

# Motor Vehicle Traffic Crash Deaths

**Definition:** Number of motor vehicle traffic crash deaths per 100,000 population (age-adjusted). Deaths are by place of residence, and not by place of occurrence.

**Healthy People 2010 Objective 15-15a:** Deaths from motor vehicle crashes - (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 9.2
- State-specific Target: 14.0

## Why Is It Important?

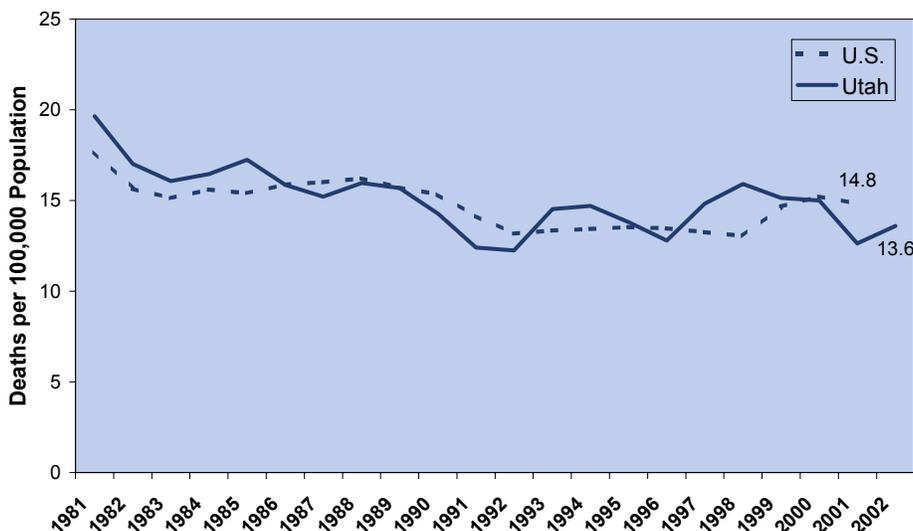
Motor vehicle crashes (MVCs) are the leading cause of injury death for all ages. From 2000 to 2002, motor vehicle crashes accounted for an average of 299 deaths annually. In addition, each year more than 30,000 Utahns will be injured and more than \$30 million will be spent on inpatient hospitalizations due to MVCs in Utah.

## Risk Factors for Motor Vehicle Traffic Crash Deaths

The most important factors contributing to motor vehicle crash injuries are failure to use seat belts, excessive speed, and driving under the influence of alcohol or drugs. Not using a safety belt or a child safety restraint while traveling in a motor vehicle greatly increases the probability of being injured or killed in a crash. When not using these safety devices, a person is more likely to be ejected from the vehicle or to be thrown against the windshield.

A person's driving ability is affected by a Blood Alcohol Concentration (BAC) as low as .02%. The likelihood of a crash increases significantly over .05%. Alcohol and other drugs were contributing factors in 21.9% of all 2002 Utah motor vehicle crash deaths.

