

Coronary Heart Disease Deaths

Definition: Number of coronary heart disease (CHD) related deaths per 100,000 population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 12-1: Coronary heart disease (CHD) deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 166.0
- State-specific Target: 109.4

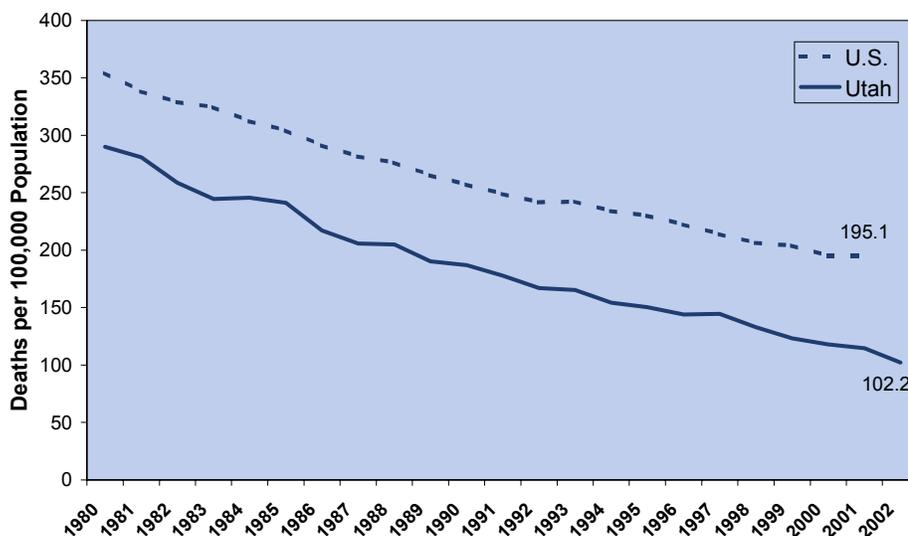
Why Is It Important?

Coronary heart disease is the leading cause of death in the United States and Utah. In Utah during 2002 there were over 7,500 hospital discharges for CHD, the average cost for a hospital stay was \$25,000, and the total cost approached \$187 million. The key to reducing CHD deaths is through preventative measures.³¹ Some of the risk factors associated with CHD, such as age, gender, and family history, cannot be modified, but many other factors can be controlled.

Risk Factors for Coronary Heart Disease Deaths

Individuals who smoke cigarettes, have high blood pressure, elevated cholesterol, diabetes, poor nutrition, a family history of heart disease, or who are overweight, obese, or physically inactive are at greater risk of developing coronary heart disease. Research in the U.S. and elsewhere suggest that the decline in coronary heart disease deaths in recent decades has resulted from both advances in treatment and reduction in risk factors, such as smoking and high blood pressure.³² Prompt medical attention for persons with acute disease dramatically improves chances of survival.

Coronary Heart Disease Death Rates, Utah and U.S., 1980-2002



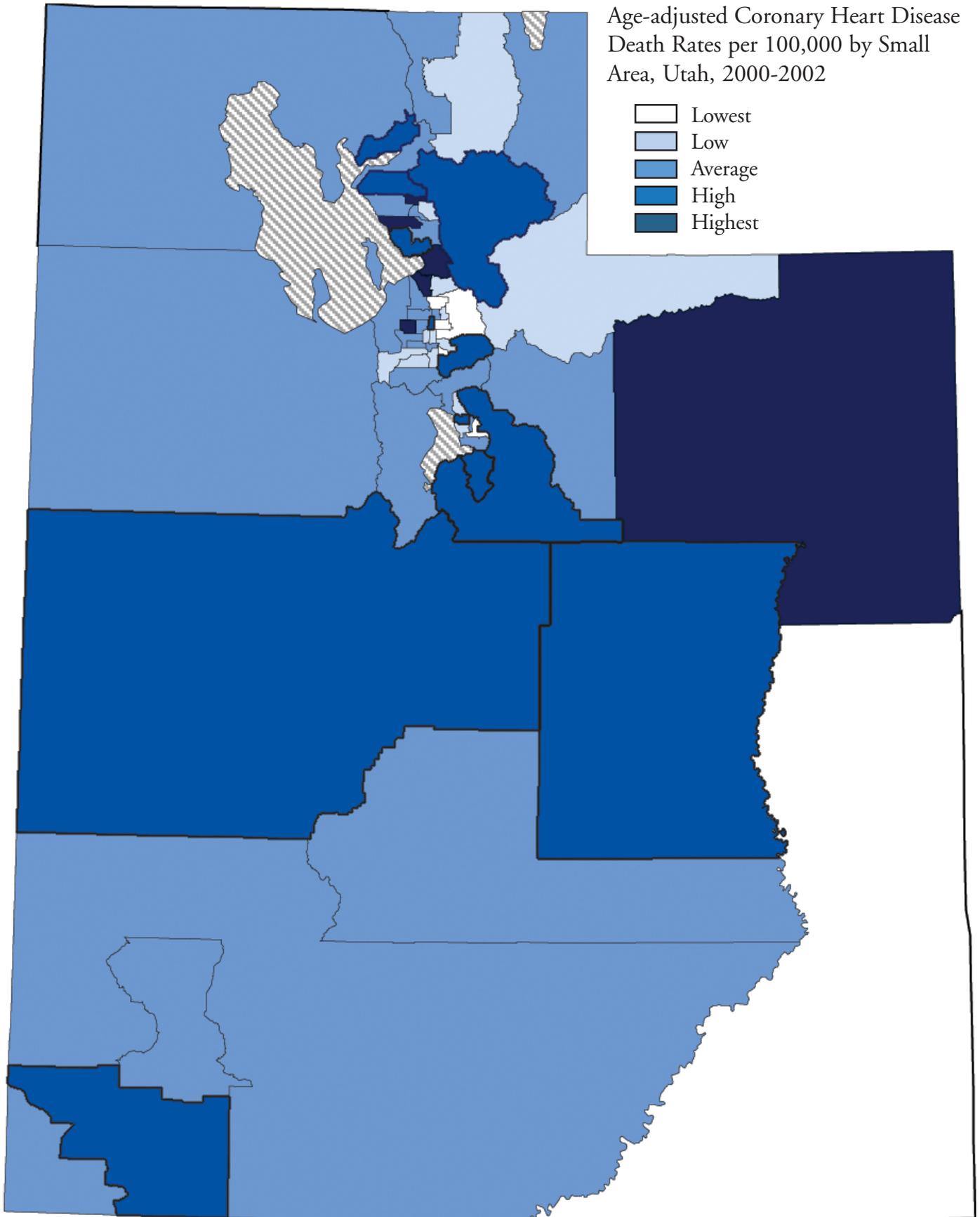
Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; Utah Governor's Office of Planning and Budget

Note: Age adjusted to U.S. 2000 standard population. ICD-9 codes 402, 410-414, 429.2; ICD-10 codes I11, I20-25. Estimates from 1998 and before have been comparability modified to be consistent with ICD-10 coding system definitions.

Coronary Heart Disease Death Ranking, 2000-2002	Rate*
Provo/BYU	78.0
Millcreek	82.4
Avenues	83.3
Grand/San Juan Co.	86.4
Sandy, NE	88.0
Holladay	88.1
Cottonwood	90.3
Foothill/U of U	90.6
South Jordan	90.8
South Ogden	96.9
Sandy Center	102.1
Summit Co.	102.5
W. Jordan, Copperton	103.4
Bountiful	103.6
Logan	104.1
West Orem	106.1
Murray	107.2
Taylorsville	108.5
Pleasant Grove/Lindon	108.5
St. George	110.3
Downtown Salt Lake	112.7
Other Cache/Rich Co.	115.7
East Orem	116.6
Midvale	116.9
Wasatch Co.	117.4
Cedar City	117.7
Lehi/Cedar Valley	119.4
West Valley East	119.9
Riverdale	120.3
Layton	121.2
Riverton/Draper	122.0
Roy/Hooper	122.9
Kearns	123.1
Provo South	126.6
Glendale	126.6
West Jordan No.	131.7
Other Southwest Dist	132.2
American Fork/Alpine	133.0
Sevier/Piute/Wayne Co.	133.2
Magna	134.1
Rose Park	135.7
Tooele Co.	135.7
Other Box Elder Co.	136.3
North Orem	136.4
Utah Co. South	138.0
Morgan/E Weber Co.	138.9
Carbon/Emery Co.	139.6
Springville/Spanish Fork	139.8
Juab/Millard/Sanpete Co.	140.6
Other Washington Co.	147.6
Ben Lomond	148.6
Syracuse/Kaysville	148.7
Brigham City	148.9
Sandy, SE	149.0
South Salt Lake	149.1
TriCounty LHD	149.3
Downtown Ogden	149.7
Woods Cross/No. SL	153.5
West Valley West	156.2
Clearfield/Hill AFB	159.9
Farmington/Centerville	162.5

* Age adjusted # of deaths per 100,000.

Coronary Heart Disease Deaths



Source: Utah Death Certificate Database

Coronary Heart Disease Deaths

Coronary Heart Disease Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	Coronary Heart Disease Deaths per 100,000			
			Average Annual Number of Events		Age Adjusted Rates*	
			Crude Rates		95% Confidence Interval	
				Lower	Upper	
	State Total	2,288,068	1,738	77.4	116.0	(112.9 - 119.2)
53	Brigham City	21,306	28	134.8	148.9	(118.9 - 184.2)
43	Other Box Elder Co.	21,957	21	94.7	136.3	(104.4 - 174.9)
15	Logan	59,888	37	63.6	104.1	(85.6 - 125.6)
22	Other Cache/Rich Co.	35,646	24	69.5	115.7	(90.5 - 145.8)
51	Ben Lomond	44,855	56	126.1	148.6	(126.8 - 173.1)
46	Morgan/East Weber Co.	33,182	24	72.2	138.9	(107.8 - 176.1)
57	Downtown Ogden	28,047	32	114.4	149.7	(121.0 - 183.1)
10	South Ogden	34,593	36	104.8	96.9	(79.3 - 117.2)
32	Roy/Hooper	40,599	29	72.1	122.9	(98.2 - 151.9)
29	Riverdale	25,265	28	112.5	120.3	(95.8 - 149.1)
60	Clearfield/Hill AFB	52,461	33	65.2	159.9	(128.6 - 196.6)
30	Layton	63,293	29	47.4	121.2	(95.3 - 151.9)
52	Syracuse/Kaysville	37,140	24	65.6	148.7	(115.9 - 187.9)
61	Farmington/Centerville	27,882	16	59.6	162.5	(116.8 - 220.0)
58	Woods Cross/North SL	19,359	13	70.1	153.5	(107.8 - 212.1)
14	Bountiful	44,886	47	104.5	103.6	(87.1 - 122.3)
41	Rose Park	32,358	25	78.8	135.7	(105.1 - 172.6)
3	Avenues	21,926	18	80.7	83.3	(62.3 - 109.0)
8	Foothill/U of U	23,221	26	111.3	90.6	(71.3 - 113.5)
40	Magna	23,294	16	68.3	134.1	(98.1 - 179.1)
34	Glendale	26,554	24	92.3	126.6	(98.9 - 159.7)
59	West Valley West	66,932	37	56.1	156.2	(124.9 - 193.1)
28	West Valley East	48,584	31	64.8	119.9	(95.5 - 148.7)
21	Downtown Salt Lake	50,533	50	100.4	112.7	(94.9 - 132.9)
55	South Salt Lake	24,556	31	127.1	149.1	(119.6 - 183.7)
2	Millcreek	57,224	65	113.0	82.4	(70.8 - 95.4)
6	Holladay	44,846	54	120.1	88.1	(74.9 - 102.9)
7	Cottonwood	43,519	26	59.1	90.3	(70.5 - 114.0)
33	Kearns	65,350	28	42.6	123.1	(94.1 - 158.2)
18	Taylorsville	38,109	26	68.8	108.5	(85.2 - 136.1)
17	Murray	30,930	36	115.8	107.2	(87.7 - 129.7)
24	Midvale	28,577	22	79.0	116.9	(89.7 - 149.8)
36	West Jordan No.	44,676	13	28.7	131.7	(85.5 - 193.9)
13	W. Jordan, Copperton	41,743	12	30.9	103.4	(70.8 - 145.9)
9	South Jordan	31,669	11	37.7	90.8	(62.3 - 127.9)
11	Sandy Center	51,861	29	56.8	102.1	(81.0 - 127.0)
5	Sandy, Northeast	25,148	10	39.2	88.0	(57.3 - 129.3)
54	Sandy, Southeast	30,588	13	42.7	149.0	(103.0 - 208.6)
31	Riverton/Draper	62,791	20	33.1	122.0	(90.1 - 161.5)
41	Tooele Co.	43,865	33	78.9	135.7	(109.8 - 166.0)
27	Lehi/Cedar Valley	26,424	11	43.9	119.4	(80.6 - 170.2)
38	American Fork/Alpine	39,620	27	69.5	133.0	(105.3 - 165.8)
18	Pleasant Grove/Lindon	37,851	16	43.2	108.5	(79.0 - 145.5)
44	North Orem	35,731	29	81.5	136.4	(108.9 - 168.7)
16	West Orem	29,543	15	52.9	106.1	(77.3 - 142.1)
23	East Orem	22,141	13	61.2	116.6	(82.4 - 160.3)
1	Provo/BYU	48,704	24	49.8	78.0	(60.9 - 98.4)
34	Provo South	57,318	24	43.5	126.6	(99.0 - 159.4)
48	Springville/Spanish Fork	59,202	42	74.3	139.8	(116.1 - 167.0)
45	Utah Co. South	26,387	19	74.1	138.0	(104.3 - 179.0)
12	Summit Co.	31,104	12	41.1	102.5	(70.8 - 143.5)
25	Wasatch Co.	15,995	12	78.4	117.4	(82.0 - 162.8)
56	TriCounty LHD	41,453	44	107.0	149.3	(124.4 - 177.5)
49	Juab/Millard/Sanpete Co.	44,288	54	123.4	140.6	(119.7 - 164.2)
39	Sevier/Piute/Wayne Co.	23,040	32	138.8	133.2	(107.7 - 162.9)
47	Carbon/Emery Co.	30,716	41	133.2	139.6	(116.1 - 166.4)
4	Grand/San Juan Co.	22,714	16	68.8	86.4	(63.4 - 115.0)
20	St. George	53,715	70	134.9	110.3	(95.4 - 126.8)
50	Other Washington Co.	41,445	49	124.2	147.6	(124.0 - 174.4)
26	Cedar City	29,612	20	67.6	117.7	(89.5 - 152.2)
37	Other Southwest Dist.	21,854	31	144.7	132.2	(106.8 - 162.0)

* Rates have been age adjusted to the U.S. 2000 standard population.

