

UTAH

BEHAVIORAL
RISK
FACTOR
SURVEILLANCE
SYSTEM

SMALL AREA REPORT, 2001–2005

OFFICE OF PUBLIC HEALTH ASSESSMENT
CENTER FOR HEALTH DATA
UTAH DEPARTMENT OF HEALTH

For more information contact:

Utah Department of Health
Office of Public Health Assessment
Center for Health Data
288 North 1460 West
Box 142101
Salt Lake City, Utah 84114-2101
Phone: (801) 538-9462
FAX: (801) 538-9346
Email: chdata@utah.gov

This report is also available on the Internet at:

<http://ibis.health.utah.gov/ophapubs.html>

UTAH

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

SMALL AREA REPORT, 2001–2005

OFFICE OF PUBLIC HEALTH ASSESSMENT
CENTER FOR HEALTH DATA
UTAH DEPARTMENT OF HEALTH

JUNE 2007

This report may be reproduced and distributed without permission.

Suggested citation:

Utah Department of Health Office of Public Health Assessment. (2007). *Utah Behavioral Risk Factor Surveillance System Small Area Report, 2001–2005*. Salt Lake City, UT: Utah Department of Health.

ACKNOWLEDGMENTS

This report was developed and prepared by the following individuals:

Utah Department of Health

Claudia Bohner, MPH, Epidemiologist, Tobacco Prevention and Control Program
Amy Bowler, BA, Epidemiologist, Utah Cancer Control Program
Richard Bullough, PhD, Manager, Diabetes Prevention and Control Program
Shandra Burnett, MS, Web Developer, Office of Public Health Assessment
Michael Friedrichs, MS, Epidemiologist, Bureau of Health Promotion
Lois M. Haggard, PhD, Director, Office of Public Health Assessment
Kathryn Marti, MPH, Research Consultant, Office of Public Health Assessment
Lynn M. Meinor, Manager, HIV Prevention Program
Kim Neerings, Research Analyst, Office of Public Health Assessment
Karen Nellist, MPH, Epidemiologist, Bureau of Health Promotion
Brenda Ralls, PhD, Epidemiologist, Diabetes Prevention and Control Program
Randy Tanner, MPA, Epidemiologist, Utah Arthritis Program
Shelly Wagstaff, BS, Epidemiologist, Bureau of Health Promotion
B. Ned Wilde, BS, Epidemiologist, Heart Disease and Stroke Prevention Program

This project was funded in part by the Centers for Disease Control and Prevention (CDC) through the Chronic Disease Prevention and Health Promotion Programs Cooperative Agreement U58/CCU822802-03 and the Preventive Health and Health Services Block Grant 93.991. The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

We would also like to acknowledge the members of the Utah Local Association of Community Health Education Specialists (ULACHES) for their participation in developing this report.

Appreciation is extended to our very capable Survey Center coordinator, Marilynn Startup, MPA, and competent survey supervisors, Ruben Robles and John Jennings.

We'd like to thank our BRFSS interviewers for their consistent superior effort:

Richard Anderson
Jennifer Baker
Susan Barney
Amy Dick
Lizeth Hernandez
Richard Kimley
Maria Lemus
Ruby Martinez
Cindy Mikkelson
Sonia Silva Santisteban

The Utah Department of Health would especially like to thank the citizens of Utah who so graciously took the time to participate in the Behavioral Risk Factor Surveillance System telephone survey. We wish you the best of health.

TABLE OF CONTENTS

	Page
Acknowledgments	ii
Table of Contents	iii
Introduction	v
Guide to This Report	vii
Utah BRFSS Measures Small Area Findings, 2001–2005	
Health Status	
1. Fair or Poor Health	2
2. Poor Physical Health	8
3. Poor Mental Health	14
4. Doctor-diagnosed Diabetes	20
5. Current Doctor-diagnosed Asthma	26
6. Doctor-diagnosed Arthritis	32
7. Doctor-diagnosed High Blood Pressure	38
8. Doctor-diagnosed High Cholesterol	44
9. Activity Limitation	50
Access to Health Care	
10. Health Care Coverage	56
11. Primary Care Provider	62
Screening	
12. HIV Testing	68
13. Sigmoidoscopy or Colonoscopy	74
Addictive or Abused Substances	
14. Current Cigarette Smoking	80
15. Binge Drinking	86
16. Chronic Drinking	92
Physical Activity and Nutrition	
17. Physical Inactivity	98
18. Recommended Physical Activity	104
19. Overweight or Obese	110
20. Obese	116
21. Two or More Fruits per Day	122
22. Three or More Vegetables per Day	128
Appendix A: Small Area BRFSS Summary Table	135
Appendix B: How Small Areas Were Designated	141
Appendix C: Small Area Definitions and Key Maps	145

TABLE OF CONTENTS

Appendix D: Small Area Demographic Summary Table	163
Appendix E: Demographic Characteristics by Small Area.....	171
Appendix F: Methodology.....	203
Appendix G: BRFSS Questions Used in This Report	209
References.....	223

INTRODUCTION

We are pleased to present the first Utah Behavioral Risk Factor Surveillance System (BRFSS) report with data summarized for each of Utah's 61 small areas. Utah Department of Health staff designated the small areas in 1997 in order to make important health data available at the community level where possible. Beginning in 2001, BRFSS sampling has been done with the specific goal of analyzing the BRFSS data by small area.

For this report we combined BRFSS data for years 2001–2005 in order to have an adequate number of completed interviews in each small area for reasonably precise estimates. Twenty-two individual BRFSS measures, for which there were sufficient data, are included in this report. In order to put the BRFSS data into context, we have included 24 health-related demographic variables by each small area.

The result is that there is an almost overwhelming amount of information in this report. Looking at 22 BRFSS measures and 24 demographic variables in 61 geographic areas has been a daunting task. We have tried to make this task as easy as possible by presenting the data in a variety of ways in order to serve a variety of purposes.

In the body of the report, *Utah BRFSS Measures Small Area Findings, 2001–2005*, each BRFSS measure summary includes information about the public health importance of that measure, the associated risk factors, the Healthy People 2010 or other Utah-specific objective when available, a list of resources, and the national, state, and small area prevalence rates. The small area data are presented in tables, bar graphs, and shaded maps. This section of the report affords a statewide view of the data for a single measure. The *Guide to This Report* provides a quick graphical reference to the information. Similarly, *Appendix E: Demographic Characteristics by Small Area*, provides a statewide view of each of the 24 demographic variables.

The *Small Area BRFSS Summary Table* in Appendix A and the *Small Area Demographic Summary Table* in Appendix D provide a compact visualization of all the BRFSS measures and demographic variables in each local health district and associated small areas, along with the U.S. and Utah rates. We used color shading to highlight where these rates were either substantially higher or lower than the Utah statewide rate. The tables include small area ranks from lowest to highest rate. For those interested in a particular local health district or small area, these tables provide a quick visual overview of all the BRFSS measures and demographic variables.

The *Small Area Definitions and Key Maps* in Appendix C are meant to help readers understand and visualize the small areas. This section starts with a list of the ZIP codes and/or counties included in each small area. The first two maps show the small areas statewide and in the Wasatch Front, respectively. Those are followed by separate maps of each health district that illustrate the small areas within them. Four of these maps are of an entire health district since those health districts have not been subdivided into small areas due to their small population.

We hope that the information in this report can be used to promote community involvement in the planning and implementation of public health interventions. Additionally, we hope that specific small area data will help make the case for targeting public health endeavors to the areas most in need in order to effect the greatest change.

Some background

The BRFSS was established by the Centers for Disease Control and Prevention (CDC) in 1984 with 14 participating states, including Utah. It was developed in order to collect uniform, state-specific data on preventive health practices and risk behaviors that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population. More information about the BRFSS is available in *Appendix F: Methodology* and online at www.cdc.gov/brfss.

Whereas the BRFSS was initially developed to make state-level estimates, from 1995 onward, the Utah BRFSS sample was stratified by local health district in order to produce estimates by health district. Starting in 2001,

INTRODUCTION

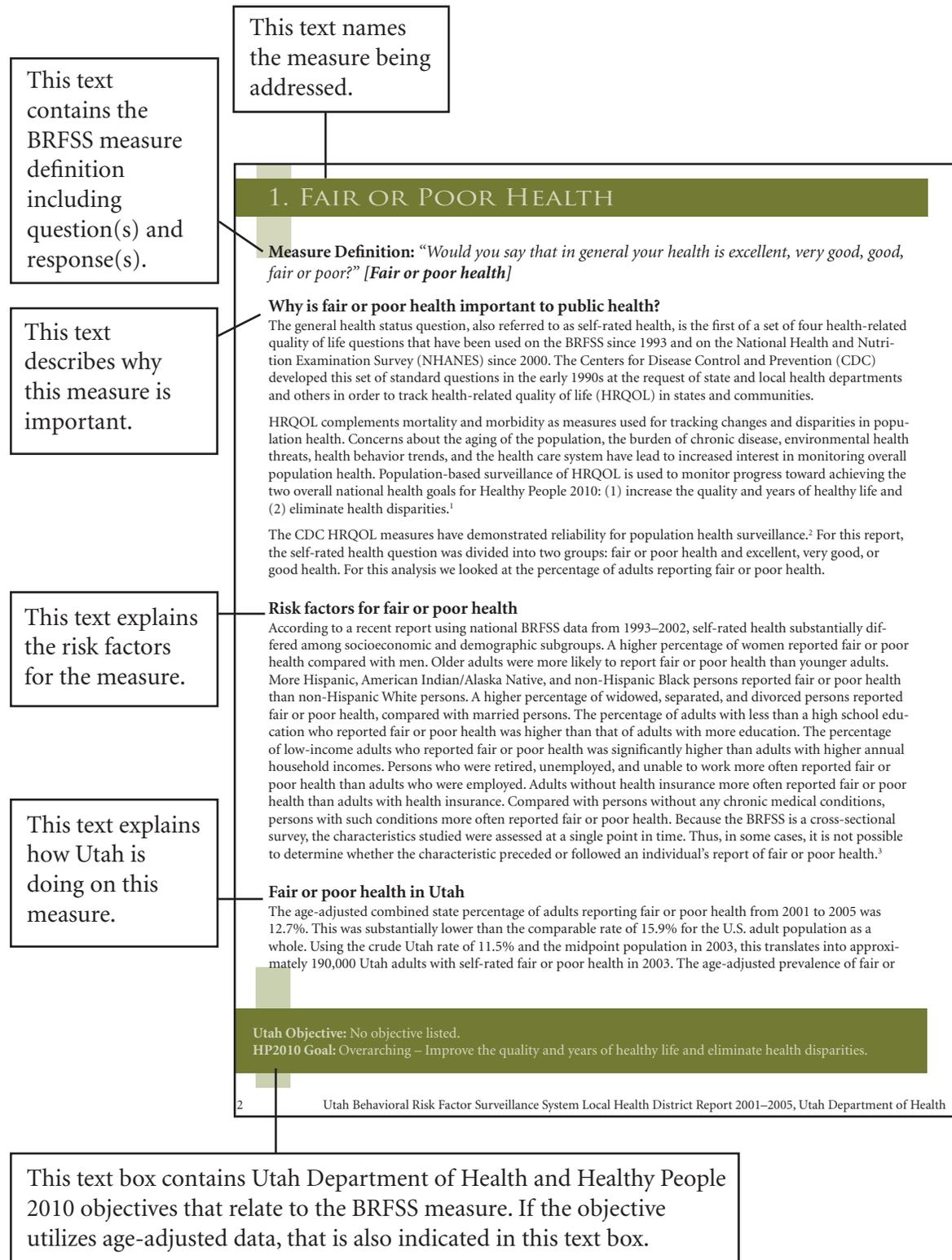
ZIP code has been asked on the BRFSS questionnaire in order to assign households to small areas. More information about Utah's BRFSS is available online at <http://ibis.health.utah.gov>.

Utah's 61 small areas were developed by the Utah Department of Health in 1997 in order to analyze health information at the community level. They were established to be of a certain population size and the exact geographic areas were determined using ZIP codes, singly or in combination, and in some cases entire counties are included within a small area. The geographic sizes vary widely, with the smallest small area consisting of a few square miles in Salt Lake County and the largest small area encompassing three frontier counties in northeastern Utah's TriCounty health district. All small areas are contained within a single health district and, in four cases, include an entire health district. When possible, areas conform to established political boundaries of cities and towns. We have discovered that some established community boundaries don't always correspond to the small areas developed for this analysis. ZIP codes were used to define the small areas because they are the smallest geographic unit that is widely available across most public health districts. However, it should be noted that ZIP codes were designed to facilitate mail delivery. Population size estimates are available from the U.S. Census Bureau, but there are some known issues with the precision of those estimates. More in-depth information about Utah's 61 small areas is included in *Appendix B: How Small Areas Were Designated*.

Finally, the exact wording of the questions and their responses for the years analyzed in this report are included in Appendix G.

GUIDE TO THIS REPORT

Six pages of the report are devoted to each measure. This guide outlines what is covered on each page.



1. FAIR OR POOR HEALTH

Fair or poor health in Utah (continued)

poor health varied by local health district ranging from a low of 9.3% in Summit County to a high of 17.4% in Central Utah. Three local health districts, Central Utah, Southeastern Utah, and TriCounty, had age-adjusted rates higher than the state. Davis County and Summit County had rates lower than the state rate. The remaining seven local health districts had rates similar to the state rate.

The age-adjusted rate of fair or poor health varied greatly amongst Utah's small areas from a low of 4.2% in Pleasant Grove/Lindon to a high of 34.0% in Glendale. There was substantial variation in this measure amongst small areas within some local health districts. For example, the age-adjusted rates varied in Davis County health district from a low of 4.8% in Farmington/Centerville to a high of 12.9% in Clearfield/Hill AFB. These rates were statistically significantly different. Please refer to the accompanying bar graph, table, and maps for more information about small areas and self-rated health. The shading on the maps indicate which small areas differed substantially from the state rate.

The Utah data also show that the percentage of people reporting fair or poor health increased with increasing age and decreased with increasing income as illustrated in the graphs below. This means that health districts and small areas with a higher percentage of people in older age groups or lower income categories would most likely have a greater percentage of adults with fair or poor health. Age-adjusted rates control for population age differences.

Graphs that are included on this page for most of the measures display the data in a variety of ways.

This text provides information about prevention and resources available.

Figure 1.A: Fair or Poor Health by Age Group, Utah Adults, 2001-2005

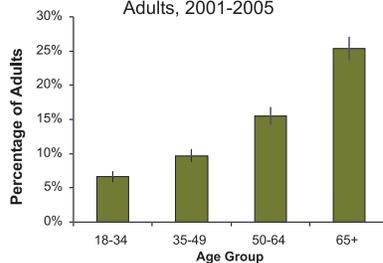
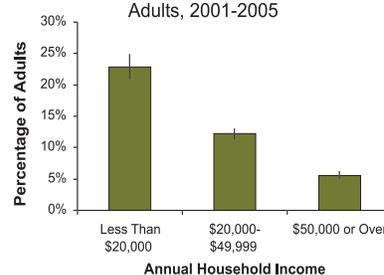


Figure 1.B: Fair or Poor Health by Income, Utah Adults, 2001-2005



Prevention/Resources

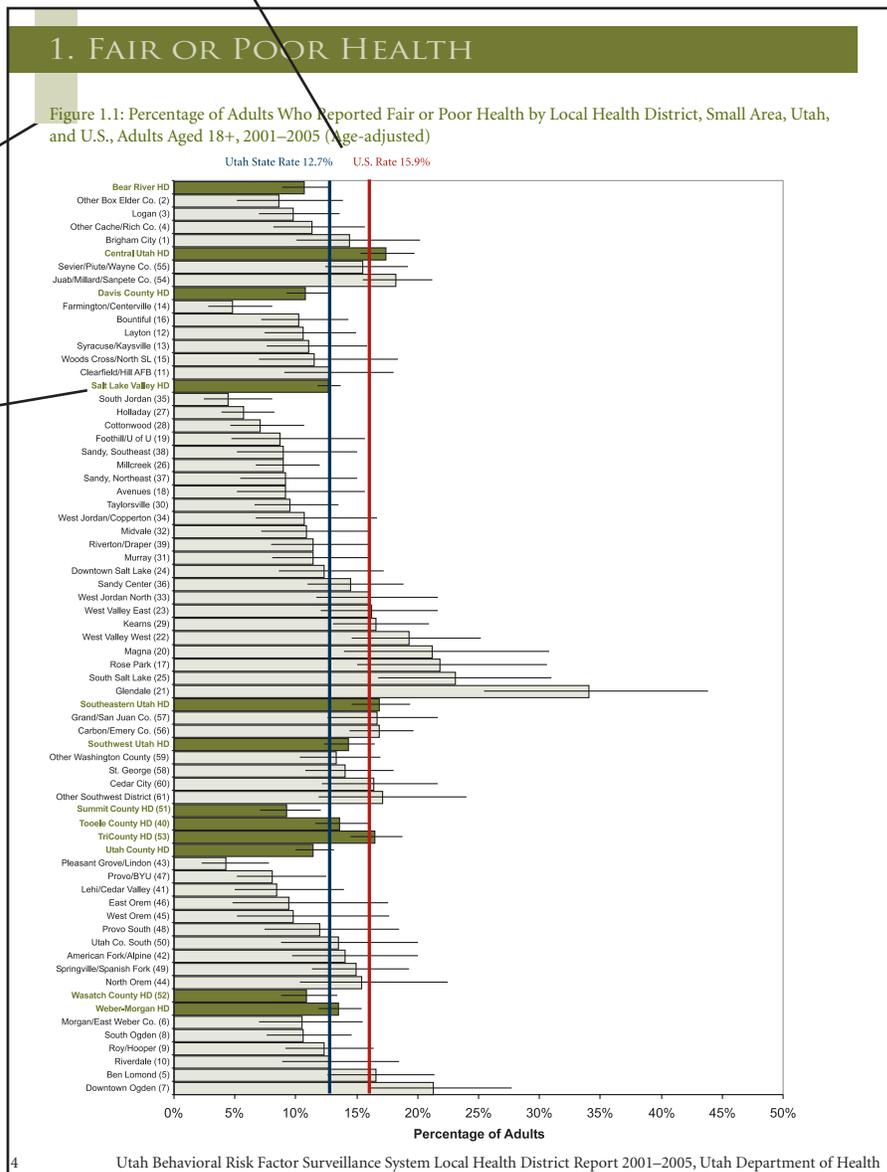
The Utah Department of Health works collaboratively with Utah's local health districts and other public and private organizations through many programs in order to prevent avoidable illness, injury, disability, and premature death; assure access to affordable, quality health care; and to promote healthy lifestyles. Many of the specific programs are discussed in the context of other BRFSS measures included in this report, such as the current smoking and diabetes measures.

GUIDE TO THIS REPORT

The Utah and U.S. rates appear as lines for easy reference.

This graph displays the age-adjusted rates for both small areas and local health districts.

Local health districts are represented by dark green bars and text.



The graph is first arranged alphabetically by local health district, then in ascending order of the percentages of the measures by small area within each health district.

GUIDE TO THIS REPORT

The first column provides the state ranking for each small area.

Crude rates should be used to gauge the true magnitude of the event in the community.

Age-adjusted rates should be used to compare across small areas and to the state and U.S. rates.

1. FAIR OR POOR HEALTH

This table contains the age-adjusted data used to create the maps and bar chart, as well as the crude rates for each small area, local health district, the state, and the U.S. It also includes the total number of adults in the relevant population, and the estimated number of those adults with the measure based on the 2003 population.

Table 1: Fair or Poor Health by Health District, Small Area Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population	Number of Adults Reporting Fair or Poor Health	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	34,804,928	16.0%	15.9%	15.8%	16.1%
	State of Utah	1,657,454	190,441	11.5%	12.7%	12.2%	13.3%
	Bear River HD	98,027	9,126	9.3%	10.7%	8.9%	12.8%
41	Brigham City (1)	14,566	2,068	14.2%	14.4%	10.0%	20.2%
17	Logan (3)	45,904	3,314	7.2%	9.8%	6.9%	13.6%
8	Other Box Elder Co. (2)	14,636	1,262	8.6%	8.6%	5.2%	13.9%
27	Other Cache/Rich Co. (4)	22,921	2,356	10.3%	11.4%	8.1%	15.6%
	Central Utah HD	47,558	8,151	17.1%	17.4%	15.3%	19.7%
55	Juab/Millard/Sanpete Co. (54)	31,637	5,682	18.0%	18.2%	15.5%	21.2%
45	Sevier/Piute/Wayne Co. (55)	15,921	2,496	15.7%	15.5%	12.4%	19.2%
	Davis County HD	175,027	16,383	9.4%	10.8%	9.2%	12.7%
19	Bountiful (16)	33,318	3,169	9.5%	10.2%	7.2%	14.4%
34	Clearfield/Hill AFB (11)	37,329	4,177	11.2%	12.9%	9.1%	16.0%
3	Farmington/Centerville (14)	19,034	663	3.6%	4.8%	2.8%	8.1%
21	Layton (12)	46,815	4,850	10.4%	10.6%	7.4%	15.0%
26	Syracuse/Kaysville (13)	24,542	2,123	8.7%	11.1%	7.6%	15.8%
30	Woods Cross/North SL (15)	13,989	1,437	10.3%	11.5%	6.9%	18.4%
	Salt Lake Valley HD	658,810	76,817	11.7%	12.7%	11.8%	13.7%
13	Avenues (18)	16,959	1,759	9.3%	9.2%	5.2%	15.7%
5	Cottonwood (28)	33,297	2,471	7.4%	7.1%	4.7%	10.7%
32	Downtown Salt Lake (24)	42,808	4,302	10.1%	12.3%	8.6%	17.2%
9	Foothill/U of U (19)	17,778	1,687	9.5%	8.7%	4.7%	15.6%
61	Glendale (21)	18,642	6,236	33.5%	34.0%	25.4%	43.9%
4	Holladay (27)	35,956	2,679	7.5%	5.7%	3.9%	8.2%
51	Keams (29)	42,995	5,220	12.1%	16.6%	13.0%	20.9%
57	Magna (20)	15,623	2,445	15.7%	21.2%	14.0%	30.8%
24	Midvale (32)	21,672	2,052	9.5%	10.8%	7.2%	16.1%
11	Millcreek (26)	44,008	4,471	10.2%	9.0%	6.7%	11.9%
29	Murray (31)	24,072	2,930	12.2%	11.4%	8.1%	16.0%
28	Riverton/Draper (39)	41,391	3,228	7.8%	11.4%	8.0%	16.0%
59	Rose Park (17)	22,639	4,732	20.9%	21.8%	15.0%	30.6%
42	Sandy Center (36)	36,106	4,127	11.4%	14.5%	11.0%	18.9%
12	Sandy, Northeast (37)	18,245	1,569	8.6%	9.1%	5.4%	15.0%
10	Sandy, Southeast (38)	20,781	1,390	6.7%	9.0%	5.2%	15.1%
2	South Jordan (35)	20,931	873	4.2%	4.4%	2.4%	8.0%
60	South Salt Lake (25)	18,456	4,010	21.7%	23.1%	16.7%	31.0%
16	Taylorsville (30)	27,372	2,570	9.4%	9.5%	6.6%	13.5%
46	West Jordan North (33)	30,391	3,659	12.0%	16.1%	11.7%	21.6%
23	West Jordan/Copperton (34)	26,360	2,278	8.6%	10.7%	6.7%	16.6%
47	West Valley East (23)	35,527	5,446	15.3%	16.3%	12.0%	21.6%
56	West Valley West (22)	44,794	8,417	18.8%	19.3%	14.5%	25.2%
	Southeastern Utah HD	36,828	6,246	17.0%	16.9%	14.7%	19.5%
53	Carbon/Emery Co. (56)	21,451	3,690	17.2%	16.9%	14.4%	19.6%
52	Grand/San Juan Co. (57)	15,377	2,537	16.5%	16.6%	12.6%	21.7%
	Southwest Utah HD	116,150	16,888	14.5%	14.3%	12.3%	16.5%
48	Cedar City (60)	22,401	2,845	12.7%	16.4%	12.2%	21.7%
54	Other Southwest District (61)	15,384	2,712	17.6%	17.1%	11.9%	24.0%
36	Other Washington County (59)	32,503	4,469	13.8%	13.3%	10.4%	16.9%
39	St. George (58)	45,862	6,595	14.4%	14.0%	10.8%	18.0%
14	Summit County HD (51)	24,525	1,950	8.0%	9.3%	7.1%	12.0%
38	Tooele County HD (40)	32,458	3,824	11.8%	13.6%	11.6%	15.9%
49	Tricounty HD (53)	28,023	4,444	15.9%	16.5%	14.5%	18.7%
	Utah County HD	278,832	25,987	9.3%	11.5%	10.0%	13.2%
40	American Fork/Alpine (42)	26,819	3,374	12.6%	14.1%	9.7%	20.0%
15	East Orem (46)	14,955	989	6.6%	9.4%	4.8%	17.6%
7	Lehi/Cedar Valley (41)	18,752	1,172	6.3%	8.5%	5.0%	13.9%
44	North Orem (44)	25,965	3,575	13.8%	15.4%	10.3%	22.5%
1	Pleasant Grove/Lindon (43)	24,636	983	4.0%	4.2%	2.3%	7.8%
6	Provo/BYU (47)	39,401	2,691	6.8%	8.1%	5.1%	12.5%
31	Provo South (48)	48,138	2,003	4.2%	11.9%	7.5%	18.5%
43	Springville/Spanish Fork (49)	41,036	5,195	12.7%	14.9%	11.4%	19.3%
37	Utah Co. South (50)	17,363	2,158	12.4%	13.5%	8.8%	20.0%
18	West Orem (45)	21,774	2,450	11.3%	9.8%	5.2%	17.7%
25	Wasatch County HD (52)	12,514	1,295	10.4%	10.9%	8.8%	13.4%
	Weber-Morgan HD	148,702	18,989	12.8%	13.6%	11.9%	15.5%
50	Ben Lomond (5)	33,215	4,713	14.2%	16.5%	12.6%	21.4%
58	Downtown Ogden (7)	21,684	4,038	18.6%	21.3%	16.0%	27.8%
20	Morgan/East Weber Co. (6)	24,131	2,314	9.6%	10.5%	7.0%	15.5%
35	Riverdale (10)	15,522	2,091	13.5%	12.9%	8.8%	18.5%
33	Roy/Hooper (9)	27,898	2,885	10.3%	12.3%	9.2%	16.4%
22	South Ogden (8)	26,255	2,967	11.3%	10.6%	7.6%	14.6%

*State rank is by 61 small areas for AA Rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

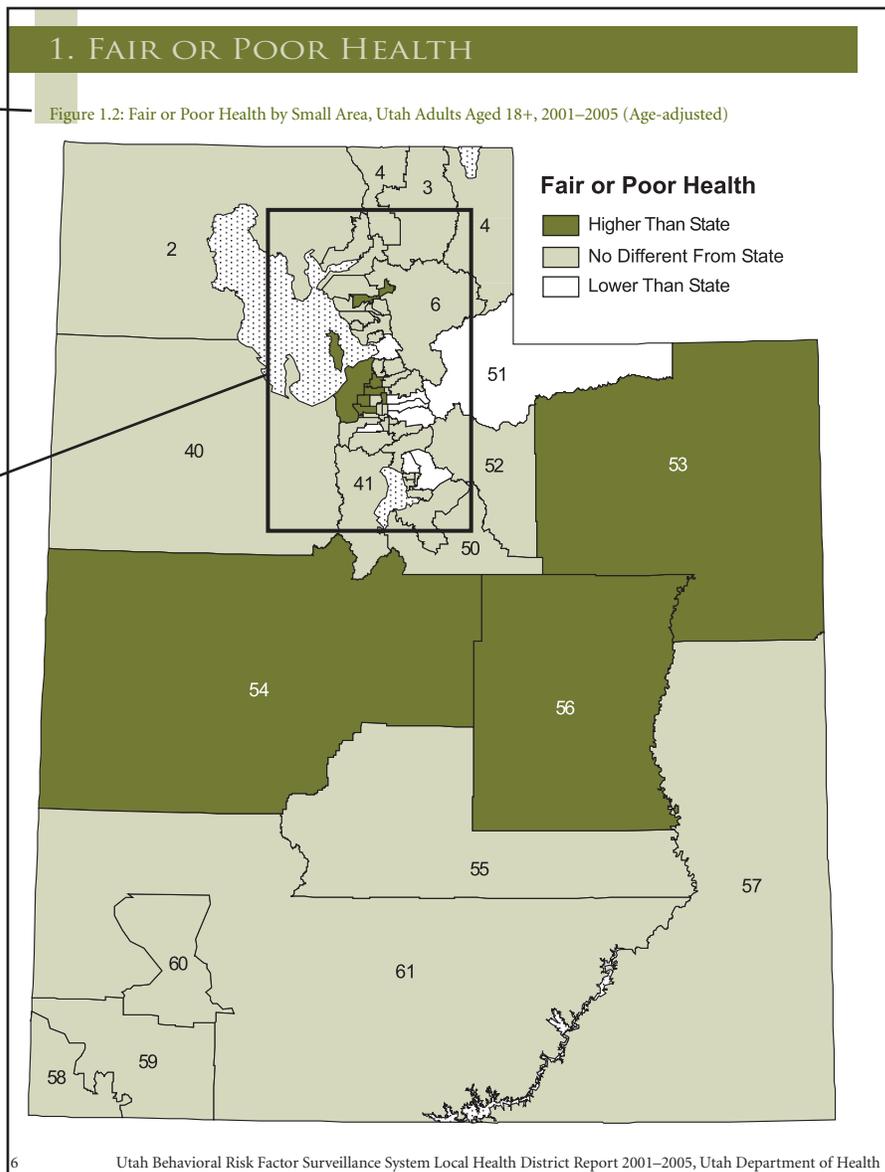
Note: U.S. rate only includes data from 2001-2004.