Motor Vehicle Traffic Crash Death Rates, Utah and U.S., 1981-2002



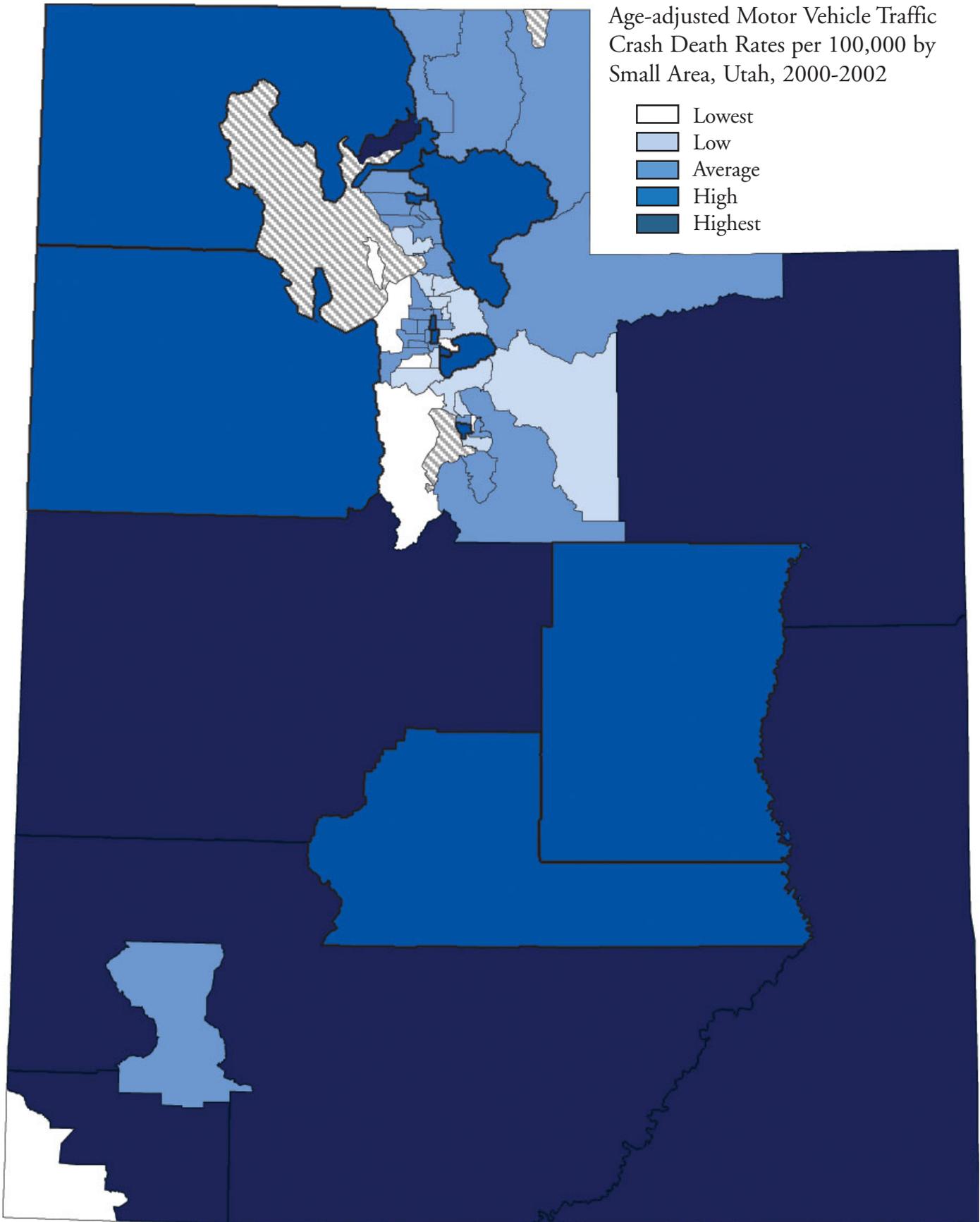
Sources: Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; Utah Governor's Office of Planning and Budget; National Vital Statistics System, National Center for Health Statistics, U.S. Centers for Disease Control and Prevention  
 Note: Data have been age adjusted to U.S. 2000 standard population; ICD-9 codes E810-819; ICD-10 codes (see Appendix A).

Motor Vehicle Death Ranking, 2000-2002	Rate*
South Jordan	2.1
Magna	4.8
Lehi/Cedar Valley	5.4
St. George	6.0
East Orem	6.0
Cottonwood	6.4
Sandy Center	6.5
Foothill/U of U	6.8
Woods Cross/No. SL	6.9
Holladay	7.4
Wasatch Co.	7.5
Riverton/Draper	7.5
American Fork/Alpine	7.6
Provo South	8.0
Bountiful	8.0
Avenues	8.9
Syracuse/Kaysville	9.4
Pleasant Grove/Lindon	9.6
Farmington/Centerville	9.7
Millcreek	9.8
Glendale	9.8
Riverdale	10.7
Provo/BYU	10.9
Clearfield/Hill AFB	11.0
Utah Co. South	11.1
Summit Co.	12.0
Other Cache/Rich Co.	12.3
Cedar City	12.4
Layton	12.5
West Valley East	12.8
Springville/Spanish Fork	13.0
Kearns	13.4
Logan	13.5
Taylorsville	13.8
W. Jordan, Copperton	14.0
Midvale	14.0
West Jordan No.	14.1
Roy/Hooper	14.8
Rose Park	14.8
Downtown Salt Lake	14.9
Ben Lomond	15.1
North Orem	15.5
South Ogden	15.8
West Valley West	15.8
Morgan/E Weber Co.	16.2
Sandy, SE	18.1
Tooele Co.	18.2
Sandy, NE	18.7
Sevier/Piute/Wayne Co.	19.2
West Orem	19.5
Murray	20.5
South Salt Lake	20.7
Other Box Elder Co.	21.1
Downtown Ogden	21.6
Carbon/Emery Co.	21.8
Other Southwest Dist.	22.3
Brigham City	22.9
Other Washington Co.	25.2
Juab/Millard/Sanpete Co.	28.4
TriCounty LHD	35.9
Grand/San Juan Co.	44.9

\* Age adjusted # of deaths per 100,000.

# Motor Vehicle Traffic Crash Deaths

Age-adjusted Motor Vehicle Traffic Crash Death Rates per 100,000 by Small Area, Utah, 2000-2002