ICD-10 codes: I20-I25, and I11.

Source: Utah Death Certificate Database

Definition: Number of stroke deaths per 100,000 population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 12-7: Stroke deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 48.0
- State-specific Target: 46.6

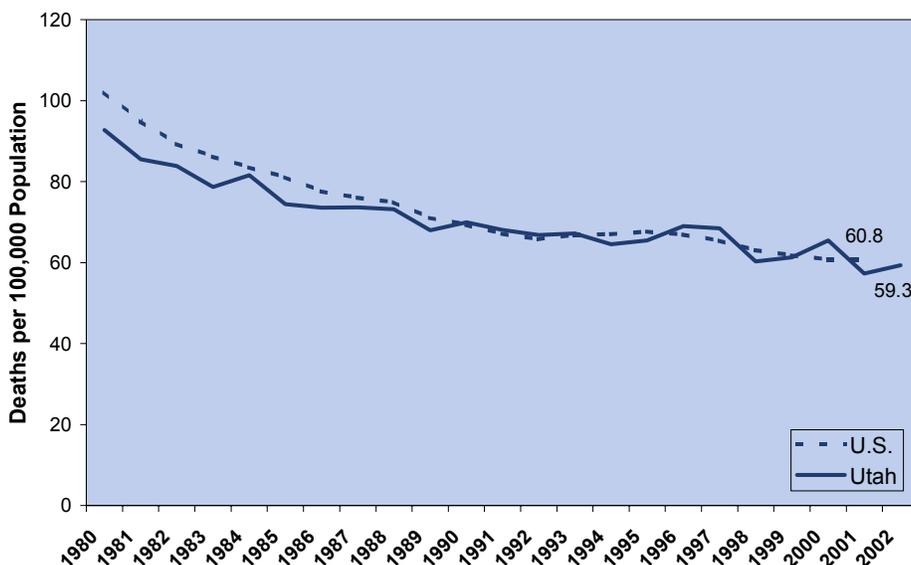
Why Is It Important?

Stroke, the death of brain tissue usually resulting from artery blockage, is the third leading cause of death in Utah, behind heart disease and cancer. About 600,000 people in the U.S. suffer a new or recurrent stroke each year.³³ Stroke is a leading cause of long-term disability.³³ New treatments can reduce disability from stroke if symptoms are recognized and rapid emergency care is provided.

Risk Factors for Stroke Deaths

Risk factors for stroke include high blood pressure (the most important risk factor), increasing age, family history of stroke, personal history of stroke, cigarette smoking, diabetes, heart disease, carotid artery disease, transient ischemic attacks, and a high red blood cell count.³⁴ Elevated cholesterol level, obesity, and lack of physical activity, all risk factors for heart disease, also increase the risk of stroke. Many of these risk factors can be modified successfully by adopting lifestyle changes.

Stroke Death Rates, Utah and U.S., 1980-2002



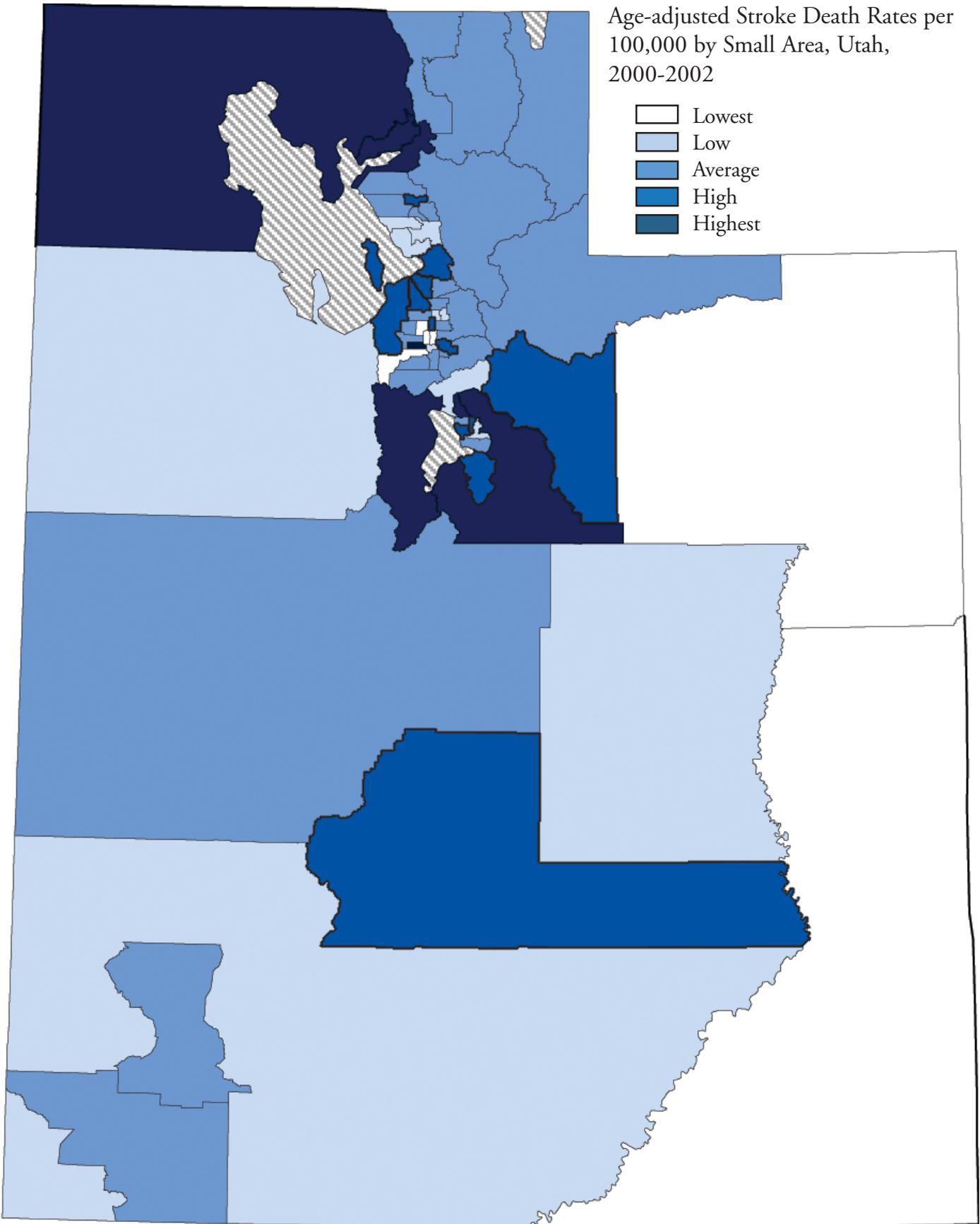
Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; National Vital Statistics System, National Center for Health Statistics, U.S. Centers for Disease Control and Prevention
 Note: Age adjusted to U.S. 2000 standard population. ICD-9 codes 430-438; ICD-10 codes I60-I69.

Stroke Death Ranking, 2000-2002	Rate*
Taylorsville	31.6
TriCounty LHD	38.2
Grand/San Juan Co.	39.8
W. Jordan, Copperton	44.2
West Valley East	45.7
Murray	45.7
Foothill/U of U	48.4
Other Southwest Dist	48.5
Layton	48.7
Clearfield/Hill AFB	49.1
St. George	50.0
Tooele Co.	50.2
Carbon/Emery Co.	50.5
American Fork/Alpine	51.6
Midvale	51.7
Provo/BYU	52.0
Downtown Salt Lake	52.4
Syracuse/Kaysville	53.4
Logan	55.2
Kearns	55.4
Summit Co.	55.6
Roy/Hooper	56.9
West Valley West	57.6
Avenues	57.7
Other Washington Co.	57.8
Morgan/E Weber Co.	59.3
Millcreek	59.5
South Ogden	59.5
Cedar City	60.2
Holladay	60.6
Provo South	60.9
Bountiful	61.0
Riverdale	61.5
Sandy Center	62.5
Ben Lomond	62.5
Juab/Millard/Sanpete Co.	64.7
Sandy, NE	66.2
Other Cache/Rich Co.	68.4
Sandy, SE	70.3
North Orem	70.6
Riverton/Draper	70.8
South Jordan	71.5
Glendale	72.6
East Orem	73.2
Sevier/Piute/Wayne Co.	73.6
Springville/Spanish Fork	75.3
Downtown Ogden	75.4
Rose Park	75.4
Cottonwood	75.5
Farmington/Centerville	75.8
Woods Cross/No. SL	76.8
South Salt Lake	80.6
Wasatch Co.	80.9
Magna	84.6
West Orem	86.0
Other Box Elder Co.	87.0
Utah Co. South	91.4
Pleasant Grove/Lindon	95.4
Brigham City	115.0
West Jordan No.	118.6
Lehi/Cedar Valley	121.9

* Age adjusted # of deaths per 100,000.