The table is arranged alphabetically by local health district then alphabetically by small area within each health district.

GUIDE TO THIS REPORT

This map is shaded to indicate small areas with rates that were significantly higher or lower than the state rate.

The Wasatch Front is enlarged on the next page for more detail.



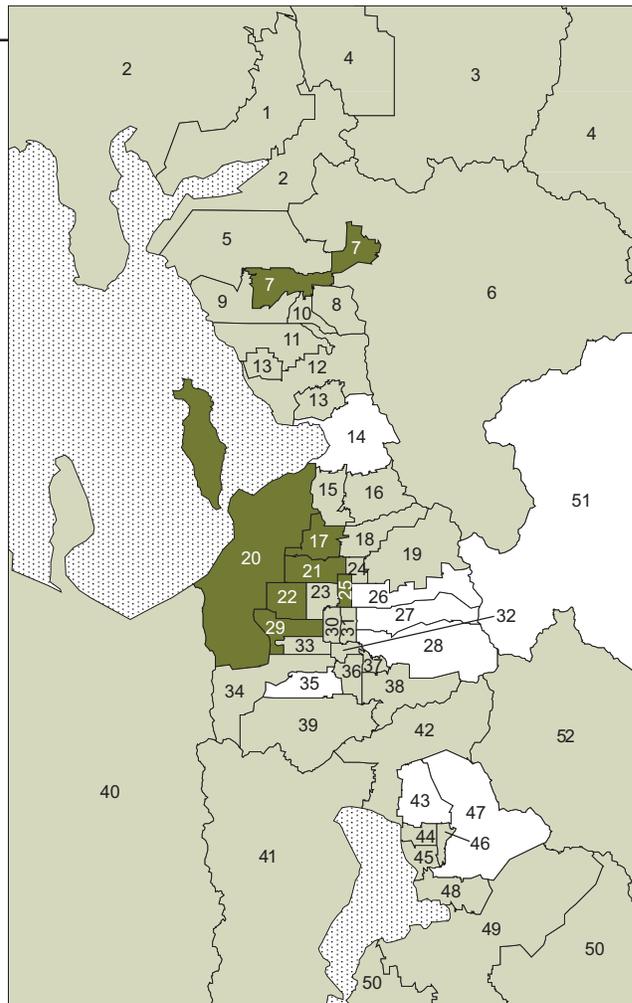
The numbers on the map are small area labels. For a complete list of small area labels, names, and boundary definitions, please refer to *Appendix C: Small Area Definition and Key Maps*, starting on page 145.

GUIDE TO THIS REPORT

1. FAIR OR POOR HEALTH

Figure 1.3: Fair or Poor Health by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)

This is an enlarged view of the Wasatch Front to show these small areas in more detail.



Utah Behavioral Risk Factor Surveillance System Local Health District Report 2001–2005, Utah Department of Health

7

The numbers on the map are small area labels. For a complete list of small area labels, names, and boundary definitions, please refer to *Appendix C: Small Area Definition and Key Maps*, starting on page 145.



UTAH
BRFSS
MEASURES
SMALL AREA
FINDINGS
2001–2005

1. FAIR OR POOR HEALTH

Measure Definition: “Would you say that in general your health is excellent, very good, good, fair or poor?” [*Fair or poor health*]

Why is fair or poor health important to public health?

The general health status question, also referred to as self-rated health, is the first of a set of four health-related quality of life questions that have been used on the BRFSS since 1993 and on the National Health and Nutrition Examination Survey (NHANES) since 2000. The Centers for Disease Control and Prevention (CDC) developed this set of standard questions in the early 1990s at the request of state and local health departments and others in order to track health-related quality of life (HRQOL) in states and communities.

HRQOL complements mortality and morbidity as measures used for tracking changes and disparities in population health. Concerns about the aging of the population, the burden of chronic disease, environmental health threats, health behavior trends, and the health care system have led to increased interest in monitoring overall population health. Population-based surveillance of HRQOL is used to monitor progress toward achieving the two overall national health goals for Healthy People 2010: (1) increase the quality and years of healthy life and (2) eliminate health disparities.¹

The CDC HRQOL measures have demonstrated reliability for population health surveillance.² For this report, the self-rated health question was divided into two groups: fair or poor health and excellent, very good, or good health. For this analysis we looked at the percentage of adults reporting fair or poor health.

Risk factors for fair or poor health

According to a recent report using national BRFSS data from 1993–2002, self-rated health differed substantially among socioeconomic and demographic subgroups. A higher percentage of women reported fair or poor health compared with men. Older adults were more likely to report fair or poor health than younger adults. More Hispanic, American Indian/Alaska Native, and non-Hispanic Black persons reported fair or poor health than non-Hispanic White persons. A higher percentage of widowed, separated, and divorced persons reported fair or poor health compared with married persons. The percentage of adults with less than a high school education who reported fair or poor health was higher than that of adults with more education. The percentage of low-income adults who reported fair or poor health was significantly higher than adults with higher annual household incomes. Persons who were retired, unemployed, and unable to work more often reported fair or poor health than adults who were employed. Adults without health insurance more often reported fair or poor health than adults with health insurance. Compared with persons without any chronic medical conditions, persons with such conditions reported fair or poor health more often. Because the BRFSS is a cross-sectional survey, the characteristics studied were assessed at a single point in time. Thus, in some cases, it is not possible to determine whether the characteristic preceded or followed an individual’s report of fair or poor health.³

Fair or poor health in Utah

The age-adjusted combined state percentage of adults reporting fair or poor health from 2001 to 2005 was 12.7%. This was substantially lower than the comparable rate of 15.9% for the U.S. adult population as a whole. Using the crude Utah rate of 11.5% and the midpoint population in 2003, this translates into approximately 190,000 Utah adults with self-rated fair or poor health in 2003. The age-adjusted prevalence of fair or

Utah Objective: No objective listed.

HP2010 Goal: Overarching – Improve the quality and years of healthy life and eliminate health disparities.

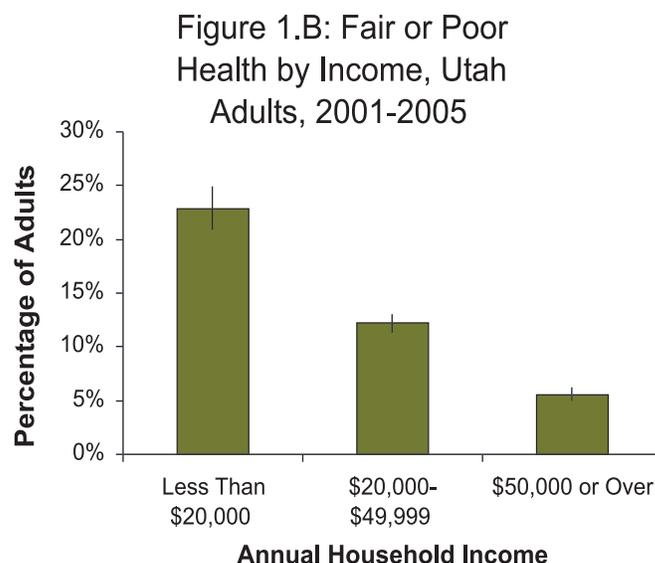
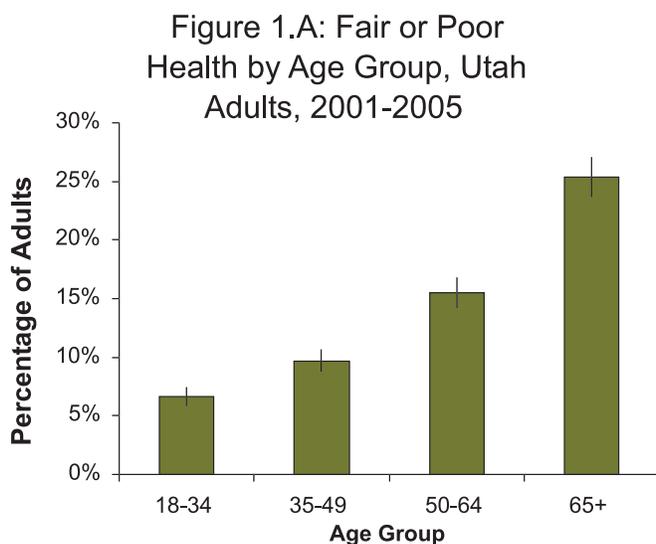
1. FAIR OR POOR HEALTH

Fair or poor health in Utah (continued)

poor health varied by local health district, ranging from a low of 9.3% in Summit County to a high of 17.4% in Central Utah. Three local health districts, Central Utah, Southeastern Utah, and TriCounty, had age-adjusted rates higher than the state. Davis County and Summit County had rates lower than the state rate. The remaining seven local health districts had rates similar to the state rate.

The age-adjusted rate of fair or poor health varied greatly among Utah's small areas, from a low of 4.2% in Pleasant Grove/Lindon to a high of 34.0% in Glendale. There was substantial variation in this measure among small areas within some local health districts. For example, the age-adjusted rates varied in Davis County health district from a low of 4.8% in Farmington/Centerville to a high of 12.9% in Clearfield/Hill AFB. These rates were statistically significantly different. Please refer to the accompanying bar graph, table, and maps for more information about small areas and self-rated health. The shading on the maps indicates which small areas differed substantially from the state rate.

The Utah data also show that the percentage of people reporting fair or poor health increased with increasing age and decreased with increasing income as illustrated in the graphs below. This means that health districts and small areas with a higher percentage of people in older age groups or lower income categories would most likely have a greater percentage of adults reporting fair or poor health. Age-adjusted rates control for population age differences.

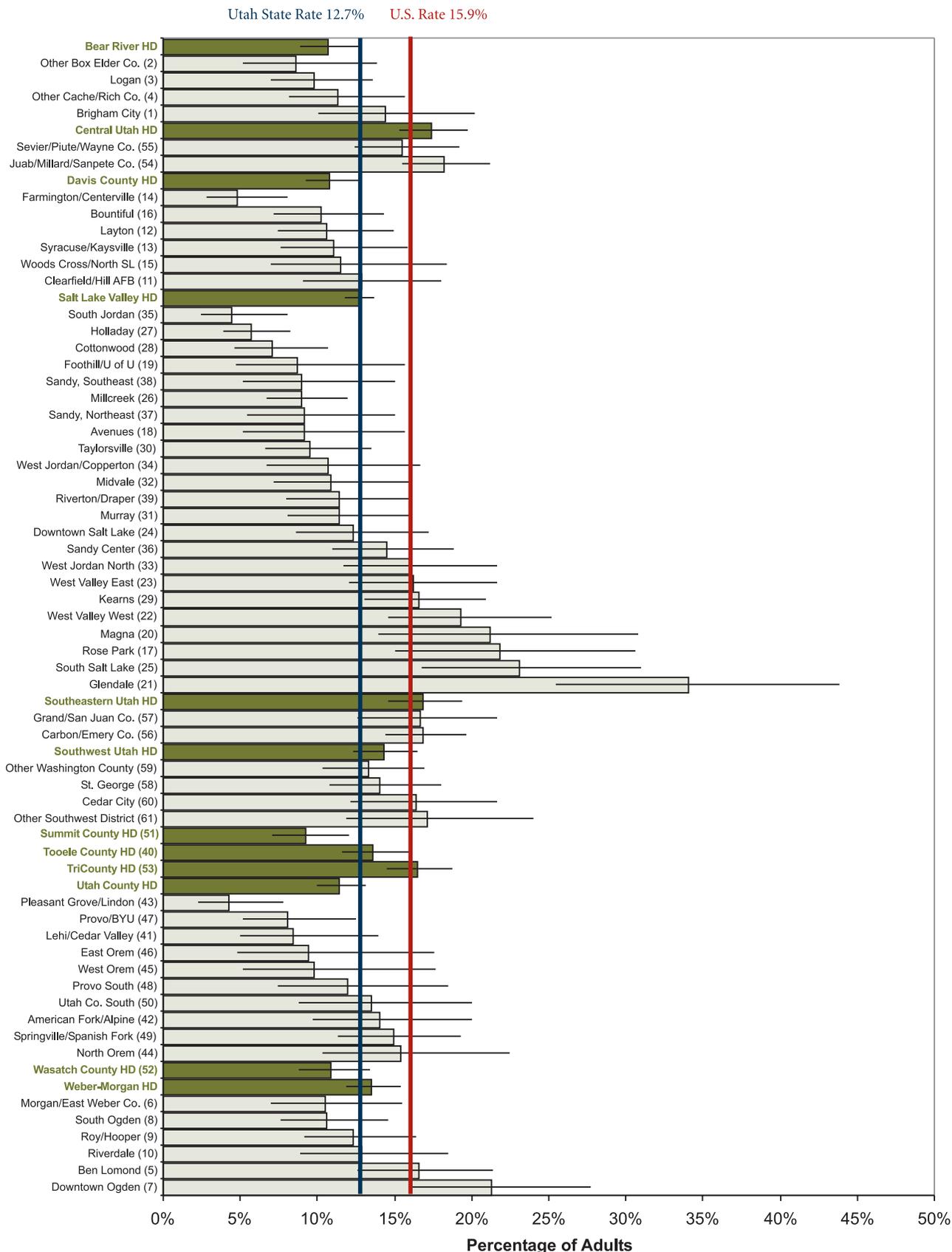


Prevention/Resources

The Utah Department of Health works collaboratively with Utah's local health districts and other public and private organizations through many programs in order to prevent avoidable illness, injury, disability, and premature death; assure access to affordable, quality health care; and to promote healthy lifestyles. Many of the specific programs are discussed in the context of other BRFSS measures included in this report, such as the current smoking and diabetes measures.

1. FAIR OR POOR HEALTH

Figure 1.1: Percentage of Adults Who Reported Fair or Poor Health by Local Health District, Small Area, Utah, and U.S., Adults Aged 18+, 2001–2005 (Age-adjusted)



1. FAIR OR POOR HEALTH

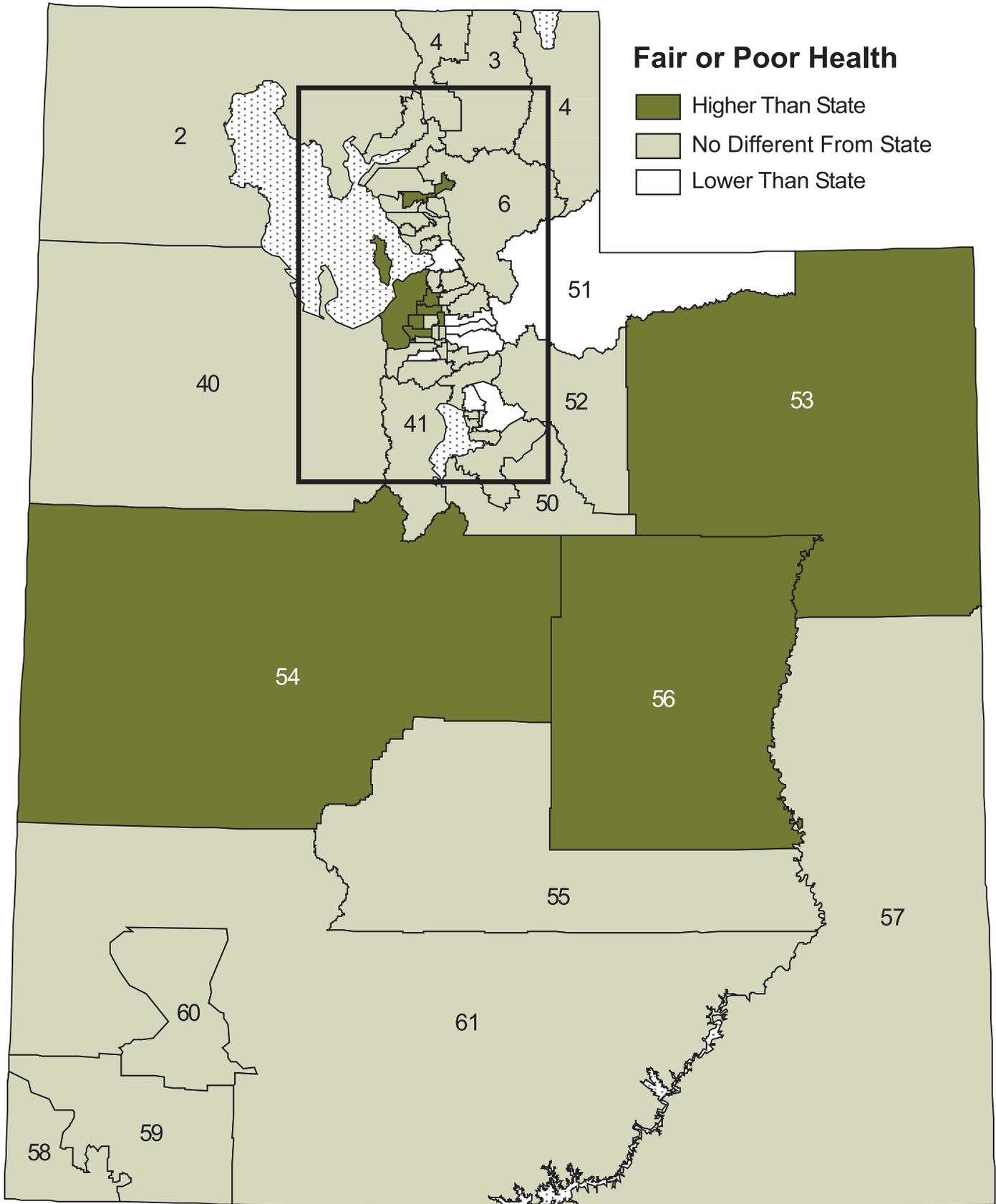
Table 1: Fair or Poor Health by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Age-adjusted		95% Confidence Interval	
			Reporting Fair or Poor Health	Crude Rate	Rate	Lower	Upper	
	U.S.	217,803,051	34,804,928	16.0%	15.9%	15.8%	16.1%	
	State of Utah	1,657,454	190,441	11.5%	12.7%	12.2%	13.3%	
	Bear River HD	98,027	9,126	9.3%	10.7%	8.9%	12.8%	
41	Brigham City (1)	14,566	2,068	14.2%	14.4%	10.0%	20.2%	
17	Logan (3)	45,904	3,314	7.2%	9.8%	6.9%	13.6%	
8	Other Box Elder Co. (2)	14,636	1,262	8.6%	8.6%	5.2%	13.9%	
27	Other Cache/Rich Co. (4)	22,921	2,356	10.3%	11.4%	8.1%	15.6%	
	Central Utah HD	47,558	8,151	17.1%	17.4%	15.3%	19.7%	
55	Juab/Millard/Sanpete Co. (54)	31,637	5,682	18.0%	18.2%	15.5%	21.2%	
45	Sevier/Piute/Wayne Co. (55)	15,921	2,496	15.7%	15.5%	12.4%	19.2%	
	Davis County HD	175,027	16,383	9.4%	10.8%	9.2%	12.7%	
19	Bountiful (16)	33,318	3,169	9.5%	10.2%	7.2%	14.4%	
34	Clearfield/Hill AFB (11)	37,329	4,177	11.2%	12.9%	9.1%	18.0%	
3	Farmington/Centerville (14)	19,034	683	3.6%	4.8%	2.8%	8.1%	
21	Layton (12)	46,815	4,850	10.4%	10.6%	7.4%	15.0%	
26	Syracuse/Kaysville (13)	24,542	2,123	8.7%	11.1%	7.6%	15.8%	
30	Woods Cross/North SL (15)	13,989	1,437	10.3%	11.5%	6.9%	18.4%	
	Salt Lake Valley HD	658,810	76,817	11.7%	12.7%	11.8%	13.7%	
13	Avenues (18)	18,959	1,759	9.3%	9.2%	5.2%	15.7%	
5	Cottonwood (28)	33,297	2,471	7.4%	7.1%	4.7%	10.7%	
32	Downtown Salt Lake (24)	42,808	4,302	10.1%	12.3%	8.6%	17.2%	
9	Foothill/U of U (19)	17,778	1,687	9.5%	8.7%	4.7%	15.6%	
61	Glendale (21)	18,642	6,236	33.5%	34.0%	25.4%	43.9%	
4	Holladay (27)	35,956	2,679	7.5%	5.7%	3.9%	8.2%	
51	Kearns (29)	42,995	5,220	12.1%	16.6%	13.0%	20.9%	
57	Magna (20)	15,623	2,445	15.7%	21.2%	14.0%	30.8%	
24	Midvale (32)	21,672	2,052	9.5%	10.8%	7.2%	16.1%	
11	Millcreek (26)	44,008	4,471	10.2%	9.0%	6.7%	11.9%	
29	Murray (31)	24,072	2,930	12.2%	11.4%	8.1%	16.0%	
28	Riverton/Draper (39)	41,391	3,228	7.8%	11.4%	8.0%	16.0%	
59	Rose Park (17)	22,639	4,732	20.9%	21.8%	15.0%	30.6%	
42	Sandy Center (36)	36,106	4,127	11.4%	14.5%	11.0%	18.9%	
12	Sandy, Northeast (37)	18,245	1,569	8.6%	9.1%	5.4%	15.0%	
10	Sandy, Southeast (38)	20,781	1,390	6.7%	9.0%	5.2%	15.1%	
2	South Jordan (35)	20,931	873	4.2%	4.4%	2.4%	8.0%	
60	South Salt Lake (25)	18,456	4,010	21.7%	23.1%	16.7%	31.0%	
16	Taylorsville (30)	27,372	2,570	9.4%	9.5%	6.6%	13.5%	
46	West Jordan North (33)	30,391	3,659	12.0%	16.1%	11.7%	21.6%	
23	West Jordan/Copperton (34)	26,360	2,278	8.6%	10.7%	6.7%	16.6%	
47	West Valley East (23)	35,527	5,446	15.3%	16.3%	12.0%	21.6%	
56	West Valley West (22)	44,794	8,417	18.8%	19.3%	14.5%	25.2%	
	Southeastern Utah HD	36,828	6,246	17.0%	16.9%	14.7%	19.5%	
53	Carbon/Emery Co. (56)	21,451	3,690	17.2%	16.9%	14.4%	19.6%	
52	Grand/San Juan Co. (57)	15,377	2,537	16.5%	16.6%	12.6%	21.7%	
	Southwest Utah HD	116,150	16,888	14.5%	14.3%	12.3%	16.5%	
48	Cedar City (60)	22,401	2,845	12.7%	16.4%	12.2%	21.7%	
54	Other Southwest District (61)	15,384	2,712	17.6%	17.1%	11.9%	24.0%	
36	Other Washington County (59)	32,503	4,469	13.8%	13.3%	10.4%	16.9%	
39	St. George (58)	45,862	6,595	14.4%	14.0%	10.8%	18.0%	
14	Summit County HD (51)	24,525	1,950	8.0%	9.3%	7.1%	12.0%	
38	Tooele County HD (40)	32,458	3,824	11.8%	13.6%	11.6%	15.9%	
49	TriCounty HD (53)	28,023	4,444	15.9%	16.5%	14.5%	18.7%	
	Utah County HD	278,832	25,987	9.3%	11.5%	10.0%	13.2%	
40	American Fork/Alpine (42)	26,819	3,374	12.6%	14.1%	9.7%	20.0%	
15	East Orem (46)	14,955	989	6.6%	9.4%	4.8%	17.6%	
7	Lehi/Cedar Valley (41)	18,752	1,172	6.3%	8.5%	5.0%	13.9%	
44	North Orem (44)	25,965	3,575	13.8%	15.4%	10.3%	22.5%	
1	Pleasant Grove/Lindon (43)	24,636	983	4.0%	4.2%	2.3%	7.8%	
6	Provo/BYU (47)	39,401	2,691	6.8%	8.1%	5.1%	12.5%	
31	Provo South (48)	48,138	2,003	4.2%	11.9%	7.5%	18.5%	
43	Springville/Spanish Fork (49)	41,036	5,195	12.7%	14.9%	11.4%	19.3%	
37	Utah Co. South (50)	17,363	2,158	12.4%	13.5%	8.8%	20.0%	
18	West Orem (45)	21,774	2,450	11.3%	9.8%	5.2%	17.7%	
25	Wasatch County HD (52)	12,514	1,295	10.4%	10.9%	8.8%	13.4%	
	Weber-Morgan HD	148,702	18,989	12.8%	13.6%	11.9%	15.5%	
50	Ben Lomond (5)	33,215	4,713	14.2%	16.5%	12.6%	21.4%	
58	Downtown Ogden (7)	21,684	4,038	18.6%	21.3%	16.0%	27.8%	
20	Morgan/East Weber Co. (6)	24,131	2,314	9.6%	10.5%	7.0%	15.5%	
35	Riverdale (10)	15,522	2,091	13.5%	12.9%	8.8%	18.5%	
33	Roy/Hooper (9)	27,898	2,885	10.3%	12.3%	9.2%	16.4%	
22	South Ogden (8)	26,255	2,967	11.3%	10.6%	7.6%	14.6%	

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

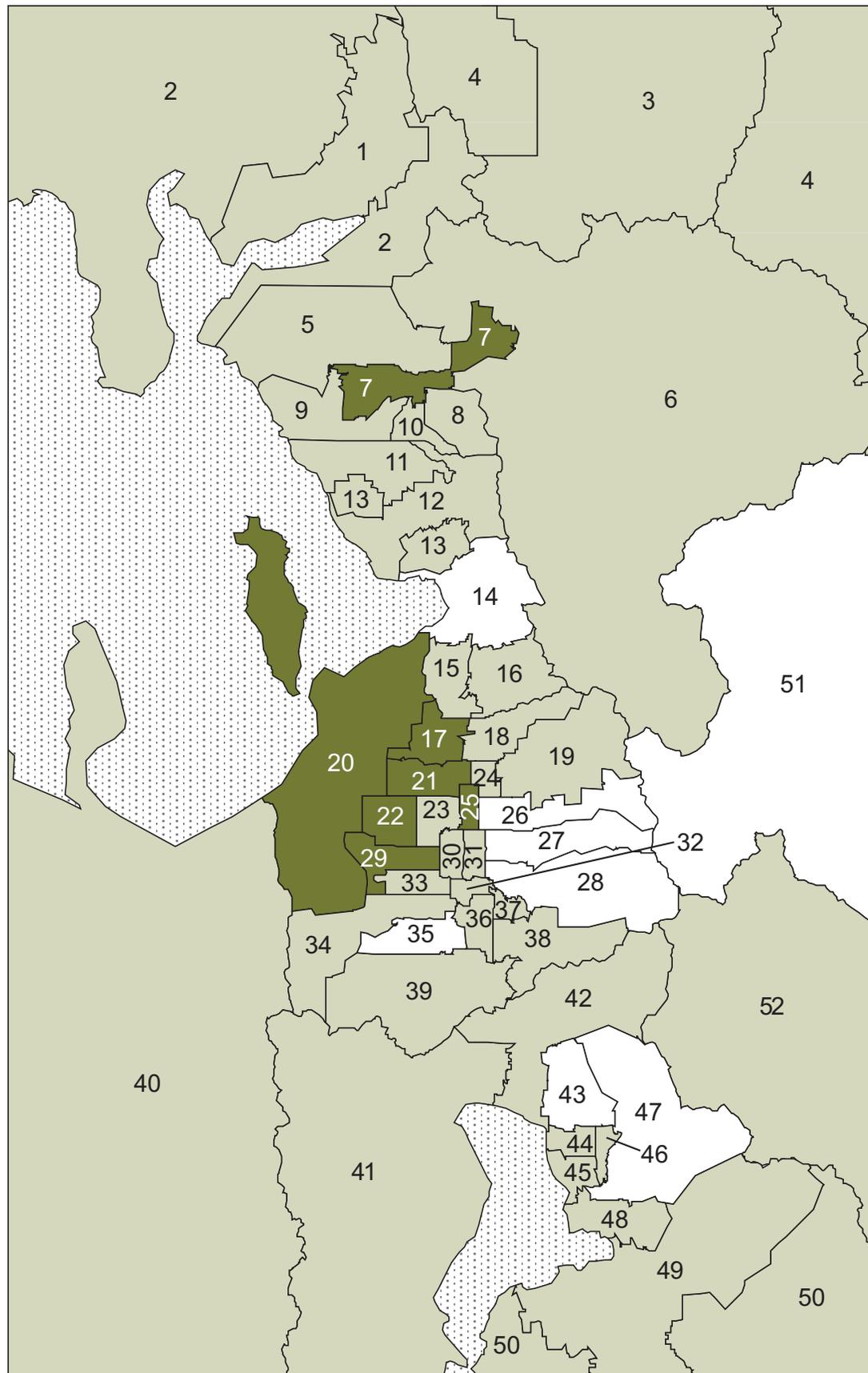
1. FAIR OR POOR HEALTH

Figure 1.2: Fair or Poor Health by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



1. FAIR OR POOR HEALTH

Figure 1.3: Fair or Poor Health by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



2. POOR PHYSICAL HEALTH

Measure Definition: *“Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” [Seven or more days of poor physical health]*

Why is recent poor physical health important to public health?

