

# Suicide

**Definition:** Number of deaths due to intentional self-inflicted injury per 100,000 population (age-adjusted).

**Healthy People 2010 Objective 18-1:** Suicide (age-adjusted per 100,000 standard population)

- U.S. Target for 2010: 5.0
- State-specific Target: none listed

## Why Is It Important?

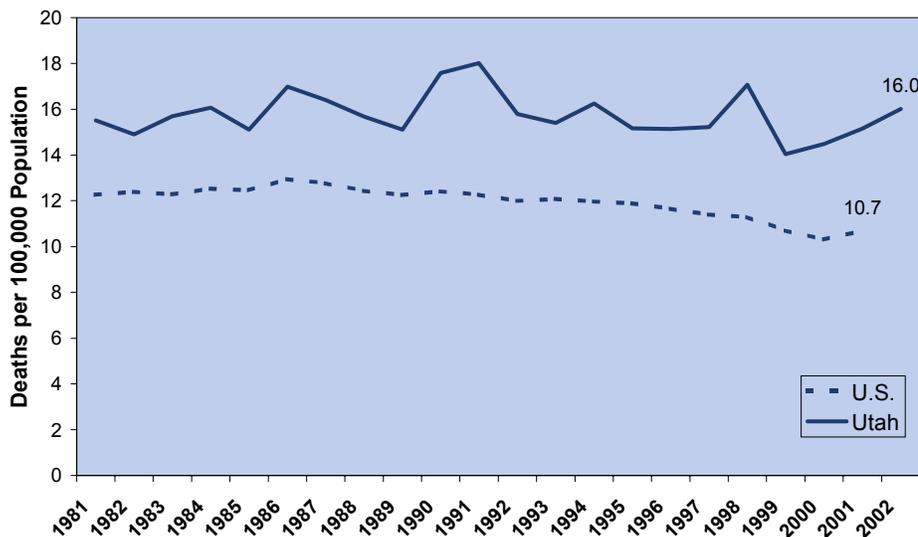
Suicide in Utah accounts for nearly as many deaths as motor vehicle crashes and Utah's rate is 10th highest in the nation. More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease combined.<sup>3</sup> Between the years 1999 and 2002, 1,228 Utahns committed suicide, making it the second leading cause of injury death for Utahns aged 10-34, and the third leading cause of death among those aged 35-44.

## Risk Factors for Suicide

Many conditions and stressors may be related to suicide. The most common risk factors for suicide are:

- undiagnosed and untreated mental health conditions (depression, anxiety, etc.)
- behavioral problems
- impulsivity
- low self-esteem
- substance use and abuse
- contact with Juvenile Court (for youth)