Source: Utah Death Certificate Database

# Motor Vehicle Traffic Crash Deaths

## Motor Vehicle Traffic Crash Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	Motor Vehicle Deaths per 100,000 Population			
			Average Annual Number of Events	Crude Rates	Age Adjusted Rates*	
					Lower	Upper
	State Total	2,288,068	299	13.1	13.7	( 12.8 - 14.7 )
57	Brigham City	21,306	4	20.3	22.9	( 12.1 - 39.5 )
53	Other Box Elder Co.	21,957	5	22.8	21.1	( 11.5 - 35.4 )
33	Logan	59,888	7	11.1	13.5	( 7.8 - 21.8 )
27	Other Cache/Rich Co.	35,646	4	11.2	12.3	( 6.0 - 22.3 )
41	Ben Lomond	44,855	7	15.6	15.1	( 9.3 - 23.3 )
45	Morgan/East Weber Co.	33,182	5	15.1	16.2	( 8.8 - 27.2 )
54	Downtown Ogden	28,047	5	19.0	21.6	( 12.1 - 35.6 )
43	South Ogden	34,593	5	14.5	15.8	( 8.7 - 26.2 )
38	Roy/Hooper	40,599	5	12.3	14.8	( 7.9 - 25.2 )
22	Riverdale	25,265	3	10.6	10.7	( 4.5 - 21.3 )
24	Clearfield/Hill AFB	52,461	5	10.2	11.0	( 5.9 - 18.8 )
29	Layton	63,293	7	10.5	12.5	( 7.3 - 19.9 )
17	Syracuse/Kaysville	37,140	3	9.0	9.4	( 4.3 - 17.7 )
19	Farmington/Centerville	27,882	2	7.2	9.7	( 2.2 - 27.1 )
9	Woods Cross/North SL	19,359	1	6.9	6.9	( 1.8 - 17.9 )
14	Bountiful	44,886	4	8.2	8.0	( 3.9 - 14.6 )
38	Rose Park	32,358	4	13.4	14.8	( 7.6 - 26.0 )
16	Avenues	21,926	2	9.1	8.9	( 3.2 - 19.6 )
8	Foothill/U of U	23,221	2	7.2	6.8	( 2.1 - 16.4 )
2	Magna	23,294	1	4.3	4.8	( 0.8 - 15.2 )
20	Glendale	26,554	2	8.8	9.8	( 3.7 - 21.0 )
43	West Valley West	66,932	9	13.9	15.8	( 10.2 - 23.4 )
30	West Valley East	48,584	6	11.7	12.8	( 7.2 - 21.1 )
40	Downtown Salt Lake	50,533	6	12.5	14.9	( 8.5 - 24.3 )
52	South Salt Lake	24,556	4	17.6	20.7	( 10.8 - 35.9 )
20	Millcreek	57,224	6	10.5	9.8	( 5.7 - 15.6 )
10	Holladay	44,846	3	6.7	7.4	( 3.3 - 14.1 )
6	Cottonwood	43,519	3	6.1	6.4	( 2.7 - 12.8 )
32	Kearns	65,350	9	13.3	13.4	( 8.3 - 20.5 )
34	Taylorsville	38,109	5	13.1	13.8	( 7.4 - 23.3 )
51	Murray	30,930	7	22.6	20.5	( 12.6 - 31.4 )
35	Midvale	28,577	4	14.0	14.0	( 7.0 - 24.9 )
37	West Jordan No.	44,676	5	11.2	14.1	( 6.1 - 27.5 )
35	W. Jordan, Copperton	41,743	5	11.2	14.0	( 6.7 - 25.6 )
1	South Jordan	31,669	1	2.1	2.1	( 0.3 - 7.5 )
7	Sandy Center	51,861	3	6.4	6.5	( 3.0 - 12.1 )
48	Sandy, Northeast	25,148	4	17.2	18.7	( 9.2 - 33.8 )
46	Sandy, Southeast	30,588	4	13.1	18.1	( 8.1 - 34.8 )
11	Riverton/Draper	62,791	4	5.8	7.5	( 3.1 - 15.1 )
47	Tooele Co.	43,865	8	17.5	18.2	( 11.3 - 27.6 )
3	Lehi/Cedar Valley	26,424	2	6.3	5.4	( 1.8 - 12.6 )
13	American Fork/Alpine	39,620	3	7.6	7.6	( 3.3 - 14.8 )
18	Pleasant Grove/Lindon	37,851	3	7.9	9.6	( 3.6 - 20.7 )
42	North Orem	35,731	5	14.0	15.5	( 8.2 - 26.6 )
50	West Orem	29,543	4	14.7	19.5	( 9.6 - 35.2 )
4	East Orem	22,141	1	6.0	6.0	( 1.5 - 15.8 )
23	Provo/BYU	48,704	5	10.3	10.9	( 5.3 - 20.0 )
14	Provo South	57,318	4	6.4	8.0	( 3.0 - 17.1 )
31	Springville/Spanish Fork	59,202	6	10.7	13.0	( 7.7 - 20.7 )
25	Utah Co. South	26,387	3	11.4	11.1	( 4.9 - 21.5 )
26	Summit Co.	31,104	4	12.9	12.0	( 6.2 - 21.0 )
11	Wasatch Co.	15,995	1	8.3	7.5	( 2.0 - 19.3 )
60	TriCounty LHD	41,453	14	33.8	35.9	( 25.6 - 48.9 )
59	Juab/Millard/Sanpete Co.	44,288	13	28.6	28.4	( 19.9 - 39.4 )
49	Sevier/Piute/Wayne Co.	23,040	4	18.8	19.2	( 10.1 - 33.2 )
55	Carbon/Emery Co.	30,716	7	22.8	21.8	( 13.4 - 33.5 )
61	Grand/San Juan Co.	22,714	9	41.1	44.9	( 29.7 - 65.2 )
4	St. George	53,715	3	6.2	6.0	( 2.7 - 11.3 )
58	Other Washington Co.	41,445	10	24.9	25.2	( 17.0 - 36.1 )
28	Cedar City	29,612	3	9.0	12.4	( 4.9 - 25.9 )
56	Other Southwest Dist.	21,854	5	24.4	22.3	( 12.7 - 36.4 )