Stroke Deaths

Age-adjusted Stroke Death Rates per 100,000 by Small Area, Utah, 2000-2002



Source: Utah Death Certificate Database

Stroke Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	Stroke Deaths per 100,000			
			Average Annual Number of Events	Crude Rates	Age Adjusted Rates*	
					Lower	Upper
	State Total	2,288,068	913	39.9	60.6	(58.4 - 63.0)
59	Brigham City	21,306	22	101.7	115.0	(88.7 - 146.6)
56	Other Box Elder Co.	21,957	13	57.7	87.0	(61.6 - 119.5)
19	Logan	59,888	21	35.6	55.2	(42.4 - 70.7)
38	Other Cache/Rich Co.	35,646	15	43.0	68.4	(49.9 - 91.5)
34	Ben Lomond	44,855	23	51.3	62.5	(48.5 - 79.3)
26	Morgan/East Weber Co.	33,182	10	30.1	59.3	(39.7 - 85.4)
47	Downtown Ogden	28,047	15	54.7	75.4	(55.2 - 100.6)
27	South Ogden	34,593	23	65.5	59.5	(46.1 - 75.6)
22	Roy/Hooper	40,599	13	32.0	56.9	(40.4 - 78.0)
33	Riverdale	25,265	14	56.7	61.5	(44.4 - 83.0)
10	Clearfield/Hill AFB	52,461	10	19.7	49.1	(32.7 - 70.8)
9	Layton	63,293	13	21.1	48.7	(34.0 - 67.6)
18	Syracuse/Kaysville	37,140	9	25.1	53.4	(35.3 - 77.7)
50	Farmington/Centerville	27,882	8	27.5	75.8	(46.6 - 116.6)
51	Woods Cross/North SL	19,359	6	32.7	76.8	(45.8 - 120.8)
32	Bountiful	44,886	29	65.4	61.0	(48.9 - 75.2)
47	Rose Park	32,358	14	44.3	75.4	(53.5 - 103.3)
24	Avenues	21,926	12	56.3	57.7	(40.5 - 79.6)
7	Foothill/U of U	23,221	14	58.9	48.4	(34.6 - 65.9)
54	Magna	23,294	10	41.5	84.6	(56.4 - 121.9)
43	Glendale	26,554	14	52.7	72.6	(52.1 - 98.4)
23	West Valley West	66,932	12	17.4	57.6	(38.3 - 83.1)
5	West Valley East	48,584	12	24.0	45.7	(31.1 - 64.7)
17	Downtown Salt Lake	50,533	26	50.8	52.4	(41.1 - 65.9)
52	South Salt Lake	24,556	19	77.4	80.6	(60.4 - 105.5)
27	Millcreek	57,224	48	83.9	59.5	(49.8 - 70.5)
30	Holladay	44,846	39	87.7	60.6	(50.1 - 72.6)
49	Cottonwood	43,519	22	50.6	75.5	(57.6 - 97.2)
20	Kearns	65,350	12	18.9	55.4	(36.6 - 80.3)
1	Taylorsville	38,109	7	19.2	31.6	(19.6 - 48.3)
5	Murray	30,930	16	51.7	45.7	(33.7 - 60.7)
15	Midvale	28,577	9	32.7	51.7	(33.7 - 75.7)
60	West Jordan No.	44,676	8	17.9	118.6	(71.5 - 185.0)
4	W. Jordan, Copperton	41,743	5	12.8	44.2	(24.6 - 73.4)
42	South Jordan	31,669	9	27.4	71.5	(46.2 - 105.6)
34	Sandy Center	51,861	18	34.1	62.5	(46.3 - 82.5)
37	Sandy, Northeast	25,148	7	27.8	66.2	(39.7 - 103.6)
39	Sandy, Southeast	30,588	6	18.5	70.3	(39.6 - 115.2)
41	Riverton/Draper	62,791	10	16.5	70.8	(47.0 - 102.5)
12	Tooele Co.	43,865	11	25.1	50.2	(34.2 - 71.0)
61	Lehi/Cedar Valley	26,424	11	40.4	121.9	(82.0 - 174.4)
14	American Fork/Alpine	39,620	10	24.4	51.6	(34.4 - 74.3)
58	Pleasant Grove/Lindon	37,851	13	34.3	95.4	(67.3 - 131.2)
40	North Orem	35,731	16	43.8	70.6	(51.5 - 94.4)
55	West Orem	29,543	13	42.9	86.0	(60.8 - 118.0)
44	East Orem	22,141	8	37.6	73.2	(46.9 - 109.0)
16	Provo/BYU	48,704	17	34.9	52.0	(38.6 - 68.6)
31	Provo South	57,318	12	20.9	60.9	(42.3 - 84.9)
46	Springville/Spanish Fork	59,202	22	37.7	75.3	(58.0 - 96.2)
57	Utah Co. South	26,387	13	49.3	91.4	(64.8 - 125.1)
21	Summit Co.	31,104	6	20.4	55.6	(32.1 - 89.8)
53	Wasatch Co.	15,995	8	50.0	80.9	(51.6 - 120.7)
2	TriCounty LHD	41,453	11	27.3	38.2	(26.3 - 53.7)
36	Juab/Millard/Sanpete Co.	44,288	25	56.4	64.7	(50.9 - 81.2)
45	Sevier/Piute/Wayne Co.	23,040	18	76.7	73.6	(55.1 - 96.3)
13	Carbon/Emery Co.	30,716	15	49.9	50.5	(37.0 - 67.4)
3	Grand/San Juan Co.	22,714	7	29.4	39.8	(24.2 - 61.6)
11	St. George	53,715	39	72.6	50.0	(41.3 - 60.1)
25	Other Washington Co.	41,445	20	49.1	57.8	(43.7 - 75.0)
29	Cedar City	29,612	10	32.6	60.2	(40.2 - 86.7)
8	Other Southwest Dist.	21,854	12	53.4	48.5	(33.7 - 67.5)

* Rates have been age adjusted to the U.S. 2000 standard population.

ICD-10 codes: I60-I69.

Source: Utah Death Certificate Database

All Cancer Deaths

Definition: Number of deaths from all cancers per 100,000 population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 3-1: Overall cancer deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 159.9
- State-specific Target: 144.1

Why Is It Important?

Cancer is the second leading cause of death in the U.S. and in Utah. The financial costs of cancer are substantial, with an overall annual cost for 2002 estimated at \$171.6 billion.³⁵ Treatment for lung, prostate, and breast cancers account for more than half of the direct medical costs.¹

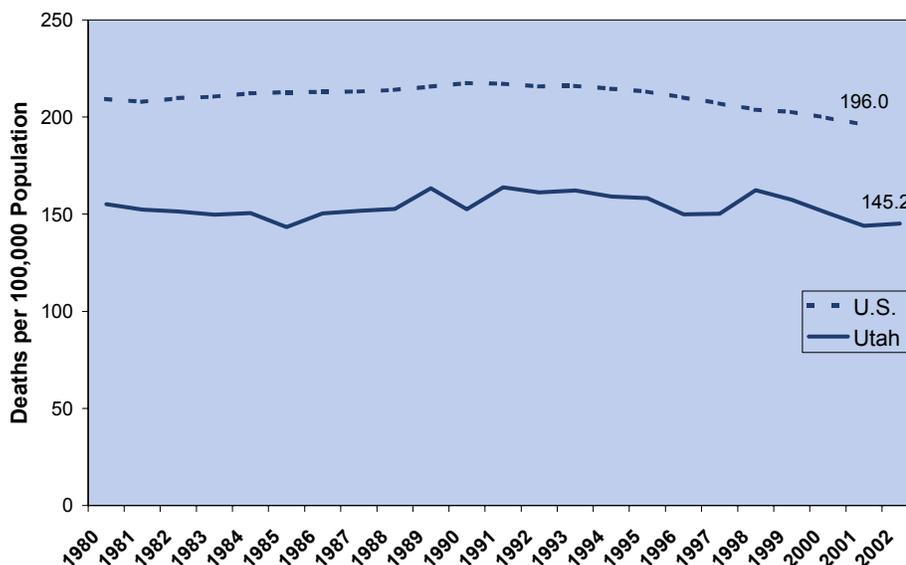
Risk Factors for All Cancer Deaths

Increasing age is a risk factor for developing cancer. About 80% of all cancers are diagnosed in persons aged 55 years or older.³⁶ Other risk factors for cancer include a person's gender and family medical history. Cancer may also be linked to environmental exposures and lifestyle choices such as use of tobacco and alcohol, diet, and sun exposure. In fact, tobacco is responsible for 87% of all cases of cancer of the lung, and is associated with cancers of the mouth, pharynx, larynx, and esophagus. Lung cancer was responsible for 30% of all cancer deaths in 2002.³⁶⁻³⁷ Lifestyle modifications and early detection are successful prevention strategies.

All Cancer Death Ranking, 2000-2002	Rate*
Cedar City	110.4
Bountiful	112.2
Foothill/U of U	113.7
Avenues	119.5
East Orem	120.9
Sandy, SE	122.0
St. George	124.7
Farmington/Centerville	124.8
Provo/BYU	125.4
Logan	125.6
North Orem	126.6
Summit Co.	127.8
Lehi/Cedar Valley	130.4
Sandy Center	134.4
Syracuse/Kaysville	135.3
Other Cache/Rich Co.	135.5
Sandy, NE	136.5
West Orem	137.0
Ben Lomond	138.2
Juab/Millard/Sanpete Co.	138.3
Springville/Spanish Fork	140.0
Holladay	140.5
Morgan/E Weber Co.	140.7
Downtown Salt Lake	145.3
Cottonwood	145.6
Woods Cross/No. SL	146.3
Sevier/Piute/Wayne Co.	147.0
American Fork/Alpine	148.5
Other Washington Co.	149.3
South Ogden	149.9
Millcreek	150.7
Taylorsville	151.1
Wasatch Co.	151.2
Midvale	152.0
W. Jordan, Copperton	152.3
Roy/Hooper	154.0
Provo South	155.5
Murray	156.3
Riverton/Draper	156.5
Other Box Elder Co.	157.1
Brigham City	158.1
Tooele Co.	158.7
Utah Co. South	159.6
Riverdale	160.0
Pleasant Grove/Lindon	162.8
West Valley East	164.1
Clearfield/Hill AFB	164.9
Layton	166.1
Glendale	167.0
West Jordan No.	169.8
Rose Park	171.1
Grand/San Juan Co.	172.1
Kearns	174.9
West Valley West	176.4
Carbon/Emery Co.	180.8
Magna	185.7
TriCounty LHD	186.5
South Jordan	188.3
Other Southwest Dist	198.1
Downtown Ogden	200.9
South Salt Lake	205.2

* Age adjusted # of deaths per 100,000.

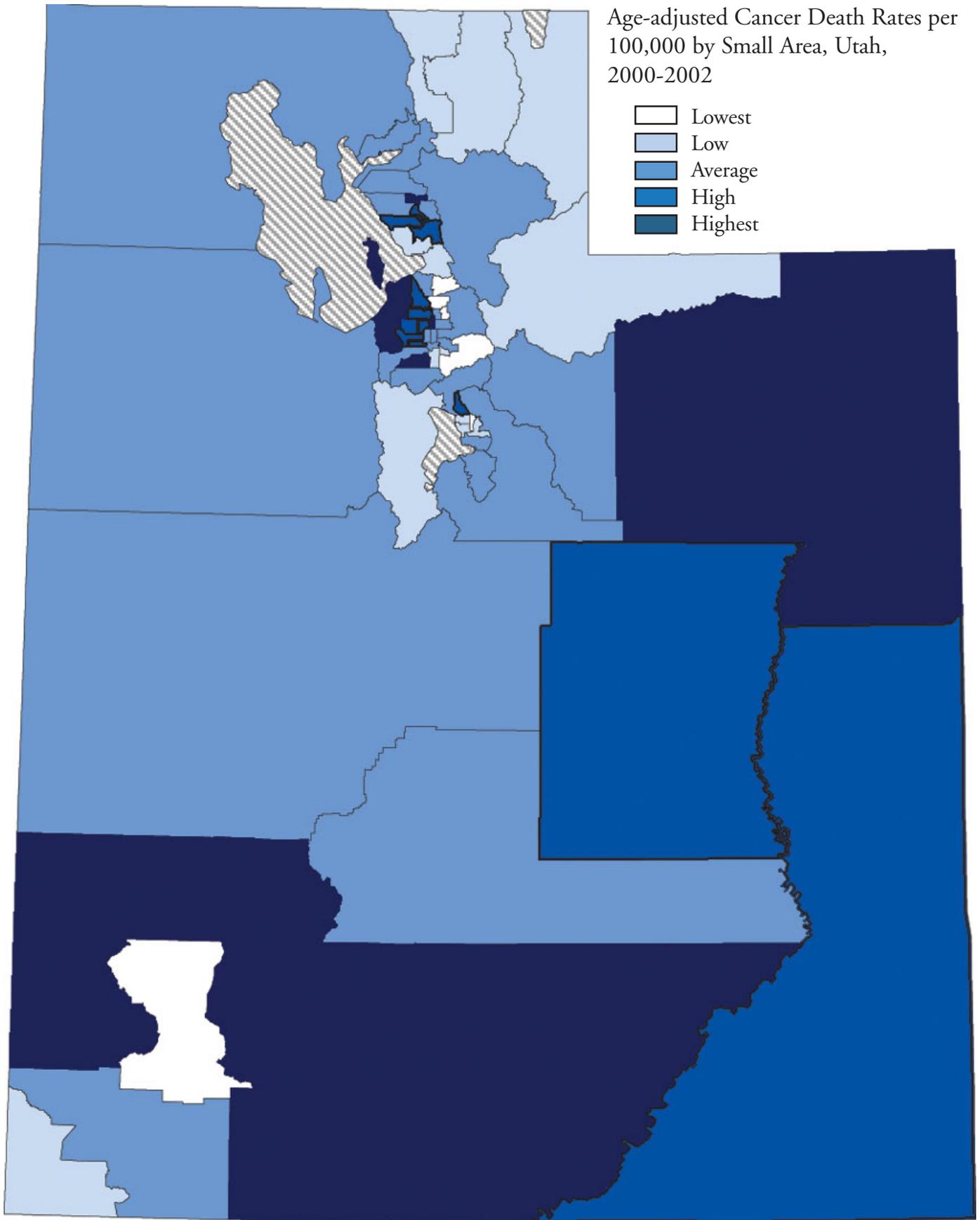
Cancer Death Rates, Utah and U.S., 1980-2002



Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; Population Estimates: Utah Governor's Office of Planning and Budget

Note: Age adjusted to U.S. 2000 standard population. ICD-9 codes 140-208; ICD-10 codes C00-C97.