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

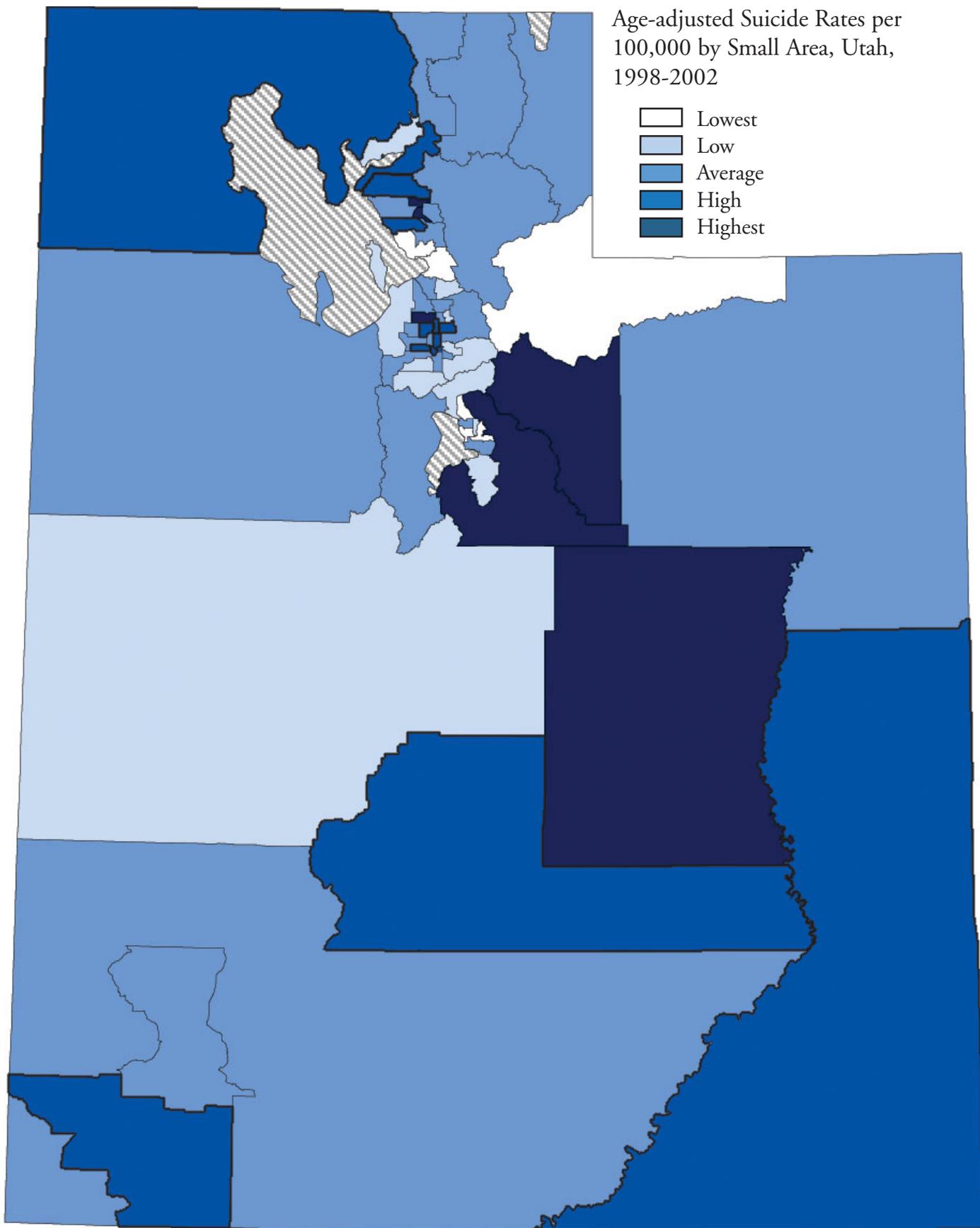


Sources: Population Estimates: Utah Governor's Office of Planning and Budget; Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health; U.S. Centers for Disease Control and Prevention, on-line data - CDC WONDER

Note: Age adjusted to U.S. 2000 population; ICD-9 codes E950-E959, ICD-10 codes X60-X84, Y87.0.

Suicide Ranking, 1998-2002	Rate*
Pleasant Grove/Lindon	6.7
West Orem	6.9
Syracuse/Kaysville	7.2
Farmington/Centerville	7.4
Summit Co.	7.4
Provo/BYU	7.7
American Fork/Alpine	8.6
Foothill/U of U	8.6
Riverton/Draper	8.9
East Orem	10.0
Sandy, SE	10.5
Brigham City	10.9
South Jordan	11.3
Magna	11.4
Bountiful	11.5
Springville/Spanish Fork	11.6
Cottonwood	12.0
Juab/Millard/Sanpete Co.	12.7
Avenues	13.2
Taylorsville	13.3
W. Jordan, Copperton	13.5
North Orem	13.6
Sandy Center	13.8
West Valley West	13.9
Sandy, NE	14.4
Other Cache/Rich Co.	14.4
Other Southwest Dist.	14.6
Lehi/Cedar Valley	14.8
Logan	15.4
Woods Cross/No. SL	15.5
Roy/Hooper	15.5
South Ogden	15.7
Kearns	16.1
Holladay	16.2
Tooele Co.	16.6
Provo South	16.8
Morgan/E Weber Co.	16.8
Cedar City	16.9
Layton	17.3
St. George	17.8
Downtown Salt Lake	18.1
TriCounty LHD	18.2
Rose Park	18.5
Murray	18.6
West Valley East	18.7
Millcreek	19.1
Grand/San Juan Co.	19.1
Other Washington Co.	19.3
Midvale	19.4
Sevier/Piute/Wayne Co.	19.5
Clearfield/Hill AFB	20.5
Ben Lomond	20.6
West Jordan No.	20.9
South Salt Lake	21.5
Other Box Elder Co.	23.0
Wasatch Co.	23.6
Riverdale	23.9
Utah Co. South	24.5
Carbon/Emery Co.	24.9
Downtown Ogden	25.0
Glendale	26.0