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

ICD-10 codes: see Appendix A

Source: Utah Death Certificate Database

# Homicide

**Definition:** Number of homicide deaths per 100,000 population (age-adjusted).

**Healthy People 2010 Objective 15-32:** Homicides (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 3.0
- State-specific Target: 2.0

## Why Is It Important?

Homicide is considered by experts to be a reliable barometer of violent crime and, at a national level, no other crime is measured as accurately and precisely.<sup>2</sup> Males are most often the victims and the perpetrators in homicides; males were 10 times more likely than females to commit murder.<sup>2</sup> Most homicides are committed with firearms, occur during an argument, and occur among people who are acquainted. There were, on average, 57 homicides among Utah residents each of the past four years (1999-2002). Overall, the U.S. has experienced a steady decline in homicide rates since 1991, while Utah rates have remained fairly consistent, aside from occasional, likely random, variation. Preventing homicide requires a community effort, including measures such as reducing gang activity, teaching conflict resolution in schools and to adults, and ensuring that firearms are stored and handled appropriately.

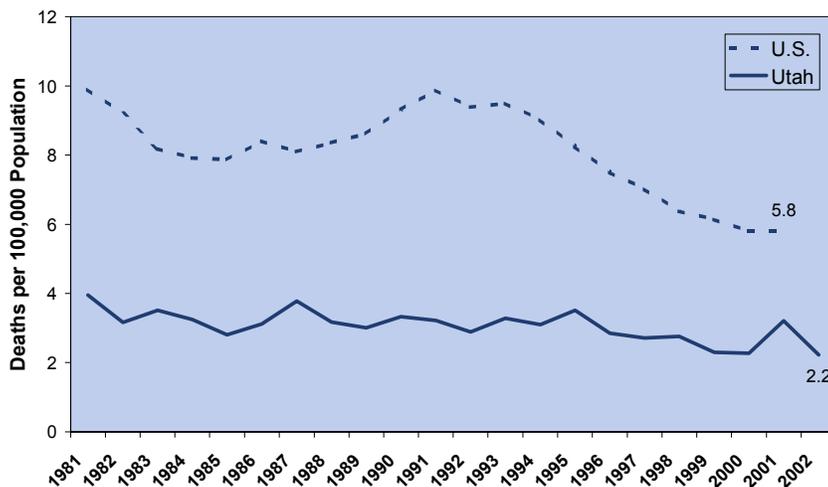
## Risk Factors for Homicide

National research has identified a variety of factors that contribute to homicide: beliefs supportive of violence; social cognitive deficits; poor monitoring and supervision of children; exposure to violence; parental drug/alcohol abuse; adolescent drug/alcohol abuse; association with peers engaged in high-risk behavior; poverty and low economic opportunity; and high levels of family disruption. Similar factors have been determined to exist and influence violence among Utah children and youth.

Homicide Ranking, 1999-2002	Rate*
Summit	0.0
Davis	1.0
Bear River	1.1
Central	1.2
Utah	1.4
Southwest	1.4
Wasatch	3.0
Salt Lake	3.3
Southeastern	3.5
Weber-Morgan	4.3
Tooele	4.4
TriCounty	4.6

\* Age adjusted # of deaths per 100,000.