All Cancer Deaths



Source: Utah Death Certificate Database

All Cancer Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	All Cancer Deaths per 100,000			
			Average Annual Number of Events		Age Adjusted Rates*	
			Crude Rates		95% Confidence Interval	Lower Upper
	State Total	2,288,068	2,342	102.3	146.6	(143.1 - 150.0)
41	Brigham City	21,306	30	139.2	158.1	(126.9 - 194.7)
40	Other Box Elder Co.	21,957	25	112.3	157.1	(123.2 - 197.4)
10	Logan	59,888	44	73.5	125.6	(104.8 - 149.3)
16	Other Cache/Rich Co.	35,646	32	88.8	135.5	(109.3 - 166.0)
19	Ben Lomond	44,855	54	119.6	138.2	(117.5 - 161.4)
23	Morgan/East Weber Co.	33,182	30	91.4	140.7	(112.1 - 174.4)
60	Downtown Ogden	28,047	40	143.8	200.9	(166.6 - 240.2)
30	South Ogden	34,593	53	153.2	149.9	(127.2 - 175.5)
36	Roy/Hooper	40,599	39	96.9	154.0	(127.1 - 184.8)
44	Riverdale	25,265	38	151.7	160.0	(132.0 - 192.2)
47	Clearfield/Hill AFB	52,461	42	80.1	164.9	(136.3 - 197.6)
48	Layton	63,293	53	83.2	166.1	(139.4 - 196.4)
15	Syracuse/Kaysville	37,140	28	76.3	135.3	(107.3 - 168.3)
8	Farmington/Centerville	27,882	17	62.2	124.8	(89.5 - 169.3)
26	Woods Cross/North SL	19,359	16	82.6	146.3	(105.6 - 197.5)
2	Bountiful	44,886	53	118.8	112.2	(95.4 - 131.1)
51	Rose Park	32,358	34	105.1	171.1	(137.8 - 210.0)
4	Avenues	21,926	24	111.0	119.5	(93.5 - 150.4)
3	Foothill/U of U	23,221	30	129.2	113.7	(91.0 - 140.3)
56	Magna	23,294	23	98.7	185.7	(143.8 - 235.9)
49	Glendale	26,554	30	114.2	167.0	(134.2 - 205.5)
54	West Valley West	66,932	48	72.2	176.4	(144.0 - 213.9)
46	West Valley East	48,584	49	100.9	164.1	(137.5 - 194.3)
24	Downtown Salt Lake	50,533	59	116.8	145.3	(123.9 - 169.3)
61	South Salt Lake	24,556	39	157.5	205.2	(168.8 - 247.0)
31	Millcreek	57,224	103	180.0	150.7	(133.6 - 169.3)
22	Holladay	44,846	85	189.5	140.5	(123.6 - 159.1)
25	Cottonwood	43,519	49	113.4	145.6	(121.9 - 172.5)
53	Kearns	65,350	51	77.5	174.9	(144.6 - 209.8)
32	Taylorsville	38,109	40	105.0	151.1	(124.8 - 181.3)
38	Murray	30,930	51	166.0	156.3	(132.4 - 183.3)
34	Midvale	28,577	31	108.5	152.0	(121.7 - 187.5)
50	West Jordan No.	44,676	24	54.5	169.8	(125.0 - 225.5)
35	W. Jordan, Copperton	41,743	24	57.5	152.3	(114.3 - 198.9)
58	South Jordan	31,669	27	84.2	188.3	(147.0 - 237.7)
14	Sandy Center	51,861	42	80.3	134.4	(110.9 - 161.4)
17	Sandy, Northeast	25,148	20	78.2	136.5	(100.8 - 180.8)
6	Sandy, Southeast	30,588	20	64.3	122.0	(87.2 - 166.0)
39	Riverton/Draper	62,791	32	51.5	156.5	(123.3 - 195.8)
42	Tooele Co.	43,865	41	94.2	158.7	(131.4 - 189.9)
13	Lehi/Cedar Valley	26,424	14	51.7	130.4	(92.1 - 179.2)
28	American Fork/Alpine	39,620	33	82.4	148.5	(120.0 - 181.7)
45	Pleasant Grove/Lindon	37,851	28	73.1	162.8	(128.2 - 203.9)
11	North Orem	35,731	27	75.6	126.6	(100.0 - 158.1)
18	West Orem	29,543	21	72.2	137.0	(105.1 - 175.6)
5	East Orem	22,141	17	76.8	120.9	(89.3 - 160.0)
9	Provo/BYU	48,704	38	78.0	125.4	(103.0 - 151.3)
37	Provo South	57,318	30	52.9	155.5	(124.2 - 192.3)
21	Springville/Spanish Fork	59,202	46	77.1	140.0	(117.1 - 166.0)
43	Utah Co. South	26,387	24	91.0	159.6	(124.4 - 201.5)
12	Summit Co.	31,104	20	64.3	127.8	(93.7 - 170.1)
33	Wasatch Co.	15,995	17	106.3	151.2	(112.2 - 199.3)
57	TriCounty LHD	41,453	61	146.4	186.5	(160.0 - 216.0)
20	Juab/Millard/Sanpete Co.	44,288	53	118.9	138.3	(117.6 - 161.7)
27	Sevier/Piute/Wayne Co.	23,040	35	150.5	147.0	(120.0 - 178.2)
55	Carbon/Emery Co.	30,716	54	174.7	180.8	(153.9 - 211.0)
52	Grand/San Juan Co.	22,714	32	140.9	172.1	(139.2 - 210.5)
7	St. George	53,715	86	160.1	124.7	(109.3 - 141.6)
29	Other Washington Co.	41,445	62	148.8	149.3	(128.0 - 173.2)
1	Cedar City	29,612	20	67.5	110.4	(83.9 - 142.6)
59	Other Southwest Dist.	21,854	48	219.6	198.1	(166.9 - 233.4)

* Rates have been age adjusted to the U.S. 2000 standard population.

ICD-10 codes: C00-C97.

Source: Utah Death Certificate Database

Definition: Number of deaths from lung cancer per 100,000 population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 3-2: Lung cancer deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 44.9
- State-specific Target: 24.8

Why Is It Important?

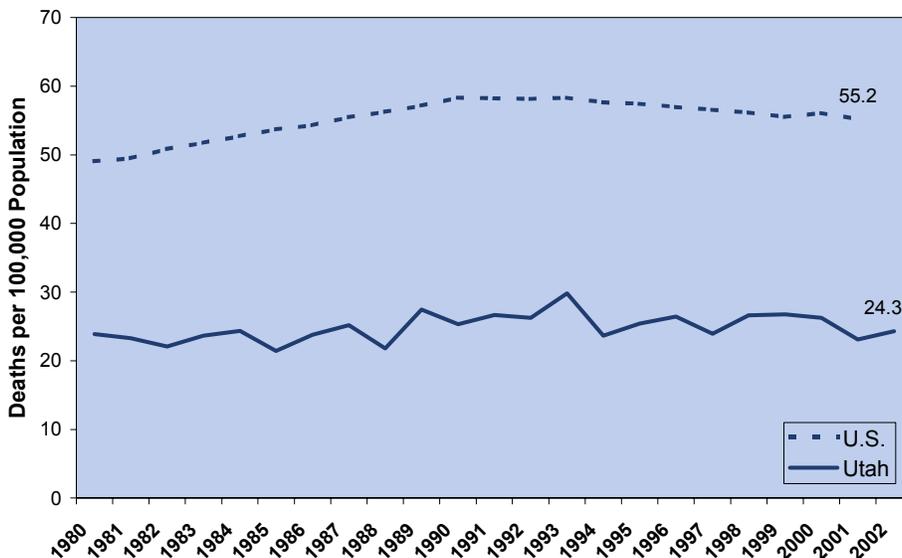
Lung cancer is the leading cause of cancer-related death in Utah and the U.S. It is estimated that lung cancer will have been responsible for 28% of all cancer deaths (approximately 157,200 deaths) in 2003.³⁵ Because symptoms often do not appear until the disease is advanced, early detection of this cancer is difficult. Tobacco is responsible for 87% of all cases of cancer of the lung, and is associated with cancers of the mouth, pharynx, larynx, and esophagus.³⁷

Risk Factors for Lung Cancer Deaths

Cigarette smoking is the most important risk factor for lung cancer. Other risk factors include occupational exposures such as radon and asbestos and indoor and outdoor pollution, including environmental tobacco smoke.

Lung Cancer Death Ranking, 2000-2002	Rate*
Provo/BYU	5.9
Other Cache/Rich Co.	7.9
Sandy, SE	8.8
Avenues	9.5
Other Box Elder Co.	9.8
Logan	11.4
North Orem	11.8
East Orem	13.5
Morgan/E Weber Co.	14.1
Foothill/U of U	14.3
Bountiful	14.8
American Fork/Alpine	15.5
Holladay	16.7
South Jordan	17.7
Cedar City	17.9
Midvale	18.0
Farmington/Centerville	18.0
West Orem	18.3
Pleasant Grove/Lindon	18.4
St. George	20.0
Cottonwood	20.5
South Ogden	21.3
Ben Lomond	21.9
Millcreek	22.2
Sandy Center	23.4
Springville/Spanish Fork	23.4
Summit Co.	23.4
Utah Co. South	23.6
Sevier/Piute/Wayne Co.	24.7
Syracuse/Kaysville	25.2
Downtown Salt Lake	26.8
Sandy, NE	26.9
Roy/Hooper	27.0
Juab/Millard/Sanpete Co.	27.2
Wasatch Co.	27.8
Provo South	29.1
South Salt Lake	29.3
Woods Cross/No. SL	29.5
Carbon/Emery Co.	29.5
Taylorsville	30.7
Brigham City	30.8
Other Washington Co.	31.1
Clearfield/Hill AFB	31.1
Murray	31.3
Riverton/Draper	31.5
Glendale	31.5
Magna	31.5
Lehi/Cedar Valley	31.6
Rose Park	32.4
Layton	33.4
Riverdale	35.0
Other Southwest Dist	35.1
W. Jordan, Copperton	35.1
West Valley East	37.9
TriCounty LHD	40.9
West Valley West	42.2
West Jordan No.	42.6
Tooele Co.	42.6
Kearns	43.2
Grand/San Juan Co.	47.2
Downtown Ogden	60.2

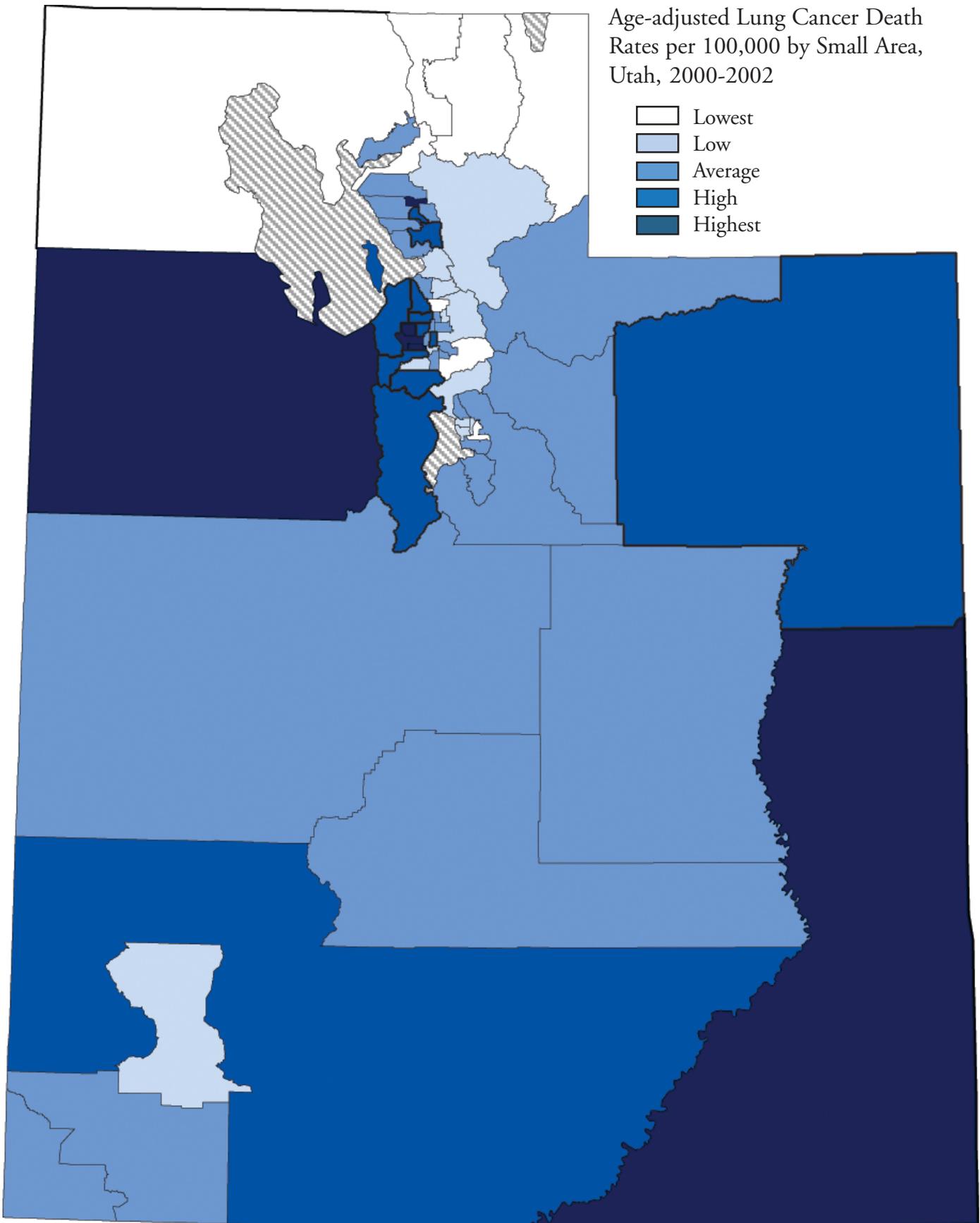
Lung Cancer Death Rates, Utah and U.S., 1980-2002



Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health
 Note: Age adjusted to U.S. 2000 standard population. ICD-9 code 162; ICD-10 codes C33-C34. ICD-10 definition also includes cancer of the trachea. However, there were no deaths in Utah from cancer of the trachea from 1995 to 1999, suggesting that this change has resulted in little or no artifactual difference in comparing death rates from the two time periods.

* Age adjusted # of deaths per 100,000.