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



Source: Utah Death Certificate Database

## Suicides by Small Area Utah, 1998-2002

Rank	Area of Residence	Average Population	Suicides per 100,000 Population			
			Average Annual Number of Events	Crude Rates	Age Adjusted Rates*	
					Lower	Upper
	State Total	2,239,772	312	13.9	15.3	( 14.5 - 16.1 )
12	Brigham City	20,973	2	10.5	10.9	( 5.4 - 19.7 )
55	Other Box Elder Co.	21,768	4	20.2	23.0	( 14.2 - 35.1 )
29	Logan	58,612	7	11.2	15.4	( 10.3 - 22.2 )
25	Other Cache/Rich Co.	35,122	4	11.9	14.4	( 8.8 - 22.4 )
52	Ben Lomond	44,207	8	18.5	20.6	( 14.7 - 28.0 )
36	Morgan/East Weber Co.	32,580	5	14.7	16.8	( 10.5 - 25.4 )
60	Downtown Ogden	27,559	6	22.5	25.0	( 16.8 - 35.9 )
32	South Ogden	34,189	5	15.2	15.7	( 10.1 - 23.2 )
30	Roy/Hooper	40,013	5	13.5	15.5	( 10.1 - 22.8 )
57	Riverdale	24,760	5	21.8	23.9	( 15.6 - 35.0 )
51	Clearfield/Hill AFB	50,554	9	17.4	20.5	( 14.2 - 28.8 )
39	Layton	61,843	10	15.5	17.3	( 12.6 - 23.3 )
3	Syracuse/Kaysville	36,544	2	4.9	7.2	( 3.2 - 14.0 )
4	Farmington/Centerville	27,389	2	7.3	7.4	( 3.4 - 14.0 )
30	Woods Cross/North SL	19,006	3	13.7	15.5	( 7.7 - 28.0 )
15	Bountiful	44,640	5	11.2	11.5	( 7.4 - 17.1 )
43	Rose Park	31,642	5	14.5	18.5	( 11.6 - 27.9 )
19	Avenues	21,842	3	14.6	13.2	( 7.4 - 21.7 )
7	Foothill/U of U	23,001	2	8.7	8.6	( 4.1 - 16.1 )
14	Magna	22,889	3	11.3	11.4	( 5.8 - 20.0 )
61	Glendale	25,949	5	20.8	26.0	( 16.8 - 38.3 )
24	West Valley West	65,856	9	13.1	13.9	( 9.9 - 18.9 )
45	West Valley East	47,704	8	16.8	18.7	( 12.9 - 26.1 )
41	Downtown Salt Lake	49,971	9	18.4	18.1	( 13.0 - 24.5 )
54	South Salt Lake	24,332	5	21.3	21.5	( 13.9 - 32.0 )
46	Millcreek	57,133	11	18.9	19.1	( 14.3 - 25.1 )
34	Holladay	44,872	7	15.1	16.2	( 11.1 - 22.7 )
17	Cottonwood	43,398	5	11.5	12.0	( 7.6 - 17.9 )
33	Kearns	64,776	10	14.8	16.1	( 11.6 - 21.8 )
20	Taylorsville	37,204	5	14.5	13.3	( 8.6 - 19.6 )
44	Murray	30,729	6	18.9	18.6	( 12.4 - 27.0 )
49	Midvale	28,185	5	18.4	19.4	( 12.4 - 29.0 )
53	West Jordan No.	44,042	7	16.8	20.9	( 13.4 - 30.9 )
21	W. Jordan, Copperton	39,842	5	13.0	13.5	( 8.5 - 20.4 )
13	South Jordan	30,036	3	9.3	11.3	( 5.8 - 19.9 )
23	Sandy Center	51,538	6	12.4	13.8	( 9.3 - 19.8 )
25	Sandy, Northeast	25,496	4	14.1	14.4	( 8.2 - 23.3 )
11	Sandy, Southeast	30,395	3	8.5	10.5	( 5.0 - 19.5 )
9	Riverton/Draper	59,351	4	6.4	8.9	( 4.7 - 15.4 )
35	Tooele Co.	41,071	7	16.1	16.6	( 11.3 - 23.5 )
28	Lehi/Cedar Valley	25,022	4	14.4	14.8	( 8.3 - 24.4 )
7	American Fork/Alpine	38,276	3	7.3	8.6	( 4.6 - 14.7 )
1	Pleasant Grove/Lindon	36,170	3	7.2	6.7	( 3.5 - 11.5 )
22	North Orem	35,898	4	10.6	13.6	( 8.0 - 21.5 )
2	West Orem	28,223	2	7.1	6.9	( 3.0 - 13.5 )
10	East Orem	21,174	2	8.5	10.0	( 4.5 - 19.4 )
6	Provo/BYU	47,751	3	5.9	7.7	( 3.8 - 13.9 )
36	Provo South	55,477	6	11.2	16.8	( 10.2 - 26.0 )
16	Springville/Spanish Fork	56,839	6	10.2	11.6	( 7.6 - 17.0 )
58	Utah Co. South	25,580	5	18.7	24.5	( 15.4 - 36.9 )
4	Summit Co.	29,956	2	6.7	7.4	( 3.1 - 14.9 )
56	Wasatch Co.	15,335	3	22.2	23.6	( 13.7 - 38.0 )
42	TriCounty LHD	40,752	7	16.7	18.2	( 12.5 - 25.5 )
18	Juab/Millard/Sanpete Co.	43,644	5	11.0	12.7	( 8.1 - 19.0 )
50	Sevier/Piute/Wayne Co.	22,737	4	18.4	19.5	( 12.0 - 29.9 )
59	Carbon/Emery Co.	31,100	7	22.5	24.9	( 17.2 - 34.7 )
46	Grand/San Juan Co.	22,804	4	16.6	19.1	( 11.5 - 30.0 )
40	St. George	52,165	8	15.7	17.8	( 12.7 - 24.5 )
48	Other Washington Co.	39,468	7	17.7	19.3	( 13.4 - 27.0 )
38	Cedar City	28,794	4	14.6	16.9	( 10.1 - 26.5 )
27	Other Southwest Dist.	21,592	3	13.9	14.6	( 8.1 - 24.3 )