For this report, we analyzed the percentage of adults who reported seven or more days of poor physical health in the past 30 days. This indicator is one approach to measuring the overall health of a population. It is a global measure of recent physical symptoms that can be used to compare across populations. A person’s self perception about his or her physical health is important in that it can serve as a proxy measure for the burden of both acute and chronic health conditions. And, because people generally seek health care only when they feel unhealthy, self-perceptions are also predictive of the burden on the health care delivery system.

Previous Utah Department of Health (UDOH) reports had used one or more days in the past 30 days as a measure of poor physical health. We became concerned that using “one or more days” identified many people with minor and transient illnesses or injuries that had little effect on their overall well being or on the health care system. In 2004, therefore, a number of UDOH staff met to decide on a number of days of poor physical health in the past 30 that could be used to identify a population experiencing substantial physical health problems. We wanted the measure to permit us to compare the burden of poor physical health across different populations and assess how chronic diseases and chronic disease risk factors related to overall physical health status. After looking at many of these factors, the group chose seven or more days of poor physical health in the past 30 days as the indicator of recent poor physical health. This measure was found to have good positive association with fair or poor health and a number of chronic health conditions and health risk factors. It also had an intuitive appeal, in that a week or more of poor physical health in the past month seemed to present a significant burden on an individual.

Risk factors for poor physical health

According to the analysis of the combined Utah BRFSS data from 2001–2005, this measure of poor physical health differed among socioeconomic and demographic subgroups in Utah. A higher percentage of women reported seven or more days of poor physical health compared with men. Older adults were more likely to report seven or more days of poor physical health than younger adults. A higher percentage of widowed, separated, or divorced persons reported seven or more days of poor physical health compared with married persons. The percentage of adults with less than a high school education who reported seven or more days of poor physical health was higher than that of adults with more education. The percentage of low-income adults who reported seven or more days of poor physical health was significantly higher than adults with higher annual household incomes. The percentage was higher for persons who were retired, unemployed, and unable to work than for adults who were employed. Compared with persons without any chronic medical conditions, persons with such conditions more often reported seven or more days of poor health.

It must be noted that since the BRFSS is a cross-sectional survey, the characteristics studied were assessed at a single point in time. Thus, in some cases, it is not possible to determine whether the characteristic preceded or followed an individual’s response to this question.

Utah Objective: No objective listed.

HP2010 Goal: Overarching – Improve the quality and years of healthy life and eliminate health disparities.

2. POOR PHYSICAL HEALTH

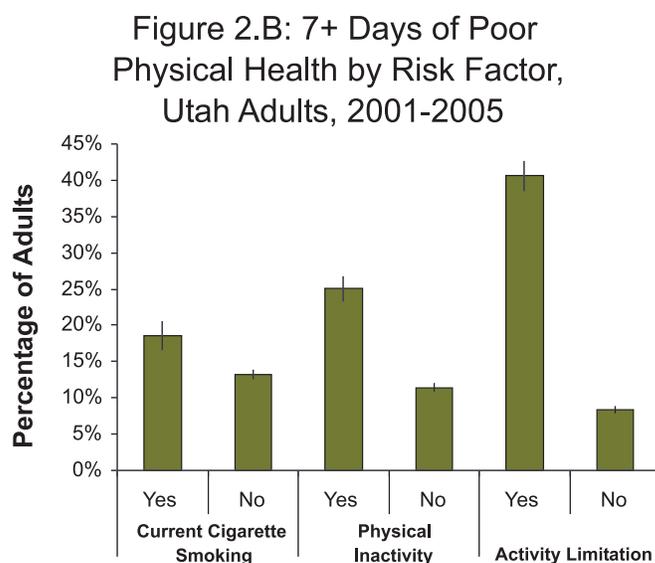
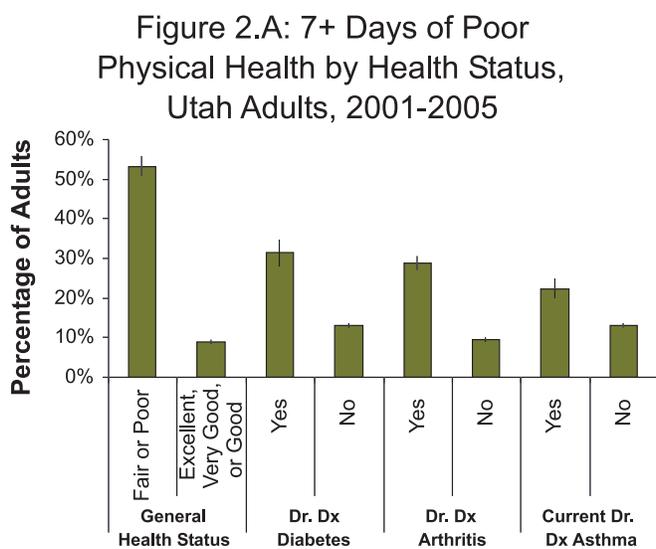
Poor physical health in Utah

Using the combined 2001–2005 data, the age-adjusted percentage of Utah adults reporting seven or more days of poor physical health was 14.6%. The age-adjusted percentage for the entire U.S. adult population was 15.1%. The corresponding crude rate in Utah was slightly lower at 13.8%, most likely due to the fact that Utah has a younger population than the U.S. and that poor physical health is less likely in younger adulthood. Using the overall crude percentage, this means that in 2003 approximately 229,000 Utah adults had seven or more days of poor physical health.

This percentage varied among Utah’s local health districts, from a low of 12.3%, age-adjusted, in Davis County and Summit County to a high of 18.9% in Southeastern Utah. Central Utah and Southeastern Utah rates were higher than the overall state rate.

Overall, the small area percentages for this measure of physical health ranged from a low of 7.9%, age-adjusted, in Woods Cross/North SL to a high of 25.0% in Magna.

In Davis County health district, the rate in Woods Cross/North SL was lower than the state rate. In the Salt Lake Valley health district, Magna and West Jordan North had rates higher than the state rate. In Southeastern Utah health district, this measure in Carbon/Emery Co. was higher than the state rate.

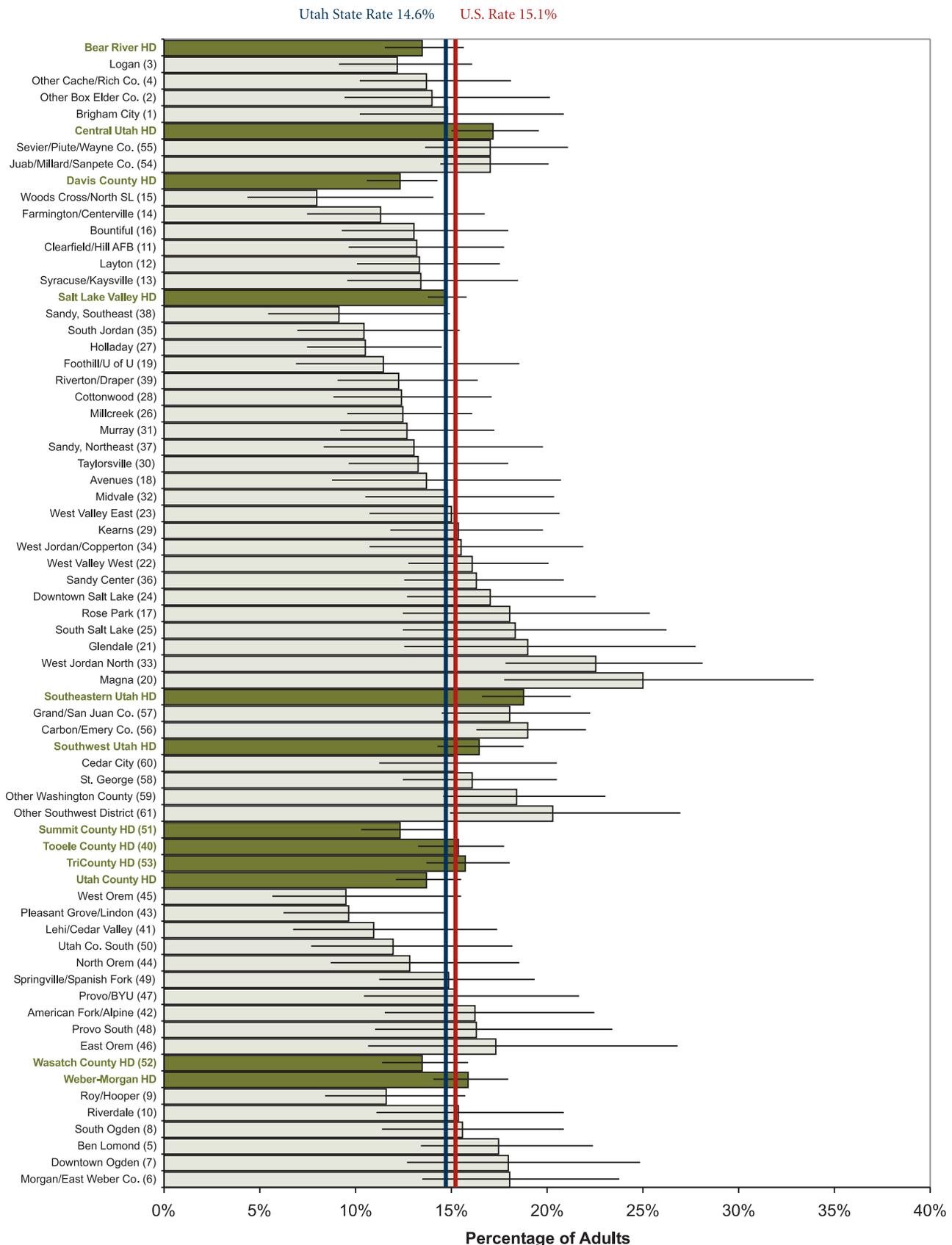


Prevention/Resources

The Utah Department of Health works collaboratively with Utah’s local health districts and other public and private organizations through many programs in order to prevent avoidable illness, injury, disability, and premature death; assure access to affordable, quality health care; and to promote healthy lifestyles. There is a wealth of information about Utah resources on the UDOH website www.health.utah.gov.

2. POOR PHYSICAL HEALTH

Figure 2.1: Percentage of Adults Who Reported Seven or More Days of Poor Physical Health by Local Health District, Small Area, Utah, and U.S., Adults Aged 18+, 2001–2005 (Age-adjusted)



2. POOR PHYSICAL HEALTH

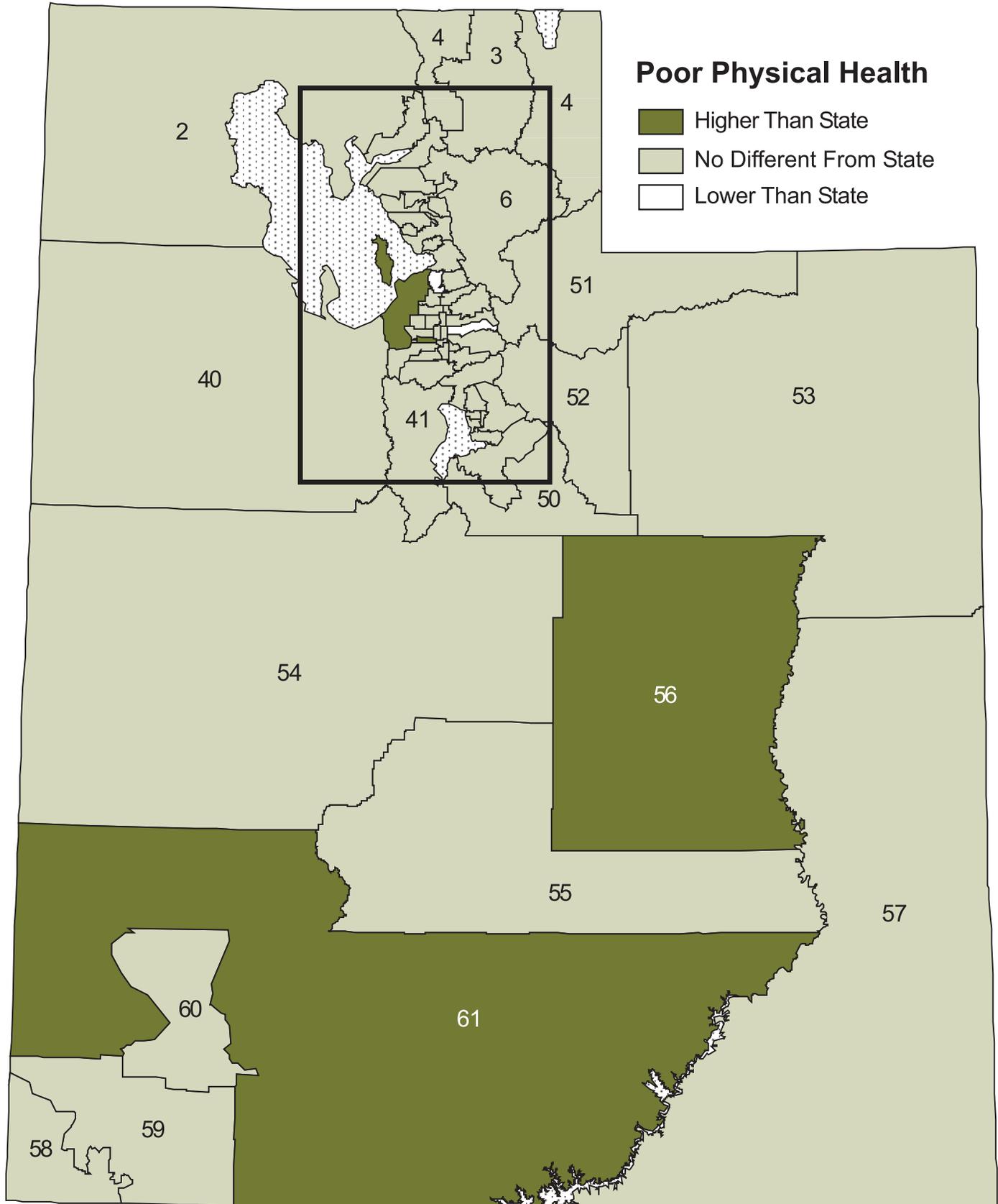
Table 2: 7+ Days Poor Physical Health by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
			Reporting 7+ Days Poor Physical Health				Lower	Upper
	U.S.	217,803,051	32,779,359		15.1%	15.1%	15.0%	15.2%
	State of Utah	1,657,454	229,060		13.8%	14.6%	14.1%	15.2%
	Bear River HD	98,027	12,851		13.1%	13.4%	11.5%	15.7%
30	Brigham City (1)	14,566	2,125		14.6%	14.8%	10.2%	20.9%
12	Logan (3)	45,904	5,637		12.3%	12.2%	9.1%	16.1%
28	Other Box Elder Co. (2)	14,636	2,090		14.3%	14.0%	9.4%	20.1%
27	Other Cache/Rich Co. (4)	22,921	2,966		12.9%	13.7%	10.2%	18.1%
	Central Utah HD	47,558	7,904		16.6%	17.1%	15.0%	19.5%
47	Juab/Millard/Sanpete Co. (54)	31,637	5,154		16.3%	17.0%	14.4%	20.1%
46	Sevier/Piute/Wayne Co. (55)	15,921	2,738		17.2%	17.0%	13.6%	21.1%
	Davis County HD	175,027	19,165		11.0%	12.3%	10.6%	14.3%
20	Bountiful (16)	33,318	4,268		12.8%	13.0%	9.3%	18.0%
21	Clearfield/Hill AFB (11)	37,329	3,584		9.6%	13.2%	9.7%	17.8%
8	Farmington/Centerville (14)	19,034	1,905		10.0%	11.3%	7.5%	16.7%
23	Layton (12)	46,815	5,669		12.1%	13.4%	10.1%	17.6%
24	Syracuse/Kaysville (13)	24,542	2,570		10.5%	10.5%	9.6%	18.5%
1	Woods Cross/North SL (15)	13,989	1,192		8.5%	7.9%	4.4%	14.0%
	Salt Lake Valley HD	658,810	92,168		14.0%	14.7%	13.8%	15.8%
26	Avenues (18)	18,959	2,406		12.7%	13.7%	8.8%	20.7%
15	Cottonwood (28)	33,297	4,076		12.2%	12.4%	8.9%	17.1%
48	Downtown Salt Lake (24)	42,808	6,973		16.3%	17.0%	12.7%	22.6%
9	Foothill/U of U (19)	17,778	2,229		12.5%	11.5%	6.9%	18.5%
58	Glendale (21)	18,642	3,292		17.7%	19.0%	12.6%	27.7%
6	Holladay (27)	35,956	4,293		11.9%	10.5%	7.5%	14.5%
37	Kearns (29)	42,995	6,402		14.9%	15.4%	11.8%	19.8%
61	Magna (20)	15,623	3,398		21.8%	25.0%	17.7%	33.9%
29	Midvale (32)	21,672	3,320		15.3%	14.8%	10.5%	20.4%
16	Millcreek (26)	44,008	6,016		13.7%	12.5%	9.6%	16.1%
17	Murray (31)	24,072	3,214		13.4%	12.7%	9.2%	17.2%
13	Riverton/Draper (39)	41,391	4,541		11.0%	12.3%	9.1%	16.4%
54	Rose Park (17)	22,639	3,907		17.3%	18.0%	12.5%	25.3%
44	Sandy Center (36)	36,106	5,528		15.3%	16.3%	12.6%	20.9%
19	Sandy, Northeast (37)	18,245	2,199		12.1%	13.0%	8.3%	19.8%
2	Sandy, Southeast (38)	20,781	1,532		7.4%	9.1%	5.4%	14.9%
5	South Jordan (35)	20,931	2,332		11.1%	10.5%	7.0%	15.5%
55	South Salt Lake (25)	18,456	3,150		17.1%	18.3%	12.4%	26.2%
22	Taylorsville (30)	27,372	3,334		12.2%	13.2%	9.6%	18.0%
60	West Jordan North (33)	30,391	5,255		17.3%	22.5%	17.8%	28.2%
38	West Jordan/Copperton (34)	26,360	3,959		15.0%	15.5%	10.8%	21.9%
32	West Valley East (23)	35,527	4,889		13.8%	15.0%	10.7%	20.7%
41	West Valley West (22)	44,794	6,365		14.2%	16.1%	12.8%	20.1%
	Southeastern Utah HD	36,828	6,758		18.4%	18.9%	16.7%	21.3%
57	Carbon/Emery Co. (56)	21,451	4,037		18.8%	19.0%	16.3%	22.0%
53	Grand/San Juan Co. (57)	15,377	2,686		17.5%	18.0%	14.5%	22.3%
	Southwest Utah HD	116,150	19,467		16.8%	16.4%	14.3%	18.7%
34	Cedar City (60)	22,401	3,004		13.4%	15.3%	11.3%	20.5%
59	Other Southwest District (61)	15,384	2,988		19.4%	20.3%	14.9%	26.9%
56	Other Washington County (59)	32,503	6,000		18.5%	18.4%	14.6%	23.0%
42	St. George (58)	45,862	7,517		16.4%	16.1%	12.5%	20.5%
14	Summit County HD (51)	24,525	2,776		11.3%	12.3%	10.3%	14.7%
36	Tooele County HD (40)	32,458	4,648		14.3%	15.4%	13.3%	17.7%
40	TriCounty HD (53)	28,023	4,338		15.5%	15.7%	13.7%	18.0%
	Utah County HD	278,832	34,268		12.3%	13.8%	12.2%	15.6%
43	American Fork/Alpine (42)	26,819	4,291		16.0%	16.2%	11.5%	22.4%
49	East Orem (46)	14,955	2,336		15.6%	17.3%	10.7%	26.8%
7	Lehi/Cedar Valley (41)	18,752	1,890		10.1%	11.0%	6.7%	17.4%
18	North Orem (44)	25,965	3,053		11.8%	12.8%	8.7%	18.6%
4	Pleasant Grove/Lindon (43)	24,636	2,042		8.3%	9.7%	6.2%	14.7%
33	Provo/BYU (47)	39,401	5,902		15.0%	15.2%	10.4%	21.7%
45	Provo South (48)	48,138	4,053		8.4%	16.3%	11.0%	23.4%
31	Springville/Spanish Fork (49)	41,036	5,585		13.6%	14.9%	11.3%	19.4%
11	Utah Co. South (50)	17,363	1,839		10.6%	12.0%	7.7%	18.2%
3	West Orem (45)	21,774	2,868		13.2%	9.5%	5.6%	15.5%
25	Wasatch County HD (52)	12,514	1,651		13.2%	13.5%	11.4%	15.9%
	Weber-Morgan HD	148,702	22,900		15.4%	15.9%	14.0%	17.9%
50	Ben Lomond (5)	33,215	5,142		15.5%	17.4%	13.4%	22.4%
51	Downtown Ogden (7)	21,684	3,675		17.0%	18.0%	12.7%	24.8%
52	Morgan/East Weber Co. (6)	24,131	4,158		17.2%	18.0%	13.4%	23.8%
35	Riverdale (10)	15,522	2,636		17.0%	15.4%	11.1%	20.9%
10	Roy/Hooper (9)	27,898	3,122		11.2%	11.6%	8.4%	15.7%
39	South Ogden (8)	26,255	4,125		15.7%	15.5%	11.4%	20.8%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

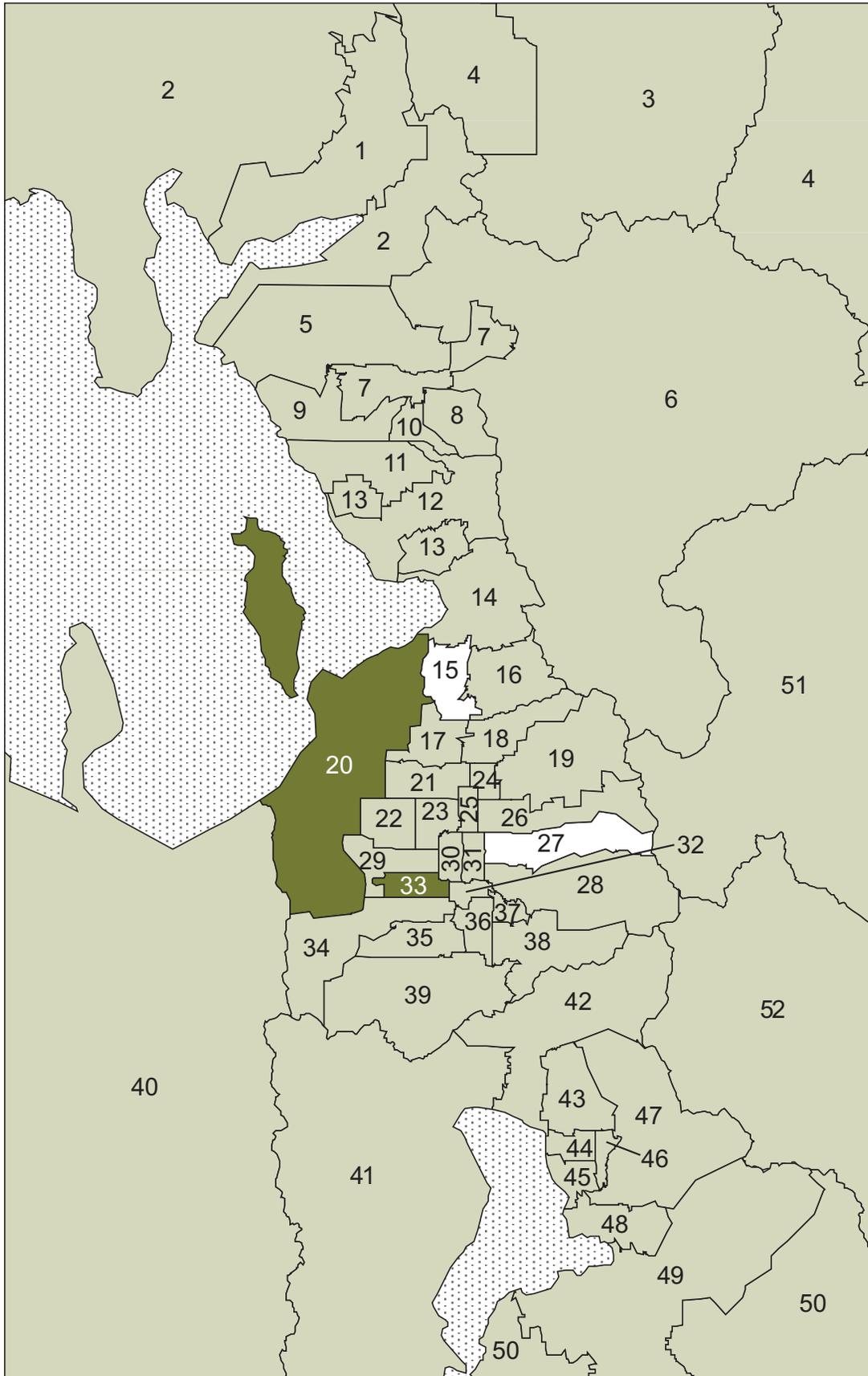
2. POOR PHYSICAL HEALTH

Figure 2.2: 7+ Days of Poor Physical Health by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



2. POOR PHYSICAL HEALTH

Figure 2.3: 7+ Days of Poor Physical Health by Small Area, Wasatch Front Adults 18+, 2001–2005 (Age-adjusted)



3. POOR MENTAL HEALTH

Measure Definition: *“Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” [Seven or more days of poor mental health]*

Why is poor mental health important to public health?