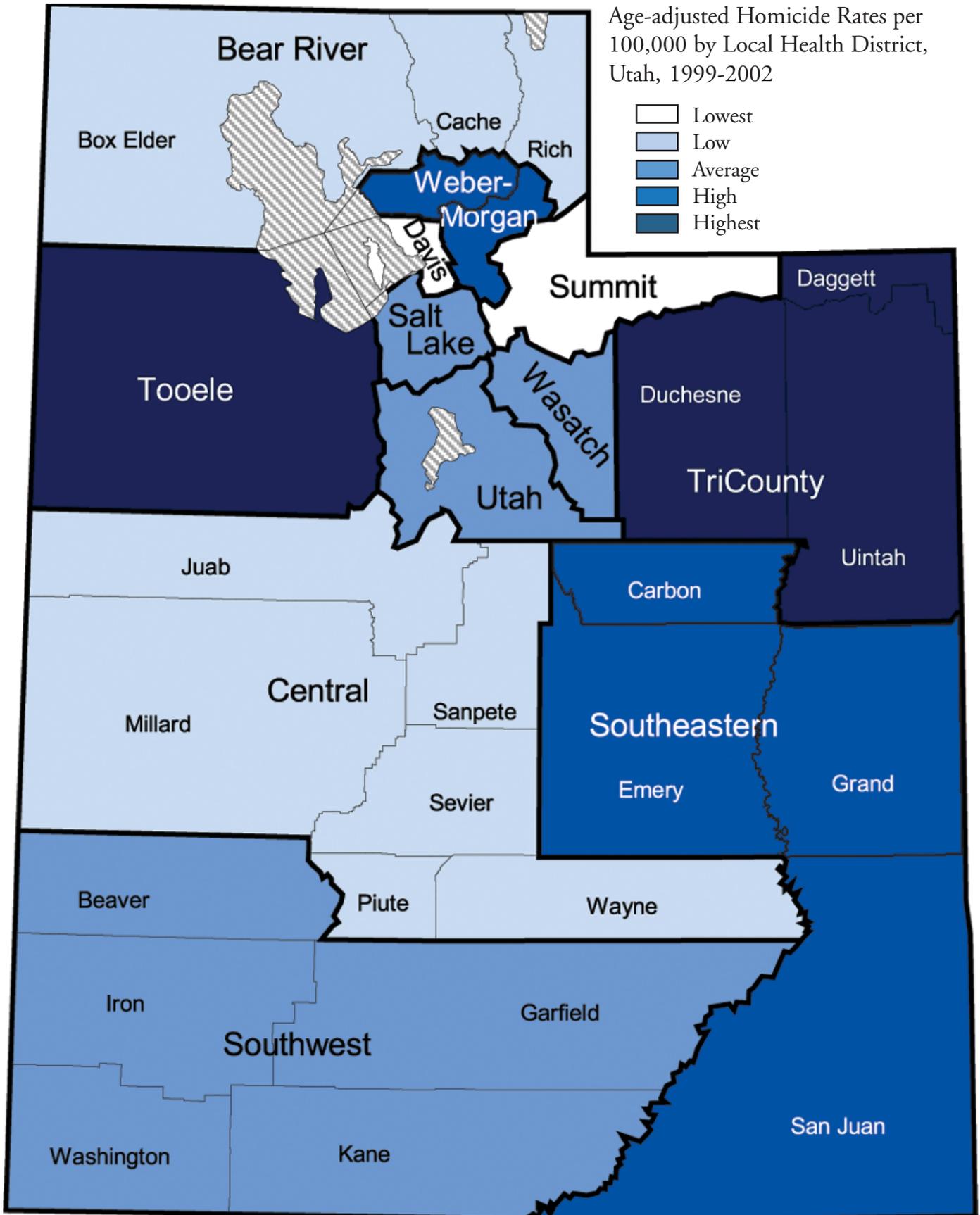
Homicide Rates, Utah and U.S., 1981-2002



Sources: Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; Utah Governor's Office of Planning and Budget; National Vital Statistics System, National Center for Health Statistics, U.S. Centers for Disease Control and Prevention

Note: Data are age adjusted to the U.S. 2000 standard population; ICD-9 codes E960-E969; ICD-10 codes X85-Y09, Y87.1.

The CDC has developed a National Violent Death Reporting System (NVDRS) to link records from violent deaths. This system collects data from death certificates and police, medical examiner, and coroner reports. Together, these sources provide the who, what, where, when, why, and how of violent incidents and should offer insight for community and programmatic intervention.



Source: Utah Death Certificate Database

## Homicides by Local Health District Utah, 1999-2002

Rank	Area of Residence	Average Population	Homicides per 100,000 Population			
			Average Annual Number of Events	Crude Rates	Age Adjusted Rates*	
					95% Confidence Interval Lower	Upper
	State Total	2,264,308	57	2.5	2.5	( 2.2 - 2.9 )
3	Bear River	137,663	2	1.3	1.1	( 0.4 - 2.4 )
4	Central	66,809	1	1.1	1.2	( 0.3 - 3.6 )
2	Davis	242,603	3	1.2	1.0	( 0.5 - 1.8 )
8	Salt Lake	907,550	31	3.4	3.3	( 2.7 - 3.9 )
9	Southeastern	53,697	2	3.7	3.5	( 1.5 - 7.0 )
5	Southwest	144,384	2	1.0	1.4	( 0.5 - 3.1 )
1	Summit	30,527	0	0.0	0.0	( . - . )
11	Tooele	42,471	2	4.1	4.4	( 1.7 - 9.2 )
12	TriCounty	41,135	2	4.9	4.6	( 2.0 - 9.3 )
5	Utah	376,809	5	1.2	1.4	( 0.8 - 2.2 )
7	Wasatch	15,636	1	3.2	3.0	( 0.3 - 10.9 )
10	Weber-Morgan	205,024	9	4.4	4.3	( 3.0 - 6.0 )

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

ICD-10 codes: X85-Y09, and Y87.1.

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

Source: Utah Death Certificate Database

# Unintentional Injury Deaths

**Definition:** Number of unintentional injury deaths per 100,000 population (age-adjusted).

**Healthy People 2010 Objective 15-13:** Deaths from unintentional injuries - (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 17.5
- State-specific Target: 30.0

## Why Is It Important?

In Utah, unintentional injuries are the leading cause of death and disability for all residents aged 1-44, and the third leading cause of death for those aged 45-54. Each year, an average of 650 Utahns die from unintentional injuries and another 9,000 are hospitalized. Injuries also account for more than 180,000 Utah emergency department visits annually.

