13.9			
DOUGLAS	350	14.0	284	11.3			
DUNDY	3	19.2	0	0.0			
FILLMORE	9	19.3	7	15.0			
FRANKLIN	3	14.3	*	8.7			
FRONTIER	*	*	*	8.9			
FURNAS	4	11.2	4	11.2			
GAGE	21	13.5	19	11.1			
GARDEN	5	21.6	6	26.8			
GARFIELD	*	*	0	0.0			
GOSPER	*	*	*	6.5			
GRANT	0	0.0	0	0.0			
GREELEY	0	0.0	0	0.0			
HALL	37	11.3	30	9.3			
HAMILTON	8	12.7	7	11.3			
HARLAN	6	18.3	7	20.9			
HAYES	0	0.0	*	10.7			
HITCHCOCK	*	*	*	7.5			
HOLT	9	9.3	9	9.7			
HOOKER	0	0.0	*	15.9			
HOWARD	4	9.3	*	4.1			
JEFFERSON	9	13.8	9	13.9			

TABLE 12A (continued): Pancreatic Cancer Incidence and Mortality

	Incid	<u>ence</u>	<u>Mortality</u>					
	# Cases	Rate	# Deaths	Rate				
<u>COUNTY</u>								
JOHNSON	6	16.1	4	10.4				
KEARNEY	6	12.7	4	8.6				
KEITH	7	10.6	9	13.7				
KEYA PAHA	*	*	*	12.0				
KIMBALL	10	32.2	11	32.3△				
KNOX	6	8.1	8	9.2				
LANCASTER	150	10.7	140	9.9				
LINCOLN	30	13.1	21	9.3				
LOGAN	0	0.0	0	0.0				
LOUP	0	0.0	0	0.0				
McPHERSON	0	0.0	0	0.0				
MADISON	31	14.3	27	12.8				
MERRICK	5	8.3	*	1.5				
MORRILL	3	9.2	5	14.3				
NANCE	*	*	6	18.8				
NEMAHA	7	14.3	6	11.5				
NUCKOLLS	6	16.7	*	5.1				
OTOE	16	11.8	14	10.1				
PAWNEE	3	11.9	4	15.9				
PERKINS	0	0.0	*	4.7				
PHELPS	*	*	*	2.4				
PIERCE	*	*	3	5.5				
PLATTE	17	9.4	13	7.1				
POLK	3	8.8	3	8.8				
RED WILLOW	10	11.6	10	11.1				
RICHARDSON	10	15.7	14	20.8				
ROCK	0	0.0	0	0.0				
SALINE	11	12.8	9	10.2				
SARPY	91	13.7	75	11.8				
SAUNDERS	19	14.3	20	14.7				
SCOTTS BLUFF	20	8.3	20	8.4				
SEWARD	9	8.0	14	12.8				
SHERIDAN	6	13.3	4	8.9				
SHERMAN	0	0.0	0	0.0				
SIOUX	0	0.0	0	0.0				
STANTON	5	13.1	5	12.2				
THAYER	5	8.3	4	5.5				
THOMAS	*	*	*	14.5				
THURSTON	*	*	*	3.1				
VALLEY	*	*	*	5.2				
WASHINGTON	16	12.4	14	10.5				
WAYNE	4	8.3	5	8.7				
WEBSTER	5	15.8	5	16.0				
WHEELER	*	*	*	14.6				
YORK	13	12.8	9	8.3				

^{*}Number and rate are not shown if based on fewer than three events Rates are per 100,000 population and are age-adjusted to the 2000 US population

[∇] county rate is significantly lower than the state rate (95% confidence level)

[▼] county rate is significantly lower than the state rate (99% confidence level)

[△]county rate is significantly higher than the state rate (95% confidence level)

[▲] county rate is significantly higher than the state rate (99% confidence level)

TABLE 13A: Cancer Incidence Number of Cases and Rates, All Sites and Selected Primary Sites, by Place of Residence Nebraska and Public Health Department Regions (2010-2014)

	All Sites		Lung & E	Bronchus	Female	Breast	Colon & I	Rectum	Prostate		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
NEBRASKA	47,020	454.4	6,214	59.6	6,547	122.0	4,550	43.7	5,981	119.7	
Central	2,128	481.0△	272	60.2	238	105.0▽	209	45.6	317	146.6▲	
Dakota County	437	422.6	68	65.4	54	100.1	44	43.3	61	122.0	
Douglas County	12,417	484.4 ▲	1,729	69.3▲	1,844	132.8△	1,060	42.2	1,452	123.1	
East Central	1,409	447.7	165	51.1	195	121.4	148	46.5	196	126.8	
Elkhorn Logan Valley	1,583	434.7	210	55.9	202	111.4	180	48.3	269	153.4 ▲	
Four Corners	1,296	442.6	143	47.2▼	175	116.0	128	42.1	186	128.0	
Lincoln/Lancaster County	6,253	434.7▼	805	57.9	955	125.8	585	41.2	746	107.7	
Loup Basin	1,016	437.8	125	48.9∇	113	98.5▽	110	46.3	138	114.9	
North Central	1,459	423.4∇	192	50.9	174	103.1∇	185	50.8	224	129.0	
Northeast	800	421.6▽	94	46.4∇	118	124.7	103	52.4	109	115.1	
Panhandle	2,362	410.8▼	289	46.8▼	316	110.0	225	39.0	326	113.2	
Public Health Solutions	1,810	468.8	252	62.1	229	113.8	205	51.1	211	112.9	
Sarpy Cass County	4,062	462.7	520	63.9	630	131.9	359	42.9	477	109.3	
South Heartland	1,438	481.6	188	59.9	198	129.7	146	45.6	187	126.4	
Southeast	1,260	454.1	200	68.7	162	118.7	136	46.4	149	108.9	
Southwest	1,296	442.0	171	53.8	165	119.6	141	46.7	152	103.6	
Three Rivers	2,431	487.4 ▲	345	65.5	321	125.4	218	42.6	349	140.5△	
Two Rivers	2,343	425.9▼	284	50.2▽	339	121.7	270	48.5	279	103.7	
West Central	1,210	485.2	161	64.0	118	91.3▼	97	37.5	153	127.1 ▼	

TABLE 13A (continued): Cancer Incidence

	Urinary	Bladder	Non-Ho Lympl		Leuk	emia	Kidney & Pel		Melanom Sk		Pancı	reas
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	2,190	20.9	2,112	20.5	1,486	14.5	1,730	16.7	2,064	20.6	1,252	12.0
Central	102	22.1	102	23.1	75	16.8	85	19.5	87	20.4	50	11.2
Dakota County	12	11.1▼	13	12.6▽	13	12.5	22	21.1	22	22.1	16	15.6
Douglas County	573	23.6	540	21.4	344	13.4	475	18.4	578	22.5	350	14.0
East Central	64	19.2	69	22.9	38	12.7	50	15.9	61	21.1	32	10.2
Elkhorn Logan Valley	58	15.6▽	63	16.8	42	11.1	55	16.1	83	23.6	52	13.2
Four Corners	78	25.1	56	19.1	42	14.6	48	15.6	49	17.6	31	9.6
Lincoln/Lancaster County	255	18.2	229	16.2▼	187	13.3	230	15.6	273	19.0	149	10.6
Loup Basin	55	21.2	52	21.5	35	13.8	36	17.0	39	15.9	16	6.6▼
North Central	68	17.5	66	18.7	35	10.0	41	11.3▽	51	18.0	27	7.4▼
Northeast	29	16.0	38	18.4	17	10.0	27	14.1	37	21.1	18	9.5
Panhandle	126	20.0	117	20.2	62	11.2	82	14.4	113	20.8	68	11.0
Public Health Solutions	87	20.9	87	21.9	59	14.9	74	20.3	64	18.2	55	13.5
Sarpy Cass County	179	21.7	179	20.4	108	12.7	154	16.7	236	26.2△	111	13.3
South Heartland	59	18.0	69	23.4	42	13.1	35	11.6▽	66	25.4	42	13.7
Southeast	67	22.0	64	21.1	32	11.8	47	16.4	31	10.9▼	42	13.6
Southwest	75	21.9	69	24.2	53	16.6	42	13.7	46	15.7	33	11.2
Three Rivers	109	21.1	98	19.3	84	17.2△	92	18.8	97	21.4	73	14.8
Two Rivers	115	20.1	106	19.0	62	11.4	85	15.6	84	15.8▽	55	9.8
West Central	79	30.5△	74	29.1△	44	17.8	50	20.0	46	18.7	31	12.2

Rates are per 100,000 population (excluding gender-specific sites, which are per 100,000 male or female population) and are age-adjusted to the 2000 US population

[∇]regional rate is significantly lower than the state rate (95% confidence level)
▼regional rate is significantly lower than the state rate (99% confidence level)
Δregional rate is significantly higher than the state rate (95% confidence level)
▲regional rate is significantly higher than the state rate (99% confidence level)

TABLE 14A: Cancer Mortality Number of Deaths and Rates, All Sites and Selected Primary Sites, by Place of Residence Nebraska and Public Health Department Regions (2010-2014)

	All Sites		Lung & B	ronchus	Female	Breast	Colon & I	Rectum	Prostate	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	17,205	162.6	4,486	43.0	1,168	20.0	1,714	16.1	914	20.8
Central	724	157.9	188	41.3	52	20.3	71	15.1	36	18.6
Dakota County	182	179.7	48	46.9	10	16.5	17	18.3	11	30.0
Douglas County	4,420	177.5▲	1,227	49.9▲	309	21.9	383	15.3	212	22.4
East Central	513	157.3	123	38.2	33	20.0	68	20.8	25	16.7
Elkhorn Logan Valley	611	157.0	158	41.0	41	19.0	72	18.6	30	16.8
Four Corners	509	161.6	105	33.9▽	41	24.5	54	17.0	24	16.4
Lincoln/Lancaster County	2,184	154.7	572	41.4	133	16.4	203	14.5	125	22.0
Loup Basin	367	141.8▽	93	35.4	37	31.6△	31	11.5	24	19.7
North Central	576	148.3∇	151	40.0	31	13.6▽	63	14.9	34	19.1
Northeast	309	149.3	62	29.2▼	21	20.3	35	15.9	16	17.8
Panhandle	916	148.5∇	225	36.2∇	63	18.1	112	18.6	46	16.8
Public Health Solutions	746	175.3	176	43.3	48	21.2	83	19.3	38	19.3
Sarpy Cass County	1,402	172.2	403	49.8△	107	23.1	129	16.2	66	22.3
South Heartland	515	157.7	138	43.4	38	24.4	61	17.9	26	17.6
Southeast	521	170.8	131	44.1	18	10.5▼	50	17.1	51	36.6 ▲
Southwest	518	161.2	128	39.4	39	23.5	59	17.4	28	19.1
Three Rivers	918	174.9	242	45.4	61	21.2	86	16.5	50	21.7
Two Rivers	854	149.9∇	201	35.1∇	49	16.9	105	18.5	53	21.7
West Central	420	162.6	115	45.5	37	26.4	32	11.9	19	16.5