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity.⁴ Mental health is one of the Healthy People 2010 Leading Health Indicators that reflect the major health concerns in the U.S. at the beginning of the 21st century. The Global Burden of Disease study conducted by the World Health Organization, the World Bank, and Harvard University, revealed that mental illness ranks second in the burden of disease in established market economies such as the U.S.⁵ Approximately 20% of the U.S. population is affected by mental illness in any given year.⁶ The BRFSS mental health question is an attempt to obtain a global measure of recent mental and emotional distress.⁷ It is one of a set of four health-related quality of life (HRQOL) questions developed by the Centers for Disease Control and Prevention (CDC) and included on the BRFSS since 1993.

For this report, we looked at the percentage of adults who reported seven or more days of poor mental health in the past 30 days. Previous Utah Department of Health (UDOH) reports have used one or more days in the past 30 days as a measure of poor mental health. This previous measure generally identified a greater percentage of the population than the known prevalence of depression. This measure identified too many people with moderate or low risk. UDOH staff met in 2004 to select a number of days in the past 30 days that could be used to identify a population at risk, compare the burden of poor mental health across different populations, and assess how chronic diseases and chronic disease risk factors affected mental health. Taking all of these factors into consideration, the group chose seven or more days of poor mental health in the past 30 days as the UDOH BRFSS indicator of recent poor mental health. That measure identified a percentage of the population similar to the known prevalence of depression and had good positive association with fair or poor health. It also had an intuitive appeal in that a week or more of poor mental health each month seemed like a significant burden on an individual.

Risk factors for poor mental health

Risk factors that are common to many mental disorders include individual factors such as neurophysiological deficits, difficult temperament, chronic physical illness, and below-average intelligence; family factors such as severe marital discord, social disadvantage, overcrowding or large family size, paternal criminality, maternal mental disorder, and admission into foster care; and community factors such as living in an area with a high rate of disorganization and inadequate schools.⁴

Poor mental health in Utah

Using the combined 2001–2005 data, the age-adjusted percentage of Utah adults reporting seven or more days of poor mental health was 15.0%. This percentage for the entire U.S. adult population was 15.1%. The corresponding crude rate in Utah was slightly higher at 15.6%, most likely due to the fact that Utah has a younger population than the U.S., and poor mental health is more likely in younger adulthood. Using the overall crude percentage, this means that in 2003 approximately 257,900 Utah adults had seven or more days of poor men-

Utah Objective: No objective listed.

HP2010 Goal: Overarching – Improve the quality and years of healthy life and eliminate health disparities.

3. POOR MENTAL HEALTH

Poor mental health in Utah (continued)

tal health. This percentage varied among Utah’s local health districts, from a low of 11.2%, age-adjusted, in Summit County to a high of 18.0% in Southwest Utah. The Summit County rate was lower than the state rate. Southwest Utah was the only local health district higher than the state rate.

Overall, the small area percentages for this poor mental health measure ranged from a low of 7.2%, age-adjusted, in American Fork/Alpine to a high of 24.6% in Magna.

Within the Davis County health district, Farmington/Centerville and Woods Cross/North SL had rates lower than the state rate. In the Salt Lake Valley health district, South Jordan’s rate was less than the state rate, and Glendale and Magna had higher rates than the state rate. In the Southwest Utah health district, St. George had a higher rate than the state rate. In the Utah County health district, the American Fork/Alpine small area rate was lower than the state rate. In the Weber-Morgan health district, the Ben Lomond small area rate was higher than the state rate.

The percentage of adults reporting seven or more days of poor mental health varied by health status and risk factors as illustrated in the graphs below.

Figure 3.A: 7+ Days of Poor Mental Health by Health Status, Utah Adults, 2001-2005

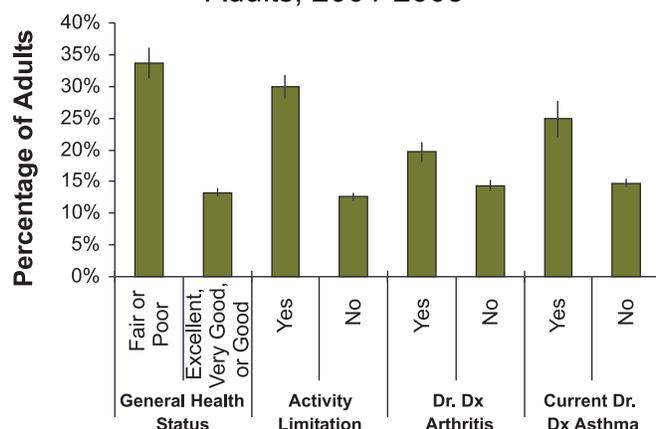
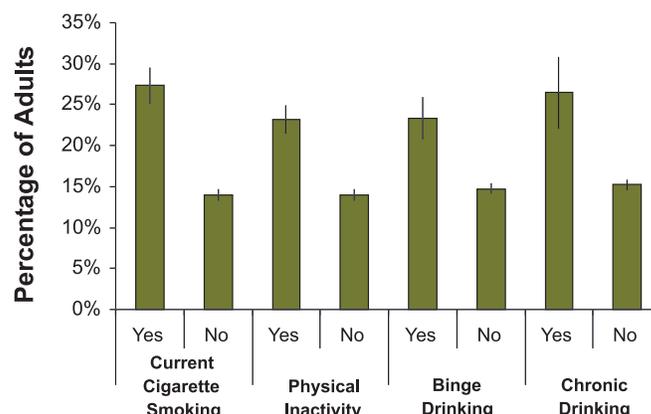


Figure 3.B: 7+ Days of Poor Mental Health by Selected Risk Factors, Utah Adults, 2001-2005

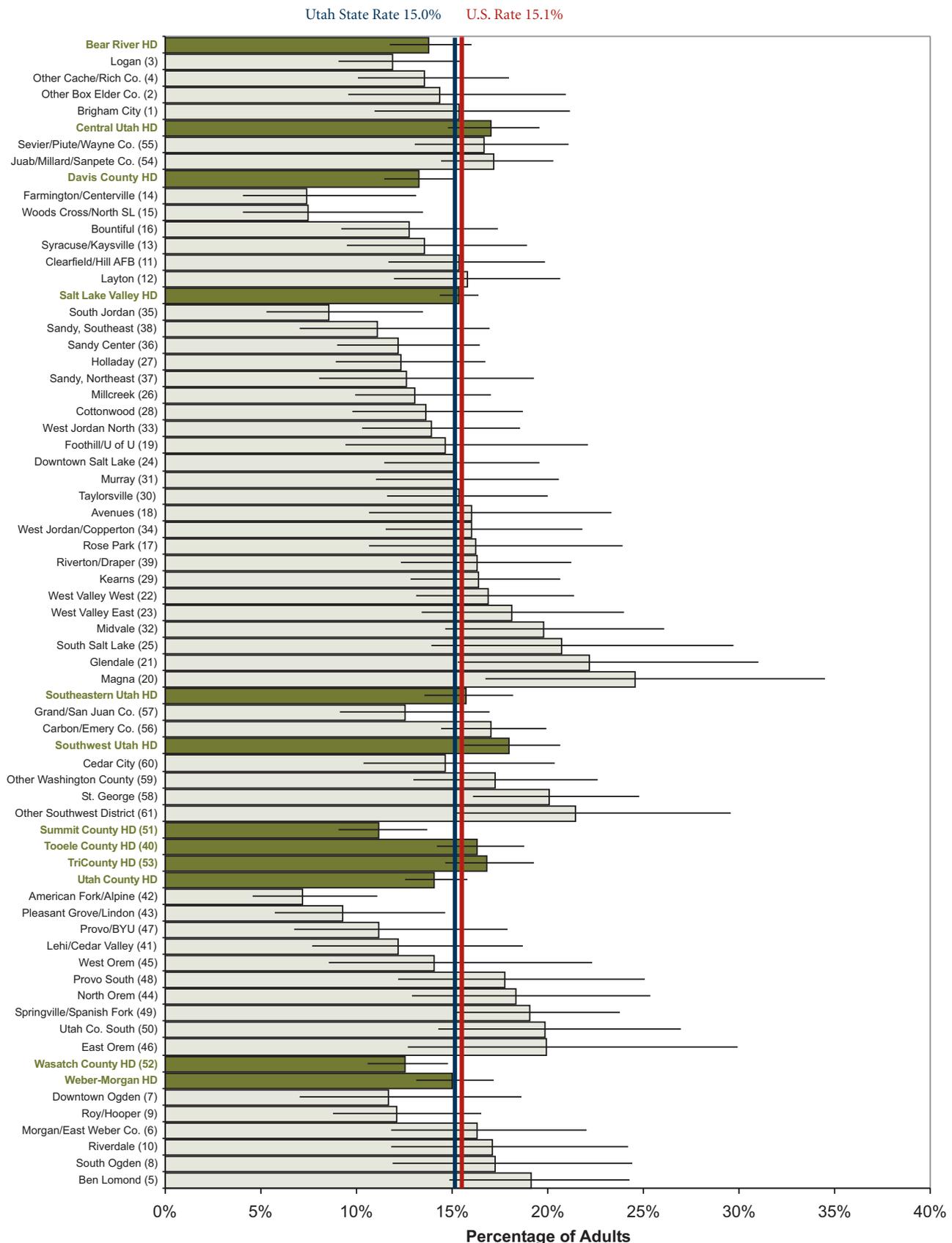


Prevention/Resources

The Utah Division of Substance Abuse and Mental Health is the state agency responsible for ensuring that prevention and treatment services for substance abuse and mental health are available statewide. The Division also acts as a resource by providing general information, research results, and statistics to the public regarding substances of abuse and mental health services. The Division contracts with community mental health centers to provide these services and monitors these centers through site visits, a year-end review process, and a peer review process. More information is available, including help in locating prevention and treatment services, on the Division’s website at <http://www.dsamh.utah.gov>. The U.S. Substance Abuse and Mental Health Services Administration has information on its website at <http://www.samhsa.gov>.

3. POOR MENTAL HEALTH

Figure 3.1: Seven or More Days of Poor Mental Health by Local Health District and Small Area, Utah, 2001–2005 (Age-adjusted)



3. POOR MENTAL HEALTH

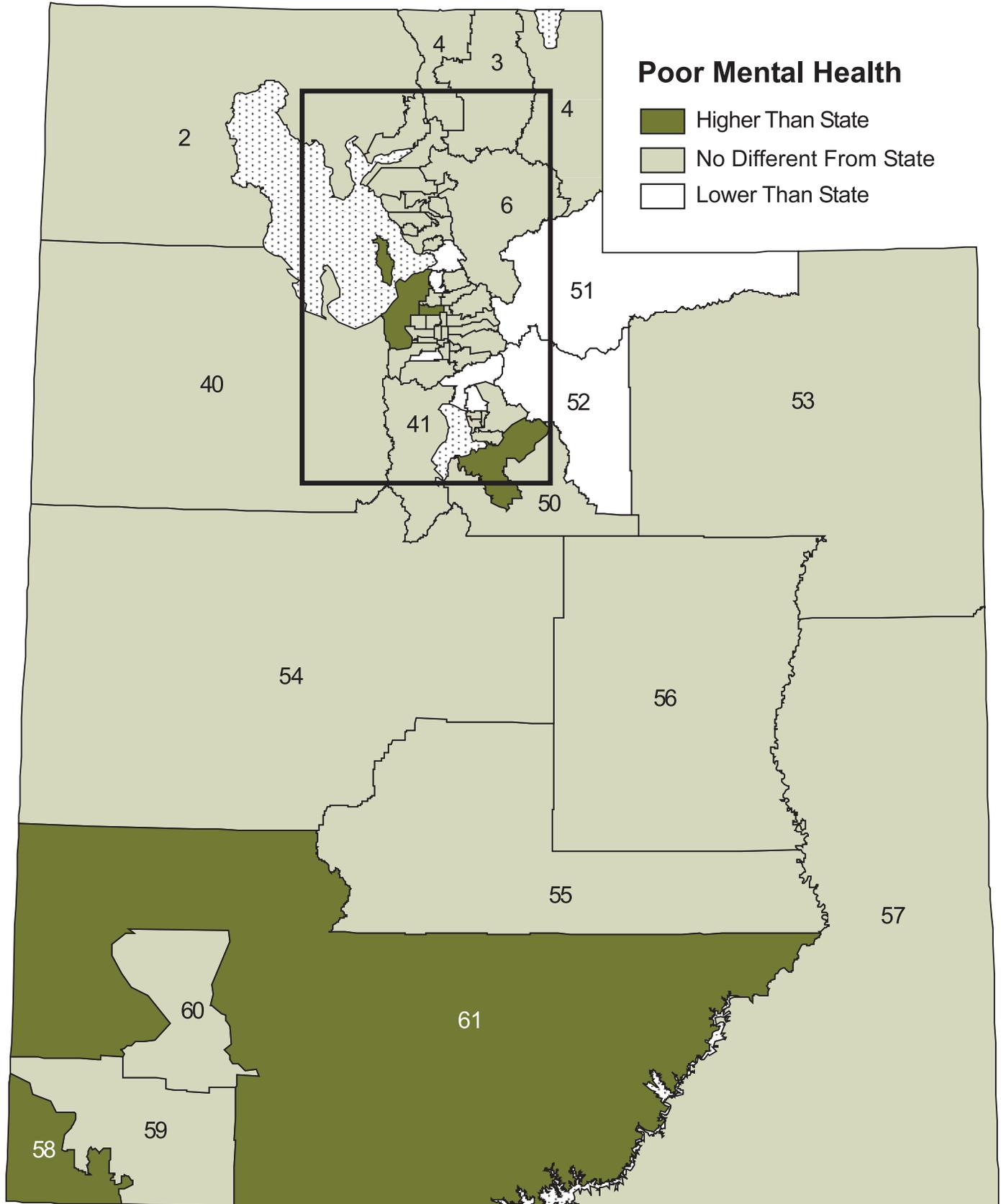
Table 3: 7+ Days Poor Mental Health by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
			Reporting 7+ Days Poor Mental Health				Lower	Upper
	U.S.	217,803,051	32,801,139		15.1%	15.1%	15.0%	15.2%
	State of Utah	1,657,454	257,900		15.6%	15.0%	14.4%	15.6%
	Bear River HD	98,027	14,528		14.8%	13.7%	11.7%	16.0%
32	Brigham City (1)	14,566	2,679		18.4%	15.4%	11.0%	21.1%
10	Logan (3)	45,904	6,688		14.6%	11.9%	9.0%	15.5%
25	Other Box Elder Co. (2)	14,636	2,021		13.8%	14.3%	9.6%	21.0%
20	Other Cache/Rich Co. (4)	22,921	3,149		13.7%	13.5%	10.1%	18.0%
	Central Utah HD	47,558	8,018		16.9%	17.0%	14.8%	19.5%
46	Juab/Millard/Sanpete Co. (54)	31,637	5,378		17.0%	17.2%	14.5%	20.3%
41	Sevier/Piute/Wayne Co. (55)	15,921	2,646		16.6%	16.7%	13.0%	21.1%
	Davis County HD	175,027	24,329		13.9%	13.2%	11.5%	15.2%
18	Bountiful (16)	33,318	4,661		14.0%	12.7%	9.2%	17.4%
31	Clearfield/Hill AFB (11)	37,329	6,365		17.1%	15.3%	11.7%	19.9%
2	Farmington/Centerville (14)	19,034	1,391		7.3%	7.4%	4.1%	13.1%
33	Layton (12)	46,815	7,668		16.4%	15.8%	11.9%	20.7%
21	Syracuse/Kaysville (13)	24,542	3,159		12.9%	13.6%	9.5%	19.0%
3	Woods Cross/North SL (15)	13,989	1,121		8.0%	7.5%	4.0%	13.5%
	Salt Lake Valley HD	658,810	104,487		15.9%	15.3%	14.3%	16.4%
34	Avenues (18)	18,959	3,030		16.0%	16.0%	10.6%	23.3%
22	Cottonwood (28)	33,297	4,821		14.5%	13.6%	9.8%	18.7%
28	Downtown Salt Lake (24)	42,808	6,879		16.1%	15.1%	11.4%	19.6%
27	Foothill/U of U (19)	17,778	2,844		16.0%	14.7%	9.4%	22.1%
60	Glendale (21)	18,642	4,239		22.7%	22.2%	15.3%	31.0%
14	Holladay (27)	35,956	4,480		12.5%	12.3%	8.9%	16.7%
40	Kearns (29)	42,995	7,541		17.5%	16.4%	12.8%	20.7%
61	Magna (20)	15,623	3,450		22.1%	24.6%	16.8%	34.5%
54	Midvale (32)	21,672	4,449		20.5%	19.7%	14.6%	26.1%
19	Millcreek (26)	44,008	5,589		12.7%	13.1%	9.9%	17.0%
29	Murray (31)	24,072	3,878		16.1%	15.2%	11.0%	20.6%
37	Riverton/Draper (39)	41,391	6,854		16.6%	16.3%	12.3%	21.2%
36	Rose Park (17)	22,639	4,086		18.1%	16.2%	10.7%	23.9%
13	Sandy Center (36)	36,106	4,539		12.6%	12.2%	9.0%	16.4%
17	Sandy, Northeast (37)	18,245	2,284		12.5%	12.6%	8.0%	19.3%
6	Sandy, Southeast (38)	20,781	2,465		11.9%	11.1%	7.0%	17.0%
4	South Jordan (35)	20,931	2,028		9.7%	8.5%	5.3%	13.5%
58	South Salt Lake (25)	18,456	3,793		20.6%	20.7%	13.9%	29.7%
30	Taylorsville (30)	27,372	4,727		17.3%	15.3%	11.6%	20.0%
23	West Jordan North (33)	30,391	4,513		14.9%	13.9%	10.3%	18.6%
35	West Jordan/Copperton (34)	26,360	4,104		15.6%	16.0%	11.5%	21.8%
50	West Valley East (23)	35,527	6,818		19.2%	18.1%	13.4%	24.0%
43	West Valley West (22)	44,794	8,363		18.7%	16.9%	13.2%	21.4%
	Southeastern Utah HD	36,828	5,804		15.8%	15.7%	13.5%	18.1%
44	Carbon/Emery Co. (56)	21,451	3,645		17.0%	17.0%	14.5%	20.0%
15	Grand/San Juan Co. (57)	15,377	2,062		13.4%	12.6%	9.2%	17.0%
	Southwest Utah HD	116,150	20,663		17.8%	18.0%	15.6%	20.6%
26	Cedar City (60)	22,401	3,609		16.1%	14.7%	10.4%	20.3%
59	Other Southwest District (61)	15,384	2,795		18.2%	21.5%	15.1%	29.6%
47	Other Washington County (59)	32,503	5,652		17.4%	17.3%	13.0%	22.6%
57	St. George (58)	45,862	8,608		18.8%	20.1%	16.1%	24.8%
8	Summit County HD (51)	24,525	2,752		11.2%	11.2%	9.1%	13.7%
39	Tooele County HD (40)	32,458	5,291		16.3%	16.3%	14.2%	18.7%
42	TriCounty HD (53)	28,023	4,845		17.3%	16.8%	14.6%	19.3%
	Utah County HD	278,832	42,717		15.3%	14.1%	12.6%	15.9%
1	American Fork/Alpine (42)	26,819	1,853		6.9%	7.2%	4.6%	11.1%
56	East Orem (46)	14,955	2,916		19.5%	19.9%	12.7%	29.9%
12	Lehi/Cedar Valley (41)	18,752	2,449		13.1%	12.1%	7.7%	18.7%
51	North Orem (44)	25,965	4,295		16.5%	18.3%	12.9%	25.4%
5	Pleasant Grove/Lindon (43)	24,636	2,501		10.2%	9.3%	5.7%	14.6%
7	Provo/BYU (47)	39,401	5,725		14.5%	11.1%	6.7%	17.9%
49	Provo South (48)	48,138	7,009		14.6%	17.7%	12.2%	25.0%
52	Springville/Spanish Fork (49)	41,036	8,261		20.1%	19.0%	15.1%	23.8%
55	Utah Co. South (50)	17,363	3,664		21.1%	19.8%	14.3%	26.9%
24	West Orem (45)	21,774	3,712		17.1%	14.1%	8.6%	22.3%
16	Wasatch County HD (52)	12,514	1,638		13.1%	12.6%	10.6%	14.8%
	Weber-Morgan HD	148,702	22,855		15.4%	15.1%	13.2%	17.2%
53	Ben Lomond (5)	33,215	6,112		18.4%	19.1%	14.9%	24.3%
9	Downtown Ogden (7)	21,684	2,301		10.6%	11.6%	7.1%	18.6%
38	Morgan/East Weber Co. (6)	24,131	4,020		16.7%	16.3%	11.8%	22.0%
45	Riverdale (10)	15,522	2,715		17.5%	17.1%	11.8%	24.2%
11	Roy/Hooper (9)	27,898	3,507		12.6%	12.1%	8.8%	16.5%
48	South Ogden (8)	26,255	4,455		17.0%	17.3%	11.9%	24.4%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

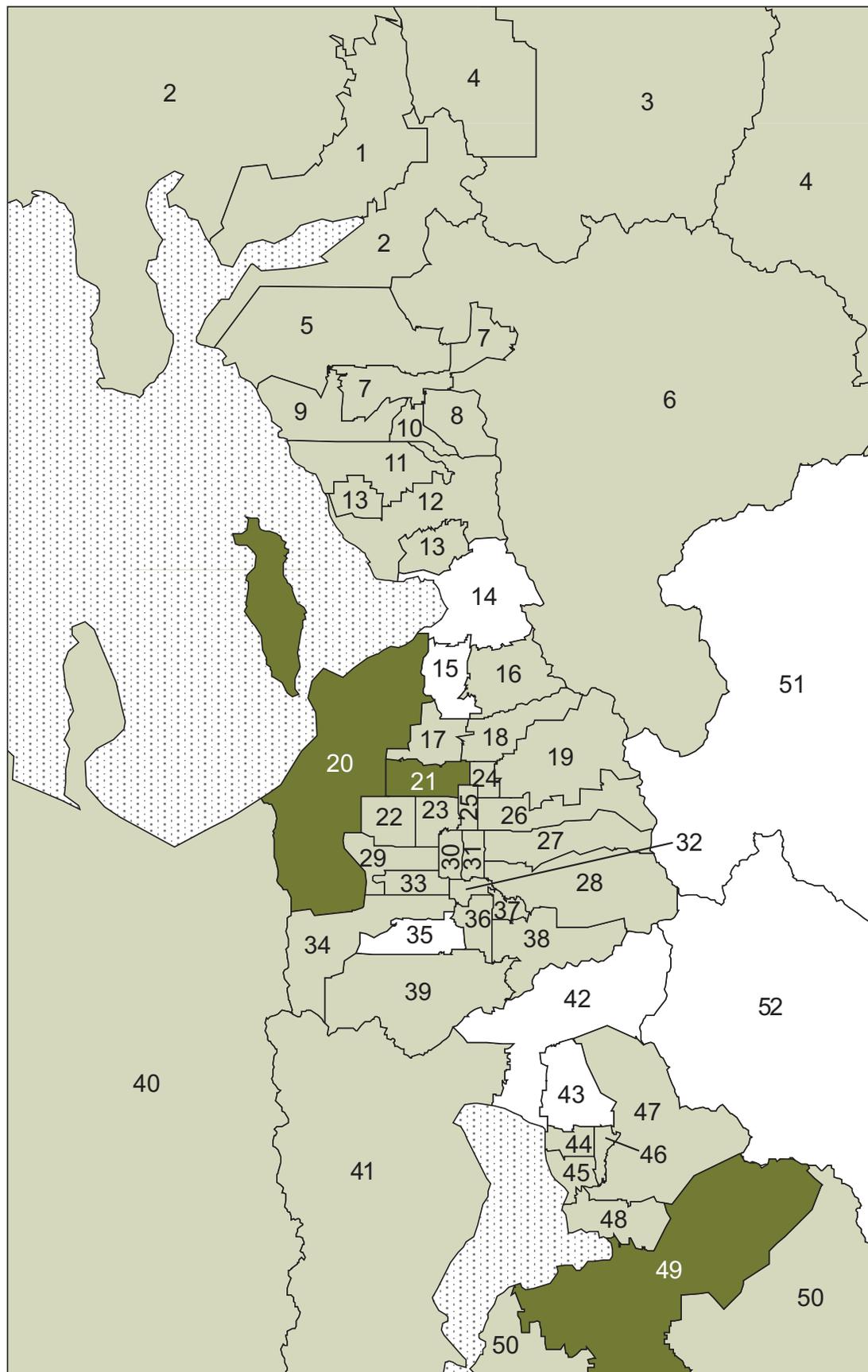
3. POOR MENTAL HEALTH

Figure 3.2: 7+ Days of Poor Mental Health by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



3. POOR MENTAL HEALTH

Figure 3.3: 7+ Days of Poor Mental Health by Small Area, Wasatch Front Adults 18+, 2001–2005 (Age-adjusted)



4. DOCTOR-DIAGNOSED DIABETES

Measure Definition: *“Have you ever been told by a doctor that you have diabetes?” [Yes, excluding females told only during pregnancy or people told they have pre-diabetes or borderline diabetes]*

Why is diabetes important to public health?

Diabetes is a serious disease that can have devastating consequences. Each year in the U.S., between 12,000 and 24,000 people with diabetes become blind, more than 42,800 develop kidney failure, and about 82,000 experience leg, foot, or toe amputations. Nerve damage brought on by diabetes can create severe pain and impaired sensation in hands and feet. Most notably, diabetes increases the risk of heart disease and stroke by two to four times. Diabetes is one of the most costly of all chronic diseases. Nationally, more than one in every ten health care dollars (10.6%), about \$92 billion a year, is spent on direct health care costs for people with diabetes.⁸

Additionally, indirect costs, such as lost productivity, disability, and premature mortality, bring the total estimated costs to \$132 billion a year.⁸

Many interventions, while shown to be effective at the state level, may have little influence in some communities. Examining prevalence of diabetes by small area is a first step toward identifying and addressing the needs that may be unique to a specific geographical area.

Risk factors for diabetes

There are two primary types of diabetes: (1) type 1 diabetes, an autoimmune disease that develops when the pancreas fails to produce insulin, and (2) type 2, which results from an inability of the body to use insulin, too little insulin production, or a combination of both. The risk factors for type 1 diabetes are not well understood, but family history appears to be a predominant risk factor.

Type 2 diabetes, on the other hand, appears to be closely linked to lifestyle. In particular, overweight and obesity are the predominant modifiable risk factors for diabetes. The Diabetes Prevention Program (DPP), a clinical trial of more than 3,000 adults at high risk for type 2 diabetes, clearly demonstrated that even moderate weight loss achieved through diet and exercise can delay or prevent diabetes onset. There is some evidence that increasing physical activity, even without weight loss, may have an effect on preventing type 2 diabetes by increasing a person’s sensitivity to insulin.⁹ Family history also appears to play a role in the risk of type 2 diabetes, although to a lesser extent than it does for type 1 diabetes.