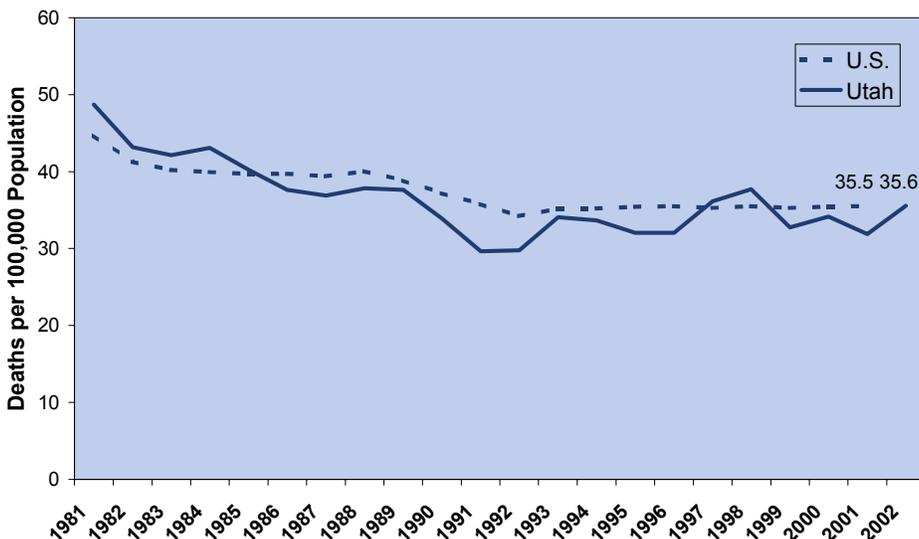
## Risk Factors for Unintentional Injuries

Utah's high-priority injury prevention areas include: motor vehicle crash injury, including crashes involving bicycles and pedestrians, and fall-related injury. Other areas of focus include drowning, which is the second leading cause of injury death for Utah children, as well as poisoning, suffocation, ATV crashes, burns, and firearm injuries.

The vast majority of injuries can be prevented by choosing safe behaviors, using safety equipment like car seats and motorcycle and bike helmets, and obeying safety laws.

Unintentional Injury Death Ranking, 2000-2002	Rate*
Woods Cross/No. SL	15.2
Sandy Center	20.8
Provo South	21.3
Taylorsville	22.8
Avenues	23.0
Bountiful	23.1
Magna	24.0
St. George	24.3
Foothill/U of U	24.3
South Jordan	24.6
Lehi/Cedar Valley	25.3
North Orem	25.6
Roy/Hooper	26.3
West Valley East	26.6
Layton	26.6
Riverdale	26.7
East Orem	27.3
Holladay	27.8
Utah Co. South	27.8
Syracuse/Kaysville	27.9
American Fork/Alpine	28.2
W. Jordan, Copperton	28.4
Millcreek	28.7
Other Cache/Rich Co.	29.1
Farmington/Centerville	29.2
Morgan/E Weber Co.	29.6
South Ogden	29.9
Springville/Spanish Fork	30.6
Cottonwood	30.7
Summit Co.	30.8
Clearfield/Hill AFB	30.8
Provo/BYU	32.1
Logan	32.8
Pleasant Grove/Lindon	33.2
West Jordan No.	33.9
Ben Lomond	34.0
Riverton/Draper	35.3
West Orem	36.9
Kearns	37.5
Wasatch Co.	37.7
Sandy, NE	37.9
Murray	39.5
West Valley West	39.8
Cedar City	40.1
Downtown Salt Lake	41.1
Sevier/Piute/Wayne Co.	42.1
Sandy, SE	43.4
Other Box Elder Co.	44.0
Glendale	45.3
Downtown Ogden	45.5
Brigham City	45.8
Tooele Co.	46.4
Midvale	46.9
Other Southwest Dist.	47.9
South Salt Lake	48.8
Carbon/Emery Co.	49.9
Rose Park	50.8
Other Washington Co.	55.8
Juab/Millard/Sanpete Co.	61.4
Grand/San Juan Co.	63.2
TriCounty LHD	73.8

