Appendix 1: Female Breast Cancer Incidence and Mortality by County in Oklahoma, 2018-2022

Table 1. Female Breast (excluding in situ) Cancer Incidence Rates by County in Oklahoma, 2018-2022

County	Cases	Crude Incidence Rates*	Age-Adjusted Incidence Rate*
Adair	56	56.9	49.9
Alfalfa	19	66.7	47.4
Atoka	47	66.4	52.8
Beaver	17	66.9	52.7
Beckham	70	62.8	56.6
Blaine	40	92.1	68.5
Bryan	154	66.3	54.5
Caddo	98	73.0	64.1
Canadian	524	66.9	63.4
Carter	176	73.1	60.5
Cherokee	172	72.6	63.5
Choctaw	56	78.4	59.1
Cimarron			
Cleveland	898	60.9	58.2
Coal	18	68.1	50.9
Comanche	387	63.7	62.1
Cotton	25	90.7	62.0
Craig	75	106.0	77.9
Creek	295	81.9	64.4
Custer	102	71.8	72.7
Delaware	156	76.4	50.9
Dewey	15	66.8	52.6
Ellis	11	58.5	38.5
Garfield	215	68.8	60.7
Garvin	118	91.5	75.1
Grady	194	70.2	57.5
Grant	15	72.2	55.2
Greer	17	61.6	50.1
Harmon			
Harper	14	85.3	55.2
Haskell	45	77.2	59.2
Hughes	40	59.6	46.1
Jackson	87	70.2	67.1
Jefferson	21	77.6	64.0
Johnston	41	79.0	69.9
Kay	210	95.8	74.4
Kingfisher	60	78.6	68.1
Kiowa	37	87.2	70.0
Latimer	47	98.8	75.9

Le Flore	158	65.1	53.4
Lincoln	137	81.3	59.5
Logan	151	60.5	49.8
Love	23	45.4	37.0
McClain	174	82.0	72.8
McCurtain	116	75.0	61.9
McIntosh	91	95.1	62.0
Major	27	70.1	55.2
Marshall	47	60.7	41.6
Mayes	139	70.7	54.8
Murray	51	73.8	59.5
Muskogee	285	85.6	71.3
Noble	49	89.3	68.7
Nowata	52	110.3	81.5
Okfuskee	44	77.4	57.9
Oklahoma	3,292	82.7	78.0
Okmulgee	142	77.0	59.1
Osage	126	54.8	40.4
Ottawa	136	89.4	75.9
Pawnee	74	94.6	74.2
Payne	257	62.7	72.1
Pittsburg	154	70.4	52.8
Pontotoc	154	80.9	68.2
Pottawatomie	321	88.3	75.7
Pushmataha	40	73.8	49.3
Roger Mills	12	70.0	56.3
Rogers	365	76.1	64.0
Seminole	82	69.4	52.2
Sequoyah	140	70.7	56.6
Stephens	242	112.3	82.7
Texas	42	39.7	41.2
Tillman	27	77.1	59.2
Tulsa	2,828	84.6	77.4
Wagoner	295	71.7	60.5
Washington	259	98.5	76.8
Washita	33	60.4	48.3
Woods	24	55.5	49.4
Woodward	55	53.9	46.5