TABLE 14A (continued): Cancer Mortality

	Urinary Bladder		Non-Ho Lymph		Leukemia		Kidney & Renal Pelvis		Melanoma of the Skin		Pancreas	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	435	4.0	645	6.1	738	7.0	474	4.4	300	2.9	1,111	10.5
Central	22	4.9	26	5.7	30	6.6	25	5.6	7	1.5	38	8.6
Dakota County	5	4.7	2	1.8▼	10	9.9	2	1.5▽	8	8.5	10	9.8
Douglas County	109	4.6	148	6.1	165	6.7	119	4.8	80	3.2	284	11.3
East Central	11	3.1	17	5.3	23	7.4	11	3.3	10	3.1	31	9.7
Elkhorn Logan Valley	11	2.4	22	5.8	21	5.5	19	4.8	7	1.6	48	12.1
Four Corners	14	4.3	23	7.2	20	6.4	22	6.4	12	3.9	35	10.8
Lincoln/Lancaster County	59	4.4	70	4.9	113	8.1	69	4.9	34	2.5	140	9.9
Loup Basin	12	4.1	21	7.8	18	6.9	9	3.4	6	2.3	13	5.0▼
North Central	13	2.8	34	8.2	24	6.7	14	4.4	11	3.8	28	6.8∇
Northeast	3	1.5▽	14	6.1	18	8.9	10	4.6	7	3.1	19	9.3
Panhandle	23	3.5	38	6.0	47	7.3	18	2.9	10	1.8	70	11.2
Public Health Solutions	24	5.5	28	6.1	25	5.6	22	5.0	14	3.4	48	11.1
Sarpy Cass County	36	4.7	55	7.2	52	6.5	33	3.6	23	2.6	96	12.0
South Heartland	10	2.7	24	7.0	21	6.0	11	3.8	18	6.2△	34	10.3
Southeast	10	2.9	29	8.5	19	6.2	12	3.7	12	4.5	42	13.4
Southwest	23	6.7	20	5.9	22	7.8	12	4.1	4	1.2▽	34	10.7
Three Rivers	14	2.4	34	6.5	51	9.6	31	5.9	12	2.3	69	13.6
Two Rivers	24	4.2	26	4.5	36	6.3	20	3.6	17	3.0	49	8.5
West Central	12	4.3	14	4.8	23	8.7	15	5.5	8	2.7	23	9.1

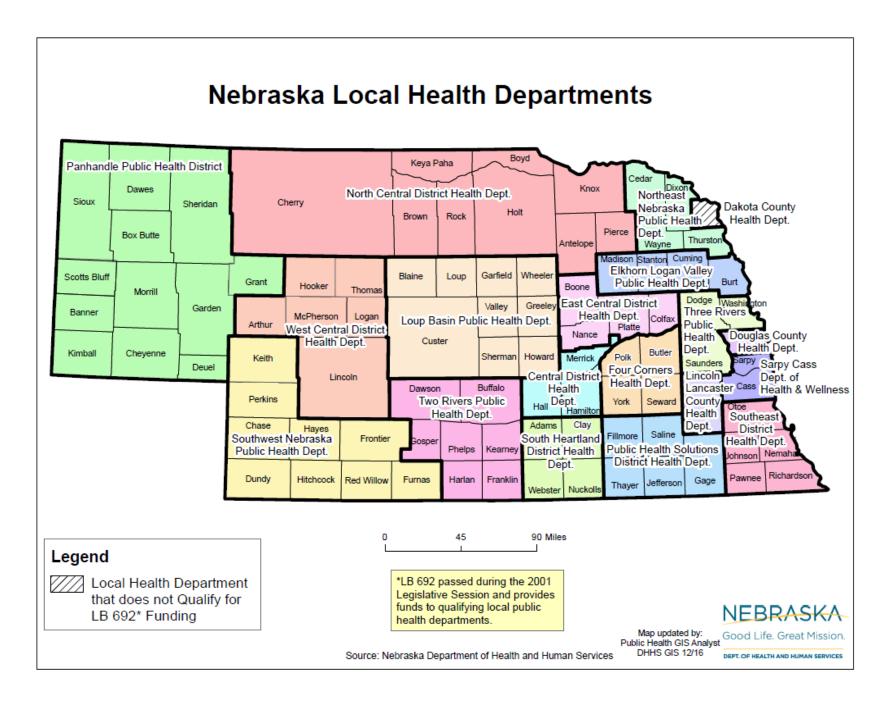
^{*}Number and rate are not shown if based on fewer than three deaths

Rates are per 100,000 population (excluding gender-specific sites, which are per 100,000 male or female population) and are age-adjusted to the 2000 US population

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Table 15A. Public Health Department Regions in Nebraska

<u>#</u>	Public Health Department	Jurisdiction, by County
1	Central	Hall, Hamilton, Merrick
2	Dakota County	Dakota
3	Douglas County	Douglas
4	East Central	Boone, Colfax, Nance, Platte
5	Elkhorn Logan Valley	Burt, Cuming, Madison, Stanton
6	Four Corners	Butler, Polk, Seward, York
7	Lincoln-Lancaster County	Lancaster
8	Loup Basin	Blaine, Custer, Garfield, Greeley, Howard, Loup, Sherman, Valley, Wheeler
9	North Central	Antelope, Boyd, Brown, Cherry, Holt, Keya Paha, Knox, Pierce, Rock
10	Northeast Nebraska	Cedar, Dixon, Thurston, Wayne
11	Panhandle	Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Grant, Kimball, Morrill, Sheridan, Sioux
12	Public Health Solutions	Fillmore, Gage, Jefferson, Saline, Thayer
13	Sarpy Cass	Cass, Sarpy
14	Scotts Bluff County	Scotts Bluff
15	South Heartland	Adams, Clay, Nuckolls, Webster
16	Southeast	Johnson, Nemaha, Otoe, Pawnee, Richardson
17	Southwest Nebraska	Chase, Dundy, Frontier, Furnas, Hayes, Hitchcock, Keith, Perkins, Red Willow
18	Three Rivers	Dodge, Saunders, Washington
19	Two Rivers	Buffalo, Dawson, Franklin, Gosper, Harlan, Kearney, Phelps
20	West Central	Arthur, Hooker, Lincoln, Logan, McPherson, Thomas



Cancer Incidence and Mortality in Nebraska: 2014





April, 2017

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

What types of data are available?

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

Who may request data from the Nebraska Cancer Registry?

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

How do I make a request?

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

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

NEBRASKA CANCER REGISTRY 2014 ANNUAL REPORT

Nebraska Department of Health and Human Services

Courtney N. Phillips, MPA, Chief Executive Officer Nebraska Department of Health and Human Services

Thomas L. Williams, MD, Chief Medical Officer Director, Division of Public Health

Jenifer Roberts-Johnson, JD, Deputy Director Division of Public Health

> Ming Qu, MEd, PhD, Administrator Epidemiology & Informatics Unit

Michelle Hood, Administrator Office of Health Statistics

Bryan Rettig, MS Epidemiology Surveillance Coordinator

Christophe Irumva, MS Health Data Coordinator

Janis Singleton Administrative Assistant Norm Nelson, MS Statistical Analyst

Kerui Xu, MPH Data Analyst Intern

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Nebraska Cancer Registry Advisory Committee Members

Jane Meza, Senior Associate Dean

College of Public Health

University of Nebraska Medical Center

Daniel Lydiatt, MD Methodist Cancer Center

John Casey, MD Lincoln, Nebraska Marilyn J. Voss, RN, CCM Nebraska Methodist Hospital

Stephen Dreyer, MD

Fremont Area Medical Center

Julie Nielsen, RHIT, LPN, CTR Nebraska Cancer Registry

Judy Gray, CTR Consultant

F. William Karrer, MD Methodist Cancer Center

Shelly Spencer, CTR

St. Elizabeth Regional Medical Center

Nagamani Narayana, MS, DMD

University of Nebraska College of Dentistry

Alan Thorson, MD, FACS Colon and Rectal Surgery

University of Nebraska Medical Center

Nebraska Cancer Registry Data Collection Staff

Julie Nielsen, RHIT, LPN, CTR Coordinator

Jeanne Prucha, CMSW, RHIT

Tumor Registrar

Mary Lien, CTR

Quality Assurance Coordinator

Adrienne Bohnencamp, RHIT, CTR Early Case Capture Data Coordinator

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EXECUTIVE SUMMARY

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

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

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

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

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

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

INTRODUCTION

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

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

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

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

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

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

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

METHODOLOGY

Data Collection and Management

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

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

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

Confidentiality

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

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

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

Quality Assurance

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

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

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

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

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

Definitions

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

Incidence rate

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

Mortality rate

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

Age-adjusted rate

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

Stage of Disease at Diagnosis

In situ

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

Invasive

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

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

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

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

Data Analysis

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

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

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

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

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

CANCER INCIDENCE IN NEBRASKA

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

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

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

Cancer (All Sites)

Incidence Rates, Nebraska & US (2004-2014)

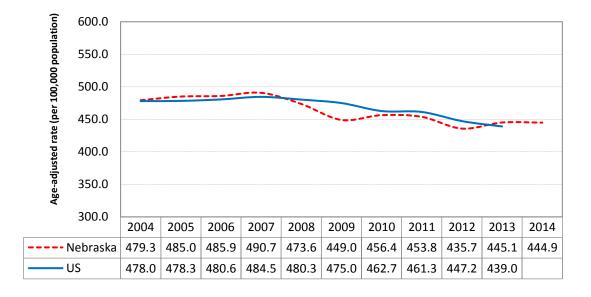


TABLE 1: Cancer Incidence Number of Cases and Rates, by Selected Primary Site and Gender Nebraska (2014 and 2010-2014) & US (2009-2013)