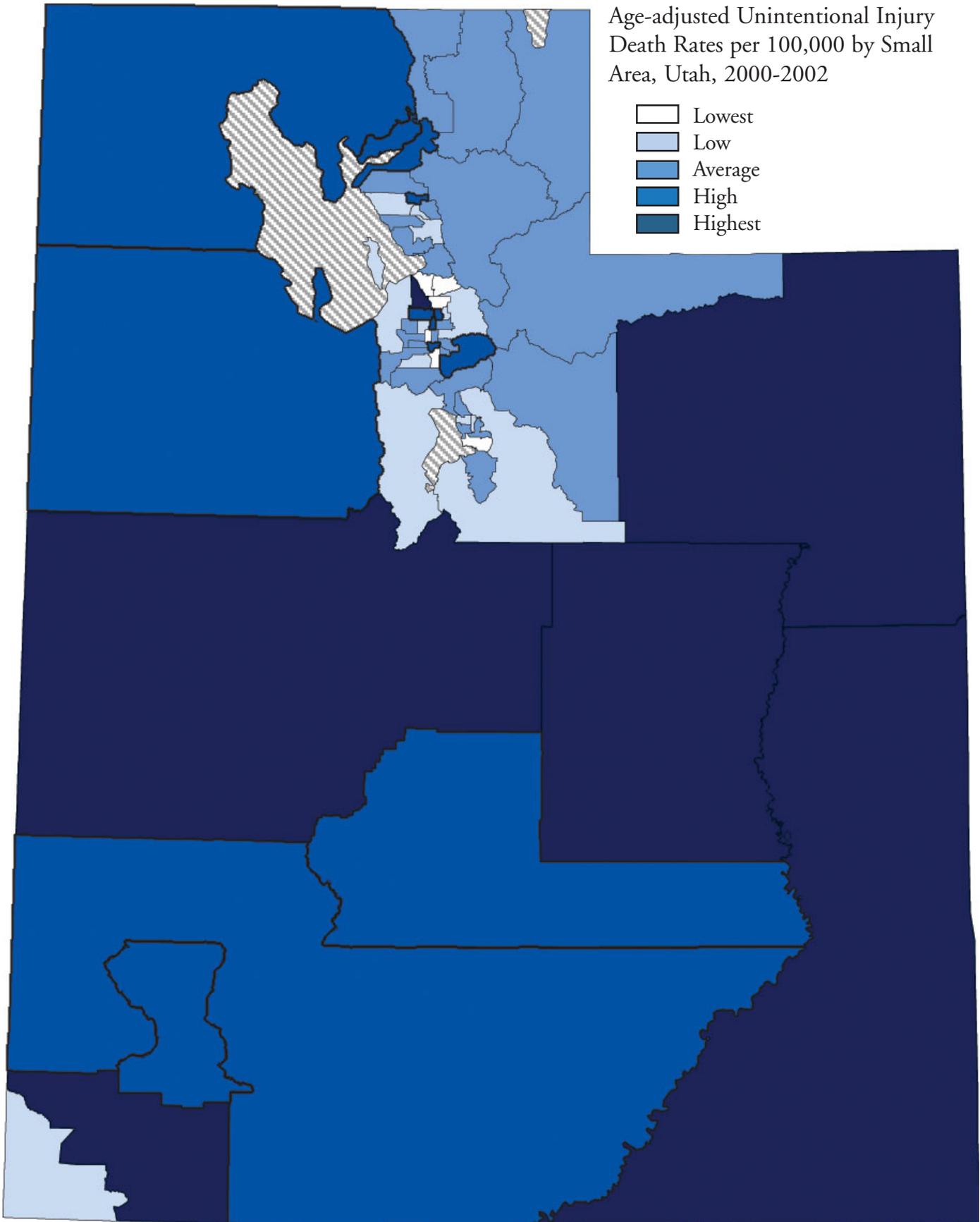
Unintentional Injury Death Rates, Utah and U.S., 1981-2002



Sources: Office of Vital Records and Statistics, Utah Department of Health; Utah Governor's Office of Planning and Budget; U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER  
 Note: Age adjusted to U.S. 2000 standard population; ICD-9 codes E800-E869, E880-E929; ICD-10 codes V01-X59, Y85-Y86.

\* Age adjusted # of deaths per 100,000.