Lung Cancer Deaths



Source: Utah Death Certificate Database

Lung Cancer Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	Lung Cancer Deaths per 100,000			
			Average Annual Number of Events		Age Adjusted Rates*	
			Events	Crude Rates	95% Confidence Interval Lower	Upper
	State Total	2,288,068	389	17.0	24.5	(23.2 - 26.0)
41	Brigham City	21,306	6	26.6	30.8	(17.9 - 49.3)
5	Other Box Elder Co.	21,957	2	7.6	9.8	(3.2 - 22.9)
6	Logan	59,888	4	6.1	11.4	(5.7 - 20.5)
2	Other Cache/Rich Co.	35,646	2	5.6	7.9	(2.9 - 17.5)
23	Ben Lomond	44,855	9	19.3	21.9	(14.3 - 32.1)
9	Morgan/East Weber Co.	33,182	3	9.0	14.1	(6.2 - 27.4)
61	Downtown Ogden	28,047	12	42.8	60.2	(42.1 - 83.5)
22	South Ogden	34,593	8	22.2	21.3	(13.4 - 32.1)
33	Roy/Hooper	40,599	7	16.4	27.0	(16.5 - 41.8)
51	Riverdale	25,265	8	31.7	35.0	(22.4 - 52.2)
42	Clearfield/Hill AFB	52,461	8	15.2	31.1	(19.6 - 47.0)
50	Layton	63,293	11	16.9	33.4	(22.6 - 47.7)
30	Syracuse/Kaysville	37,140	5	14.4	25.2	(14.1 - 41.3)
16	Farmington/Centerville	27,882	2	8.4	18.0	(6.6 - 39.3)
38	Woods Cross/North SL	19,359	3	15.5	29.5	(13.0 - 57.4)
11	Bountiful	44,886	7	16.3	14.8	(9.3 - 22.4)
49	Rose Park	32,358	6	19.6	32.4	(19.1 - 51.5)
4	Avenues	21,926	2	9.1	9.5	(3.4 - 20.7)
10	Foothill/U of U	23,221	4	17.2	14.3	(7.3 - 25.2)
45	Magna	23,294	4	15.7	31.5	(15.6 - 56.6)
45	Glendale	26,554	5	20.1	31.5	(17.9 - 51.3)
56	West Valley West	66,932	10	15.4	42.2	(27.3 - 62.5)
54	West Valley East	48,584	12	24.0	37.9	(26.1 - 53.1)
31	Downtown Salt Lake	50,533	10	19.8	26.8	(17.8 - 38.7)
37	South Salt Lake	24,556	5	21.7	29.3	(16.6 - 47.9)
24	Millcreek	57,224	14	24.5	22.2	(15.8 - 30.4)
13	Holladay	44,846	10	22.3	16.7	(11.2 - 24.0)
21	Cottonwood	43,519	7	16.9	20.5	(12.5 - 31.7)
59	Kearns	65,350	12	18.4	43.2	(29.3 - 61.3)
40	Taylorville	38,109	8	21.0	30.7	(19.5 - 45.9)
44	Murray	30,930	10	33.4	31.3	(21.2 - 44.6)
16	Midvale	28,577	4	12.8	18.0	(8.7 - 32.8)
57	West Jordan No.	44,676	5	11.9	42.6	(21.8 - 74.9)
52	W. Jordan, Copperton	41,743	4	9.6	35.1	(17.3 - 63.4)
14	South Jordan	31,669	2	6.3	17.7	(6.5 - 38.7)
25	Sandy Center	51,861	7	12.9	23.4	(14.0 - 36.6)
32	Sandy, Northeast	25,148	3	13.3	26.9	(12.6 - 50.2)
3	Sandy, Southeast	30,588	1	4.4	8.8	(1.9 - 25.1)
45	Riverton/Draper	62,791	6	9.0	31.5	(17.2 - 52.8)
57	Tooele Co.	43,865	11	25.8	42.6	(29.4 - 59.8)
48	Lehi/Cedar Valley	26,424	3	11.4	31.6	(13.9 - 61.5)
12	American Fork/Alpine	39,620	3	8.4	15.5	(7.3 - 28.9)
19	Pleasant Grove/Lindon	37,851	3	7.9	18.4	(8.2 - 35.6)
7	North Orem	35,731	2	6.5	11.8	(4.7 - 24.5)
18	West Orem	29,543	3	9.0	18.3	(7.9 - 36.2)
8	East Orem	22,141	2	9.0	13.5	(4.9 - 29.6)
1	Provo/BYU	48,704	2	3.4	5.9	(1.9 - 13.8)
36	Provo South	57,318	5	9.3	29.1	(16.3 - 48.1)
25	Springville/Spanish Fork	59,202	8	13.5	23.4	(14.9 - 35.1)
28	Utah Co. South	26,387	4	13.9	23.6	(11.7 - 42.5)
25	Summit Co.	31,104	3	9.6	23.4	(10.3 - 45.7)
35	Wasatch Co.	15,995	3	18.8	27.8	(12.6 - 53.2)
55	TriCounty LHD	41,453	13	32.2	40.9	(29.2 - 55.9)
34	Juab/Millard/Sanpete Co.	44,288	10	23.3	27.2	(18.5 - 38.6)
29	Sevier/Piute/Wayne Co.	23,040	6	26.0	24.7	(14.6 - 39.1)
38	Carbon/Emery Co.	30,716	9	28.2	29.5	(19.3 - 43.3)
60	Grand/San Juan Co.	22,714	9	39.6	47.2	(31.0 - 68.8)
20	St. George	53,715	14	26.1	20.0	(14.3 - 27.3)
42	Other Washington Co.	41,445	14	33.0	31.1	(22.1 - 42.4)
15	Cedar City	29,612	3	11.3	17.9	(8.5 - 33.0)
52	Other Southwest Dist.	21,854	8	38.1	35.1	(22.6 - 51.9)

* Rates have been age adjusted to the U.S. 2000 standard population.

ICD-10 codes: C33-C34.

Source: Utah Death Certificate Database

Female Breast Cancer Deaths

Definition: Number of deaths from cancer of the breast per 100,000 female population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 3-3: Female breast cancer deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 22.3
- State-specific Target: 22.3

Why Is It Important?

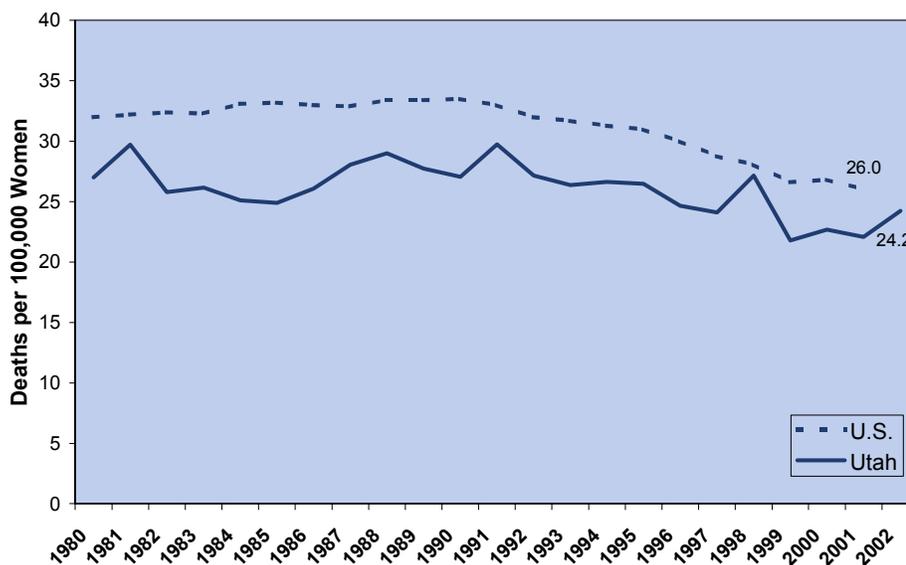
Breast cancer is the most commonly occurring cancer in U.S. women (excluding basal and squamous cell skin cancers) and the leading cause of cancer death among Utah women.

Risk Factors for Female Breast Cancer Deaths

Deaths from breast cancer can be substantially reduced if the tumor is discovered at an early stage. Mammography is currently an important method for detecting cancer early. The most important risk factor for breast cancer is increasing age. Other established risk factors include personal or family history of breast cancer, history of abnormal breast biopsy, genetic mutations, early age at onset of menses, late age at onset of menopause, never having children or having a first live birth at age 30 or older, and history of exposure to high dose radiation. Associations have also been suggested between breast cancer and oral contraceptives, long-term use of hormone replacement therapy, obesity (in post-menopausal women), alcohol, and a diet high in fat. Maintaining a healthy body weight and participating in regular physical activity are associated with lower risk of developing breast cancer.³⁵

Breast Cancer Death Ranking, 1998-2002	Rate*
Carbon/Emery Co.	9.3
Grand/San Juan Co.	11.7
West Valley East	12.8
Wasatch Co.	12.9
W. Jordan, Copperton	14.3
East Orem	15.1
Pleasant Grove/Lindon	15.2
Sandy Center	16.6
Cedar City	16.8
Avenues	17.3
Murray	18.1
Clearfield/Hill AFB	18.4
West Orem	18.8
Utah Co. South	18.8
Rose Park	18.8
Riverdale	18.8
Brigham City	20.3
Ben Lomond	20.3
St. George	20.7
Juab/Millard/Sanpete Co.	20.7
North Orem	20.7
Riverton/Draper	21.1
TriCounty LHD	21.3
Cottonwood	21.6
Midvale	21.8
Bountiful	21.8
Downtown Salt Lake	22.7
Tooele Co.	22.9
Logan	23.0
Springville/Spanish Fork	23.1
Taylorsville	23.7
Morgan/E Weber Co.	23.9
Roy/Hooper	24.2
Lehi/Cedar Valley	24.8
Summit Co.	25.2
Holladay	25.4
Sandy, NE	25.7
Foothill/U of U	25.7
Downtown Ogden	26.3
West Valley West	26.4
Woods Cross/No. SL	26.9
Other Southwest Dist	26.9
Magna	27.0
South Ogden	27.9
Glendale	28.2
Syracuse/Kaysville	28.5
Millcreek	28.7
Other Cache/Rich Co.	30.0
South Salt Lake	30.6
Provo South	31.4
Layton	31.8
Farmington/Centerville	31.9
Kearns	32.3
Sevier/Piute/Wayne Co.	32.8
American Fork/Alpine	33.3
Other Box Elder Co.	35.0
Sandy, SE	37.3
Provo/BYU	37.6
Other Washington Co.	38.1
West Jordan No.	38.5
South Jordan	42.0

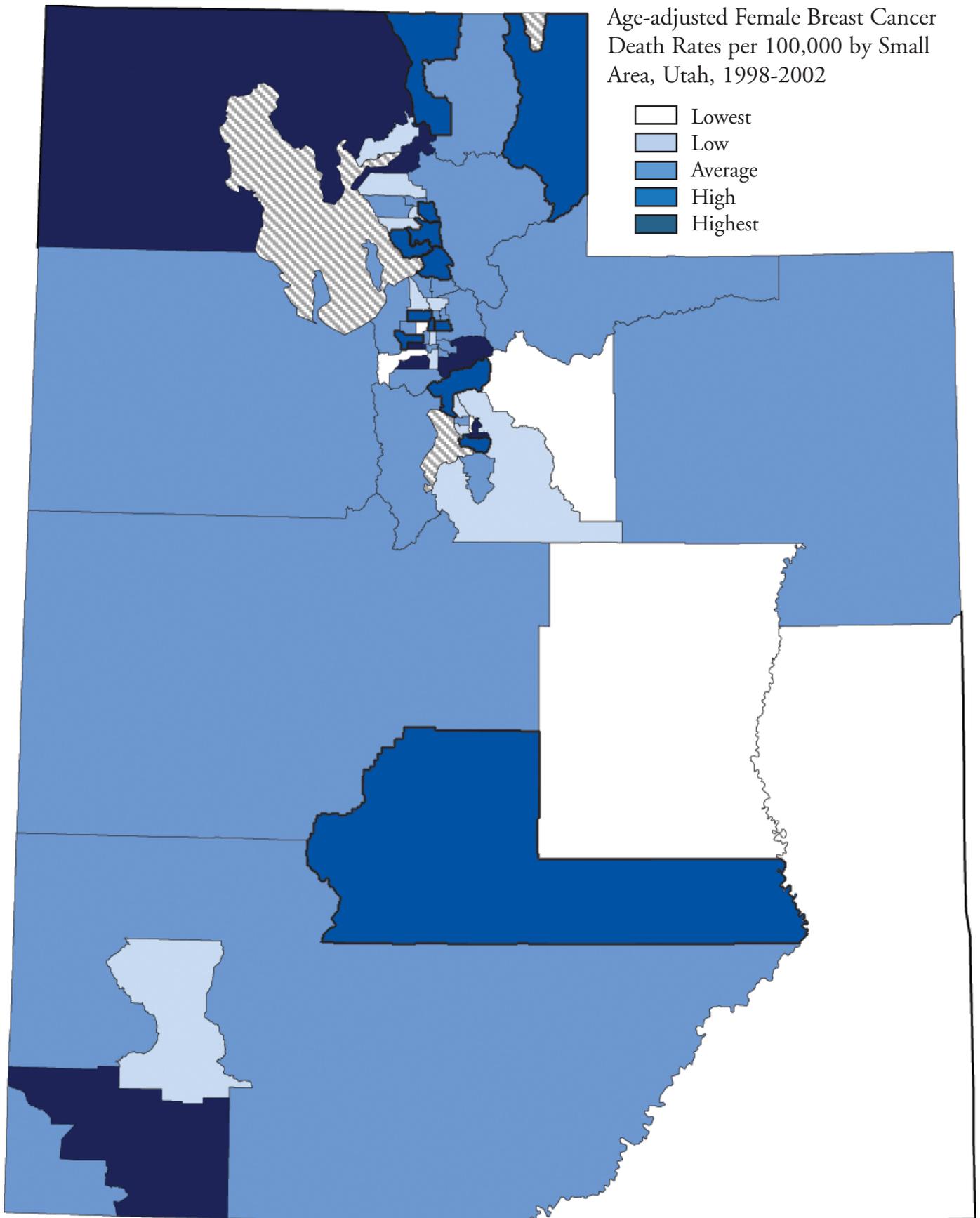
Breast Cancer Death Rates, Utah and U.S., 1980-2002



Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health
 Note: Age adjusted to U.S. 2000 standard population. ICD-9 code 174; ICD-10 code C50.