				ASKA 14			NEBRASKA 2010-2014							US 2009-2013			
Site	Ma No.	ale Rate	Fen No.	nale Rate	To No.	tal Rate	Ma No.	le Rate	Fem No.	ale Rate	To No.	tal Rate	Male Rate	Female Rate	Total Rate		
All Sites	4,899	488.5	4,615	415.2	9,514	444.9	24,354	508.2	22,664	416.6	47,020	454.4	511.3	418.2	461.9		
Oral Cavity & Pharynx	192	18.6	64	6.0	256	12.0	844	17.0	360	6.5	1,204	11.5	17.1	6.3	11.4		
Esophagus	80	7.7	21	1.8	101	4.5	421	8.6	97	1.7	518	4.8	8.1	1.8	4.7		
Stomach	72	7.2	33	3.0	105	4.9	368	7.9	168	2.9	536	5.2	9.2	4.6	6.7		
Small Intestine	33	3.5	17	1.6	50	2.5	149	3.1	85	1.6	234	2.3	2.6	2.0	2.3		
Colon & Rectum (Colorectal)	505	49.9	412	35.5	917	42.3	2,379	50.0	2,171	38.2	4,550	43.7	46.8	35.5	40.6		
Liver & Intrahepatic Bile Ducts	71	6.9	31	2.5	102	4.6	420	8.4	168	3.0	589	5.5	11.7	4.0	7.6		
Pancreas	134	14.0	125	10.8	259	12.2	654	13.8	598	10.4	1,252	12.0	14.1	10.9	12.4		
Larynx	45	4.4	17	1.5	62	2.9	266	5.3	73	1.3	339	3.2	6.2	1.4	3.5		
Lung & Bronchus	669	68.3	557	48.5	1,226	57.0	3,376	71.9	2,837	50.3	6,214	59.6	74.6	53.4	62.5		
Soft Tissue	50	5.1	23	2.1	73	3.5	196	4.2	134	2.5	330	3.3	3.9	2.8	3.3		
Melanoma of the Skin	254	25.0	232	23.3	486	23.5	1,123	23.5	941	18.8	2,064	20.6	26.0	16.2	20.3		
Breast (invasive cases only)	15	1.4	1,373	124.3	1,388	65.6	69	1.5	6,547	122.0	6,616	64.7	1.3	123.4	66.3		
Uterine Cervix			80	8.7					328	7.3				7.6			
Uterine Corpus & Unspecified			299	26.6					1,471	26.6				24.8			

TABLE 1 (continued): Cancer Incidence

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

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

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

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

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

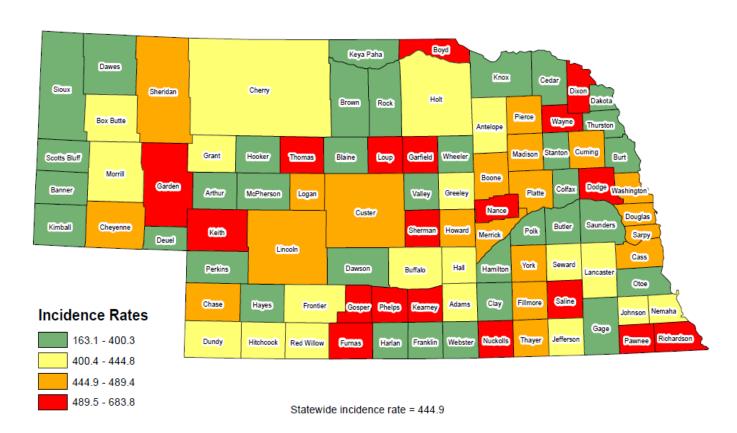
TABLE 3: Cancer Incidence
Number of Cases and Rates, All Sites and Top Ten Primary Sites, by Race and Ethnicity
Nebraska (2005-2014)

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

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

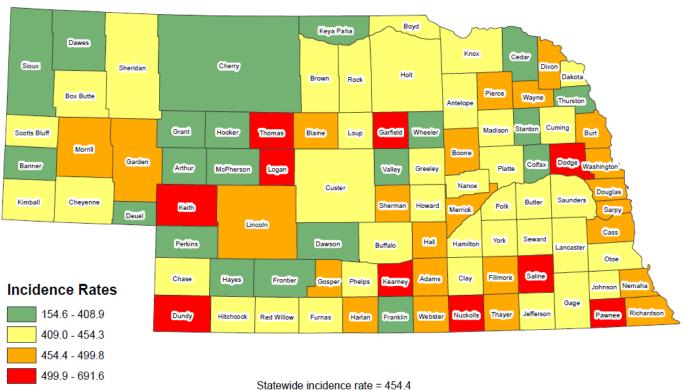
Cancer (all sites) Diagnoses in Nebraska, 2014 Incidence Rates by County of Residence

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



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

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



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CANCER MORTALITY IN NEBRASKA

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

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

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

Cancer (All Sites)

Mortality Rates, Nebraska & US (2004-2014)

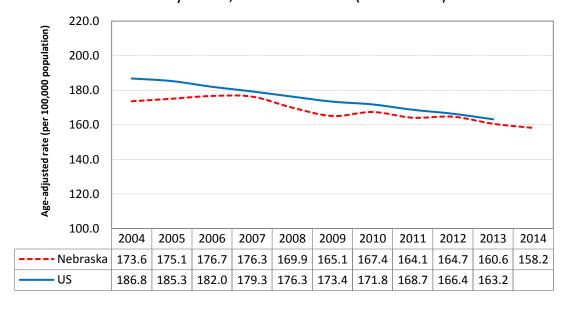


TABLE 4: Cancer Mortality Number of Deaths and Rates, by Selected Primary Site and Gender Nebraska (2014 and 2010-2014) & US (2009-2013)

NEBRASKA NEBRASKA US 2014 2010-2014 2009-2013 Site Male Female Total Male Female Total Male Female Total No. Rate No. Rate No. Rate No. Rate No. Rate No. Rate Rate Rate Rate All Sites 204.0 143.9 168.9 1,851 192.8 1,592 132.5 3,443 158.2 9,091 196.6 8,114 138.1 17,205 162.6 Oral Cavity & Pharynx 1.3 2.4 32 3.1 18 1.5 50 2.2 164 3.3 82 1.3 246 2.2 3.8 Esophagus 82 8.5 12 0.9 94 4.3 402 8.4 486 4.6 7.4 1.5 4.1 84 1.4 Stomach 4.5 2.4 3.3 27 2.8 12 0.9 39 1.8 128 2.7 77 1.3 205 1.9 Colon & Rectum (Colorectal) 12.8 18.1 15.1 173 17.8 164 13.4 337 854 18.4 860 14.2 1,714 16.1 15.5 Liver & Intrahepatic Bile Ducts 3.7 6.2 9.1 67 6.7 7.1 512 4.8 33 2.8 100 4.6 347 165 3.0 **Pancreas** 10.9 119 12.2 102 8.6 221 10.2 12.5 524 8.9 1.111 12.6 9.6 587 10.5 Larynx 0.4 1.1 27 2.6 6 0.5 33 1.5 88 1.9 18 0.3 106 1.0 1.9 Lung & Bronchus 504 52.6 378 32.2 882 41.2 2,502 54.2 1,984 34.5 4,486 43.0 57.7 37.1 46.0 Melanoma of the Skin 4.1 1.7 2.7 37 3.7 16 1.4 53 2.4 190 4.1 110 2.0 300 2.9 21.6 12.0 Breast 1,168 0.3 1 0.1 251 21.3 252 11.6 11 0.2 20.0 1.179 11.1 2.3 Uterine Cervix 25 2.2 112 2.2

TABLE 4 (continued): Cancer Mortality

				RASKA 014					NEBF 2010		US 2009-2013				
Site	M No.	lale Rate	Fer No.	nale Rate	To No.	otal Rate	M No.	ale Rate	Fer No.	nale Rate	To No.	tal Rate	Male Rate	Female Rate	Total Rate
Uterine Corpus & Unspecified			46	4.0					256	4.4				4.5	
Ovary			78	6.3					387	6.7				7.6	
Prostate	174	18.9					914	20.8					20.6		
Kidney & Renal Pelvis	69	6.8	32	2.6	101	4.6	314	6.5	160	2.6	474	4.4	5.7	2.5	3.9
Urinary Bladder	54	5.8	27	1.9	81	3.6	303	6.8	132	2.1	435	4.0	7.7	2.2	4.4
Brain & Other Nervous System	59	5.9	45	4.0	104	4.9	287	6.2	228	4.1	515	5.1	59	5.9	45
Thyroid	8	0.8	6	0.5	14	0.7	32	0.7	35	0.5	67	0.6	8	0.8	6
Hodgkin Lymphoma	3	0.3	2	0.2	5	0.2	21	0.5	11	0.2	32	0.3	3	0.3	2
Non-Hodgkin Lymphoma	61	6.5	63	4.9	124	5.6	329	7.2	316	5.1	645	6.1	61	6.5	63
Leukemia	92	9.9	64	5.1	156	7.1	413	9.2	325	5.4	738	7.0	9.2	5.1	6.9
Myeloma	45	4.9	22	1.7	67	3.1	201	4.3	154	2.5	355	3.3	4.4	2.8	3.5