# Unintentional Injury Deaths



Source: Utah Death Certificate Database

# Unintentional Injury Deaths

## Unintentional Injury Deaths by Small Area Utah, 2000-2002

Rank	Area of Residence	Average Population	Unintentional Injury Deaths per 100,000 Population			
			Average Annual Number of Events		Age Adjusted Rates*	
			Crude Rates		95% Confidence Interval	
					Lower	Upper
	State Total	2,288,068	664	29.0	33.9	( 32.3 - 35.4 )
51	Brigham City	21,306	9	40.7	45.8	( 29.8 - 67.4 )
48	Other Box Elder Co.	21,957	9	41.0	44.0	( 28.4 - 64.9 )
33	Logan	59,888	15	25.0	32.8	( 23.3 - 44.9 )
24	Other Cache/Rich Co.	35,646	9	26.2	29.1	( 18.8 - 43.0 )
36	Ben Lomond	44,855	14	32.0	34.0	( 24.4 - 46.0 )
26	Morgan/East Weber Co.	33,182	8	24.1	29.6	( 18.5 - 45.1 )
50	Downtown Ogden	28,047	11	39.2	45.5	( 30.9 - 64.6 )
27	South Ogden	34,593	10	29.9	29.9	( 20.2 - 42.8 )
13	Roy/Hooper	40,599	8	19.7	26.3	( 16.4 - 39.9 )
16	Riverdale	25,265	6	25.1	26.7	( 16.0 - 42.0 )
30	Clearfield/Hill AFB	52,461	12	23.5	30.8	( 20.6 - 44.4 )
14	Layton	63,293	13	20.5	26.6	( 18.3 - 37.5 )
20	Syracuse/Kaysville	37,140	8	20.6	27.9	( 16.8 - 43.7 )
25	Farmington/Centerville	27,882	6	22.7	29.2	( 15.0 - 51.3 )
1	Woods Cross/North SL	19,359	3	15.5	15.2	( 6.9 - 29.2 )
6	Bountiful	44,886	11	23.8	23.1	( 15.7 - 32.7 )
57	Rose Park	32,358	12	36.1	50.8	( 34.2 - 72.5 )
5	Avenues	21,926	5	22.8	23.0	( 12.7 - 38.1 )
8	Foothill/U of U	23,221	6	27.3	24.3	( 14.4 - 38.5 )
7	Magna	23,294	5	20.0	24.0	( 12.4 - 41.8 )
49	Glendale	26,554	10	36.4	45.3	( 30.0 - 65.8 )
43	West Valley West	66,932	16	24.4	39.8	( 27.1 - 56.3 )
14	West Valley East	48,584	10	21.3	26.6	( 17.3 - 39.0 )
45	Downtown Salt Lake	50,533	19	36.9	41.1	( 30.4 - 54.2 )
55	South Salt Lake	24,556	11	43.4	48.8	( 33.0 - 69.5 )
23	Millcreek	57,224	19	33.2	28.7	( 21.5 - 37.5 )
18	Holladay	44,846	14	30.5	27.8	( 19.7 - 38.1 )
29	Cottonwood	43,519	10	23.7	30.7	( 20.2 - 44.5 )
39	Kearns	65,350	17	25.5	37.5	( 24.9 - 54.2 )
4	Taylorsville	38,109	8	21.9	22.8	( 14.5 - 34.3 )
42	Murray	30,930	13	43.1	39.5	( 28.1 - 54.0 )
53	Midvale	28,577	10	35.0	46.9	( 30.6 - 68.9 )
35	West Jordan No.	44,676	11	24.6	33.9	( 20.5 - 52.8 )
22	W. Jordan, Copperton	41,743	8	18.4	28.4	( 15.7 - 47.2 )
10	South Jordan	31,669	4	13.7	24.6	( 11.8 - 45.1 )
2	Sandy Center	51,861	9	18.0	20.8	( 13.5 - 30.5 )
41	Sandy, Northeast	25,148	7	29.2	37.9	( 22.2 - 60.4 )
47	Sandy, Southeast	30,588	7	22.9	43.4	( 23.1 - 74.2 )
37	Riverton/Draper	62,791	11	18.0	35.3	( 21.2 - 55.1 )
52	Tooele Co.	43,865	16	37.2	46.4	( 33.4 - 62.8 )
11	Lehi/Cedar Valley	26,424	6	21.4	25.3	( 12.6 - 45.4 )
21	American Fork/Alpine	39,620	8	20.2	28.2	( 17.3 - 43.4 )
34	Pleasant Grove/Lindon	37,851	7	18.5	33.2	( 18.9 - 54.1 )
12	North Orem	35,731	8	23.3	25.6	( 16.1 - 38.8 )
38	West Orem	29,543	7	24.8	36.9	( 22.2 - 57.7 )
17	East Orem	22,141	5	21.1	27.3	( 14.1 - 47.5 )
32	Provo/BYU	48,704	12	25.3	32.1	( 21.8 - 45.7 )
3	Provo South	57,318	8	14.5	21.3	( 12.2 - 34.5 )
28	Springville/Spanish Fork	59,202	13	22.5	30.6	( 21.4 - 42.3 )
18	Utah Co. South	26,387	6	24.0	27.8	( 16.1 - 44.8 )
30	Summit Co.	31,104	8	25.7	30.8	( 18.3 - 48.6 )
40	Wasatch Co.	15,995	5	33.3	37.7	( 21.1 - 62.2 )
61	TriCounty LHD	41,453	28	66.7	73.8	( 58.4 - 92.0 )
59	Juab/Millard/Sanpete Co.	44,288	26	58.0	61.4	( 48.1 - 77.1 )
46	Sevier/Piute/Wayne Co.	23,040	10	42.0	42.1	( 28.1 - 60.8 )
56	Carbon/Emery Co.	30,716	15	48.8	49.9	( 36.2 - 67.1 )
60	Grand/San Juan Co.	22,714	13	55.8	63.2	( 44.5 - 87.0 )
8	St. George	53,715	14	26.7	24.3	( 17.2 - 33.3 )
58	Other Washington Co.	41,445	22	53.1	55.8	( 42.7 - 71.5 )
44	Cedar City	29,612	8	27.0	40.1	( 24.9 - 61.3 )
54	Other Southwest Dist.	21,854	11	50.3	47.9	( 32.8 - 67.5 )

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

ICD-10 codes: V01-X59, and Y85-Y86.

Source: Utah Death Certificate Database