*per 100,000

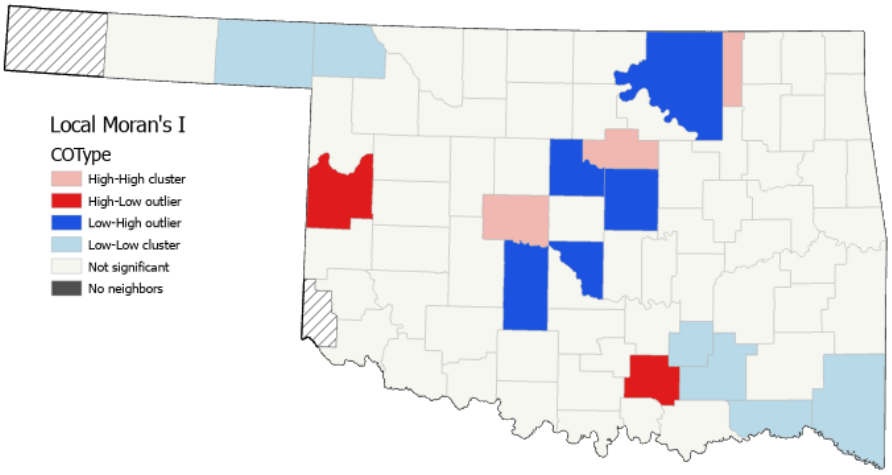
Table 2. Female Breast Cancer Mortality Rates by County in Oklahoma, 2018-2022

County	Cases	Crude Mortality Rates*	Age-Adjusted Mortality Rate*
Alfalfa	13	24.7	22.1
Atoka			
Beaver	9	27.2	18.7
Beckham			
Blaine	17	33.7	26.3
Bryan	8	35.4	20.8
Caddo	30	24.5	18.3
Canadian	23	35.6	23.6
Carter	88	22.5	20.8
Cherokee	48	38.8	28.8
Choctaw	36	29.1	21.4
Cimarron	12	31.9	22.7
Cleveland	164	22.6	19.7
Coal	7	51.3	29.0
Comanche	85	29.1	25.6
Cotton			
Craig	10	28.9	18.9
Creek	88	48.5	33.1
Custer	13	18.2	17.5
Delaware	33	30.9	23.5
Dewey			
Ellis			
Garfield	48	31.5	24.0
Garvin	22	32.4	25.1
Grady	37	26.5	19.9
Grant			
Greer			
Harmon			
Harper			
Haskell	9	29.3	19.8
Hughes	14	46.2	28.6
Jackson	14	22.7	19.3
Jefferson			
Johnston	6	22.3	17.3
Kay	44	40.1	27.5
Kingfisher	6	15.4	11.5
Kiowa	12	55.7	37.1
Latimer	5	20.5	10.7
Le Flore	42	34.2	23.8
Lincoln	22	25.4	17.2
Logan	35	28.3	22.1

Love	8	31.5	20.6
McClain	36	34.0	27.3
McCurtain	36	44.4	34.2
McIntosh	21	42.5	22.0
Major	8	41.5	27.8
Marshall	10	24.1	16.3
Mayes	39	38.7	28.9
Murray	11	32.0	20.9
Muskogee	47	27.3	21.6
Noble			
Nowata	8	32.5	21.1
Okfuskee	7	26.2	20.4
Oklahoma	552	27.1	23.6
Okmulgee	33	34.6	22.7
Osage	35	30.4	19.8
Ottawa	23	29.4	20.0
Pawnee	8	19.8	13.5
Payne	44	21.9	21.5
Pittsburg	35	32.7	21.6
Pontotoc	20	20.4	14.6
Pottawatomie	62	32.7	26.0
Pushmataha	8	28.7	15.6
Roger Mills			
Rogers	70	29.6	23.4
Seminole	22	36.1	25.0
Sequoyah	42	40.8	28.6
Stephens	38	34.2	23.0
Texas	11	23.1	23.7
Tillman	8	45.1	29.3
Tulsa	423	25.0	20.7
Wagoner	49	23.5	18.5
Washington	36	26.9	19.6
Washita	5	18.2	12.4
Woods			
Woodward	9	19.0	14.3

*per 100,000

Appendix 2: Local Moran's I Female Breast Cancer Incidence by County in Oklahoma, 2018-2022



This map shows both high clusters and low outliers in central Oklahoma's urban counties. We see some low clusters in southeastern and northwestern Oklahoma and a few high outliers in southeastern and western Oklahoma. These clusters are sporadic and do not show us any geographic areas to target.