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

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

	<u>0-17 Yr</u>	<u>s.</u>	<u>18-44 Y</u>	rs.	45-64 Y	rs.	<u>65+ Yı</u>	<u>rs</u>	TOTAL	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	Number	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
All Sites	68	0.4	435	2.5	4,231	24.6	12,471	72.5	17,205	100.0
Oral Cavity & Pharynx	0	0.0	3	1.2	86	35.0	157	63.8	246	100.0
Esophagus	0	0.0	12	2.5	146	30.0	328	67.5	486	100.0
Stomach	0	0.0	12	5.9	63	30.7	130	63.4	205	100.0
Colon & Rectum (Colorectal)	0	0.0	42	2.5	401	23.4	1,271	74.2	1,714	100.0
Liver & Intrahepatic Bile Ducts	1	0.2	16	3.1	195	38.1	300	58.6	512	100.0
Pancreas	0	0.0	14	1.3	280	25.2	817	73.5	1,111	100.0
Lung & Bronchus	0	0.0	34	8.0	1,105	24.6	3,347	74.6	4,486	100.0
Melanoma of the Skin	0	0.0	21	7.0	101	33.7	178	59.3	300	100.0
Female Breast	0	0.0	63	5.4	357	30.6	748	64.0	1,168	100.0
Uterine Cervix	0	0.0	24	21.4	59	52.7	29	25.9	112	100.0
Uterine Corpus & Unspecified	0	0.0	6	2.3	73	28.4	178	69.3	257	100.0
Ovary	0	0.0	9	2.3	126	32.6	252	65.1	387	100.0
Prostate	0	0.0	1	0.1	76	8.3	837	91.6	914	100.0
Kidney & Renal Pelvis	2	0.4	6	1.3	158	33.3	308	65.0	474	100.0
Urinary Bladder	0	0.0	1	0.2	63	14.5	371	85.3	435	100.0
Brain & Central Nervous System	27	5.2	44	8.5	159	30.9	285	55.3	515	100.0
Thyroid	0	0.0	0	0.0	15	22.4	52	77.6	67	100.0
Hodgkin Lymphoma	0	0.0	4	12.5	15	46.9	13	40.6	32	100.0
Non-Hodgkin Lymphoma	5	8.0	21	3.3	104	16.1	515	79.8	645	100.0
Leukemia	10	1.4	28	3.8	126	17.1	574	77.8	738	100.0
Myeloma	0	0.0	2	0.6	70	19.7	283	79.7	355	100.0

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

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

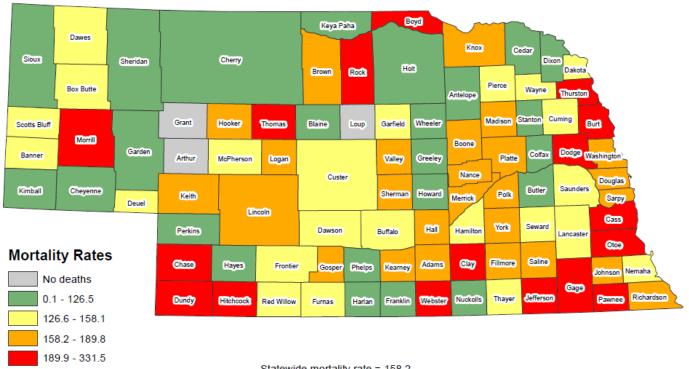
		White		Africa	n-American		Native	e American		Asian/P	acific Island	der	Hispanic			
	<u>Site</u>	Number	Rate	Site	Number	Rate	Site	Number	Rate	Site	Number	Rate	Site	Number	Rate	
	All Sites	32,582	165.9	All Sites	1,117	214.0	All Sites	160	169.1	All Sites	199	105.8	All Sites	531	102.6	
Rank												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

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

Abbreviation: CNS, central nervous system

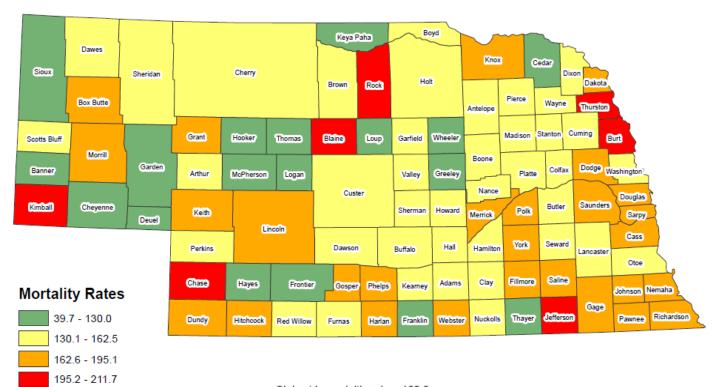
Cancer (all sites) Deaths in Nebraska, 2014 Mortality Rates by County of Residence

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



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

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



Statewide mortality rate = 162.6

INCIDENCE AND MORTALITY FOR SELECTED PRIMARY SITES

Lung and Bronchus

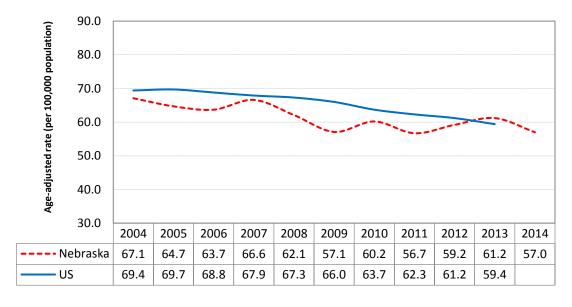
Although lung cancer was only the second most frequently diagnosed cancer among Nebraska residents in 2014, it was the year's leading cause of cancer mortality, accounting for 26% of the state's cancer deaths. During the past five years (2010-2014), lung cancer has averaged over 1,200 diagnoses and 900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

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

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

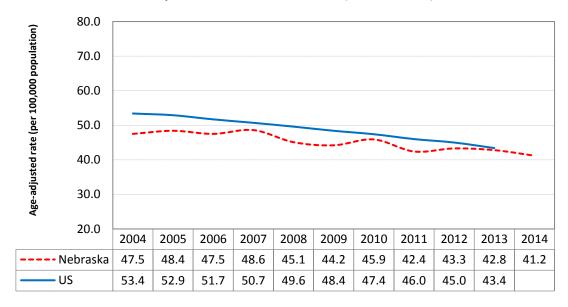
Lung and Bronchus Cancer

Incidence Rates, Nebraska & US (2004-2014)



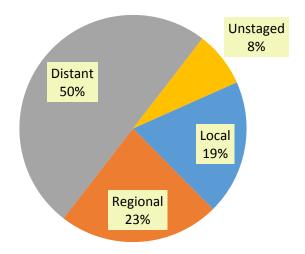
Lung and Bronchus Cancer

Mortality Rates, Nebraska & US (2004-2014)



Lung and Bronchus Cancer

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



Breast (Female only)

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

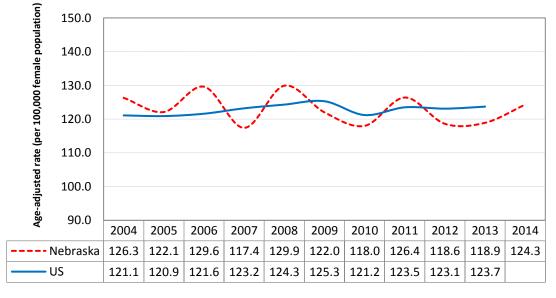
Age is an important risk factor for breast cancer, with 80% of all cases occurring among women age 50 and older. Other risk factors include genetic mutations, a personal or family history of breast cancer, some forms of benign breast disease, early menstruation, late menopause, never having children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

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

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

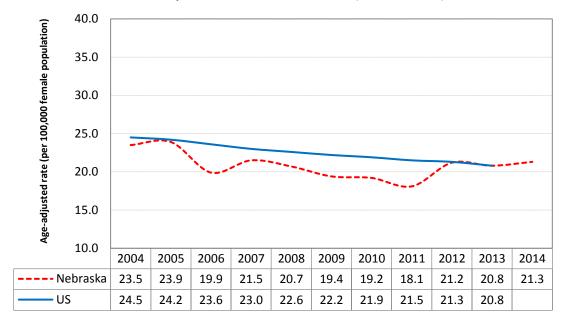
Female Breast Cancer

Incidence Rates, Nebraska & US (2004-2014)



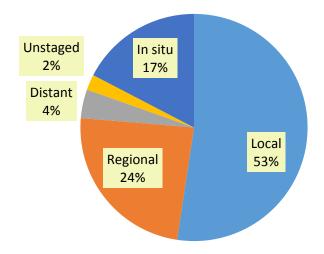
Female Breast Cancer

Mortality Rates, Nebraska & US (2004-2014)



Female Breast Cancer

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



Colon and Rectum (Colorectal)

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

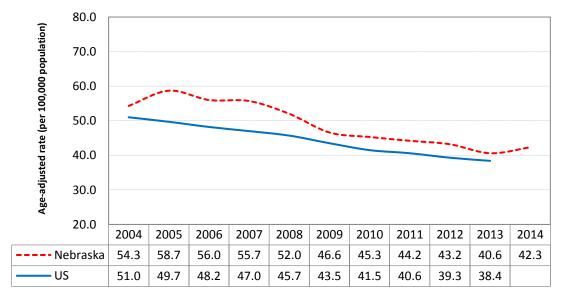
The risk of developing colorectal cancer increases with age. Almost two-thirds (62.8%) of all colorectal cancer cases that occurred in Nebraska during 2010-2014 were 65 or older at diagnosis. Other risk factors include a personal or family history of colorectal cancer or polyps, a personal history of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

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

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

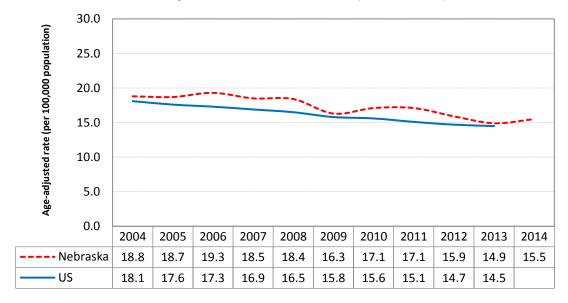
Colon and Rectum (Colorectal) Cancer

Incidence Rates, Nebraska & US (2004-2014)



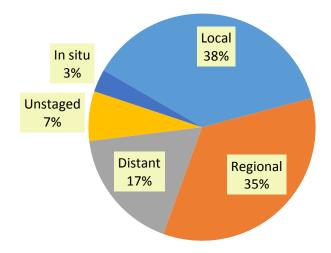
Colon and Rectum (Colorectal) Cancer

Mortality Rates, Nebraska & US (2004-2014)



Colon and Rectum (Colorectal) Cancer

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



Prostate

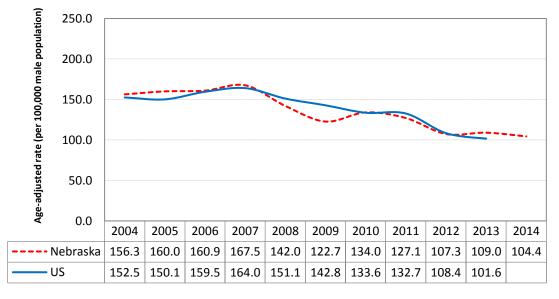
With 1,106 diagnoses in 2014, prostate cancer was the most common cancer among Nebraska men, accounting for over 22% of all new cancers. During the past five years (2010-2014), it has also been the second leading cause of cancer deaths among Nebraska men, accounting for 914 deaths. Since the mid-1990s,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

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

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

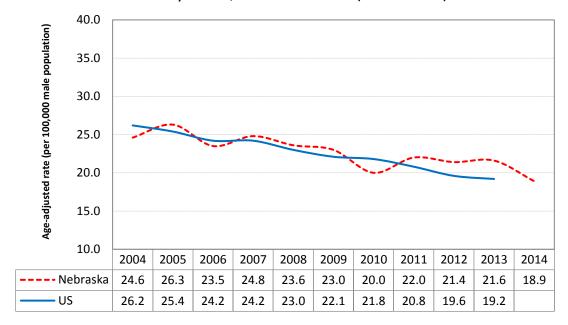
Maps on pages 51-52 present incidence and mortality rates for prostate cancer by county of residence; county-specific statistics are also found in an appendix to this report (<u>Table 6A</u>).