* Age adjusted # of deaths per 100,000.

Female Breast Cancer Deaths



Source: Utah Death Certificate Database

Female Breast Cancer Deaths

Female Breast Cancer Deaths by Small Area
Utah, 1998-2002

Rank	Area of Residence	Average Female Population	Female Breast Cancer Deaths per 100,000			
			Average Annual Number of Events	Crude Rates	Age Adjusted Rates*	
					Lower	Upper
	State Total	1,119,015	204	18.2	23.6	(22.1 - 25.1)
17	Brigham City	10,493	2	19.1	20.3	(9.6 - 37.6)
56	Other Box Elder Co.	10,789	3	27.8	35.0	(19.6 - 57.7)
29	Logan	29,769	4	14.1	23.0	(14.1 - 35.4)
48	Other Cache/Rich Co.	17,303	4	20.8	30.0	(17.7 - 47.5)
17	Ben Lomond	22,448	4	18.7	20.3	(12.5 - 31.2)
32	Morgan/East Weber Co.	16,162	3	18.6	23.9	(13.2 - 39.9)
39	Downtown Ogden	12,947	3	23.2	26.3	(14.4 - 43.9)
44	South Ogden	17,278	5	29.0	27.9	(17.8 - 41.6)
33	Roy/Hooper	20,291	3	16.8	24.2	(14.0 - 38.8)
13	Riverdale	12,553	3	20.7	18.8	(10.0 - 32.3)
12	Clearfield/Hill AFB	24,436	2	9.8	18.4	(9.4 - 32.3)
51	Layton	30,605	6	18.3	31.8	(20.0 - 48.0)
46	Syracuse/Kaysville	18,312	3	17.5	28.5	(16.0 - 47.0)
52	Farmington/Centerville	13,390	3	19.5	31.9	(15.4 - 58.2)
41	Woods Cross/North SL	9,514	2	16.8	26.9	(11.1 - 54.5)
25	Bountiful	22,942	5	23.6	21.8	(14.3 - 31.9)
13	Rose Park	15,334	2	13.0	18.8	(8.9 - 34.9)
10	Avenues	11,111	2	18.0	17.3	(8.1 - 32.2)
37	Foothill/U of U	11,642	3	29.2	25.7	(14.7 - 41.8)
43	Magna	11,388	2	14.1	27.0	(11.6 - 53.3)
45	Glendale	12,382	2	17.8	28.2	(13.7 - 51.4)
40	West Valley West	32,931	3	10.3	26.4	(14.3 - 44.6)
3	West Valley East	22,667	2	9.7	12.8	(6.4 - 23.1)
27	Downtown Salt Lake	25,021	6	22.4	22.7	(14.7 - 33.4)
49	South Salt Lake	12,001	3	26.7	30.6	(17.1 - 50.5)
47	Millcreek	29,563	10	34.6	28.7	(20.9 - 38.4)
36	Holladay	23,348	8	33.5	25.4	(17.8 - 35.3)
24	Cottonwood	21,720	4	18.4	21.6	(12.7 - 34.3)
53	Kearns	32,054	6	18.7	32.3	(20.6 - 48.1)
31	Taylorsville	19,014	4	20.0	23.7	(14.2 - 37.2)
11	Murray	15,710	3	21.7	18.1	(10.4 - 29.2)
25	Midvale	13,925	2	17.3	21.8	(11.2 - 38.2)
60	West Jordan No.	21,899	3	14.6	38.5	(19.3 - 68.5)
5	W. Jordan, Copperton	20,110	2	9.0	14.3	(6.3 - 27.9)
61	South Jordan	14,825	3	23.0	42.0	(23.1 - 70.3)
8	Sandy Center	25,926	3	12.4	16.6	(9.4 - 27.2)
37	Sandy, Northeast	12,521	2	19.2	25.7	(11.7 - 48.9)
57	Sandy, Southeast	15,032	3	20.0	37.3	(17.8 - 68.6)
22	Riverton/Draper	28,049	3	10.0	21.1	(10.5 - 37.7)
28	Tooele Co.	20,631	3	16.5	22.9	(13.3 - 36.8)
34	Lehi/Cedar Valley	12,391	1	9.7	24.8	(8.9 - 54.7)
55	American Fork/Alpine	18,955	4	19.0	33.3	(19.6 - 52.8)
7	Pleasant Grove/Lindon	17,961	1	7.8	15.2	(5.9 - 32.0)
19	North Orem	18,223	2	13.2	20.7	(10.5 - 36.8)
13	West Orem	14,121	2	11.3	18.8	(8.1 - 37.0)
6	East Orem	10,624	1	11.3	15.1	(5.5 - 33.0)
58	Provo/BYU	25,027	6	24.0	37.6	(25.2 - 54.0)
50	Provo South	28,350	4	12.7	31.4	(18.3 - 50.2)
30	Springville/Spanish Fork	28,280	4	13.5	23.1	(13.8 - 36.4)
13	Utah Co. South	12,680	2	12.6	18.8	(8.1 - 37.0)
35	Summit Co.	14,529	3	17.9	25.2	(12.7 - 44.9)
4	Wasatch Co.	7,577	1	10.6	12.9	(3.5 - 33.2)
23	TriCounty LHD	20,367	4	17.7	21.3	(12.6 - 33.7)
19	Juab/Millard/Sanpete Co.	21,739	4	18.4	20.7	(12.6 - 32.1)
54	Sevier/Piute/Wayne Co.	11,368	4	33.5	32.8	(19.7 - 51.4)
1	Carbon/Emery Co.	15,771	2	10.2	9.3	(4.0 - 18.4)
2	Grand/San Juan Co.	11,511	1	10.4	11.7	(4.3 - 25.4)
19	St. George	26,773	6	22.4	20.7	(13.6 - 30.2)
59	Other Washington Co.	19,524	7	34.9	38.1	(26.3 - 53.4)
9	Cedar City	14,493	2	11.1	16.8	(7.3 - 33.1)
41	Other Southwest Dist.	10,712	3	31.8	26.9	(15.5 - 43.3)

* Rates have been age adjusted to the U.S. 2000 standard population.
ICD-9 code: 174; ICD-10 code: C50. ICD-9 and ICD-10 adjusted for comparability.
Source: Utah Death Certificate Database

Colorectal Cancer Deaths

Definition: Number of deaths from cancer of the colon or rectum per 100,000 population (age-adjusted to the U.S. 2000 standard population).

Healthy People 2010 Objective 3-5: Colorectal cancer deaths (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 13.9
- State-specific Target: 15.0

Why Is It Important?

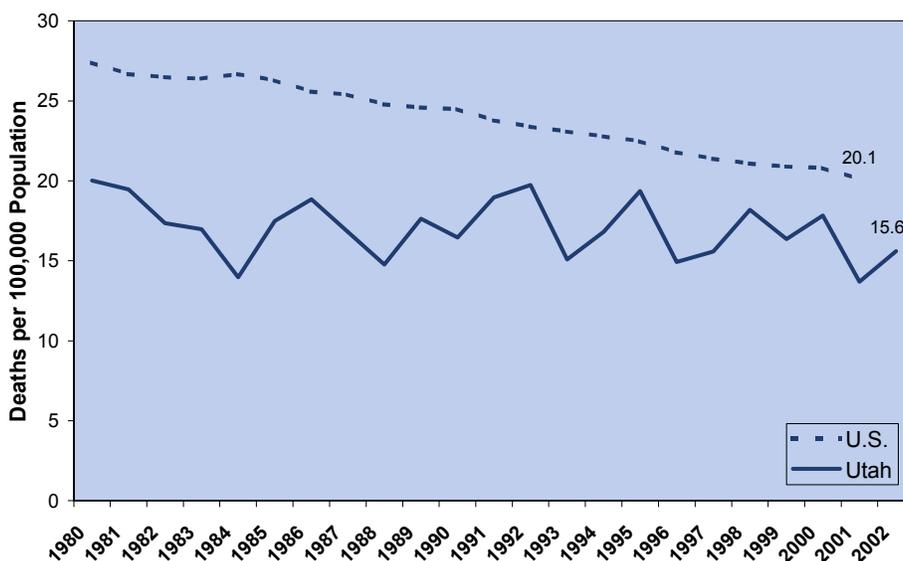
Colorectal cancer is the third leading cause of cancer death in the U.S. behind lung and breast cancer for females and behind lung and prostate cancer for males.

Risk Factors for Colorectal Cancer Deaths

Risk factors for colorectal cancer include increasing age, inflammatory bowel disease, a family history of polyps or colorectal cancer, a personal history of polyps or colorectal cancer, and certain hereditary syndromes. Physical inactivity, a low fiber/high fat diet, obesity, excessive alcohol consumption, and tobacco use may all increase risk. A diet high in fruits and vegetables, hormone replacement therapy in post-menopausal women, and aspirin use may reduce colorectal cancer risk.

Deaths from colorectal cancer can be substantially reduced when precancerous polyps are detected early and removed. When colorectal cancer is diagnosed early, the five-year survival rate is 90%. Several scientific organizations recommend that routine screening for colorectal cancer begin at age 50 for adults at average risk.

Colorectal Cancer Death Rates, Utah and U.S., 1980-2002

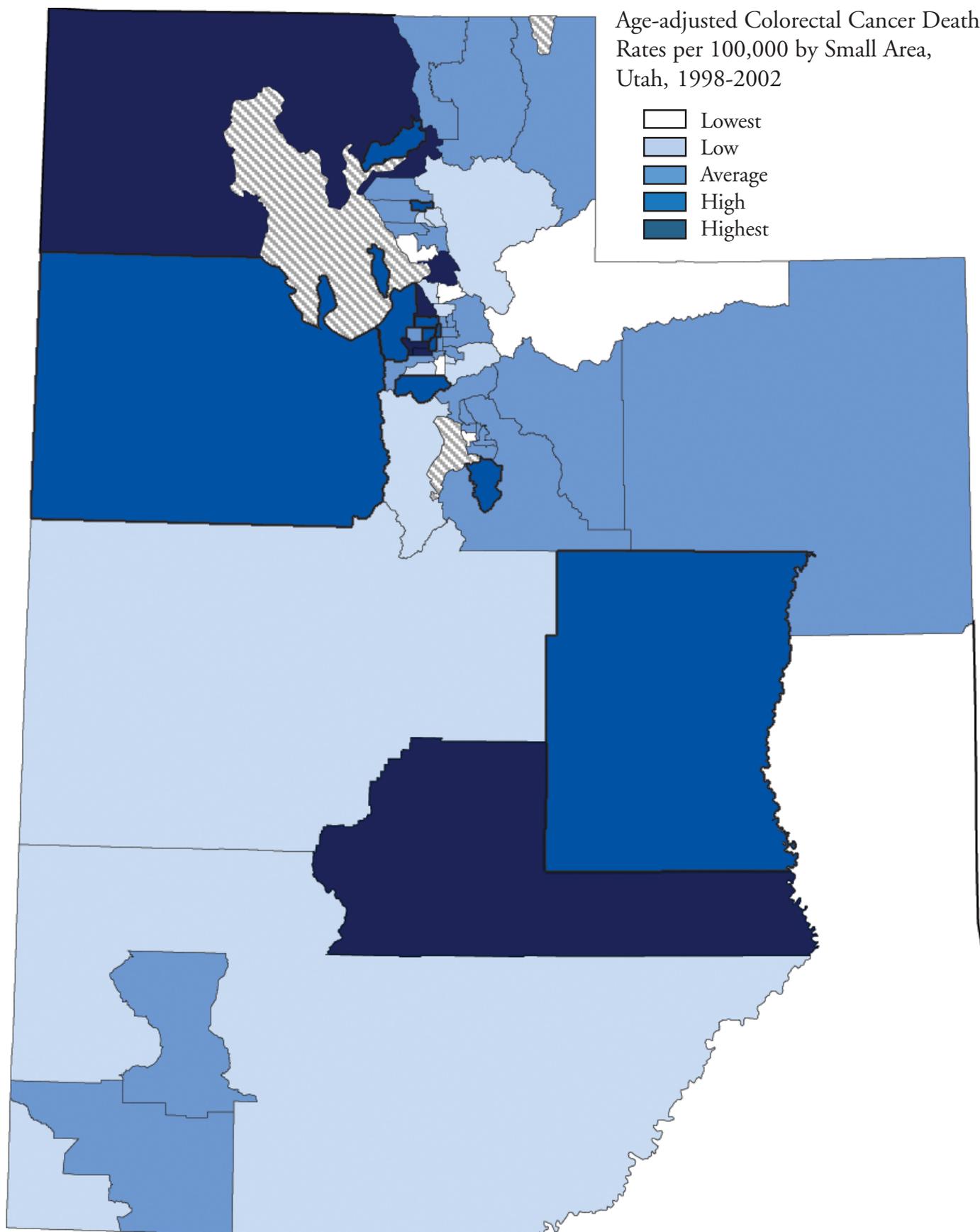


Sources: U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health
 Note: Age adjusted to U.S. 2000 standard population. ICD-9 codes 153 and 154; ICD-10 codes C18-C21.