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

ICD-9 codes: E950-E959; ICD-10 codes: X60-X84, and Y87.0. ICD-9 and ICD-10 adjusted for comparability.

Source: Utah Death Certificate Database

**Definition:** Percentage of adults aged 18 years and older who reported seven or more days when their mental health was not good in the past 30 days.

Similar to Healthy People 2010 Objective 18-9b: Increase the proportion of adults with mental disorders who receive treatment - Adults ages 18 to 54 years with serious mental illness.

### Why Is It Important?

Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Untreated mental health problems cause decreased productivity and impair social relationships. Parents with mental health problems may inadvertently cause problems for their children through impaired social relationships. Some persons abuse drugs or alcohol as an attempt to "self medicate" the emotional pain of a mental health problem. Unfortunately, the stigma of a mental health problem causes many individuals to go without treatment. It is estimated that fewer than 30% of Utahns with poor mental health seek treatment.<sup>4</sup>

Poor Mental Health Days Ranking, 2001-2003	Percent*
Summit	11.1%
Bear River	12.3%
Davis	12.5%
Wasatch	12.9%
Utah	13.4%
Weber-Morgan	14.0%
Salt Lake	15.4%
Southeastern	16.2%
Tooele	16.2%
Central	17.4%
TriCounty	17.5%
Southwest	18.5%