Prostate CancerIncidence Rates, Nebraska & US (2004-2014)



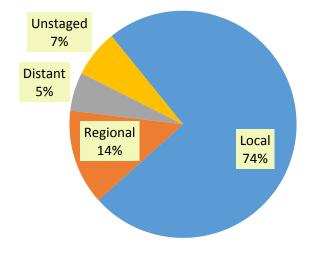
Prostate Cancer

Mortality Rates, Nebraska & US (2004-2014)



Prostate Cancer

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



Urinary Bladder

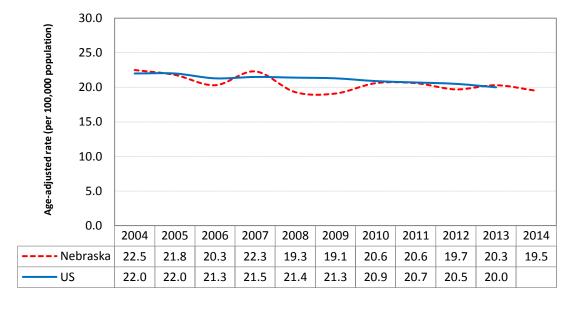
Between 2010 and 2014, 2,190 Nebraska residents were diagnosed with bladder cancer. Bladder cancer occurs much more frequently among men than women (by about a 3-to-1 ratio), and it now ranks as the fourth most common site of cancer diagnoses among Nebraska men. However, deaths from bladder cancer occur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

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

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

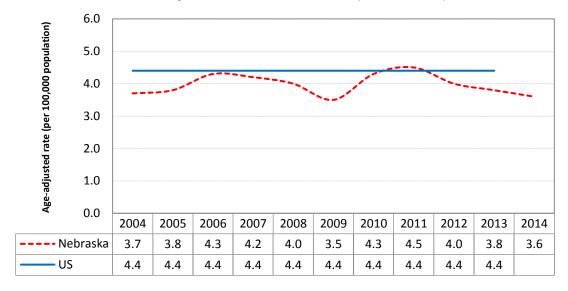
Urinary Bladder Cancer

Incidence Rates, Nebraska & US (2004-2014)



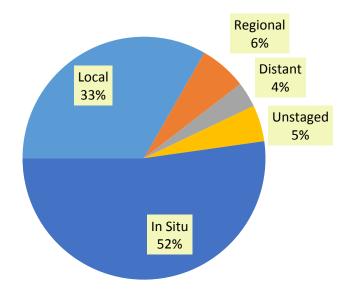
Urinary Bladder Cancer

Mortality Rates, Nebraska & US (2004-2014)



Urinary Bladder Cancer

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



Non-Hodgkin Lymphoma

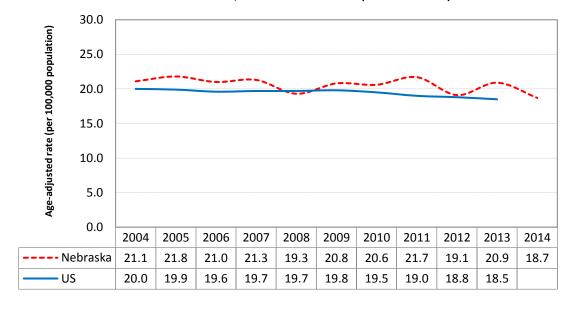
Lymphomas are cancers that affect the white blood cells of the immune system, and are usually classified as either Hodgkin or Non-Hodgkin lymphoma. Non-Hodgkin lymphoma is by far the more common disorder of the two, accounting for 2,112 diagnoses and 645 deaths among Nebraska residents between 2010 and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

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

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

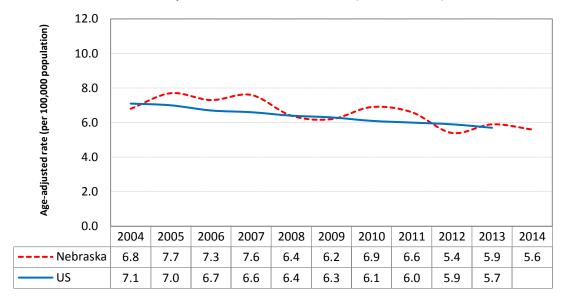
Non-Hodgkin Lymphoma

Incidence Rates, Nebraska & US (2004-2014)



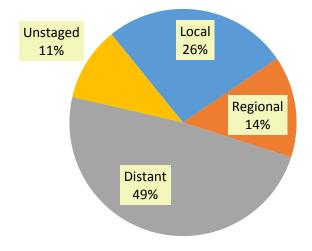
Non-Hodgkin Lymphoma

Mortality Rates, Nebraska & US (2004-2014)



Non-Hodgkin Lymphoma

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



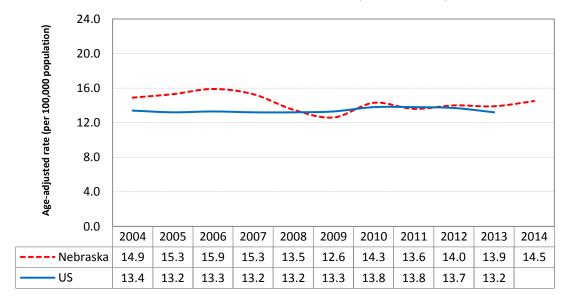
Leukemia

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

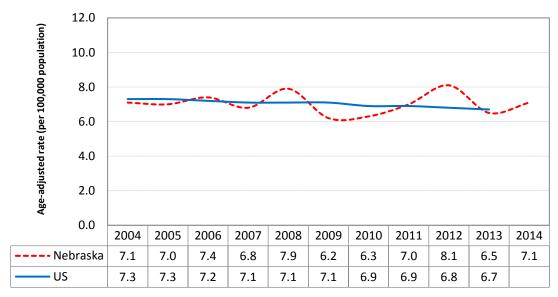
The major causes of most types of leukemia are unknown. Nevertheless, several risk factors have been identified, and include genetic abnormalities (such as Down's syndrome), exposure to ionizing radiation, and workplace exposure to benzene and other related solvents. Adult T-cell leukemia is strongly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

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

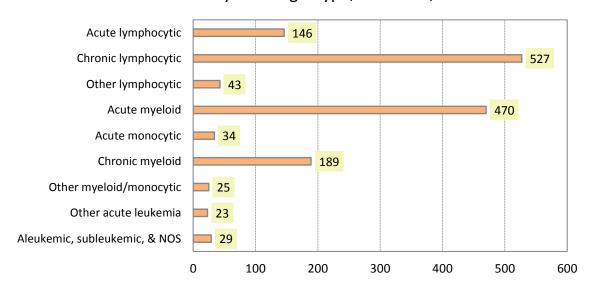
LeukemiaIncidence Rates, Nebraska & US (2004-2014)



LeukemiaMortality Rates, Nebraska & US (2004-2014)



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



Abbreviation: NOS, not otherwise specified

Kidney and Renal Pelvis

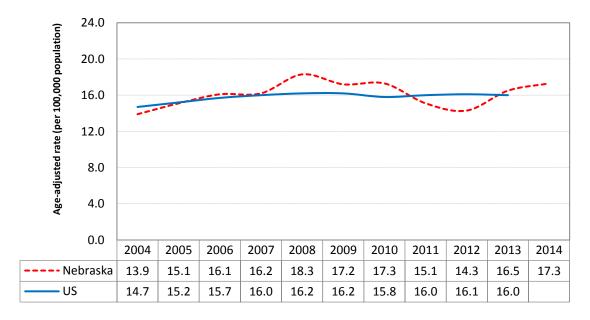
Cancers of the kidney and renal pelvis accounted for 1,730 diagnoses in Nebraska between 2010 and 2014, and also accounted for 474 deaths in Nebraska during the same years. State and national trends since 1990 show a significant increase in the rate of diagnosis of these cancers, but little change in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

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

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

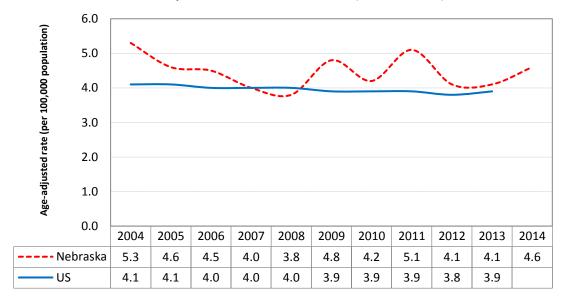
Kidney and Renal Pelvis Cancer

Incidence Rates, Nebraska & US (2004-2014)



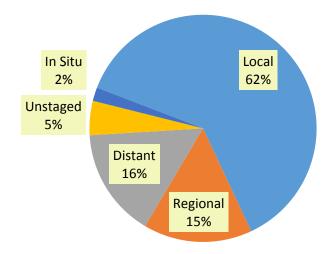
Kidney and Renal Pelvis Cancer

Mortality Rates, Nebraska & US (2004-2014)



Kidney and Renal Pelvis Cancer

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



Melanoma of the Skin

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

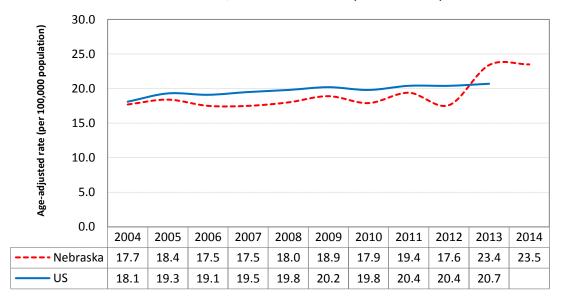
Melanoma is related to exposure to ultraviolet radiation (most of which comes from the sun), particularly exposures during childhood that resulted in severe sunburns. The risk of developing melanoma is particularly high among people with light skin. Sun exposure is not the only risk factor. Family history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