Colorectal Cancer Death Ranking, 1998-2002	Rate*
West Orem	5.3
Grand/San Juan Co.	6.8
Bountiful	9.1
Sandy Center	10.3
Summit Co.	10.3
Syracuse/Kaysville	10.8
South Jordan	11.0
South Ogden	11.0
Riverdale	11.3
Sandy, SE	12.1
Sandy, NE	12.5
Juab/Millard/Sanpete Co.	12.7
St. George	13.7
Morgan/E Weber Co.	13.9
Lehi/Cedar Valley	13.9
Other Southwest Dist	14.2
Woods Cross/No. SL	14.8
Avenues	14.8
North Orem	15.4
Other Washington Co.	15.4
Provo/BYU	15.5
Ben Lomond	15.7
Murray	16.0
Holladay	16.4
Cottonwood	16.4
Provo South	16.6
Foothill/U of U	16.7
Logan	16.8
Millcreek	17.1
Midvale	17.1
American Fork/Alpine	17.2
W. Jordan, Copperton	17.5
West Valley West	17.5
Roy/Hooper	17.7
Utah Co. South	18.0
Wasatch Co.	18.5
Clearfield/Hill AFB	18.5
TriCounty LHD	18.5
Other Cache/Rich Co.	18.6
Downtown Salt Lake	18.7
Pleasant Grove/Lindon	18.8
Cedar City	18.8
Layton	18.9
East Orem	18.9
Magna	19.2
West Valley East	19.3
Taylorsville	19.8
Carbon/Emery Co.	19.9
Riverton/Draper	20.0
Tooele Co.	20.3
Springville/Spanish Fork	20.3
Glendale	20.5
Brigham City	21.0
Downtown Ogden	21.2
South Salt Lake	21.3
Farmington/Centerville	21.9
Other Box Elder Co.	22.0
Sevier/Piute/Wayne Co.	22.2
Rose Park	22.3
Kearns	26.6
West Jordan No.	27.1

* Age adjusted # of deaths per 100,000.

Colorectal Cancer Deaths



Source: Utah Death Certificate Database

Colorectal Cancer Deaths

Colorectal Cancer Deaths by Small Area Utah, 1998-2002

Rank	Area of Residence	Average Population	Colorectal Cancer Deaths per 100,000			
			Average Annual Number of Events		Age Adjusted Rates*	
			Crude Rates	95% Confidence Interval	Lower	Upper
	State Total	2,239,772	248	11.1	16.3	(15.4 - 17.2)
53	Brigham City	20,973	4	18.1	21.0	(12.6 - 32.8)
57	Other Box Elder Co.	21,768	3	15.6	22.0	(12.8 - 35.3)
28	Logan	58,612	6	9.9	16.8	(11.2 - 24.1)
39	Other Cache/Rich Co.	35,122	4	11.4	18.6	(11.3 - 28.8)
22	Ben Lomond	44,207	6	13.1	15.7	(10.5 - 22.6)
14	Morgan/East Weber Co.	32,580	2	7.4	13.9	(7.0 - 24.6)
54	Downtown Ogden	27,559	4	16.0	21.2	(13.2 - 32.1)
7	South Ogden	34,189	4	11.7	11.0	(6.7 - 17.1)
34	Roy/Hooper	40,013	5	11.5	17.7	(11.2 - 26.7)
9	Riverdale	24,760	3	10.5	11.3	(6.0 - 19.4)
36	Clearfield/Hill AFB	50,554	4	8.7	18.5	(11.4 - 28.4)
43	Layton	61,843	5	8.1	18.9	(11.6 - 29.0)
6	Syracuse/Kaysville	36,544	2	5.5	10.8	(5.0 - 20.2)
56	Farmington/Centerville	27,389	2	7.3	21.9	(9.6 - 42.9)
17	Woods Cross/North SL	19,006	1	7.4	14.8	(5.7 - 31.4)
3	Bountiful	44,640	4	9.4	9.1	(5.6 - 13.9)
59	Rose Park	31,642	4	12.6	22.3	(13.1 - 35.5)
17	Avenues	21,842	3	13.7	14.8	(8.3 - 24.5)
27	Foothill/U of U	23,001	5	20.0	16.7	(10.5 - 25.1)
45	Magna	22,889	2	10.5	19.2	(9.8 - 33.9)
52	Glendale	25,949	4	14.6	20.5	(12.3 - 32.1)
32	West Valley West	65,856	4	6.7	17.5	(10.1 - 28.4)
46	West Valley East	47,704	5	11.3	19.3	(12.4 - 28.6)
40	Downtown Salt Lake	49,971	8	16.8	18.7	(13.3 - 25.6)
55	South Salt Lake	24,332	4	18.1	21.3	(13.2 - 32.5)
29	Millcreek	57,133	12	21.4	17.1	(12.9 - 22.2)
24	Holladay	44,872	10	22.3	16.4	(12.1 - 21.6)
24	Cottonwood	43,398	5	12.4	16.4	(10.6 - 24.2)
60	Kearns	64,776	6	9.3	26.6	(16.6 - 40.5)
47	Taylorsville	37,204	5	13.4	19.8	(12.7 - 29.3)
23	Murray	30,729	5	16.9	16.0	(10.4 - 23.5)
29	Midvale	28,185	4	12.8	17.1	(10.0 - 27.3)
61	West Jordan No.	44,042	3	6.4	27.1	(12.6 - 50.8)
32	W. Jordan, Copperton	39,842	2	5.5	17.5	(7.9 - 33.3)
7	South Jordan	30,036	2	5.3	11.0	(4.4 - 22.8)
4	Sandy Center	51,538	3	6.6	10.3	(5.8 - 16.8)
11	Sandy, Northeast	25,496	2	7.8	12.5	(5.3 - 24.7)
10	Sandy, Southeast	30,395	1	4.6	12.1	(4.2 - 27.2)
49	Riverton/Draper	59,351	4	6.1	20.0	(10.7 - 34.0)
50	Tooele Co.	41,071	5	12.7	20.3	(13.2 - 29.9)
14	Lehi/Cedar Valley	25,022	1	5.6	13.9	(5.4 - 29.0)
31	American Fork/Alpine	38,276	4	9.4	17.2	(10.1 - 27.4)
41	Pleasant Grove/Lindon	36,170	3	7.2	18.8	(9.8 - 32.7)
19	North Orem	35,898	3	8.4	15.4	(8.6 - 25.5)
1	West Orem	28,223	1	2.8	5.3	(1.4 - 13.6)
43	East Orem	21,174	2	10.4	18.9	(9.3 - 34.2)
21	Provo/BYU	47,751	5	9.6	15.5	(9.8 - 23.3)
26	Provo South	55,477	3	5.4	16.6	(9.2 - 27.4)
50	Springville/Spanish Fork	56,839	6	11.3	20.3	(13.7 - 29.0)
35	Utah Co. South	25,580	3	10.2	18.0	(9.5 - 31.0)
4	Summit Co.	29,956	2	8.0	10.3	(4.8 - 19.2)
36	Wasatch Co.	15,335	2	13.0	18.5	(8.8 - 34.2)
36	TriCounty LHD	40,752	6	14.2	18.5	(12.3 - 26.7)
12	Juab/Millard/Sanpete Co.	43,644	5	11.0	12.7	(8.1 - 18.9)
58	Sevier/Piute/Wayne Co.	22,737	5	22.9	22.2	(14.5 - 32.6)
48	Carbon/Emery Co.	31,100	6	18.6	19.9	(13.3 - 28.6)
2	Grand/San Juan Co.	22,804	1	5.3	6.8	(2.5 - 14.9)
13	St. George	52,165	9	16.5	13.7	(9.8 - 18.6)
19	Other Washington Co.	39,468	5	13.2	15.4	(10.0 - 22.8)
41	Cedar City	28,794	3	11.1	18.8	(10.7 - 30.6)
16	Other Southwest Dist.	21,592	3	14.8	14.2	(8.1 - 23.0)

* Rates have been age adjusted to the U.S. 2000 standard population.

ICD-9 codes: 153 and 154; ICD-10 codes: C18-21. ICD-9 and ICD-10 adjusted for comparability.

Source: Utah Death Certificate Database

Hepatitis A

Definition: Number of reported hepatitis A cases per 100,000 population.

Healthy People 2010 Objective 14-6: Hepatitis A - (new cases per 100,000 population)

- U.S. Target for 2010: 4.5
- State-specific Target: 1.3

Why Is It Important?

Hepatitis A is a serious viral illness that results in inflammation of the liver. People with hepatitis A can have fever, jaundice (yellowing of the skin and the whites of the eyes), nausea, loss of appetite, vomiting, and malaise. It can take 15 to 50 days after getting the virus before showing any symptoms (average of 28 days). Hepatitis A is the most common type of hepatitis reported in the United States. The decline in hepatitis A cases since 1996 is most likely due to better hygiene, especially hand washing and food preparation, and broader use of the hepatitis A vaccine, but it may also be due to the natural cycle of the disease.

Hepatitis A Ranking, 2001-2003	Rate*
Bear River	0.2
Davis	1.5
TriCounty	1.6
Central	2.0
Southwest	2.0
Wasatch	2.0
Summit	2.1
Tooele	2.2
Utah	2.2
Salt Lake	2.7
Weber-Morgan	2.7
Southeastern	9.4

* Rate per 100,000.

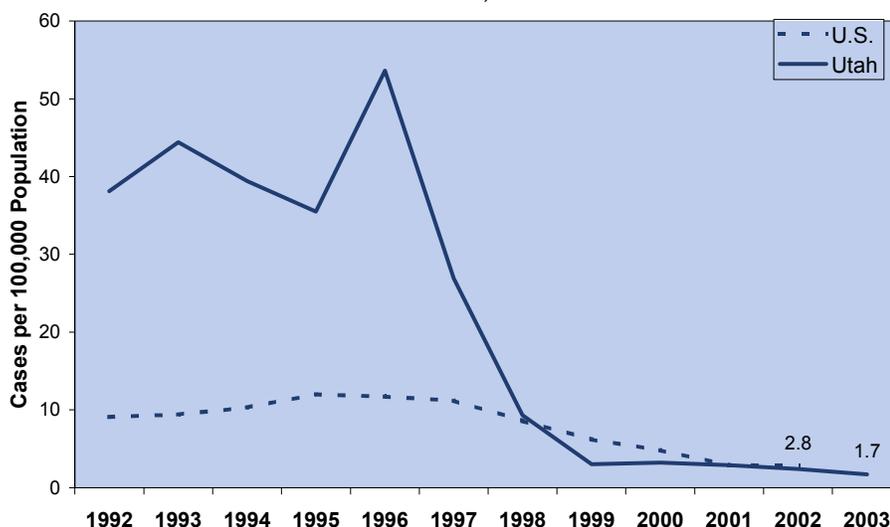
Risk Factors for Hepatitis A

Most cases of hepatitis A are due to person-to-person transmission, but can also be acquired by eating food or drinking water contaminated with the virus. Many children with hepatitis A do not show symptoms but are still able to pass on the infection. Hepatitis A virus only infects humans, and occasionally some other primates. Infection is spread through the fecal-oral route, so it's often grouped with other foodborne illnesses. However, hepatitis A is a vaccine-preventable disease. Vaccination is recommended for children entering school, travelers to developing countries, and others with high-risk activities. Also, household contacts of recently diagnosed cases of hepatitis A can be administered Immune Globulin under the direction of the health department to prevent infection. Immune Globulin and hepatitis A immunization can be administered simultaneously.