Type 2 diabetes is a condition for which demographics appears to have a strong impact. Prevalence of type 2 diabetes is higher among middle-aged and elderly populations, members of certain racial/ethnic minority groups, and low income populations.

Diabetes in Utah

Approximately 82,324 Utah adults have been diagnosed with diabetes, representing (for 2003) 5.0% of the adult population. Rates are shown by health district and small areas within each health district (Table 4). In some instances, the population for a health district is small enough to be considered a small area on its own. Crude rates are used to show the true prevalence of a condition in a population. Crude rates of diabetes ranged

Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 5-3: Reduce the overall rate of diabetes that is clinically diagnosed to 25 overall cases per 1,000 population (age-adjusted to U.S. 2000 standard population).

4. DOCTOR-DIAGNOSED DIABETES

Diabetes in Utah (continued)

from a low of 1.7% for the Avenues to a high of 9.8% for South Salt Lake. Because diabetes is so closely linked to age, age-adjusted rates are commonly used to compare prevalence rates across populations. Age-adjusted rates are artificial rates that are calculated as though the age compositions for each area are identical. The standard population used for age adjustment is the 2000 U.S. population.

After adjusting for the differences in age compositions, five small areas were observed to have a lower-than-state prevalence. The lower age-adjusted rate was seen in the Avenues at 1.5%, followed by Roy/Hooper at 2.7%, Northeast Sandy at 2.8%, Foothill/U of U at 2.8%, and Summit County at 3.1%.

A number of small areas had prevalence rates that were higher than the state rate. The highest age-adjusted prevalence was seen for Pleasant Grove/Lindon with a rate that approaches double that for the state at 10.5%. This small area was followed closely by Downtown Ogden, with 10.2%; West Jordan North, Cedar City, West Valley West, Woods Cross/North SL, and Other Cache/Rich County also had rates that were higher than the state rate. Higher-than-state rates were also noted for two local health districts: Tooele County and Utah County.

As the population of Utah becomes increasingly diversified, it is important to recognize the considerable community variations that may affect the prevalence of chronic conditions. For example, the high prevalence of diabetes in the Downtown Ogden area likely reflects the high percentage of minority members living in this community. Downtown Ogden has the highest concentration of Black persons (3.2%) of all small areas, and one of the highest concentrations of Hispanic/Latino population (29.4%). The higher-than-state concentration of Hispanic/Latino population in West Jordan North (11.0%) and the high concentration of Pacific Islander persons in West Valley West (2.4%) may help to account for some of the higher prevalence in these areas. West Jordan North also had the highest rate of obesity of all small areas (30.5%), and the third highest prevalence of diabetes.

An important note is that rates of diabetes, particularly in those populations with limited access to health care, are likely to be underestimated. Approximately 28% of people with diabetes have not been diagnosed. Therefore, the rates in some small areas may be substantially higher than depicted in this report.¹⁰

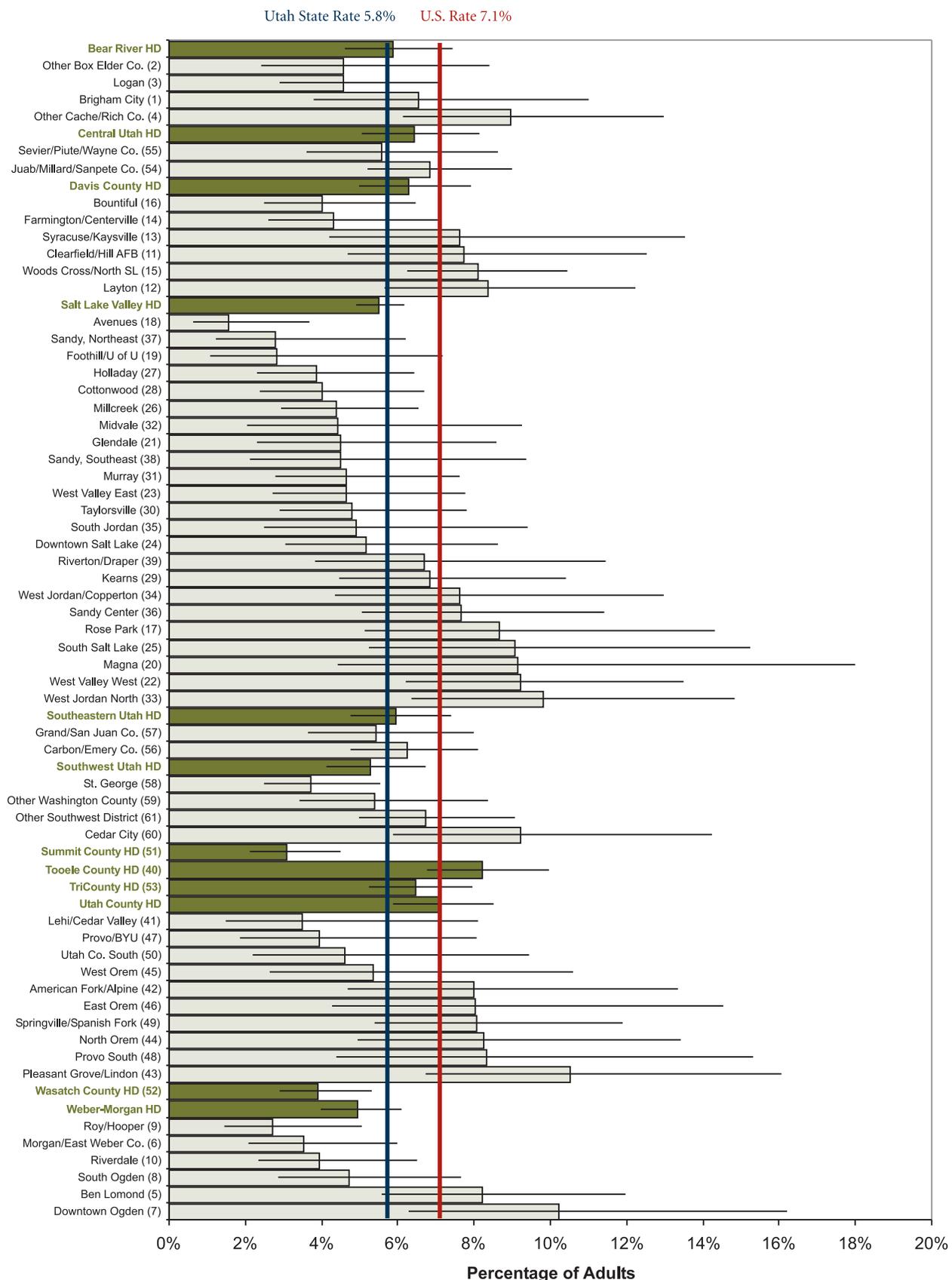
Prevention/Resources

The Utah Diabetes Prevention and Control Program (DPCP), Bureau of Health Promotion at the Utah Department of Health recognizes the importance of promoting resources and building capacity at the community level. The program provides information on diabetes awareness and management to health care providers and to the general public. Self-care manuals in eleven languages are available through the program and may be downloaded from its website, <http://health.utah.gov/diabetes>. The site also offers a number of links with resources for clinicians and provides links to patient assistance programs.

The DPCP certifies diabetes education programs, a good proportion providing services in rural areas where no other programs are available. The DPCP also sponsors monthly telehealth programs for health care professionals, covering such topics as foot care, insulin use, and aggressive treatment. The DPCP uses the media extensively to promote awareness of the risk factors and warning signs of diabetes. Those interested in obtaining more information on diabetes control may call the Health Resource Line, 1-800-222-2542.

4. DOCTOR-DIAGNOSED DIABETES

Figure 4.1: Percentage of Adults Who Reported Doctor-diagnosed Diabetes by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



4. DOCTOR-DIAGNOSED DIABETES

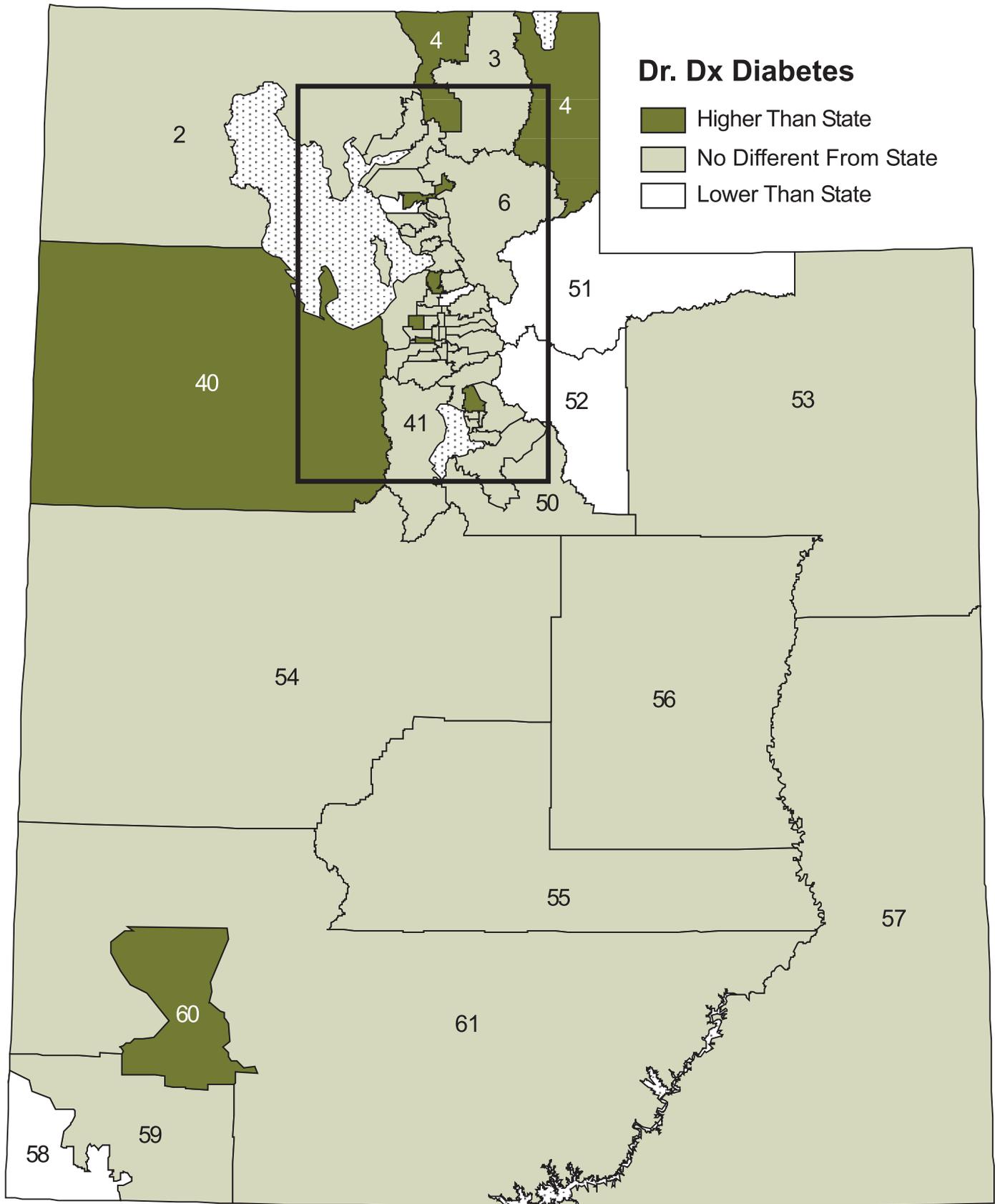
Table 4: Dr. Dx Diabetes by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Dr. Dx Diabetes	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	15,725,380	7.2%	7.1%	7.0%	7.2%
	State of Utah	1,657,454	82,375	5.0%	5.8%	5.4%	6.2%
	Bear River HD	98,027	4,990	5.1%	5.9%	4.6%	7.4%
35	Brigham City (1)	14,566	954	6.6%	6.5%	3.8%	11.0%
21	Logan (3)	45,904	1,189	2.6%	4.6%	2.9%	7.2%
20	Other Box Elder Co. (2)	14,636	688	4.7%	4.6%	2.4%	8.4%
54	Other Cache/Rich Co. (4)	22,921	2,012	8.8%	9.0%	6.1%	13.0%
	Central Utah HD	47,558	2,972	6.3%	6.4%	5.1%	8.1%
39	Juab/Millard/Sanpete Co. (54)	31,637	2,072	6.6%	6.9%	5.2%	9.0%
32	Sevier/Piute/Wayne Co. (55)	15,921	907	5.7%	5.6%	3.6%	8.6%
	Davis County HD	175,027	9,171	5.2%	6.3%	5.0%	7.9%
14	Bountiful (16)	33,318	1,646	4.9%	4.0%	2.5%	6.5%
43	Clearfield/Hill AFB (11)	37,329	2,128	5.7%	7.7%	4.7%	12.5%
15	Farmington/Centerville (14)	19,034	773	4.1%	4.3%	2.6%	7.1%
52	Layton (12)	46,815	2,856	6.1%	8.4%	5.6%	12.2%
41	Syracuse/Kaysville (13)	24,542	1,517	6.2%	7.6%	4.2%	13.5%
47	Woods Cross/North SL (15)	13,989	442	3.2%	8.1%	6.3%	10.5%
	Salt Lake Valley HD	658,810	31,293	4.8%	5.5%	4.9%	6.2%
1	Avenues (18)	18,959	320	1.7%	1.5%	0.6%	3.7%
13	Cottonwood (28)	33,297	1,578	4.7%	4.0%	2.4%	6.7%
28	Downtown Salt Lake (24)	42,808	1,704	4.0%	5.2%	3.0%	8.6%
4	Foothill/U of U (19)	17,778	418	2.4%	2.8%	1.1%	7.2%
18	Glendale (21)	18,642	913	4.9%	4.5%	2.3%	8.6%
9	Holladay (27)	35,956	1,773	4.9%	3.9%	2.3%	6.4%
38	Kearns (29)	42,995	2,348	5.5%	6.9%	4.5%	10.4%
56	Magna (20)	15,623	789	5.1%	9.1%	4.4%	18.0%
17	Midvale (32)	21,672	802	3.7%	4.4%	2.1%	9.3%
16	Millcreek (26)	44,008	2,016	4.6%	4.4%	2.9%	6.6%
23	Murray (31)	24,072	1,064	4.4%	4.6%	2.8%	7.6%
36	Riverton/Draper (39)	41,391	1,519	3.7%	6.7%	3.8%	11.5%
53	Rose Park (17)	22,639	1,422	6.3%	8.7%	5.1%	14.3%
42	Sandy Center (36)	36,106	2,018	5.6%	7.7%	5.1%	11.4%
3	Sandy, Northeast (37)	18,245	483	2.7%	2.8%	1.2%	6.2%
19	Sandy, Southeast (38)	20,781	584	2.8%	4.5%	2.1%	9.4%
27	South Jordan (35)	20,931	588	2.8%	4.9%	2.5%	9.4%
55	South Salt Lake (25)	18,456	1,811	9.8%	9.1%	5.2%	15.2%
26	Taylorsville (30)	27,372	1,196	4.4%	4.8%	2.9%	7.8%
59	West Jordan North (33)	30,391	1,684	5.5%	9.8%	6.4%	14.9%
40	West Jordan/Copperton (34)	26,360	1,392	5.3%	7.6%	4.3%	13.0%
24	West Valley East (23)	35,527	1,542	4.3%	4.6%	2.7%	7.8%
57	West Valley West (22)	44,794	3,449	7.7%	9.2%	6.2%	13.5%
	Southeastern Utah HD	36,828	2,202	6.0%	5.9%	4.8%	7.4%
33	Carbon/Emery Co. (56)	21,451	1,349	6.3%	6.2%	4.8%	8.1%
31	Grand/San Juan Co. (57)	15,377	829	5.4%	5.4%	3.7%	8.0%
	Southwest Utah HD	116,150	6,202	5.3%	5.3%	4.1%	6.7%
58	Cedar City (60)	22,401	1,261	5.6%	9.2%	5.9%	14.2%
37	Other Southwest District (61)	15,384	1,008	6.6%	6.7%	5.0%	9.1%
30	Other Washington County (59)	32,503	1,807	5.6%	5.4%	3.4%	8.4%
8	St. George (58)	45,862	1,899	4.1%	3.7%	2.5%	5.6%
5	Summit County HD (51)	24,525	564	2.3%	3.1%	2.1%	4.5%
48	Tooele County HD (40)	32,458	2,298	7.1%	8.2%	6.8%	10.0%
34	TriCounty HD (53)	28,023	1,813	6.5%	6.5%	5.2%	8.0%
	Utah County HD	278,832	13,691	4.9%	7.1%	5.9%	8.5%
44	American Fork/Alpine (42)	26,819	1,896	7.1%	8.0%	4.7%	13.4%
45	East Orem (46)	14,955	1,053	7.0%	8.0%	4.3%	14.5%
6	Lehi/Cedar Valley (41)	18,752	411	2.2%	3.5%	1.5%	8.1%
50	North Orem (44)	25,965	1,690	6.5%	8.2%	5.0%	13.4%
61	Pleasant Grove/Lindon (43)	24,636	1,877	7.6%	10.5%	6.7%	16.1%
12	Provo/BYU (47)	39,401	985	2.5%	3.9%	1.9%	8.1%
51	Provo South (48)	48,138	1,218	2.5%	8.3%	4.4%	15.3%
46	Springville/Spanish Fork (49)	41,036	2,602	6.3%	8.1%	5.4%	11.9%
22	Utah Co. South (50)	17,363	599	3.5%	4.6%	2.2%	9.4%
29	West Orem (45)	21,774	945	4.3%	5.4%	2.6%	10.6%
10	Wasatch County HD (52)	12,514	443	3.5%	3.9%	2.9%	5.3%
	Weber-Morgan HD	148,702	6,781	4.6%	5.0%	4.1%	6.2%
49	Ben Lomond (5)	33,215	2,186	6.6%	8.2%	5.6%	12.0%
60	Downtown Ogden (7)	21,684	1,926	8.9%	10.2%	6.3%	16.2%
7	Morgan/East Weber Co. (6)	24,131	818	3.4%	3.5%	2.1%	6.0%
11	Riverdale (10)	15,522	582	3.8%	3.9%	2.3%	6.5%
2	Roy/Hooper (9)	27,898	617	2.2%	2.7%	1.5%	5.1%
25	South Ogden (8)	26,255	1,160	4.4%	4.7%	2.9%	7.7%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

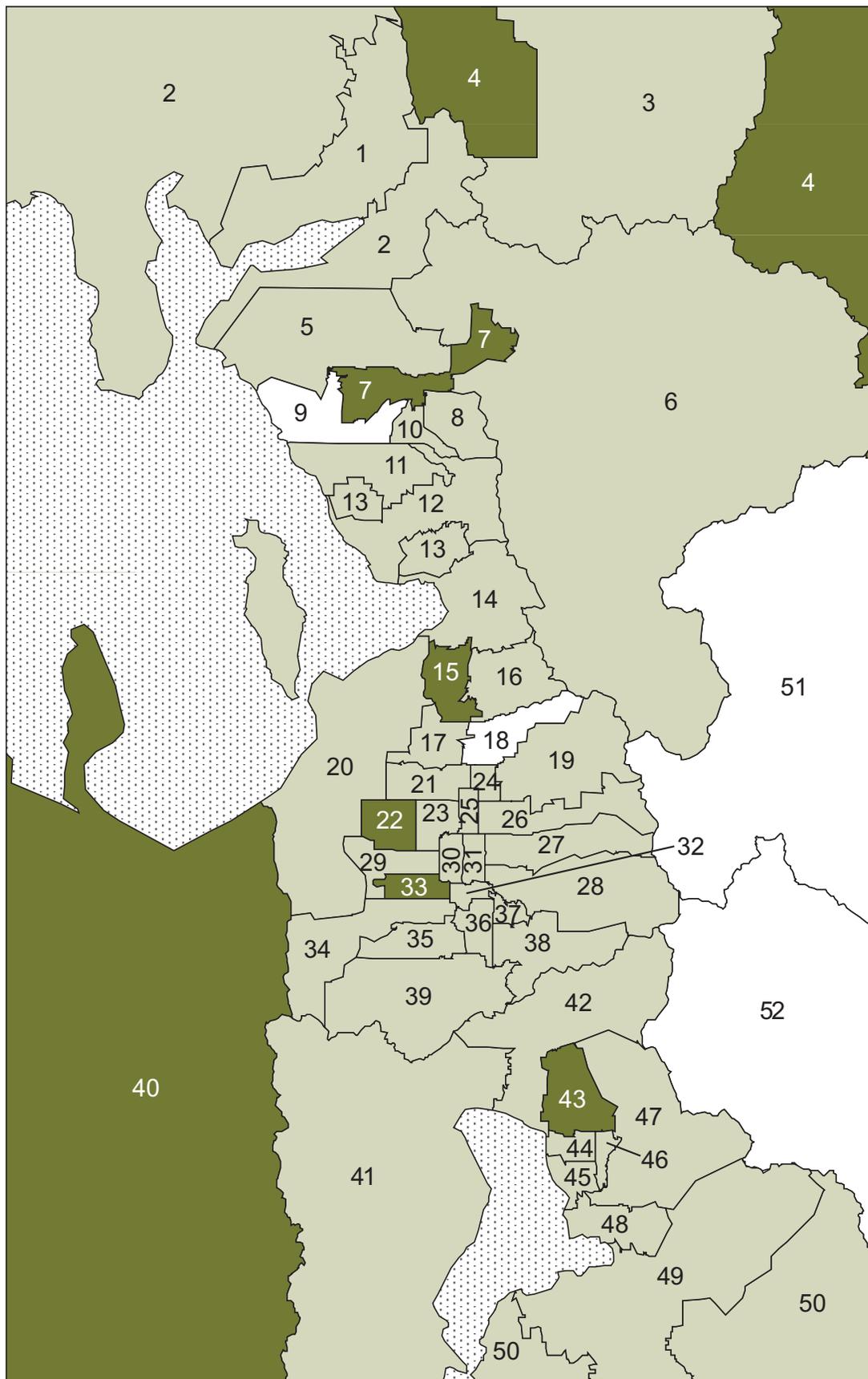
4. DOCTOR-DIAGNOSED DIABETES

Figure 4.2: Dr. Dx Diabetes by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



4. DOCTOR-DIAGNOSED DIABETES

Figure 4.3: Dr. Dx Diabetes by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



5. CURRENT DOCTOR-DIAGNOSED ASTHMA

Measure Definition: *“Have you ever been told by a doctor, nurse, or other health professional that you had asthma? Do you still have asthma?” [Yes to both questions]*

Why is asthma important to public health?

Asthma is a chronic lung disease caused by airway inflammation that leads to reversible airflow obstruction. Asthma is one of the ten leading chronic conditions that restrict activity. In 2004, it was estimated that 20.5 million Americans currently have asthma. Of these, 11.7 million Americans, including 4 million children under 18, had an asthma attack.¹¹ Asthma is a serious personal and public health issue that has far-reaching medical, economic, and psychosocial implications. The burden of asthma can be seen in the number of asthma-related medical events, including emergency department visits, hospitalizations, and deaths. Although not much is known about asthma prevention, effective asthma management by patients, their family members, and their health care providers can reduce or prevent many problems caused by the disease.

Risk factors for asthma

According to BRFSS data 2001–2005, many factors are associated with the likelihood of an individual having asthma. Some of these factors include gender, age, ethnicity, and household income. Adult asthma rates were higher for women than men at every age category. For men, rates were highest in the 18–34 year age group. For women, rates were highest in the 50–64 year age group. Additionally, White, non-Hispanic persons and those with a lower household income were more likely to have asthma.

Asthma in Utah

The age-adjusted aggregated state asthma prevalence rate for 2001–2005 was 7.5%. The corresponding crude rate was 7.7%. This means that approximately 127,000 adult Utahns had asthma in 2003. The age-adjusted prevalence of asthma varied by local health district and ranged from a low of 6.1% in Utah County to a high of 10.4% in Central Utah. These were the only two health districts where asthma prevalence differed significantly from the state rate, with Central Utah’s rate being higher than the state and the Utah County rate being lower than the state.

When the local health districts were separated into their pre-determined small areas, it showed that within a local health district there were many small areas with higher or lower prevalence relative to the district’s prevalence. For example, in Salt Lake Valley (overall prevalence 7.9%) the small area prevalence ranged from a low of 4.9% (age-adjusted) in Sandy Center to a high of 14.2% in Murray; the difference between these small areas was statistically significant.

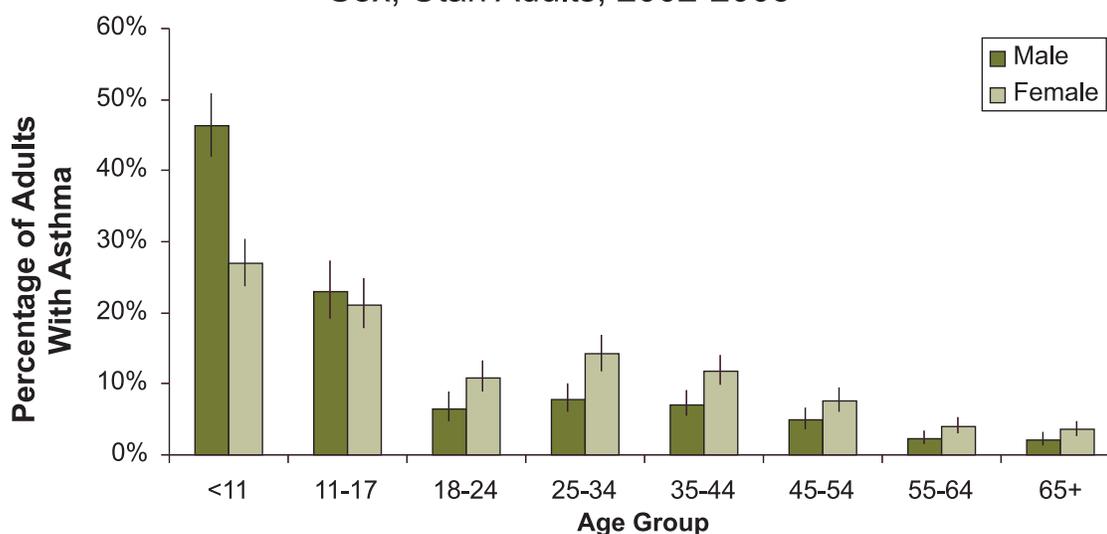
Overall, the small area with the highest rate of asthma was Murray, with a rate of 14.2% and the small area with the lowest rate was North Orem, with a rate of 3.3%. Nearly half (44.1%) of adults with asthma have had it for more than 10 years. Males tended to be diagnosed with asthma in childhood, with about 70% of males diagnosed before age 18. Females, however, were split about 50/50, with half being diagnosed with asthma before age 18 and the other half after age 18 (Figure 5.A).

Utah Objective: No objective listed.
HP2010 Objective: No objective listed.