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

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

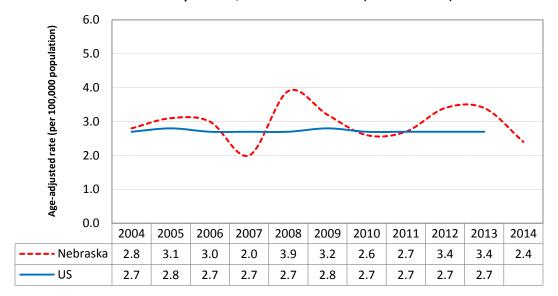
Melanoma of the Skin

Incidence Rates, Nebraska & US (2004-2014)



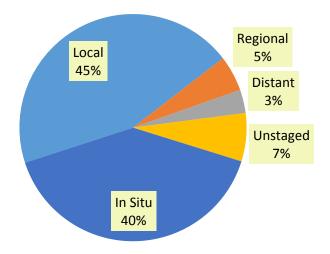
Melanoma of the Skin

Mortality Rates, Nebraska & US (2004-2014)



Melanoma of the Skin

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



Pancreas

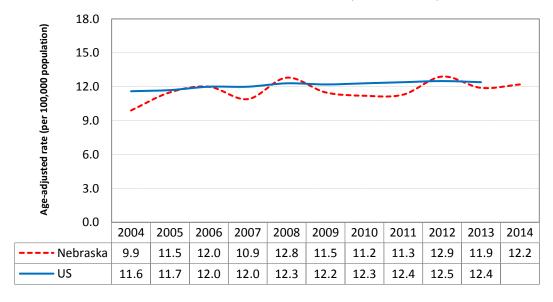
Between 2010 and 2014, cancer of the pancreas accounted for 1,252 diagnoses and 1,111 deaths among Nebraska residents. Risk for pancreatic cancer increases with age, and over two-thirds (68%) of Nebraskans diagnosed with the disease during 2010-2014 were 65 years of age or older. Both statewide and nationally,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

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

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

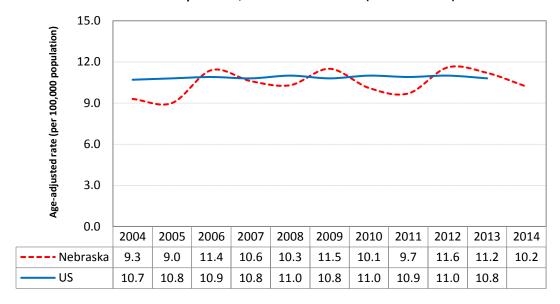
Pancreatic Cancer

Incidence Rates, Nebraska & US (2004-2014)



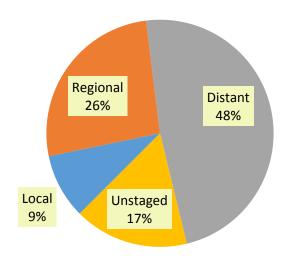
Pancreatic Cancer

Mortality Rates, Nebraska & US (2004-2014)



Pancreatic Cancer

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

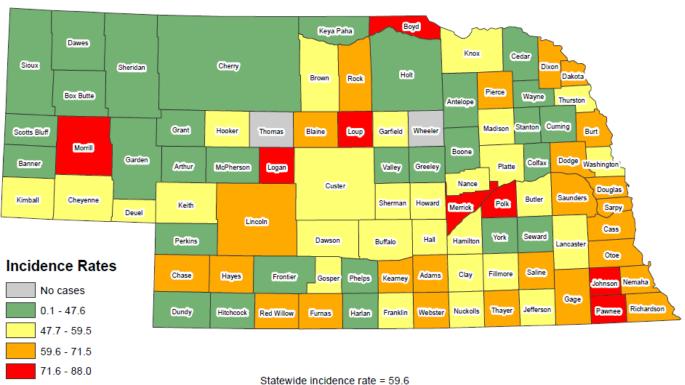


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INCIDENCE & MORTALITY RATE MAPS, FOR SELECTED PRIMARY SITES

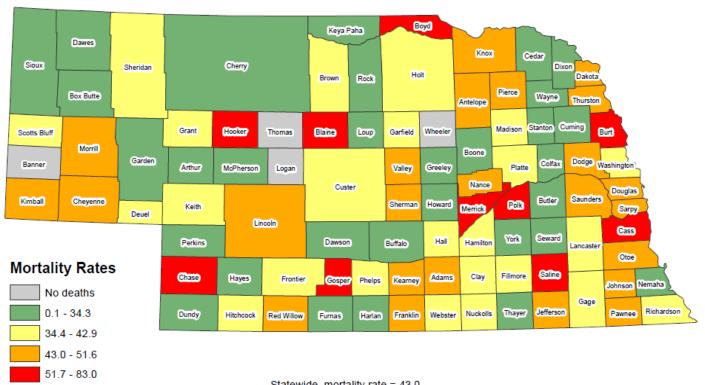
Primary Site	Contents	Page
Lung & bronchus	Incidence Mortality	45 46
Female breast	Incidence Mortality	47 48
Colon & rectum (colorectal)	Incidence Mortality	49 50
Prostate	Incidence Mortality	51 52
Urinary bladder	Incidence Mortality	53 54
Non-Hodgkin lymphoma	Incidence Mortality	55 56
Leukemia	Incidence Mortality	57 58
Kidney & renal pelvis	Incidence Mortality	59 60
Melanoma of the skin	Incidence Mortality	61 62
Pancreas	Incidence Mortality	63 64

Lung & Bronchus Cancer Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence



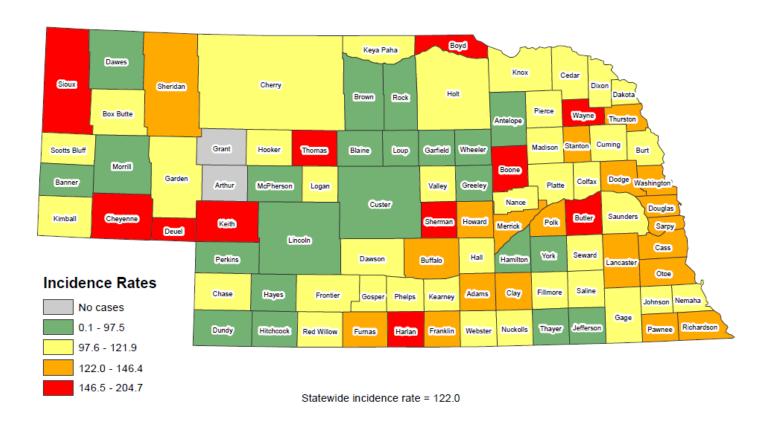
Lung & Bronchus Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

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



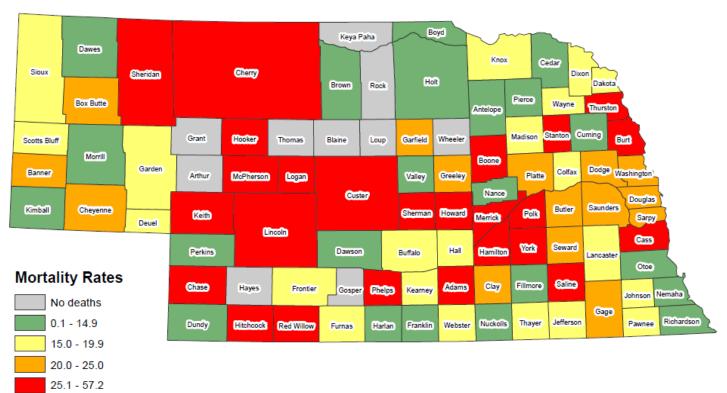
Statewide mortality rate = 43.0

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



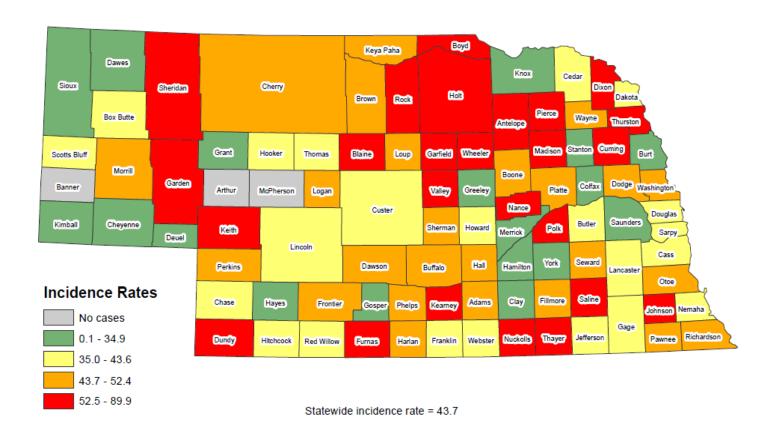
Female Breast Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence

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

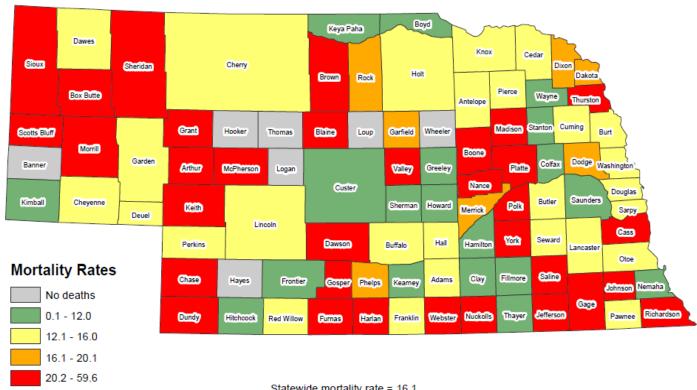


Statewide mortality rate = 20.0

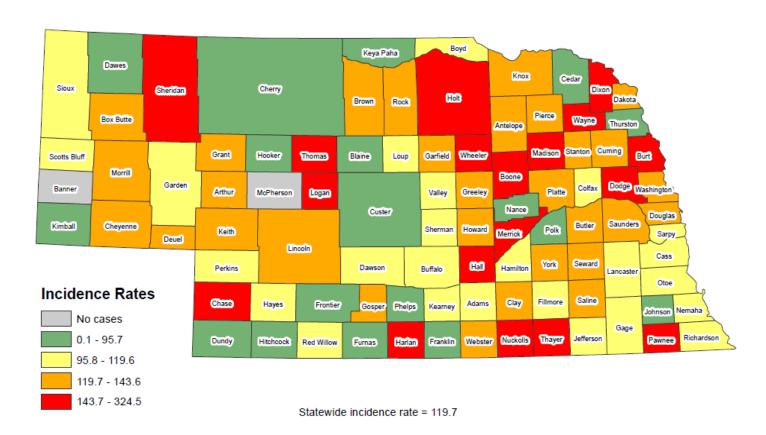
Colorectal (Colon & Rectum) Cancer Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence



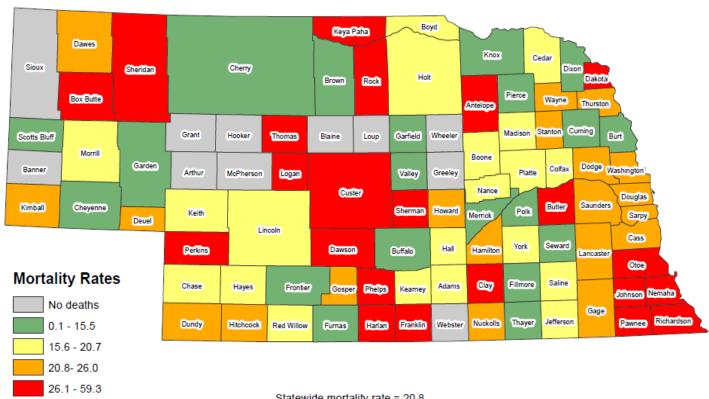
Colorectal (Colon & Rectum) Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



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

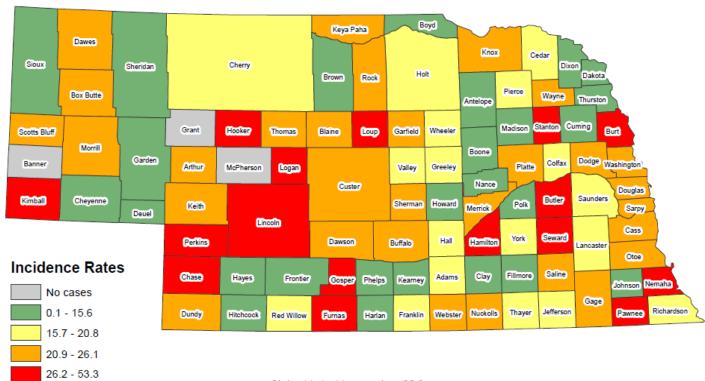


Prostate Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



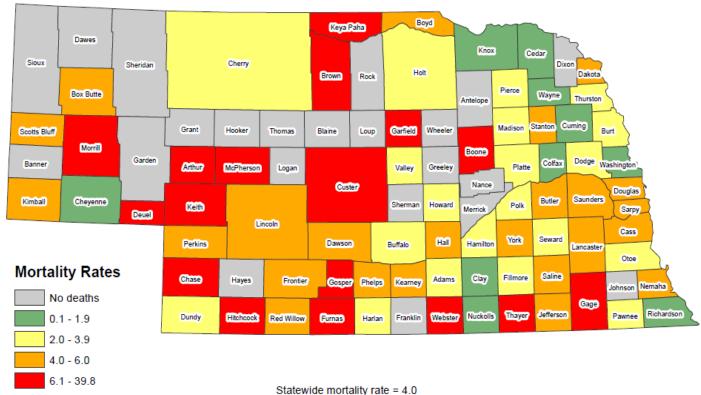
Urinary Bladder Cancer Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

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

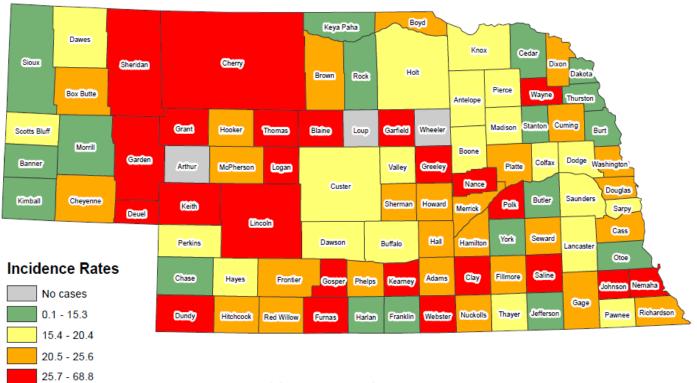


Statewide incidence rate = 20.9

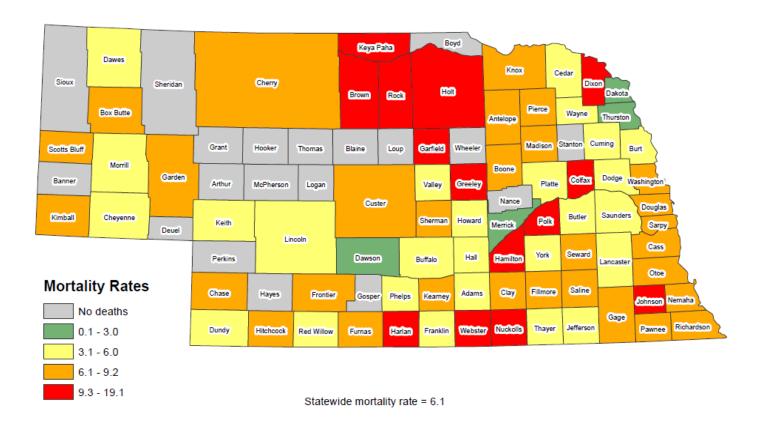
Urinary Bladder Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



Non-Hodgkin Lymphoma Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

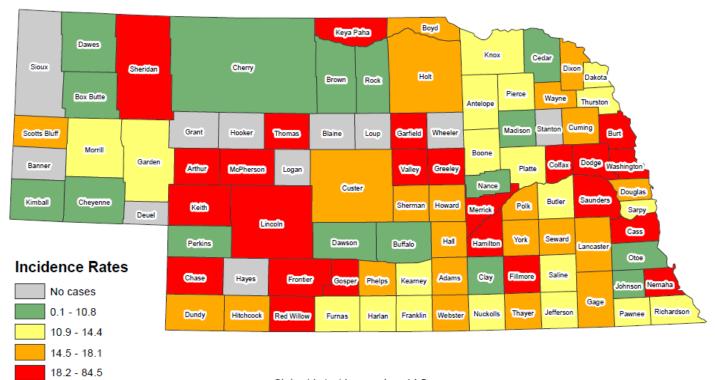


Non-Hodgkin Lymphoma Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



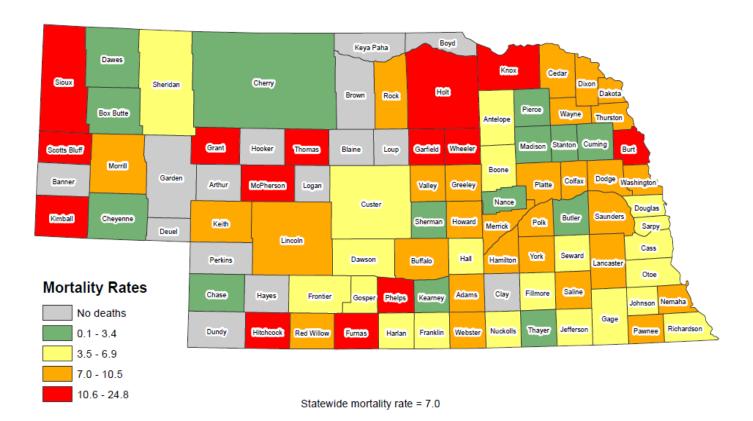
Leukemia Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence

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

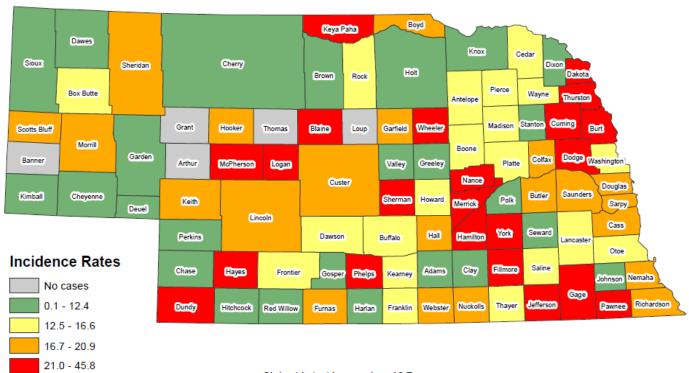


Statewide incidence rate = 14.5

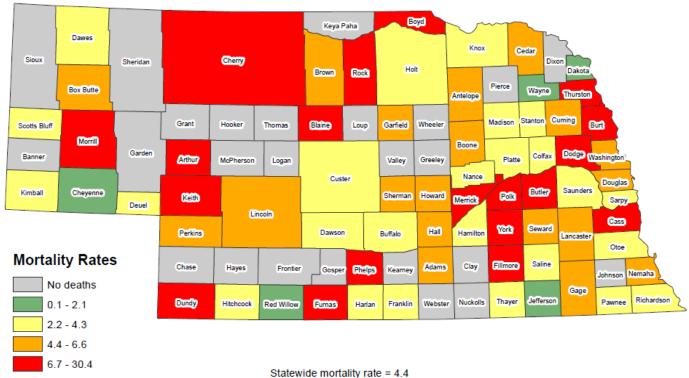
Leukemia Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



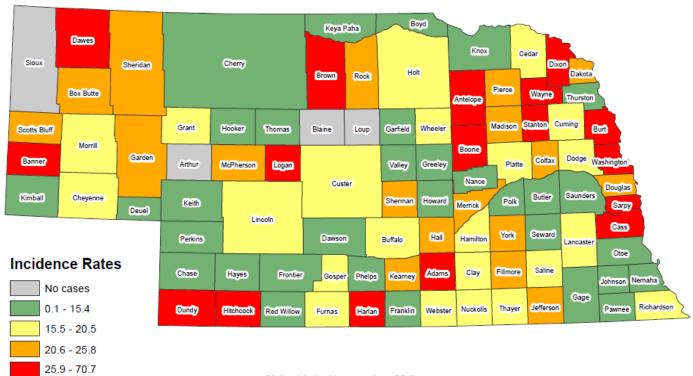
Kidney & Renal Pelvis Cancer Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence