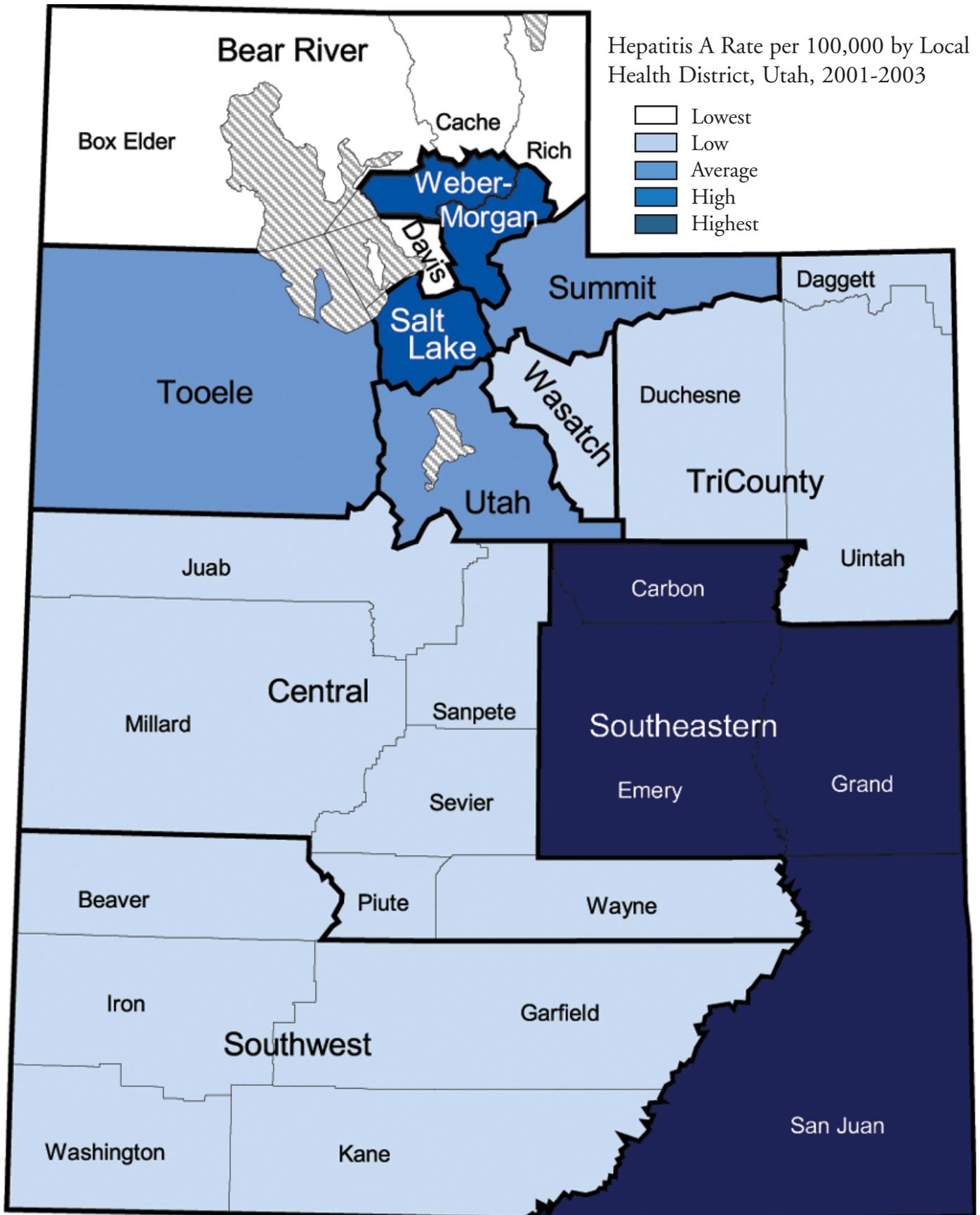
People who have hepatitis A can easily give this infection to other children, co-workers, or family members. Children with diarrhea should not go to day care, and food handlers should not go to work. Careful hand

washing after using the toilet can reduce the risk of spreading illness. Careful hand washing includes using plenty of hot water and soap and rubbing hands vigorously for 20 seconds.

Rates of Reported Hepatitis A Cases, Utah and U.S., 1992-2003



Sources: Utah Department of Health, Office of Epidemiology



Source: Utah Department of Health, Office of Epidemiology

Hepatitis A by Local Health District Utah, 2001-2003

Rank	Area of Residence	Average Population	Hepatitis A Cases per 100,000		
			Average Annual Number of Events	Crude Rates	
				95% Confidence Interval**	Lower
	State Total	2,324,149	55	2.4	(2.0 - 2.8)
1	Bear River	141,090	0	0.2	(0.0 - 1.3)
4	Central	68,206	1	2.0	(0.5 - 5.0)
2	Davis	249,124	3	1.5	(0.7 - 2.6)
10	Salt Lake	924,858	24	2.7	(2.1 - 3.3)
12	Southeastern	53,297	5	9.4	(5.3 - 15.5)
4	Southwest	150,674	3	2.0	(0.9 - 3.8)
7	Summit	32,032	1	2.1	(0.3 - 7.5)
8	Tooele	45,621	1	2.2	(0.5 - 6.4)
3	TriCounty	41,991	1	1.6	(0.2 - 5.7)
8	Utah	392,517	8	2.2	(1.4 - 3.2)
4	Wasatch	16,577	0	2.0	(0.1 - 11.2)
10	Weber-Morgan	208,162	5	2.7	(1.6 - 4.4)

Source: Utah Department of Health, Office of Epidemiology

Definition: Number of cases of reported tuberculosis per 100,000 population.

Healthy People 2010 Objective 14-11: Tuberculosis - (new cases per 100,000 population)

- U.S. Target for 2010: 1.0
- State-specific Target: 0.8

Why Is It Important?

Tuberculosis (TB) is caused by a type of bacteria called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but they may attack any part of the body. TB is typically spread through the air from one person to another. The U.S. experienced a resurgence of TB between 1985 and 1992, when the number of TB cases increased by 20%. Early detection and treatment of TB are essential to control the spread of the disease and to prevent outbreaks. Some people may have what is known as latent TB and may later develop active TB.

Tuberculosis Ranking, 1999-2003	Rate*
Wasatch	0.0
Bear River	0.3
Central	0.6
Summit	0.6
Utah	0.7
Southwest	0.8
Davis	1.1
Southeastern	1.5
Tooele	1.8
TriCounty	1.9
Weber-Morgan	1.9
Salt Lake	2.7

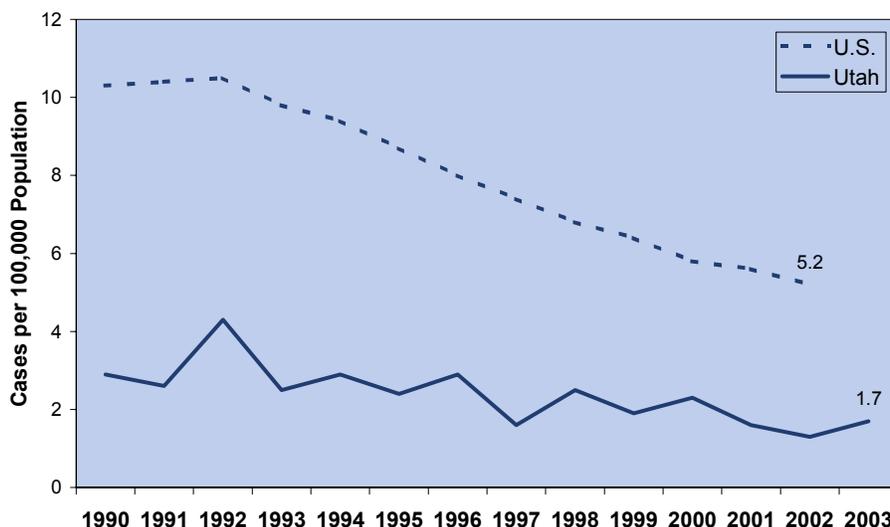
* Rate per 100,000.

Risk Factors for Tuberculosis

People who are at a high risk of developing TB disease include: individuals with HIV or AIDS, individuals who were infected with TB within the last two years, babies and young children, IV-drug users, individuals with chronic illnesses that weaken the immune system, elderly individuals who were not properly treated for TB infections in the past.

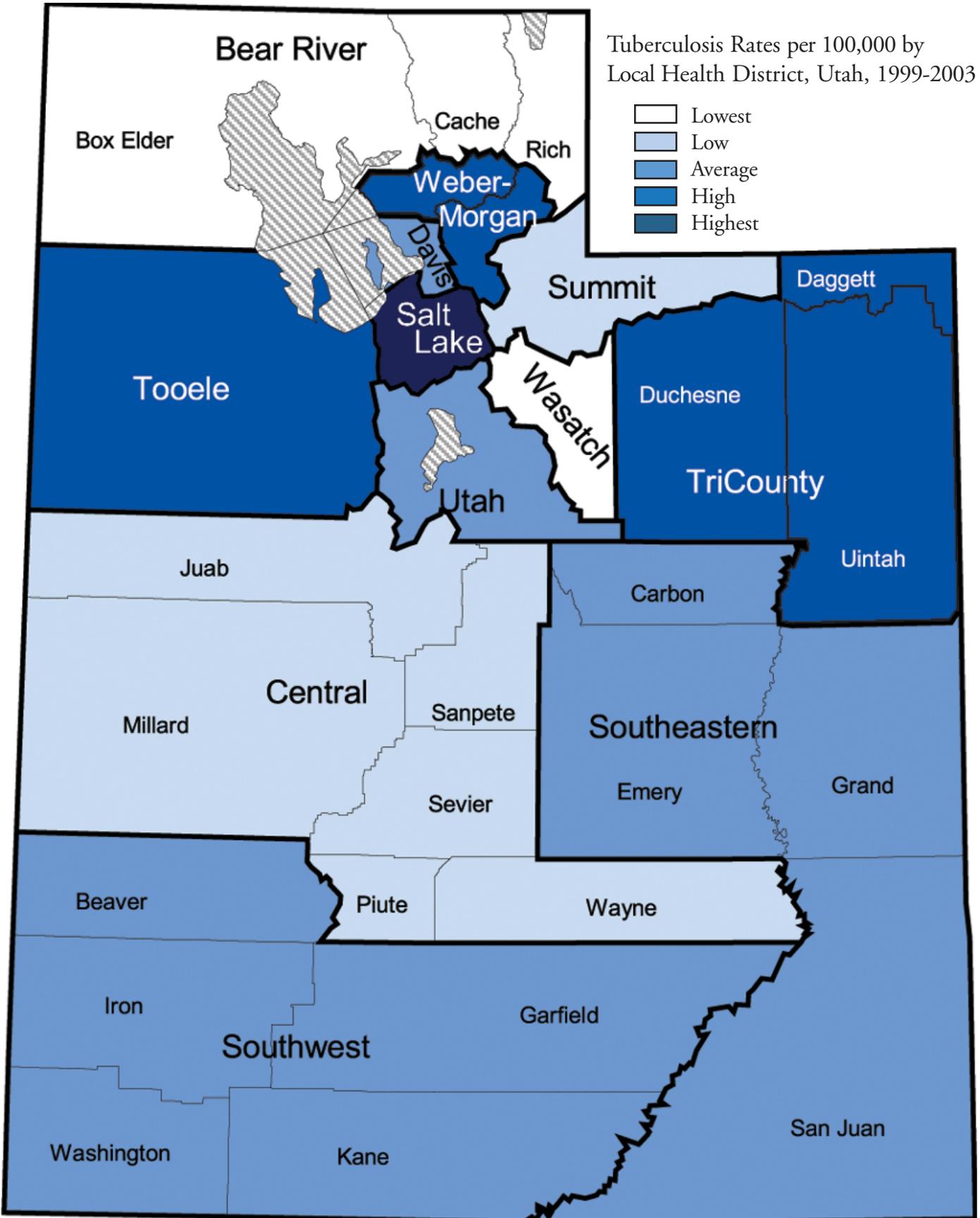
Risk factors for progressing to active tuberculosis disease include alcohol and injecting drug use. Directly observed therapy (DOT) should be considered for all patients because of the difficulty in predicting which patients will adhere to a prescribed treatment program. DOT increases the treatment completion rate and leads to the reduction of treatment failure, relapse and drug resistance.

Rates of Reported Tuberculosis Cases, Utah and U.S., 1990-2003



Sources: Bureau of Communicable Disease Control, Utah Department of Health; National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention

Tuberculosis



Source: Bureau of Communicable Disease Control, Utah Department of Health

**Tuberculosis by Local Health District
Utah, 1999-2003**

Rank	Area of Residence	Average Population	Tuberculosis Cases per 100,000		
			Average Annual Number of Events	Crude Rates	
				95% Confidence Interval**	Lower
	State Total	2,282,401	38	1.7	(1.5 - 2.0)
2	Bear River	138,849	0	0.3	(0.0 - 1.0)
3	Central	67,274	0	0.6	(0.1 - 2.1)
7	Davis	244,586	2	1.1	(0.6 - 1.9)
12	Salt Lake	912,512	24	2.7	(2.3 - 3.2)
8	Southeastern	53,692	1	1.5	(0.4 - 3.8)
6	Southwest	146,337	1	0.8	(0.3 - 1.8)
3	Summit	30,988	0	0.6	(0.0 - 3.6)
9	Tooele	43,340	1	1.8	(0.5 - 4.7)
10	TriCounty	41,356	1	1.9	(0.5 - 5.0)
5	Utah	381,580	2	0.7	(0.4 - 1.2)
1	Wasatch	15,944	0	0.0	(. - .)
10	Weber-Morgan	205,937	4	1.9	(1.2 - 3.0)

Source: Bureau of Communicable Disease Control, Utah Department of Health

Note: Confidence intervals were not calculated for values of 0.