5. CURRENT DOCTOR-DIAGNOSED ASTHMA

Asthma in Utah (continued)

Figure 5.A: Age First Diagnosed With Asthma by Sex, Utah Adults, 2002-2005



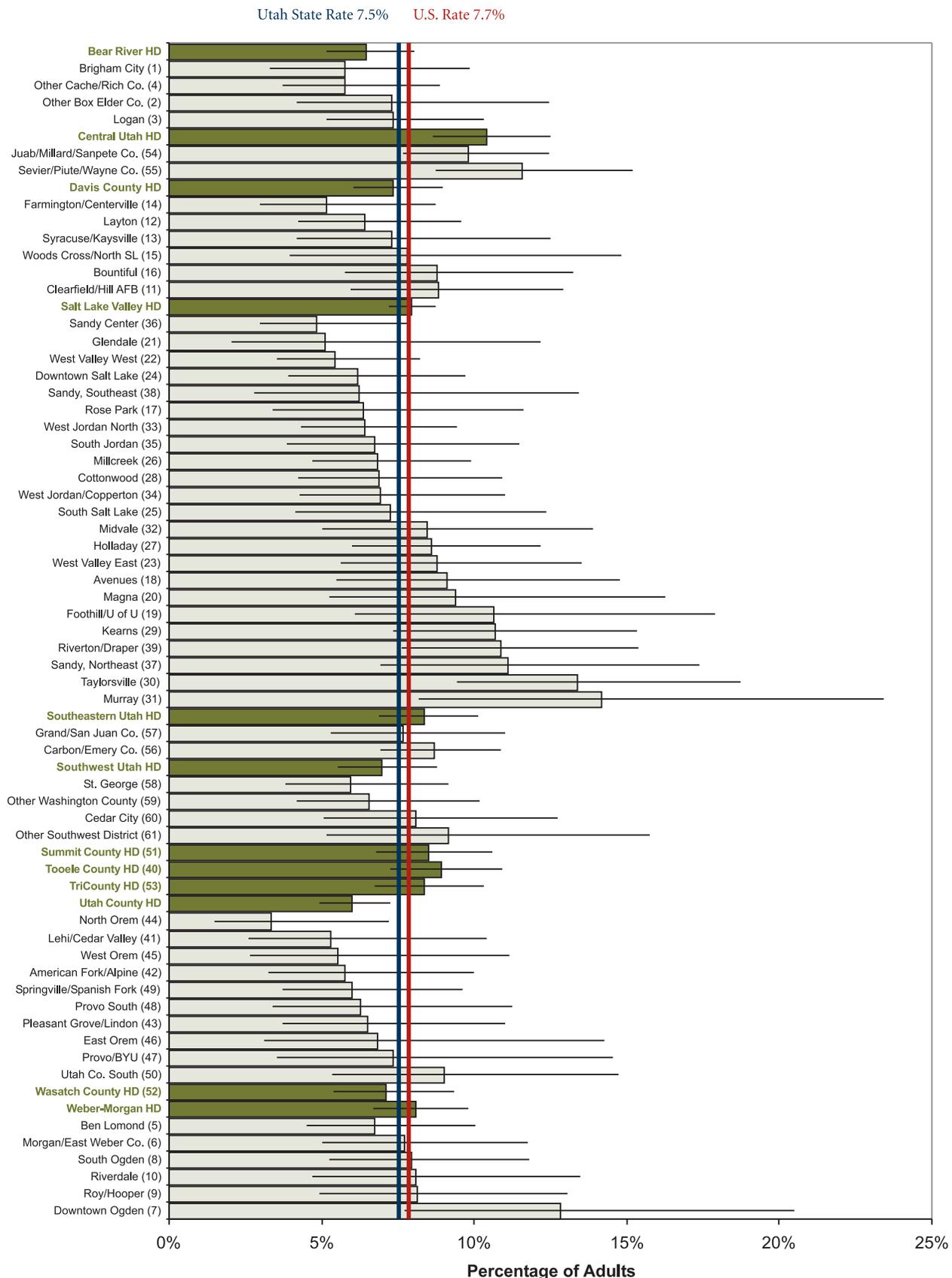
Prevention/Resources

The Utah Asthma Program, Bureau of Health Promotion at the Utah Department of Health recognizes the importance of promoting resources and building capacity at the community level. The program provides information on asthma awareness and management to health care providers and to the general public. The program provides health care professionals with resources to assist them with asthma management for their patients. It also works with high-risk occupations to help reduce asthma in the workplace. Information on air quality, pollen counts, and other resources are available at the program's website, <http://health.utah.gov/asthma>.

The Asthma Program and the American Lung Association of Utah offer several programs to schools to assist faculty, staff, and students with managing asthma in the classroom and other school activities. The Utah Asthma School Resource Manual and Training offers training to faculty and staff and provides them with a manual to help inform them about asthma. The Winning With Asthma online tutorial provides information to coaches and physical education teachers about how to manage asthma in athletes. The Open Airways for Schools teaches students with asthma how to manage their symptoms. More information on this program is available at <http://www.lungusa2.org/utah/index.html>. Those interested in obtaining more information on asthma control may call the Health Resource Line, 1-800-222-2542.

5. CURRENT DOCTOR-DIAGNOSED ASTHMA

Figure 5.1: Percentage of Adults Reporting Current Doctor-diagnosed Asthma by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



5. CURRENT DOCTOR-DIAGNOSED ASTHMA

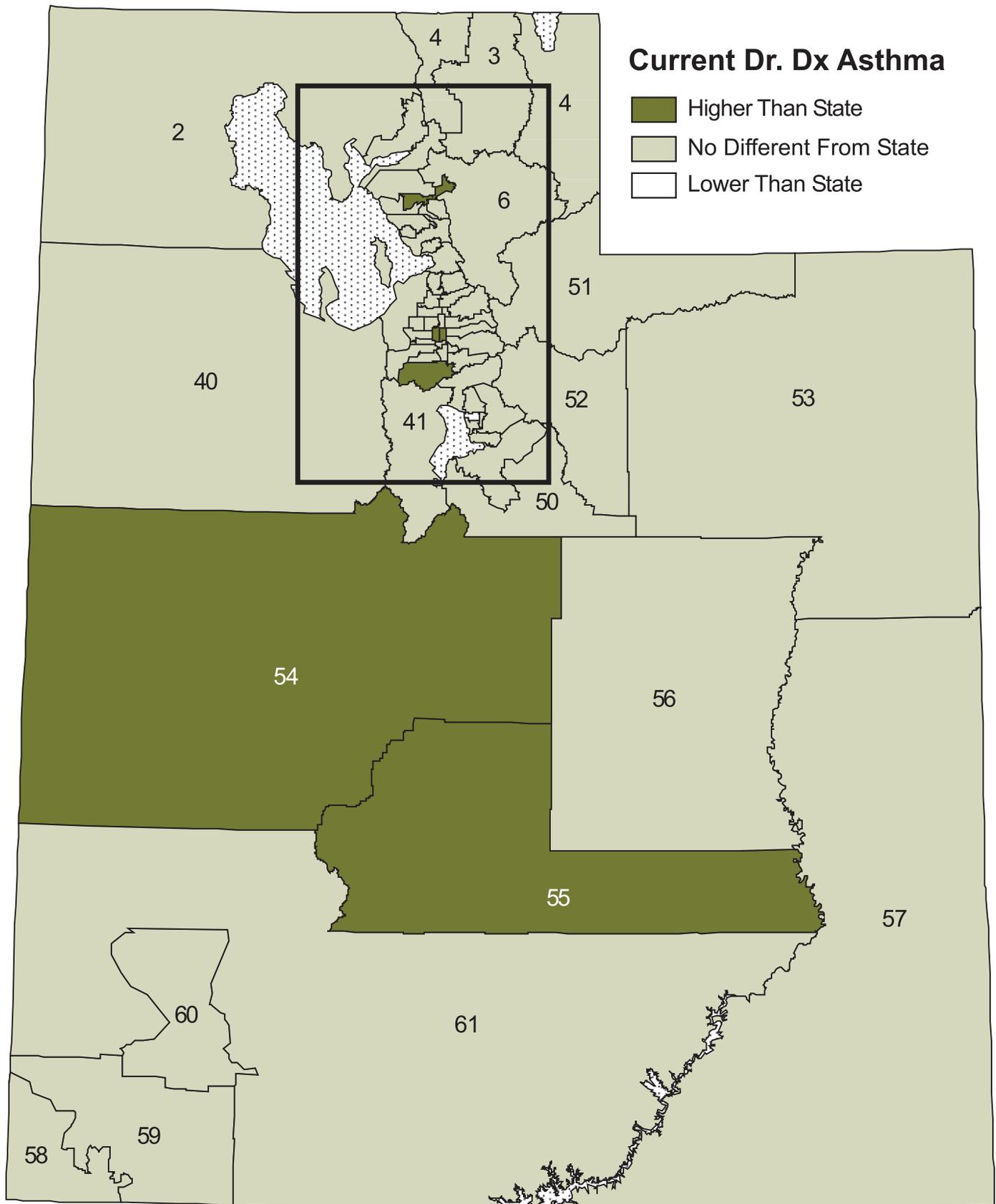
Table 5: Current Dr. Dx Asthma by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Current Dr. Dx Asthma	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	16,705,494	7.7%	7.7%	7.6%	7.7%
	State of Utah	1,657,454	127,458	7.7%	7.5%	7.1%	8.0%
	Bear River HD	98,027	6,382	6.5%	6.5%	5.2%	8.0%
8	Brigham City (1)	14,566	830	5.7%	5.7%	3.3%	9.9%
31	Logan (3)	45,904	3,250	7.1%	7.3%	5.1%	10.3%
29	Other Box Elder Co. (2)	14,636	1,052	7.2%	7.3%	4.2%	12.5%
10	Other Cache/Rich Co. (4)	22,921	1,235	5.4%	5.8%	3.7%	8.9%
	Central Utah HD	47,558	4,946	10.4%	10.4%	8.7%	12.5%
53	Juab/Millard/Sanpete Co. (54)	31,637	3,031	9.6%	9.8%	7.7%	12.4%
58	Sevier/Piute/Wayne Co. (55)	15,921	1,887	11.9%	11.6%	8.7%	15.2%
	Davis County HD	175,027	13,197	7.5%	7.4%	6.1%	9.0%
46	Bountiful (16)	33,318	2,722	8.2%	8.8%	5.8%	13.2%
47	Clearfield/Hill AFB (11)	37,329	3,737	10.0%	8.8%	6.0%	12.9%
4	Farmington/Centerville (14)	19,034	716	3.8%	5.1%	3.0%	8.7%
17	Layton (12)	46,815	3,399	7.3%	6.4%	4.3%	9.6%
30	Syracuse/Kaysville (13)	24,542	1,377	5.6%	7.3%	4.2%	12.5%
35	Woods Cross/North SL (15)	13,989	1,086	7.8%	7.8%	4.0%	14.8%
	Salt Lake Valley HD	658,810	53,693	8.2%	7.9%	7.2%	8.8%
50	Avenues (18)	18,959	1,623	8.6%	9.1%	5.5%	14.8%
25	Cottonwood (28)	33,297	2,647	8.0%	6.9%	4.3%	10.9%
13	Downtown Salt Lake (24)	42,808	2,470	5.8%	6.2%	3.9%	9.7%
54	Foothill/U of U (19)	17,778	1,806	10.2%	10.6%	6.1%	17.9%
3	Glendale (21)	18,642	1,258	6.8%	5.1%	2.1%	12.2%
43	Holladay (27)	35,956	3,333	9.3%	8.6%	6.0%	12.2%
55	Kearns (29)	42,995	4,368	10.2%	10.7%	7.3%	15.4%
52	Magna (20)	15,623	1,248	8.0%	9.4%	5.2%	16.3%
41	Midvale (32)	21,672	2,076	9.6%	8.5%	5.0%	13.9%
24	Millcreek (26)	44,008	3,072	7.0%	6.8%	4.7%	9.9%
61	Murray (31)	24,072	3,134	13.0%	14.2%	8.2%	23.4%
56	Riverton/Drapers (39)	41,391	4,305	10.4%	10.9%	7.6%	15.4%
16	Rose Park (17)	22,639	1,442	6.4%	6.4%	3.4%	11.6%
2	Sandy Center (36)	36,106	1,708	4.7%	4.9%	3.0%	7.8%
57	Sandy, Northeast (37)	18,245	2,025	11.1%	11.1%	6.9%	17.4%
14	Sandy, Southeast (38)	20,781	1,085	5.2%	6.2%	2.8%	13.5%
21	South Jordan (35)	20,931	1,463	7.0%	6.7%	3.9%	11.5%
28	South Salt Lake (25)	18,456	1,261	6.8%	7.2%	4.2%	12.4%
60	Taylorsville (30)	27,372	3,920	14.3%	13.4%	9.4%	18.7%
18	West Jordan North (33)	30,391	2,033	6.7%	6.4%	4.3%	9.4%
26	West Jordan/Copperton (34)	26,360	1,792	6.8%	6.9%	4.3%	11.0%
45	West Valley East (23)	35,527	3,023	8.5%	8.8%	5.6%	13.5%
6	West Valley West (22)	44,794	2,746	6.1%	5.4%	3.5%	8.2%
	Southeastern Utah HD	36,828	3,090	8.4%	8.3%	6.9%	10.1%
44	Carbon/Emery Co. (56)	21,451	1,864	8.7%	8.7%	6.9%	10.9%
33	Grand/San Juan Co. (57)	15,377	1,201	7.8%	7.7%	5.3%	11.0%
	Southwest Utah HD	116,150	8,479	7.3%	7.0%	5.5%	8.8%
38	Cedar City (60)	22,401	1,940	8.7%	8.1%	5.1%	12.7%
51	Other Southwest District (61)	15,384	1,283	8.3%	9.1%	5.1%	15.8%
20	Other Washington County (59)	32,503	2,171	6.7%	6.6%	4.2%	10.2%
11	St. George (58)	45,862	3,018	6.6%	5.9%	3.8%	9.2%
42	Summit County HD (51)	24,525	1,960	8.0%	8.5%	6.8%	10.6%
48	Tooele County HD (40)	32,458	2,886	8.9%	8.9%	7.3%	10.9%
40	TriCounty HD (53)	28,023	2,430	8.7%	8.4%	6.7%	10.3%
	Utah County HD	278,832	17,176	6.2%	6.1%	5.0%	7.4%
9	American Fork/Alpine (42)	26,819	1,824	6.8%	5.7%	3.3%	10.0%
23	East Orem (46)	14,955	812	5.4%	6.8%	3.1%	14.3%
5	Lehi/Cedar Valley (41)	18,752	911	4.9%	5.3%	2.6%	10.4%
1	North Orem (44)	25,965	862	3.3%	3.3%	1.5%	7.2%
19	Pleasant Grove/Lindon (43)	24,636	1,616	6.6%	6.5%	3.7%	11.0%
32	Provo/BYU (47)	39,401	3,345	8.5%	7.3%	3.5%	14.6%
15	Provo South (48)	48,138	2,768	5.8%	6.3%	3.4%	11.3%
12	Springville/Spanish Fork (49)	41,036	2,462	6.0%	6.0%	3.7%	9.6%
49	Utah Co. South (50)	17,363	1,455	8.4%	9.0%	5.4%	14.7%
7	West Orem (45)	21,774	1,487	6.8%	5.5%	2.6%	11.1%
27	Wasatch County HD (52)	12,514	875	7.0%	7.1%	5.4%	9.4%
	Weber-Morgan HD	148,702	12,000	8.1%	8.1%	6.7%	9.8%
22	Ben Lomond (5)	33,215	2,338	7.0%	6.8%	4.5%	10.0%
59	Downtown Ogden (7)	21,684	2,728	12.6%	12.8%	7.7%	20.5%
34	Morgan/East Weber Co. (6)	24,131	1,834	7.6%	7.7%	5.0%	11.8%
37	Riverdale (10)	15,522	1,349	8.7%	8.1%	4.7%	13.5%
39	Roy/Hooper (9)	27,898	1,958	7.0%	8.1%	5.0%	13.0%
36	South Ogden (8)	26,255	2,240	8.5%	7.9%	5.3%	11.8%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

5. CURRENT DOCTOR-DIAGNOSED ASTHMA

Figure 5.2: Current Dr. Dx Asthma by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



6. DOCTOR-DIAGNOSED ARTHRITIS

Measure Definition: *“Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?” [Yes]*

Why is arthritis important to public health?

In 2002, an estimated 42.7 million, or 20.8% of U.S. adults aged 18 years and older reported arthritis. Women had a higher prevalence of arthritis (24.3%) than men (17.1%). Prevalence among all respondents increased with age. One in three U.S. adults with arthritis (37.6%) reported activity limitations caused by arthritis or joint symptoms, which equals 7.8% or 16 million U.S. adults. Nearly one in four adults with arthritis (24.6%) reported severe joint pain during the preceding 30 days. Among persons 18–64 years of age with arthritis, 30.6% or 8.2 million adults reported limitations at work which were caused by arthritis.¹²

Arthritis also results in a substantial burden to the U.S. health care system. Each year, arthritis results in 750,000 hospitalizations and 36 million outpatient visits. The total cost of arthritis and other related conditions in the United States in 1997 was \$86.2 billion (including \$51.1 billion in direct costs and \$35.1 billion in indirect costs), which was approximately 1% of the 1997 U.S. gross domestic product.¹³

Risk factors for arthritis

Certain factors have been shown to be associated with a greater risk of arthritis. Some of these risk factors are modifiable while others are not. Non-modifiable risk factors include age, gender, and genetics. The risk of developing arthritis increases with age. Most types of arthritis are more common in women. Genes have been identified that are associated with a higher risk of certain types of arthritis, such as rheumatoid arthritis and systemic lupus erythematosus. Modifiable risk factors include overweight or obesity, joint injuries, infection, and occupation. Excess weight can contribute to both the onset and progression of knee osteoarthritis. Damage to a joint can contribute to the development of osteoarthritis of that joint. Many microbial agents can infect joints and may cause various forms of arthritis. Certain occupations involving repetitive knee bending are associated with osteoarthritis of the knee.

Arthritis in Utah

The age-adjusted prevalence rate of arthritis in Utah using the aggregated 2001–2005 data was 24.8% of the population aged 18 and older. The crude rate was 21.8%, meaning that in 2003, approximately 361,000 Utah adults reported arthritis. The age-adjusted U.S. rate of 25.6% was slightly higher than the Utah rate.

After adjusting for age, Central Utah and Weber-Morgan health districts had a higher prevalence of arthritis (30.6% and 27.7% respectively) compared to the state rate. The age-adjusted prevalence of arthritis in Utah’s local health districts ranged from a low of 20.6% in Summit County to a high of 30.6% in Central Utah.

Within the local health districts there were small areas with higher and lower prevalence rates of arthritis relative to the age-adjusted state rate. For example, adults living in Juab, Millard, and Sanpete Counties, North Orem, and Ben Lomond reported a higher prevalence of arthritis than the state rate. Adults living in Southeast Sandy and Alpine/American Fork reported a lower prevalence of arthritis compared to the state rate. Overall, the small area with the highest prevalence of arthritis was North Orem (36.1%), and the small area with the lowest prevalence of arthritis was Alpine/American Fork, with a rate of 15.1%.

Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 2-7: (Developmental) Increase the proportion of adults who have seen a health care provider for their chronic joint symptoms.

6. DOCTOR-DIAGNOSED ARTHRITIS

Prevention/Resources

The Utah/Idaho Chapter of the Arthritis Foundation offers the following programs to improve quality of life and general health status:

Arthritis Foundation Aquatics Program – This program uses exercises that are performed while standing in a warm water pool. The water provides resistance to build muscle strength and supports joints to encourage free movement.

Arthritis Foundation Exercise Program – This program uses low-impact exercises created by physical therapists that can be performed while standing or sitting. The exercises use gentle range-of-motion movements suitable for any fitness level.

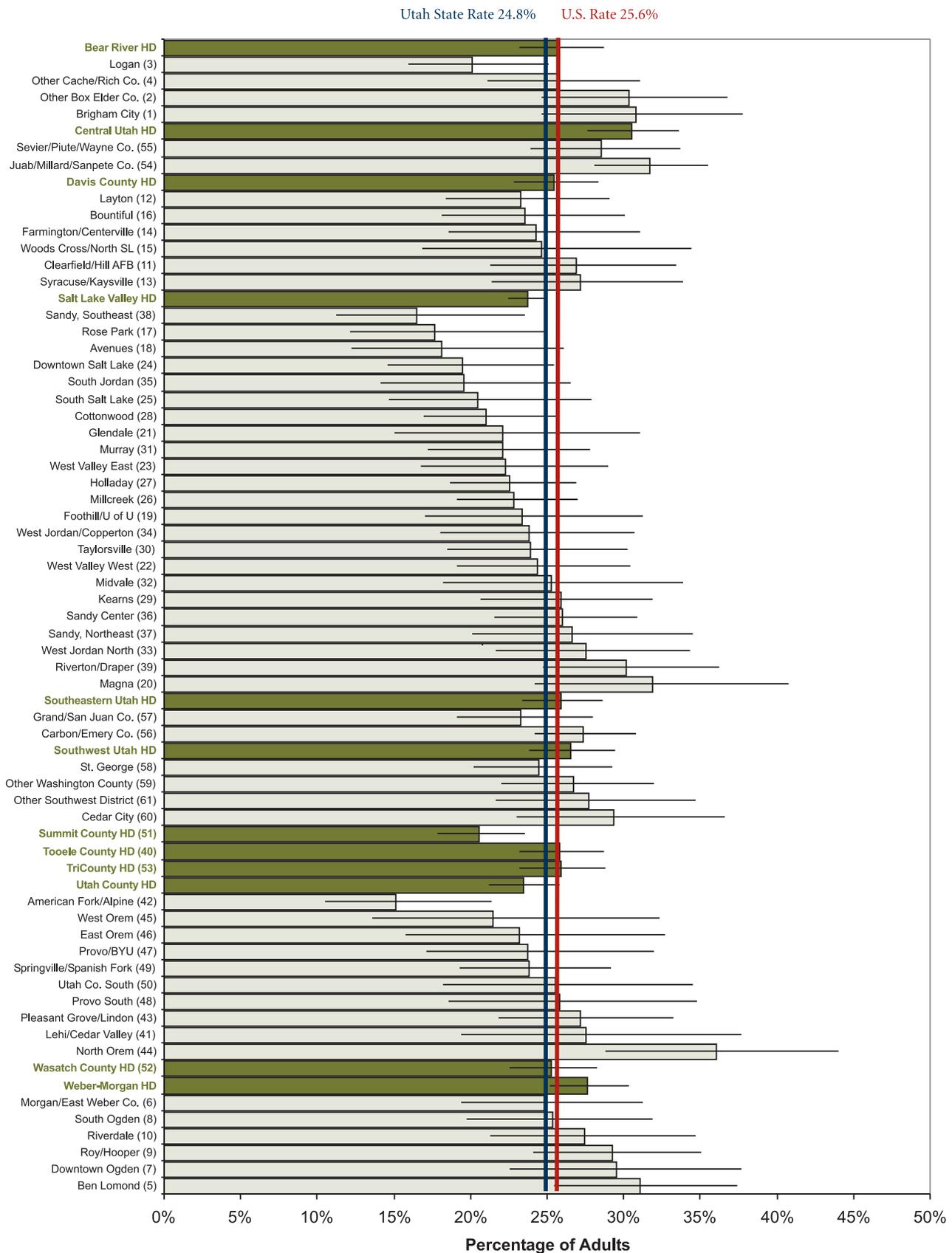
Arthritis Foundation Self-Help Program – This six-week program teaches participants about joint anatomy and protecting joints, the importance of exercise and nutrition, how to take medications properly, and to communicate better with their doctor.

Other resources include local orthopedic clinics, local health departments, Salt Lake County Aging Services, the Utah Division of Aging and Adult Services, the Department of Veterans Affairs Medical Center, the Department of Rheumatology at the University of Utah School of Medicine, and the Centers for Disease Control and Prevention.

For more information about arthritis contact the Utah Department of Health Arthritis Program at (801) 538-9458 or <http://health.utah.gov/arthritis/>.

6. DOCTOR-DIAGNOSED ARTHRITIS

Figure 6.1: Percentage of Adults Reporting Doctor-diagnosed Arthritis by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2003, 2005 (Age-adjusted)