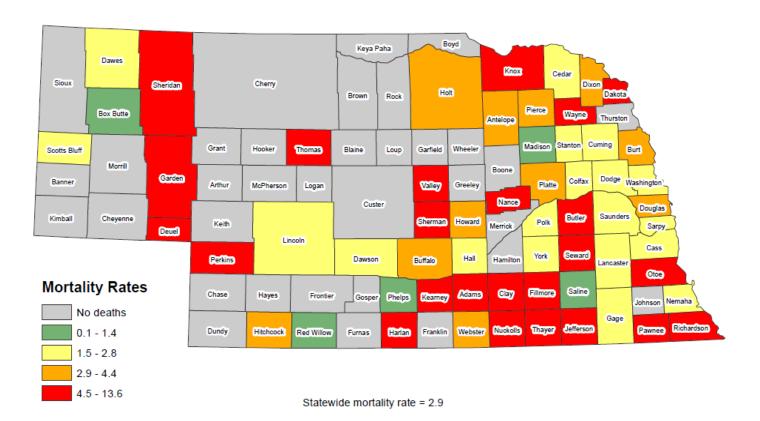
Kidney & Renal Pelvis Cancer Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



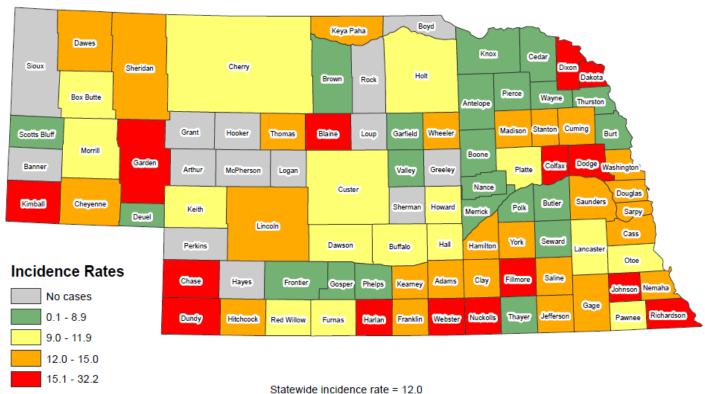
Melanoma of the Skin Diagnoses in Nebraska, 2010-2014 Incidence Rates by County of Residence



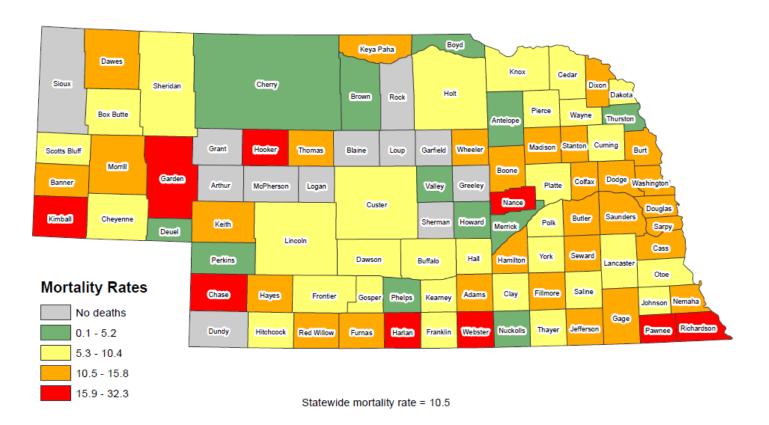
Melanoma of the Skin Deaths in Nebraska, 2010-2014 Mortality Rates by County of Residence



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



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



REFERENCES

American Cancer Society. Cancer Facts and Figures 2017. Atlanta, GA: American Cancer Society, 2017. Available at:

https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2017/cancer-facts-and-figures-2017.pdf

American Cancer Society. Pancreatic Cancer Risk Factors. Atlanta, GA: American Cancer Society, 2017. Available at:

 $\underline{https://www.cancer.org/cancer/pancreatic-cancer/causes-risks-prevention/risk-factors.html}$

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015, CDC WONDER On-line database, released 2015. Available at: http://wonder.cdc.gov/ucd-icd10.html

Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, Whelan S. International Classification of Diseases for Oncology, 3rd edition (US interim version 2000). Geneva, Switzerland: World Health Organization, 2000.

National Cancer Institute. A Snapshot of Pancreatic Cancer. Bethesda, MD: National Cancer Institute, November 2014. Available at:

https://www.cancer.gov/research/progress/snapshots/pancreatic

United States Cancer Statistics: 1999-2013 Incidence, CDC WONDER On-line Database. US Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute, 2016. Available at: https://wonder.cdc.gov/cancer-v2013.HTML

United States Cancer Statistics: 1999-2013 Mortality, CDC WONDER On-line Database. US Department of Health and Human Services, Centers for Disease Control and Prevention, 2016. Available at: https://wonder.cdc.gov/cancermort-v2013.HTML

US Preventive Services Task Force. Final Recommendation Statement: Breast Cancer: Screening, November 2016. Available at:

http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/breast-cancer-screening1

US Preventive Services Task Force. Final Recommendation Statement: Colorectal Cancer: Screening. June 2016. Available at: <u>Final Recommendation Statement: Colorectal Cancer:</u> Screening - US Preventive Services Task Force

US Preventive Services Task Force. Final Recommendation Statement: Lung Cancer: Screening. December 2013. Available at:

http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/lung-cancer-screening

World Health Organization. Manual of the International Statistical Classification of Diseases and Related Health Problems, 10th revision. Geneva, Switzerland: World Health Organization, 1992.

REPORTING FACILITIES

Ainsworth--Brown County Hospital

Albion--Boone County Health Center

Alliance--Box Butte General Hospital

Alma--Harlan County Health System

Atkinson--West Holt Memorial Hospital, Inc.

Auburn--Nemaha County Hospital

Aurora--Memorial Hospital

Bassett--Rock County Hospital

Beatrice--Beatrice Community Hospital & Health

Center, Inc.

Benkelman--Dundy County Hospital

Blair--Memorial Community Hospital

Bridgeport--Morrill County Community Hospital

Broken Bow--Jennie Melham Memorial Medical Ctr.

Callaway--Callaway District Hospital

Cambridge--Tri Valley Health System

Central City--Litzenberg Memorial County Hospital

Chadron-Chadron Community Hospital & Health

Services

Columbus -- Columbus Community Hospital, Inc.

Cozad--Cozad Community Hospital

Creighton--Creighton Area Health Services

Crete--Crete Area Medical Center

David City--Butler County Health Care Center

Fairbury--Jefferson Community Health Center, Inc.

Falls City--Community Medical Center, Inc.

Franklin--Franklin County Memorial Hospital

Fremont--Fremont Area Medical Center

Friend--Warren Memorial Hospital

Geneva--Fillmore County Hospital

Genoa--Genoa Community Hospital/LTC

Gordon--Gordon Memorial Hospital District

Gothenburg--Gothenburg Memorial Hospital

Grand Island--CHI Health St. Francis

Grant--Perkins County Health Services

Hastings--Mary Lanning Memorial Hospital

Hebron--Thayer County Health Services

Henderson--Henderson Health Care Services

Holdrege--Phelps Memorial Health Center

Imperial--Chase County Community Hospital

Kearney--CHI Health Good Samaritan

Kearney--CHI Health Good Samaritan Pathology

Kimball--Kimball Health Services & Hospital

Lexington--Tri-County Area Hospital District

Lincoln--Bryan-LGH Medical Center East & West

Lincoln--CHI Health Saint Elizabeth

Lincoln--Pathology Medical Services

Lincoln--Williamsburg Radiation Center

Lincoln--CHI Health Nebraska Heart

Lincoln--UNMC College of Dentistry

Lynch--Niobrara Valley Hospital Corp.

McCook--Community Hospital

Minden--Kearney County Health Services

Nebraska City--CHI Health St. Mary's

Neligh--Antelope Memorial Hospital

Norfolk--Faith Regional Health Services East & West

North Platte--Great Plains Regional Medical Center

North Platte--Pathology Services

Oakland--Oakland Memorial Hospital

Ogallala--Ogallala Community Hospital

Omaha--CHI Health Bergan Mercy

Omaha--CHI Health Immanuel

Omaha--Children's Hospital

Omaha--VA Nebraska-Western Iowa Health Care

System

Omaha--Methodist Hospital Pathology Center

Omaha--Nebraska Medical Center

Omaha--Nebraska Methodist Hospital

Omaha--CHI Health Creighton University Med. Ctr.

Omaha--Boys Town National Research Hospital

Omaha--CHI Health Lakeside

Omaha--CHI Health Bergan Mercy Pathology

Omaha--Bishop Clarkson Hospital Pathology

Omaha--Creighton Pathology Associates

Omaha--Physicians Lab

O'Neill--Avera St. Anthony's Hospital

Ord--Valley County Hospital

Osceola--Annie Jeffrey Memorial County Health Ctr.

Oshkosh--Garden County Health Services

Osmond--Osmond General Hospital

Papillion--CHI Health Midlands

Pawnee City--Pawnee County Memorial Hospital

Pender--Pender Community Hospital

Plainview--CHI Health Plainview

Red Cloud--Webster County Community Hospital

Schuyler--CHI Health Schuyler

Scottsbluff--Regional West Medical Center

Scottsbluff--Western Pathology Consultants

Seward--Memorial Hospital

Sidney--Memorial Health Center

St. Paul--Howard County Community Hospital

Superior--Brodstone Memorial Hospital

Syracuse--Community Memorial Hospital

Tecumseh--Johnson County Hospital

Tilden--Tilden Community Hospital

Valentine--Cherry County Hospital

Wahoo--Saunders County Health Services

Wayne--Providence Medical Center

West Point--St. Francis Memorial Hospital

Winnebago--USPHS Indian Hospital

York--York General Hospital

Other States:

Sioux City, IA--Mercy Medical Center

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



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DEPT. OF HEALTH AND HUMAN SERVICES

THE NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES
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DISCRIMINATE IN DELIVERING BENEFITS OR SERVICES.
AA/EOE/ADA