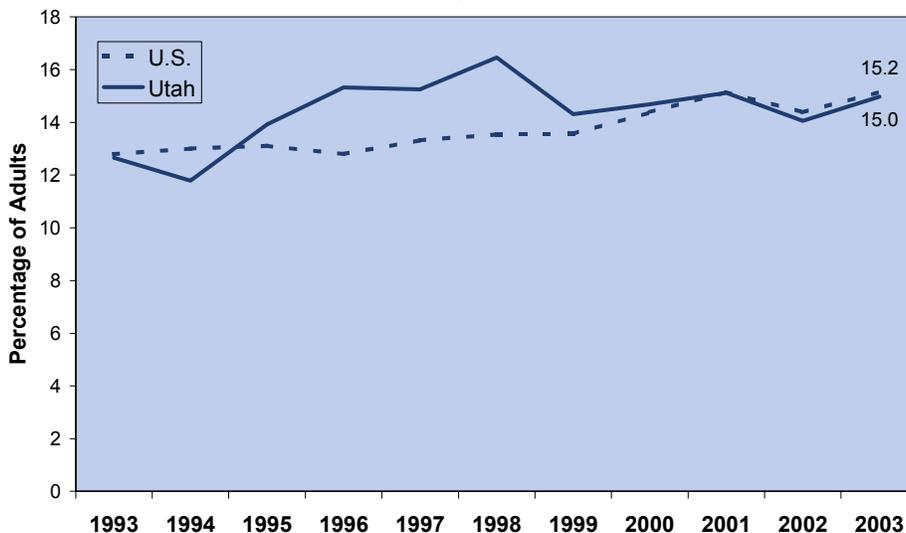
\* Age adjusted percentages.

### Risk Factors for Poor Mental Health Days

Mental health and mental disorders can be influenced by numerous conditions including biologic and genetic vulnerabilities, acute or chronic physical dysfunction, and environmental conditions and stresses. Young adults, aged 18-24, are most likely to report seven or more days of poor mental health in the past month, as are females, and those with lower incomes and educational attainment.

Mental health problems are associated with lower income and education levels. It is likely that mental health problems are as much a cause of low income and education level as they are a result of them.

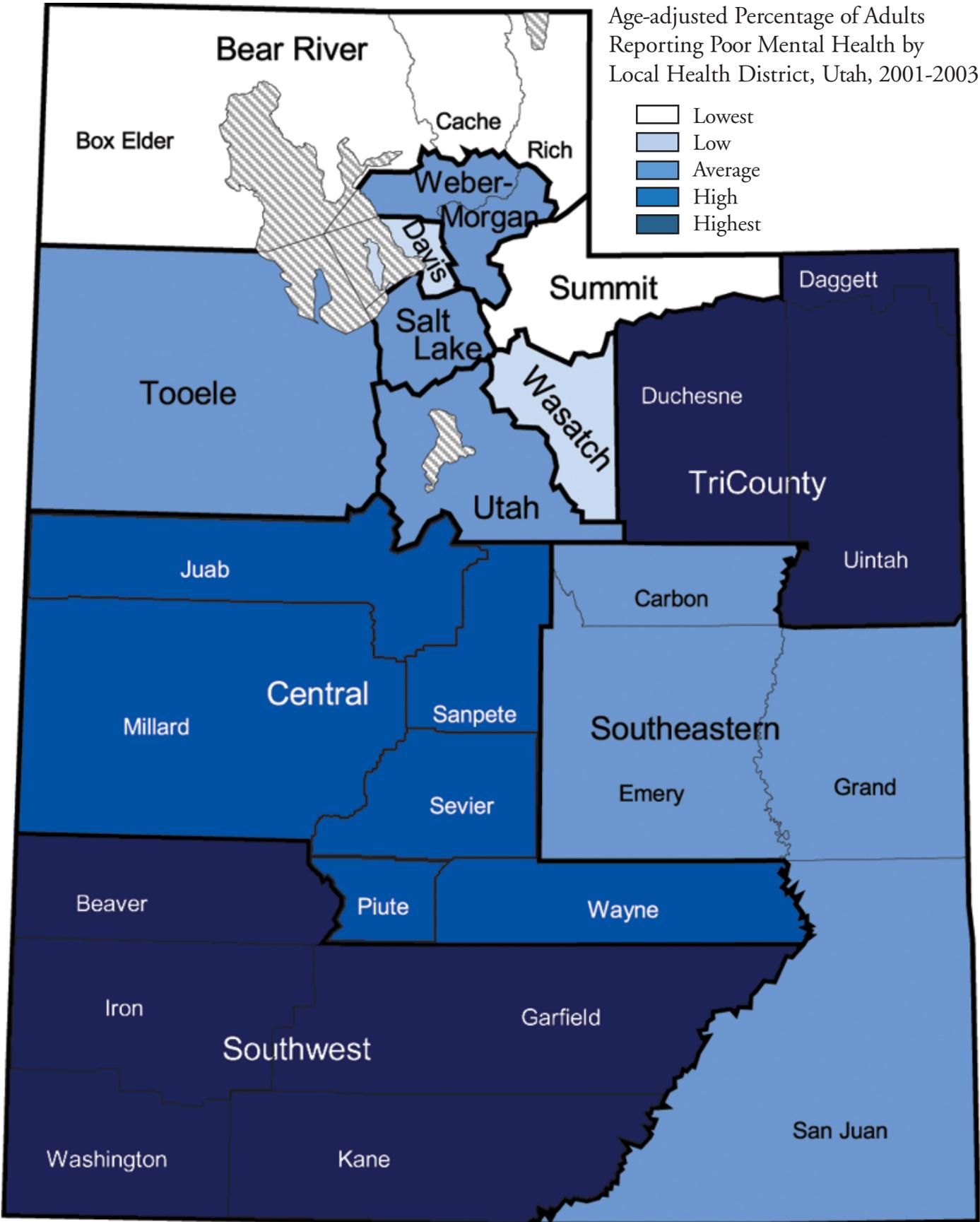
Percentage of Adults Who Reported 7+ Days Mental Health Not Good in the Past 30 Days, Utah and U.S., 1993-2003