6. DOCTOR-DIAGNOSED ARTHRITIS

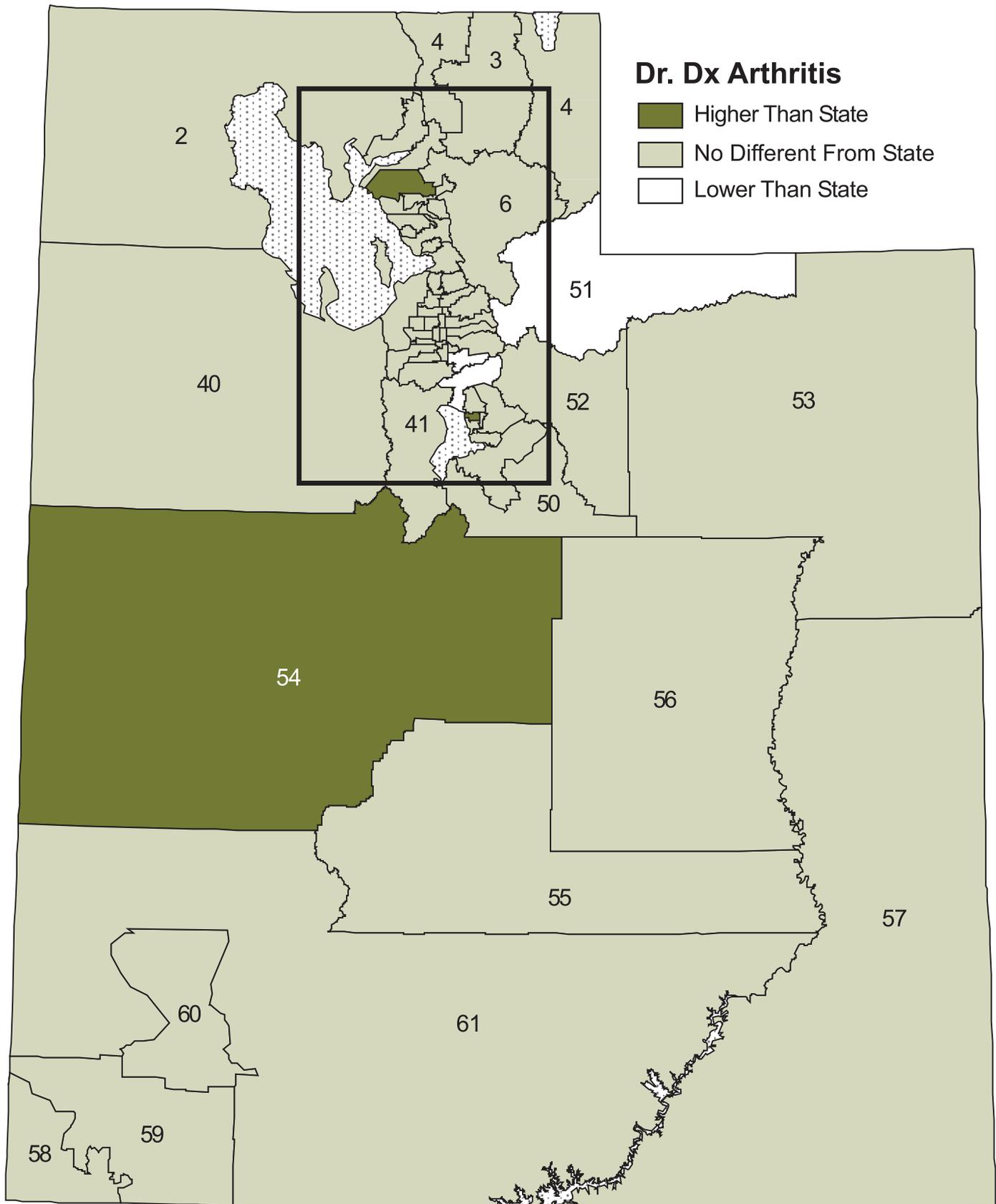
Table 6: Dr. Dx Arthritis by Health District, Small Area, Utah, and U.S., 2001-2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Dr. Dx Arthritis	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	56,672,354	26.0%	25.6%	25.5%	25.8%
	State of Utah	1,657,454	361,656	21.8%	24.8%	24.1%	25.6%
	Bear River HD	98,027	20,919	21.3%	25.9%	23.2%	28.7%
57	Brigham City (1)	14,566	4,100	28.2%	30.8%	24.7%	37.8%
7	Logan (3)	45,904	6,165	13.4%	20.1%	15.9%	25.1%
56	Other Box Elder Co. (2)	14,636	4,482	30.6%	30.4%	24.6%	36.8%
35	Other Cache/Rich Co. (4)	22,921	5,437	23.7%	25.8%	21.1%	31.1%
	Central Utah HD	47,558	14,377	30.2%	30.6%	27.7%	33.7%
59	Juab/Millard/Sanpete Co. (54)	31,637	9,640	30.5%	31.7%	28.1%	35.5%
51	Sevier/Piute/Wayne Co. (55)	15,921	4,744	29.8%	28.6%	23.9%	33.7%
	Davis County HD	175,027	39,609	22.6%	25.4%	22.8%	28.3%
21	Bountiful (16)	33,318	7,760	23.3%	23.5%	18.1%	30.0%
43	Clearfield/Hill AFB (11)	37,329	7,959	21.3%	26.9%	21.3%	33.4%
26	Farmington/Centerville (14)	19,034	4,608	24.2%	24.3%	18.6%	31.1%
19	Layton (12)	46,815	9,794	20.9%	23.3%	18.4%	29.1%
44	Syracuse/Kaysville (13)	24,542	5,686	23.2%	27.2%	21.4%	33.9%
29	Woods Cross/North SL (15)	13,989	3,480	24.9%	24.6%	16.9%	34.4%
	Salt Lake Valley HD	658,810	137,098	20.8%	23.7%	22.5%	25.0%
4	Avenues (18)	18,959	3,181	16.8%	18.1%	12.2%	26.1%
10	Cottonwood (28)	33,297	7,695	23.1%	21.0%	16.9%	25.8%
5	Downtown Salt Lake (24)	42,808	6,781	15.8%	19.4%	14.6%	25.4%
20	Foothill/U of U (19)	17,778	3,975	22.4%	23.4%	17.0%	31.3%
12	Glendale (21)	18,642	2,999	16.1%	22.1%	15.1%	31.1%
15	Holladay (27)	35,956	10,258	28.5%	22.5%	18.6%	26.9%
38	Kearns (29)	42,995	8,307	19.3%	25.9%	20.6%	31.9%
60	Magna (20)	15,623	4,243	27.2%	31.9%	24.2%	40.8%
31	Midvale (32)	21,672	4,129	19.1%	25.2%	18.2%	33.9%
16	Millcreek (26)	44,008	10,989	25.0%	22.8%	19.2%	27.0%
13	Murray (31)	24,072	5,455	22.7%	22.1%	17.2%	27.8%
55	Riverton/Drapers (39)	41,391	9,032	21.8%	30.2%	24.7%	36.3%
3	Rose Park (17)	22,639	3,663	16.2%	17.7%	12.2%	25.0%
40	Sandy Center (36)	36,106	7,066	19.6%	26.0%	21.6%	30.9%
41	Sandy, Northeast (37)	18,245	4,766	26.1%	26.7%	20.1%	34.5%
2	Sandy, Southeast (38)	20,781	3,157	15.2%	16.5%	11.3%	23.5%
6	South Jordan (35)	20,931	3,196	15.3%	19.6%	14.1%	26.5%
8	South Salt Lake (25)	18,456	3,700	20.1%	20.5%	14.7%	27.9%
25	Taylorsville (30)	27,372	5,729	20.9%	23.9%	18.5%	30.3%
48	West Jordan North (33)	30,391	6,051	19.9%	27.5%	21.6%	34.3%
23	West Jordan/Copperton (34)	26,360	4,827	18.3%	23.8%	18.0%	30.7%
14	West Valley East (23)	35,527	7,599	21.4%	22.3%	16.8%	29.0%
27	West Valley West (22)	44,794	9,165	20.5%	24.3%	19.1%	30.4%
	Southeastern Utah HD	36,828	9,336	25.4%	25.9%	23.3%	28.6%
46	Carbon/Emery Co. (56)	21,451	5,813	27.1%	27.4%	24.2%	30.8%
18	Grand/San Juan Co. (57)	15,377	3,364	21.9%	23.2%	19.1%	28.0%
	Southwest Utah HD	116,150	31,593	27.2%	26.5%	23.9%	29.4%
53	Cedar City (60)	22,401	5,038	22.5%	29.3%	23.0%	36.6%
50	Other Southwest District (61)	15,384	5,101	33.2%	27.7%	21.6%	34.7%
42	Other Washington County (59)	32,503	8,532	26.3%	26.7%	22.0%	32.0%
28	St. George (58)	45,862	12,337	26.9%	24.4%	20.2%	29.2%
9	Summit County HD (51)	24,525	4,449	18.1%	20.6%	17.9%	23.5%
37	Tooele County HD (40)	32,458	7,342	22.6%	25.9%	23.2%	28.7%
39	TriCounty HD (53)	28,023	7,042	25.1%	25.9%	23.2%	28.8%
	Utah County HD	278,832	48,489	17.4%	23.6%	21.4%	26.0%
1	American Fork/Alpine (42)	26,819	3,427	12.8%	15.1%	10.5%	21.4%
17	East Orem (46)	14,955	2,665	17.8%	23.2%	15.8%	32.7%
49	Lehi/Cedar Valley (41)	18,752	3,298	17.6%	27.6%	19.3%	37.7%
61	North Orem (44)	25,965	6,733	25.9%	36.1%	28.8%	44.0%
45	Pleasant Grove/Lindon (43)	24,636	4,654	18.9%	27.2%	21.9%	33.3%
22	Provo/BYU (47)	39,401	6,434	16.3%	23.7%	17.1%	32.0%
36	Provo South (48)	48,138	4,718	9.8%	25.8%	18.5%	34.8%
24	Springville/Spanish Fork (49)	41,036	8,654	21.1%	23.9%	19.3%	29.2%
34	Utah Co. South (50)	17,363	3,306	19.0%	25.5%	18.2%	34.5%
11	West Orem (45)	21,774	4,091	18.8%	21.5%	13.6%	32.3%
32	Wasatch County HD (52)	12,514	2,922	23.4%	25.3%	22.5%	28.3%
	Weber-Morgan HD	148,702	38,187	25.7%	27.7%	25.2%	30.4%
58	Ben Lomond (5)	33,215	9,134	27.5%	31.1%	25.5%	37.4%
54	Downtown Ogden (7)	21,684	6,067	28.0%	29.5%	22.5%	37.7%
30	Morgan/East Weber Co. (6)	24,131	5,799	24.0%	24.8%	19.4%	31.3%
47	Riverdale (10)	15,522	4,092	26.4%	27.5%	21.3%	34.7%
52	Roy/Hooper (9)	27,898	6,799	24.4%	29.2%	24.1%	35.0%
33	South Ogden (8)	26,255	6,440	24.5%	25.4%	19.8%	31.9%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

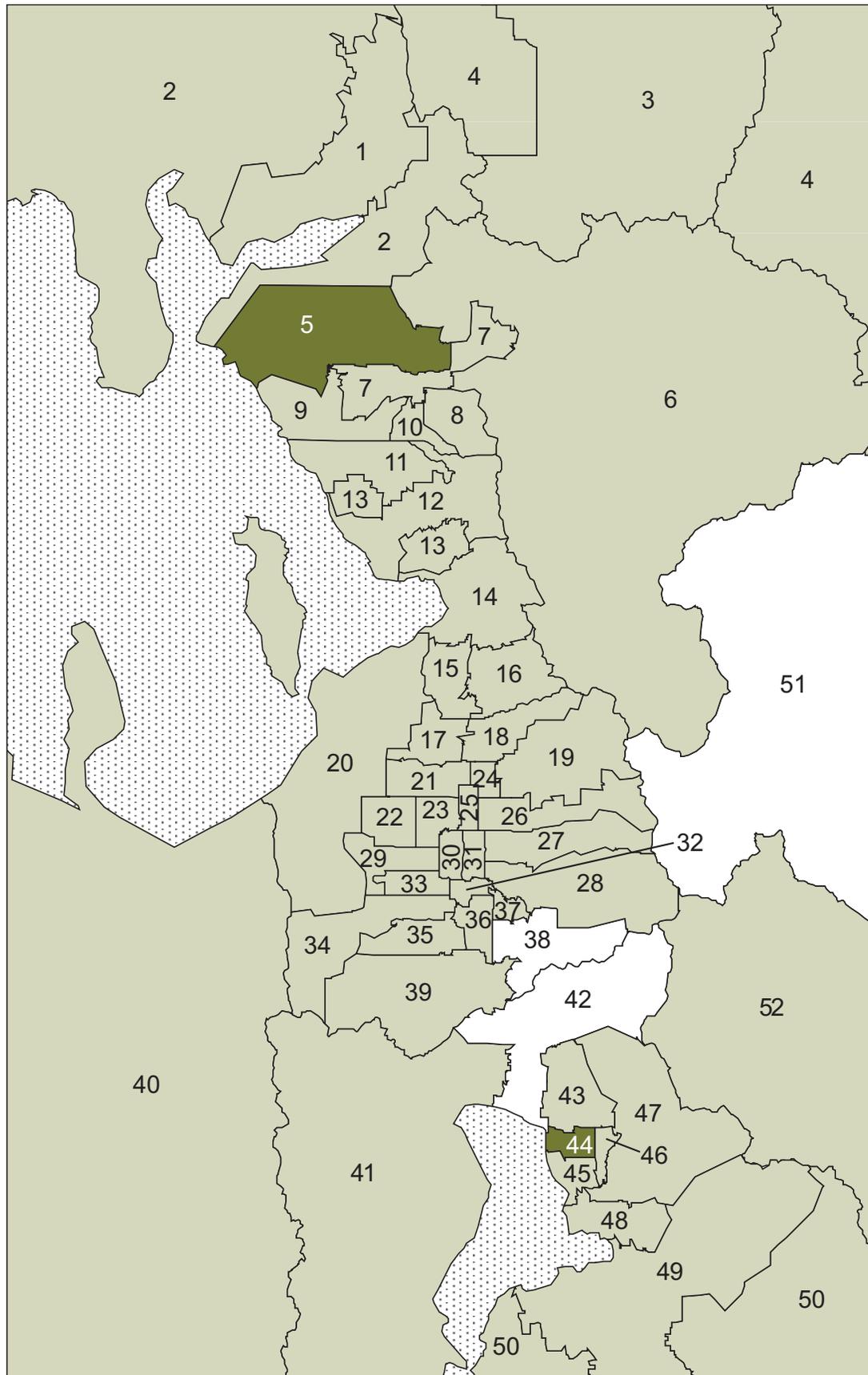
6. DOCTOR-DIAGNOSED ARTHRITIS

Figure 6.2: Dr. Dx Arthritis by Small Area, Utah Adults Aged 18+, 2001–2003, 2005 (Age-adjusted)



6. DOCTOR-DIAGNOSED ARTHRITIS

Figure 6.3: Dr. Dx Arthritis by Small Area, Wasatch Front Adults Aged 18+, 2001–2003, 2005 (Age-adjusted)



7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

Measure Definition: *“Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?” [Yes, excluding females told during pregnancy or people told they have borderline high blood pressure or are pre-hypertensive]*

Why is high blood pressure important to public health?

Heart disease and stroke are the number one and number three causes of death, respectively, in the United States and Utah. Approximately 4,000 people die of one of these two diseases in Utah each year. High blood pressure is a leading cause for these two diseases. Hypertension, often called high blood pressure, is defined as a systolic blood pressure of 140mm Hg or higher or a diastolic blood pressure of 90mm Hg or higher. Through regular blood pressure measurement, a doctor can diagnose high blood pressure. According to the American Heart Association, blood pressure measurement should be performed at least every two years after a normal reading. Hypertension is related to an increased incidence of heart disease, which includes heart attack, stroke, atherosclerosis (hardening of the arteries), and coronary artery disease (narrowing of the blood vessels that supply blood and oxygen to the heart). Individuals with high blood pressure should take steps to reduce and control their blood pressure.¹⁴

Risk factors for high blood pressure

Everyone has blood pressure, it is a sign that the heart is working and pumping blood through the body. Blood pressure varies throughout the day based on activities, emotions, stress, drug use (including prescriptions), time of day, alcohol use, smoking, diet, and many other factors. Prolonged elevated blood pressure can be dangerous because it means the heart is working too hard to pump the blood throughout the body. This can lead to weakening of the arteries and veins, which can cause a heart attack or stroke. People can lower their blood pressure by being physically active and eating a diet low in salt and high in fruits and vegetables. If this does not work, there are many types of medications that can lower a person's blood pressure.

Some women develop high blood pressure during pregnancy. This is known as gestational hypertension. Approximately 6% to 8% of pregnant women will develop high blood pressure.¹⁵ Usually blood pressure returns to normal following pregnancy.

High blood pressure in Utah

Rates for high blood pressure have remained relatively unchanged over the past decade in Utah. Between 2001–2005, the age-adjusted percentage of adults with high blood pressure was 22.4%. The age-adjusted rate varied by local health district from a low of 17.7% (Summit Co.) to a high of 29.5% (Tooele Co.). Three health districts had rates higher than the state, and one had rates lower than the state rate. Four of Utah's 61 small areas had age-adjusted rates that were significantly lower than the state, and eight small areas had rates that were significantly higher than the state rate. Eight small areas had rates that were significantly lower than the U.S. rate.

In 2005, respondents with high blood pressure were asked if they were taking steps to reduce their blood pressure, and 96.5% said they were taking some form of action to control their blood pressure, including taking medication, reducing alcohol intake, eating better, exercising more, and reducing salt intake. Of those taking

Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 12-9: Reduce the proportion of adults aged 20 years and older with high blood pressure to 16% (age-adjusted to the U.S. 2000 standard population).

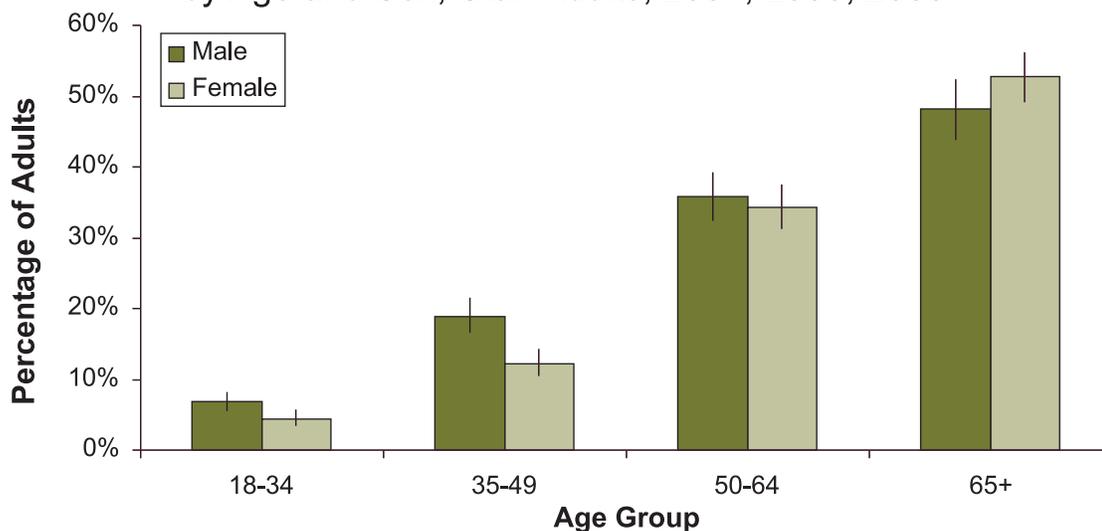
7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

High blood pressure in Utah (continued)

action, 1.5% were taking medication alone, 53.6% were taking medication and doing at least one other thing, and 44.9% were doing something other than taking medication.

Men aged 18–34 and 35–49 were significantly more likely to be told they had high blood pressure than women of the same age group ($p=0.01$ and $p<0.001$, respectively). Significant differences between sexes were not observed in other age groups. Chances of a respondent having high blood pressure increased with age.

Figure 7.A: Doctor-diagnosed High Blood Pressure by Age and Sex, Utah Adults, 2001, 2003, 2005

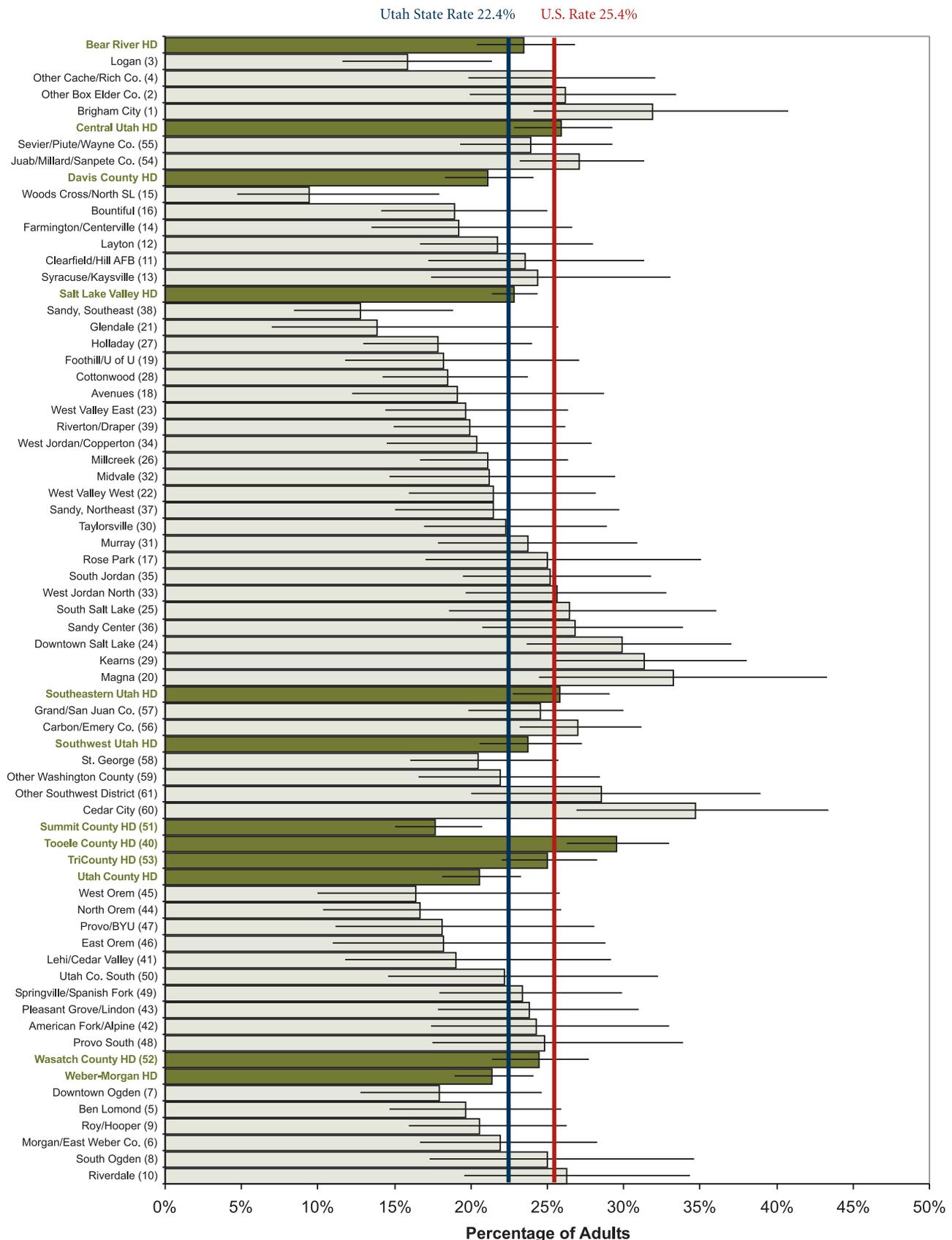


Prevention/Resources

The Heart Disease and Stroke Prevention Program (HDSPP) at the Utah Department of Health has a goal to decrease the number of heart disease and stroke-related deaths in the state. One way this is being addressed is by educating providers on current recommendations for blood pressure levels and treatment. For a copy of the manual that was produced for these teaching opportunities, please contact the HDSPP program at 801-538-6141. Many insurance companies and community health centers provide patients diagnosed with high blood pressure with a patient self-management kit that teaches the patient about high blood pressure and how to lower it. The kit also provides resources for getting more physical activity (a pedometer), a recipe book on “Dietary Approaches to Stop Hypertension” (DASH), and resources on how to take a blood pressure measurement so that they can monitor it at home or away from the clinical setting. The kit helps patients know what questions to ask their doctor so that they can discuss their disease more easily with their physician and empowers them to manage their blood pressure. The HDSPP provides more information at <http://www.hearhighway.org>. The National Institutes of Health provides resources, fact sheets, and answers to questions at <http://health.nih.gov>. The American Heart Association administers a comprehensive website for consumers and health care providers at <http://www.americanheart.org>.

7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

Figure 7.1: Percentage of Adults Reporting Doctor-diagnosed High Blood Pressure by Local Health District and Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

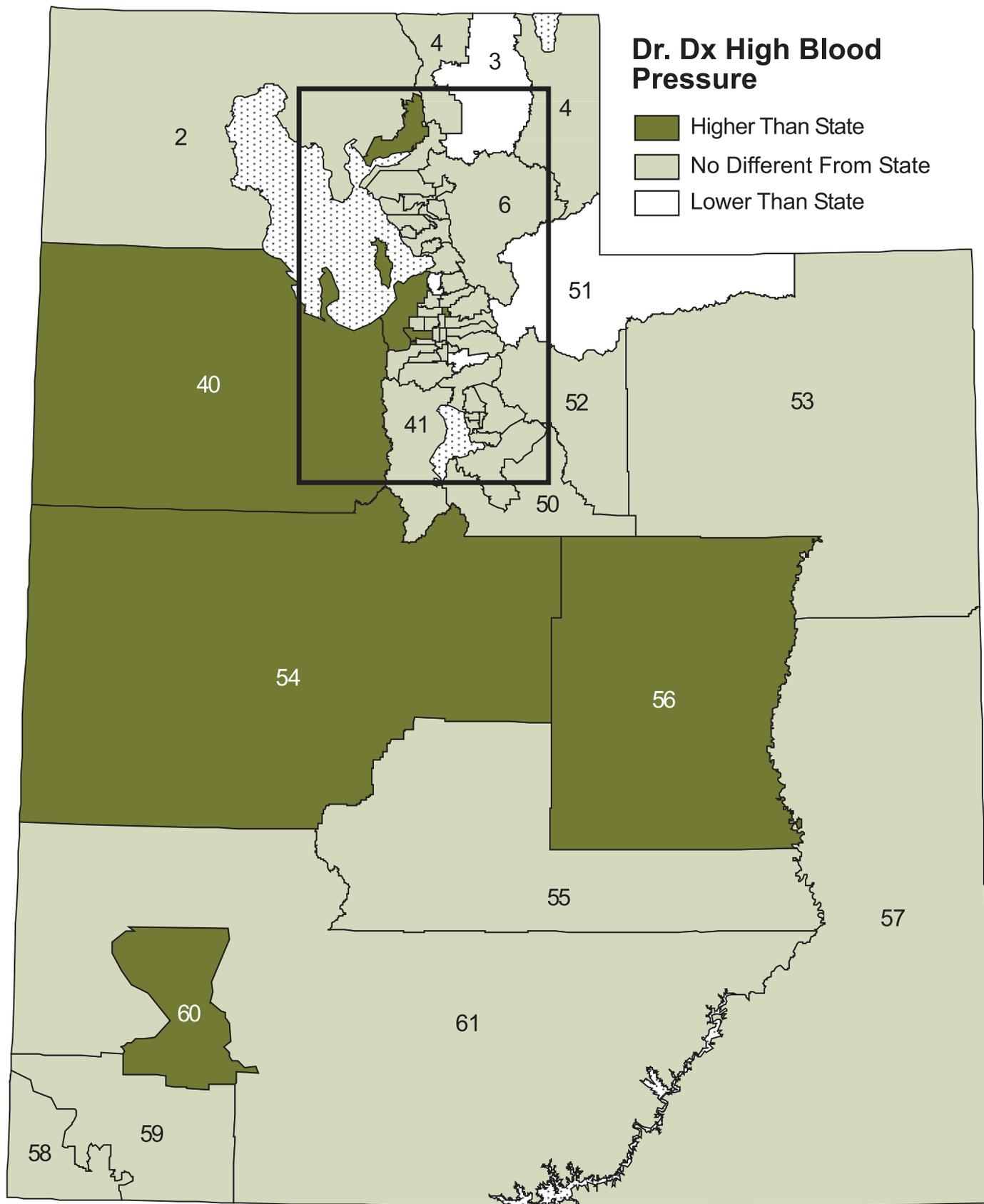
Table 7: Dr. Dx High Blood Pressure by Health District, Small Area, Utah, and U.S., 2001, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Dr. Dx High Blood Pressure	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	56,410,990	25.9%	25.4%	25.3%	25.6%
	State of Utah	1,657,454	327,513	19.8%	22.4%	21.5%	23.3%
	Bear River HD	98,027	18,968	19.4%	23.4%	20.4%	26.8%
59	Brigham City (1)	14,566	4,246	29.2%	31.8%	24.1%	40.7%
4	Logan (3)	45,904	4,967	10.8%	15.9%	11.6%	21.4%
49	Other Box Elder Co. (2)	14,636	3,751	25.6%	26.1%	20.0%	33.4%
47	Other Cache/Rich Co. (4)	22,921	5,611	24.5%	25.5%	19.9%	32.0%
	Central Utah HD	47,558	12,256	25.8%	25.8%	22.8%	29.2%
54	Juab/Millard/Sanpete Co. (54)	31,637	8,409	26.6%	27.1%	23.2%	31.3%
37	Sevier/Piute/Wayne Co. (55)	15,921	3,875	24.3%	23.9%	19.3%	29.3%
	Davis County HD	175,027	31,592	18.1%	21.1%	18.3%	24.1%
14	Bountiful (16)	33,318	6,387	19.2%	19.0%	14.1%	25.0%
34	Clearfield/Hill AFB (11)	37,329	6,783	18.2%	23.6%	17.2%	31.3%
17	Farmington/Centerville (14)	19,034	3,316	17.4%	19.2%	13.5%	26.7%
28	Layton (12)	46,815	8,750	18.7%	21.8%	16.6%	28.0%
39	Syracuse/Kaysville (13)	24,542	5,151	21.0%	24.4%	17.4%	33.1%
1	Woods Cross/North SL (15)	13,989	1,175	8.4%	9.4%	4.7%	17.9%
	Salt Lake Valley HD	658,810	133,673	20.3%	22.8%	21.4%	24.3%
16	Avenues (18)	18,959	3,576	18.9%	19.1%	12.2%	28.7%
13	Cottonwood (28)	33,297	7,449	22.4%	18.5%	14.2%	23.8%
57	Downtown Salt Lake (24)	42,808	10,514	24.6%	29.9%	23.7%	37.0%
11	Foothill/U of U (19)	17,778	3,419	19.2%	18.2%	11.8%	27.1%
3	Glendale (21)	18,642	1,987	10.7%	13.9%	7.0%	25.7%
8	Holladay (27)	35,956	7,738	21.5%	17.8%	13.0%	24.0%
58	Kearns (29)	42,995	10,740	25.0%	31.3%	25.4%	38.0%
60	Magna (20)	15,623	3,778	24.2%	33.2%	24.5%	43.3%
25	Midvale (32)	21,672	3,673	17.0%	21.2%	14.7%	29.5%
24	Millcreek (26)	44,008	11,490	26.1%	21.1%	16.7%	26.3%
35	Murray (31)	24,072	6,057	25.2%	23.8%	17.9%	30.9%
20	Riverton/Draper (39)	41,391	5,050	12.2%	19.9%	14.9%	26.1%
44	Rose Park (17)	22,639	4,408	19.5%	25.0%	17.0%	35.1%
52	Sandy Center (36)	36,106	8,041	22.3%	26.8%	20.8%	33.8%
27	Sandy, Northeast (37)	18,245	3,456	18.9%	21.5%	15.1%	29.7%
2	Sandy, Southeast (38)	20,781	2,336	11.2%	12.8%	8.4%	18.8%
46	South Jordan (35)	20,931	3,820	18.3%	25.2%	19.5%	31.8%
51	South Salt Lake (25)	18,456	4,775	25.9%	26.4%	18.6%	36.1%
32	Taylorsville (30)	27,372	5,622	20.5%	22.3%	16.9%	28.9%
48	West Jordan North (33)	30,391	5,616	18.5%	25.7%	19.6%	32.8%
21	West Jordan/Copperton (34)	26,360	5,045	19.1%	20.4%	14.5%	27.9%
19	West Valley East (23)	35,527	7,770	21.9%	19.7%	14.4%	26.4%
26	West Valley West (22)	44,794	7,794	17.4%	21.4%	16.0%	28.2%
	Southeastern Utah HD	36,828	9,273	25.2%	25.7%	22.7%	29.0%
53	Carbon/Emery Co. (56)	21,451	5,642	26.3%	27.0%	23.2%	31.2%
41	Grand/San Juan Co. (57)	15,377	3,498	22.8%	24.5%	19.8%	30.0%
	Southwest Utah HD	116,150	27,795	23.9%	23.7%	20.6%	27.2%
61	Cedar City (60)	22,401	5,968	26.6%	34.7%	26.9%	43.4%
55	Other Southwest District (61)	15,384	4,757	30.9%	28.5%	20.0%	38.9%
30	Other Washington County (59)	32,503	6,835	21.0%	22.0%	16.6%	28.5%
22	St. George (58)	45,862	9,668	21.1%	20.5%	16.1%	25.7%
7	Summit County HD (51)	24,525	3,541	14.4%	17.7%	15.0%	20.8%
56	Tooele County HD (40)	32,458	8,644	26.6%	29.5%	26.3%	33.0%
45	TriCounty HD (53)	28,023	6,726	24.0%	25.0%	22.0%	28.2%
	Utah County HD	278,832	41,853	15.0%	20.6%	18.1%	23.3%
38	American Fork/Alpine (42)	26,819	5,723	21.3%	24.3%	17.4%	32.9%
12	East Orem (46)	14,955	2,789	18.7%	18.2%	11.0%	28.8%
15	Lehi/Cedar Valley (41)	18,752	2,211	11.8%	19.0%	11.7%	29.2%
6	North Orem (44)	25,965	3,768	14.5%	16.7%	10.3%	25.9%
36	Pleasant Grove/Lindon (43)	24,636	4,127	16.8%	23.8%	17.9%	31.0%
10	Provo/BYU (47)	39,401	4,413	11.2%	18.1%	11.2%	28.0%
42	Provo South (48)	48,138	4,852	10.1%	24.8%	17.5%	33.9%
33	Springville/Spanish Fork (49)	41,036	6,828	16.6%	23.4%	17.9%	29.9%
31	Utah Co. South (50)	17,363	2,860	16.5%	22.2%	14.6%	32.3%
5	West Orem (45)	21,774	2,746	12.6%	16.4%	10.0%	25.8%
40	Wasatch County HD (52)	12,514	2,833	22.6%	24.4%	21.4%	27.7%
	Weber-Morgan HD	148,702	29,859	20.1%	21.4%	18.9%	24.1%
18	Ben Lomond (5)	33,215	5,992	18.0%	19.7%	14.6%	25.9%
9	Downtown Ogden (7)	21,684	4,580	21.1%	18.0%	12.8%	24.7%
29	Morgan/East Weber Co. (6)	24,131	5,026	20.8%	21.9%	16.7%	28.2%
50	Riverdale (10)	15,522	3,590	23.1%	26.3%	19.6%	34.3%
23	Roy/Hooper (9)	27,898	4,854	17.4%	20.6%	15.9%	26.2%
43	South Ogden (8)	26,255	6,401	24.4%	25.0%	17.3%	34.6%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