Sources: Utah Data: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health; U.S. Data: National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS)  
 Note: Age adjusted to U.S. 2000 population. U.S. data are the average for all states and the District of Columbia but do not include the U.S. territories. In 2002, the U.S. data includes only 22 states that asked the question.

# Poor Mental Health Days

Age-adjusted Percentage of Adults Reporting Poor Mental Health by Local Health District, Utah, 2001-2003



Source: Utah Behavioral Risk Factor Surveillance System

## Self-reported Poor Mental Health Days by Local Health District Utah Adults Ages 18 and Over, 2001-2003

Rank	Area of Residence	Average Adult Population (Ages 18+)	Percentage of Adults Ages 18+ Reporting 7 or More Days in Past 30 When Their Mental Health Was Not Good			
			Average Annual Number of Adults	Crude Rates	Age Adjusted Rates*	
					Lower	Upper
	State Total	1,588,190	244,192	15.4%	14.7%	( 13.9% - 15.6% )
2	Bear River	95,435	12,581	13.2%	12.3%	( 9.7% - 14.9% )
10	Central	45,566	7,886	17.3%	17.4%	( 14.4% - 20.4% )
3	Davis	164,964	22,189	13.5%	12.5%	( 10.0% - 15.1% )
7	Salt Lake	646,050	103,787	16.1%	15.4%	( 13.9% - 16.8% )
8	Southeastern	36,642	5,997	16.4%	16.2%	( 13.0% - 19.3% )
12	Southwest	104,390	18,722	17.9%	18.5%	( 15.3% - 21.7% )
1	Summit	22,982	2,456	10.7%	11.1%	( 8.1% - 14.1% )
8	Tooele	30,286	4,855	16.0%	16.2%	( 13.2% - 19.3% )
11	TriCounty	27,944	5,005	17.9%	17.5%	( 14.4% - 20.6% )
5	Utah	258,294	38,849	15.0%	13.4%	( 11.3% - 15.6% )
4	Wasatch	11,201	1,480	13.2%	12.9%	( 9.7% - 16.1% )
6	Weber-Morgan	144,437	20,370	14.1%	14.0%	( 11.2% - 16.8% )

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

Source: Utah Behavioral Risk Factor Surveillance System