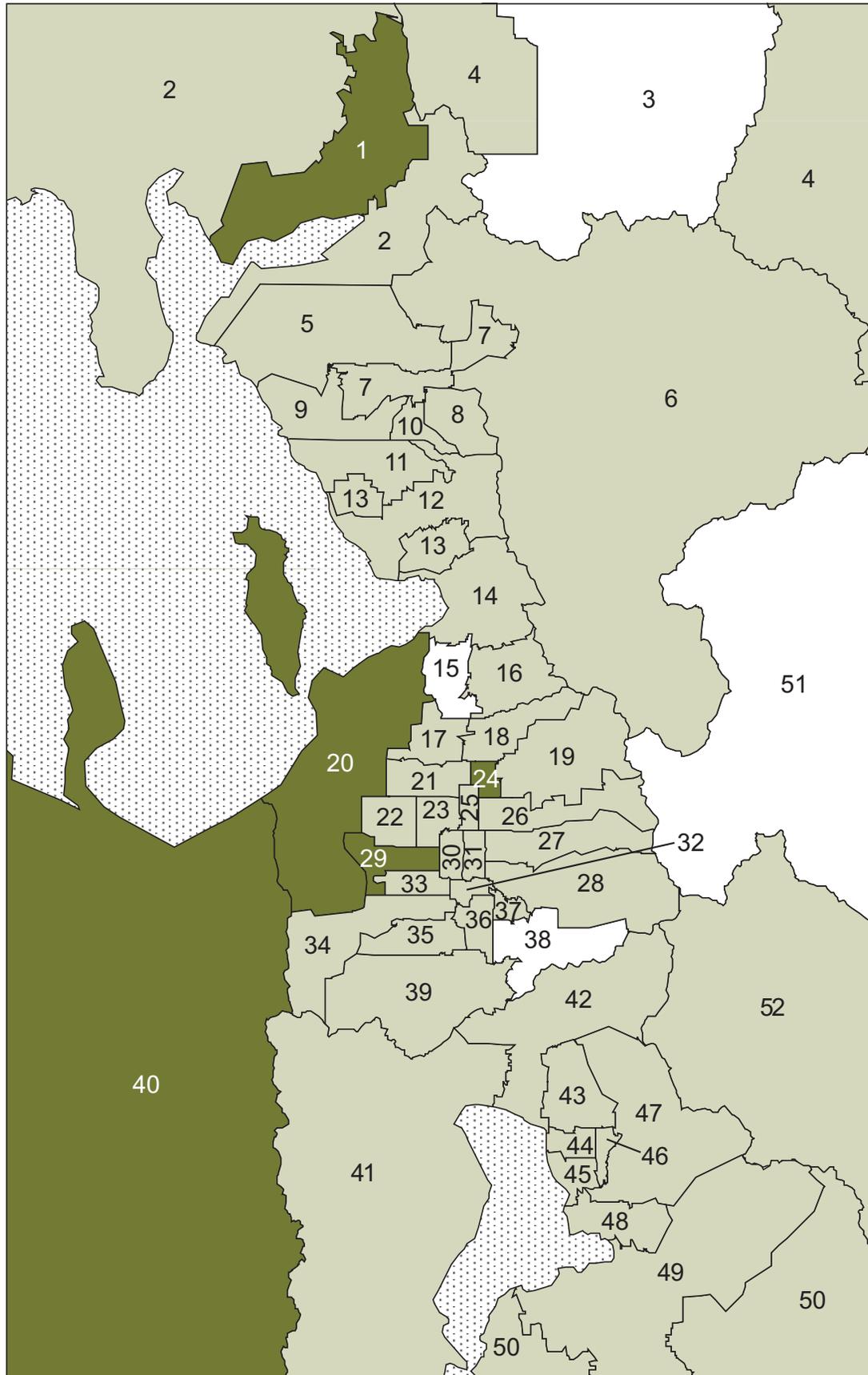
7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

Figure 7.2: Dr. Dx High Blood Pressure by Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE

Figure 7.3: Dr. Dx High Blood Pressure by Small Area, Wasatch Front Adults 18+, 2001, 2003, 2005 (Age-adjusted)



8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

Measure Definition: *“Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?” [Yes]*

Why is high cholesterol important to public health?

High levels of cholesterol and triglycerides increase the risk for heart disease, the number one killer in Utah. The National Heart, Lung, and Blood Institute defines high blood cholesterol as 240 mg/dl or greater and borderline high cholesterol as 200 to 239 mg/dl. Cholesterol and other fats cannot dissolve in the blood. They must be transported to and from the cells by special carriers called lipoproteins. There are two types of lipoproteins that are important in our bodies: low-density lipoprotein (LDL), which carries cholesterol to the arteries, and high-density lipoprotein (HDL), which removes cholesterol from the arteries. High levels of LDL and low levels of HDL are related to an increased incidence of heart disease including heart attack, atherosclerosis (hardening of the arteries), and coronary artery disease (narrowing of the blood vessels that supply blood and oxygen to the heart). Individuals with high cholesterol should take steps to reduce and control their cholesterol levels.¹⁶

Risk factors for high cholesterol

Everyone needs cholesterol. It is necessary for building cell walls and the production of sex hormones, vitamin D, and digestive juices. Cholesterol is necessary to help every organ in the body function properly. The body is able to make all the cholesterol a person needs. Cholesterol is also found in the animal products that we eat such as eggs, dairy products, meat, and poultry. When a person ingests too much cholesterol or the body makes too much cholesterol, it can build up in the blood vessels. The largest contributor to high blood cholesterol is eating a diet high in cholesterol. Physical activity can help lower the amount of LDL cholesterol in the body and increase the amount of HDL cholesterol. Increasing the amount of HDL in the body is beneficial because HDL cholesterol removes the LDL cholesterol from the arteries and transports it to the liver where it is used. Obesity, smoking, and excessive alcohol consumption can also increase the risk for high cholesterol.^{9,17-19}

High cholesterol in Utah

The percentage of persons who have had their blood cholesterol measured in the past five years was 62.8% in 2005. This means a large number of Utahns who have not been tested could have high cholesterol and not know it. The data in this report should not be interpreted as the incidence of high blood cholesterol in Utah.

Between 2001–2005, the age-adjusted percentage of adults who had been told by a doctor that they had high cholesterol was 22.9%. The rate varied by local health district from a low of 20.4% to a high of 25.1%. None of the 12 health districts had rates that differed from the state. Two of Utah’s 61 small areas had age-adjusted rates that were significantly lower than the state rate, and two small areas had rates that were significantly higher than the state rate. Overall Utah rates were lower than the U.S. rate. Eight small areas had rates that were significantly lower than the U.S. rate.

Rates for doctor-diagnosed high cholesterol have increased significantly over the past few years. From 1995–2005 the rate increased from 15.0% to 22.0%. Rates of respondents screened for high cholesterol did not increase significantly, which would suggest that actual rates of Utahns with high cholesterol are increas-

Utah Objective: Same as HP2010 objective.

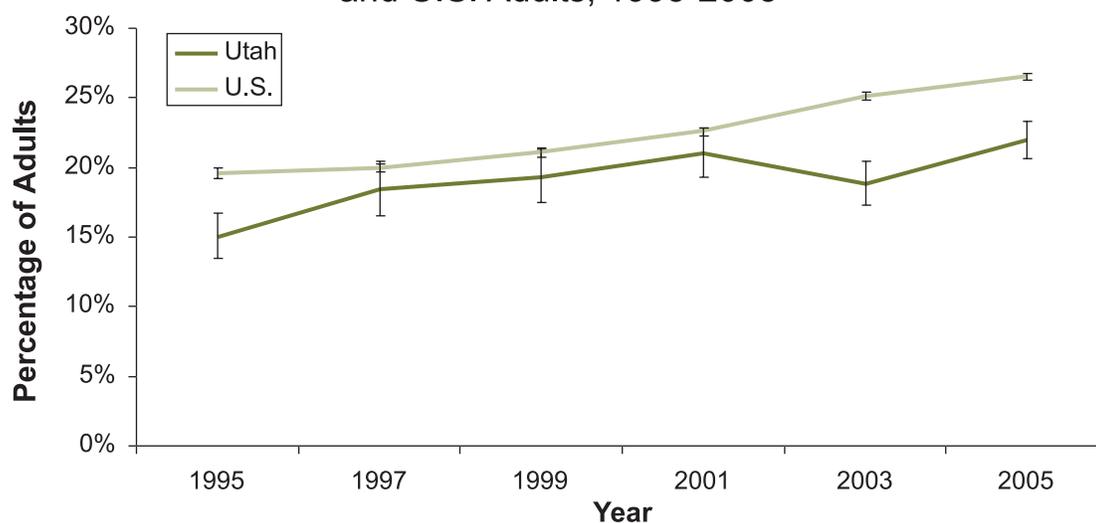
HP2010 Objective (related) 12-14: Reduce the proportion of adults aged 20 years and older with high total blood cholesterol levels to 17% (age-adjusted to U.S. 2000 standard population).

8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

High cholesterol in Utah (continued)

ing. Significant differences were not observed between genders. Rates of being diagnosed with high cholesterol increased with age.

Figure 8.A: Doctor-diagnosed High Cholesterol, Utah and U.S. Adults, 1995-2005

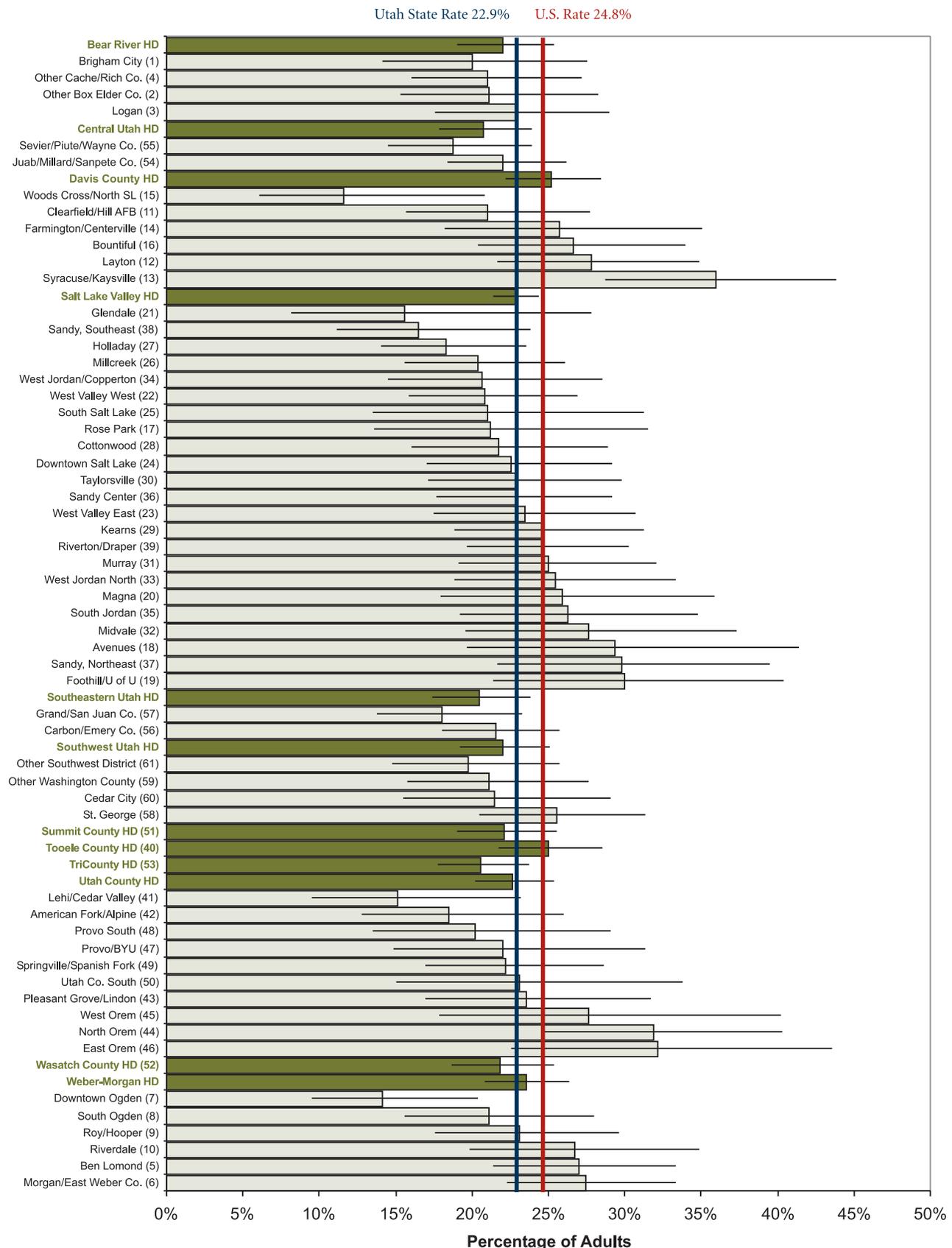


Prevention/Resources

The Heart Disease and Stroke Prevention Program (HDSPP) at the Utah Department of Health has a goal to decrease the number of heart disease and stroke-related deaths in the state. One way this is being done is by educating providers on the most current recommendations for cholesterol levels. This education also includes teaching physicians the suggested treatment of high blood cholesterol, and how to take a quick finger prick cholesterol test in the office. This is done so that they can give patients their results and counsel them at the initial office visit so patients who have a hard time following up with the physician will still be informed. For a copy of the manual that was produced for these teaching opportunities, please contact the HDSPP program at 801-538-6141. The HDSPP provides additional information at <http://www.hearthishighway.org>. The National Institutes of Health provides resources, fact sheets, and answers to questions at <http://health.nih.gov>. The American Heart Association administers a comprehensive website for consumers and health care providers at <http://www.americanheart.org>.

8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

Figure 8.1: Percentage of Adults Who Reported Doctor-diagnosed High Cholesterol by Local Health District and Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

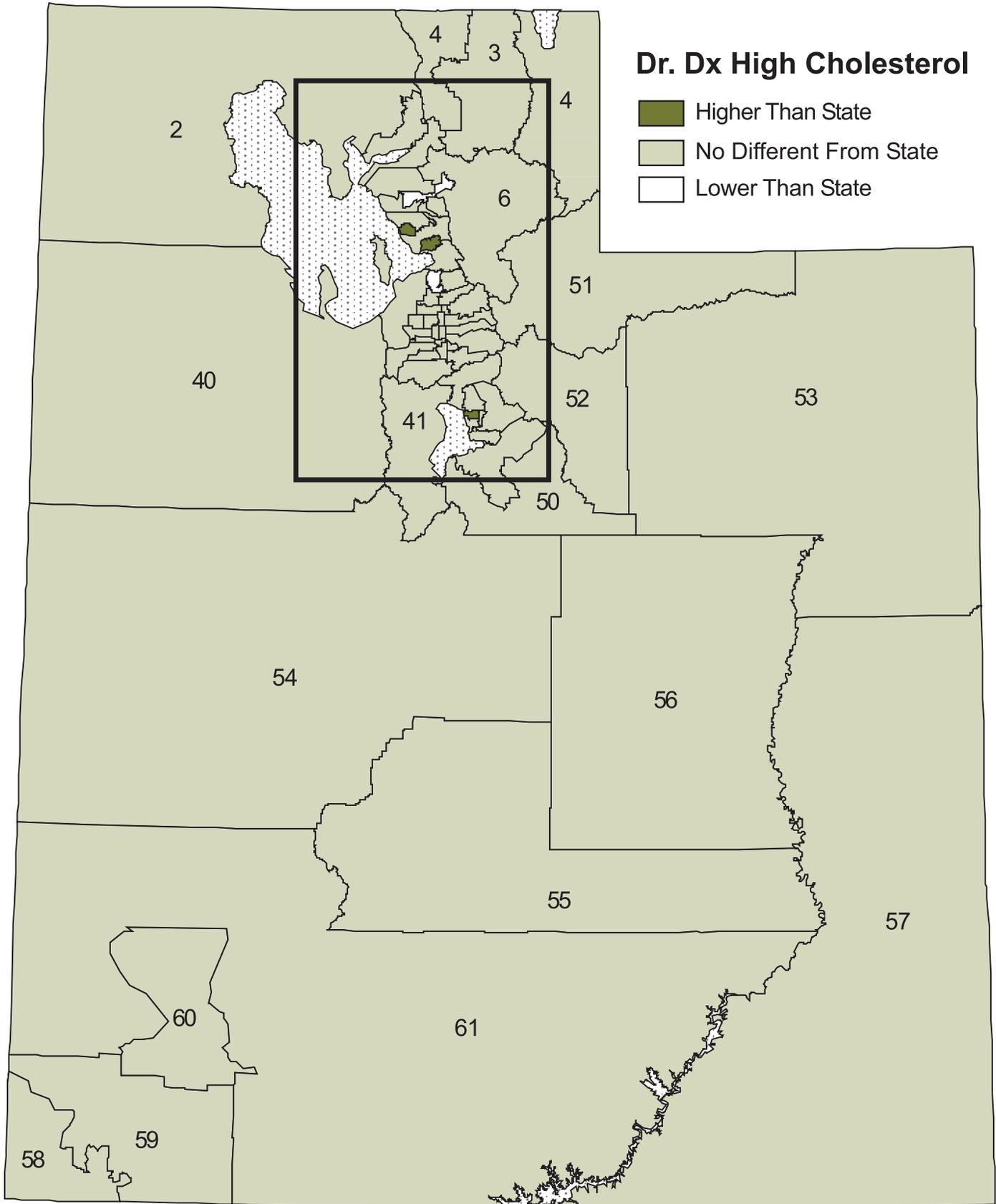
Table 8: Dr. Dx High Cholesterol by Health District, Small Area, Utah, and U.S., 2001, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Dr. Dx High Cholesterol		Age-adjusted Rate	95% Confidence Interval	
			Crude Rate			Lower	Upper
	U.S.	217,803,051	54,995,270	25.3%	24.8%	24.6%	24.9%
	State of Utah	1,657,454	341,601	20.6%	22.9%	22.1%	23.8%
	Bear River HD	98,027	17,713	18.1%	22.0%	19.0%	25.4%
11	Brigham City (1)	14,566	3,028	20.8%	20.0%	14.1%	27.5%
33	Logan (3)	45,904	6,720	14.6%	22.8%	17.6%	29.0%
20	Other Box Elder Co. (2)	14,636	2,964	20.3%	21.1%	15.4%	28.2%
18	Other Cache/Rich Co. (4)	22,921	4,752	20.7%	21.1%	16.0%	27.2%
	Central Utah HD	47,558	9,721	20.4%	20.7%	17.8%	23.9%
28	Juab/Millard/Sanpete Co. (54)	31,637	6,685	21.1%	22.0%	18.4%	26.1%
9	Sevier/Piute/Wayne Co. (55)	15,921	3,062	19.2%	18.8%	14.5%	23.9%
	Davis County HD	175,027	40,204	23.0%	25.1%	22.2%	28.4%
49	Bountiful (16)	33,318	8,689	26.1%	26.6%	20.4%	34.0%
19	Clearfield/Hill AFB (11)	37,329	6,036	16.2%	21.1%	15.6%	27.7%
46	Farmington/Centerville (14)	19,034	4,947	26.0%	25.7%	18.2%	35.0%
55	Layton (12)	46,815	11,713	25.0%	27.8%	21.7%	34.9%
61	Syracuse/Kaysville (13)	24,542	7,758	31.6%	35.9%	28.7%	43.9%
1	Woods Cross/North SL (15)	13,989	1,441	10.3%	11.6%	6.1%	20.8%
	Salt Lake Valley HD	658,810	138,745	21.1%	22.9%	21.5%	24.4%
56	Avenues (18)	18,959	5,460	28.8%	29.3%	19.7%	41.4%
26	Cottonwood (28)	33,297	8,258	24.8%	21.8%	16.0%	28.9%
32	Downtown Salt Lake (24)	42,808	7,316	17.1%	22.5%	17.1%	29.1%
58	Foothill/U of U (19)	17,778	5,465	30.7%	30.0%	21.4%	40.4%
4	Glendale (21)	18,642	2,103	11.3%	15.6%	8.1%	27.8%
7	Holladay (27)	35,956	8,299	23.1%	18.3%	14.0%	23.5%
40	Kearns (29)	42,995	9,369	21.8%	24.5%	18.8%	31.3%
47	Magna (20)	15,623	2,959	18.9%	25.9%	18.0%	35.9%
53	Midvale (32)	21,672	4,538	20.9%	27.6%	19.6%	37.3%
13	Millcreek (26)	44,008	9,083	20.6%	20.6%	15.6%	26.1%
43	Murray (31)	24,072	6,487	27.0%	25.0%	19.1%	32.1%
41	Riverton/Draper (39)	41,391	8,307	20.1%	24.6%	19.7%	30.2%
23	Rose Park (17)	22,639	3,966	17.5%	21.2%	13.6%	31.5%
35	Sandy Center (36)	36,106	6,694	18.5%	22.9%	17.7%	29.2%
57	Sandy, Northeast (37)	18,245	4,879	26.7%	29.8%	21.6%	39.5%
5	Sandy, Southeast (38)	20,781	4,482	21.6%	16.5%	11.1%	23.9%
48	South Jordan (35)	20,931	5,423	25.9%	26.3%	19.2%	34.8%
17	South Salt Lake (25)	18,456	3,514	19.0%	21.0%	13.5%	31.2%
34	Taylorsville (30)	27,372	5,113	18.7%	22.8%	17.1%	29.8%
44	West Jordan North (33)	30,391	5,212	17.2%	25.4%	18.9%	33.4%
15	West Jordan/Copperton (34)	26,360	4,734	18.0%	20.6%	14.5%	28.5%
38	West Valley East (23)	35,527	8,971	25.3%	23.5%	17.5%	30.7%
16	West Valley West (22)	44,794	8,936	20.0%	20.9%	15.9%	26.9%
	Southeastern Utah HD	36,828	7,564	20.5%	20.4%	17.4%	23.8%
25	Carbon/Emery Co. (56)	21,451	4,458	20.8%	21.6%	18.0%	25.7%
6	Grand/San Juan Co. (57)	15,377	3,075	20.0%	18.1%	13.8%	23.3%
	Southwest Utah HD	116,150	26,076	22.5%	22.0%	19.2%	25.1%
24	Cedar City (60)	22,401	3,477	15.5%	21.5%	15.5%	29.0%
10	Other Southwest District (61)	15,384	3,664	23.8%	19.7%	14.8%	25.8%
21	Other Washington County (59)	32,503	6,813	21.0%	21.1%	15.8%	27.6%
45	St. George (58)	45,862	12,309	26.8%	25.5%	20.5%	31.4%
30	Summit County HD (51)	24,525	5,116	20.9%	22.1%	19.0%	25.6%
42	Tooele County HD (40)	32,458	7,569	23.3%	25.0%	21.8%	28.5%
14	TriCounty HD (53)	28,023	5,666	20.2%	20.6%	17.7%	23.7%
	Utah County HD	278,832	47,095	16.9%	22.6%	20.2%	25.3%
8	American Fork/Alpine (42)	26,819	3,902	14.6%	18.5%	12.7%	26.0%
60	East Orem (46)	14,955	4,765	31.9%	32.1%	22.5%	43.6%
3	Lehi/Cedar Valley (41)	18,752	2,181	11.6%	15.1%	9.5%	23.2%
59	North Orem (44)	25,965	5,920	22.8%	31.9%	24.5%	40.3%
39	Pleasant Grove/Lindon (43)	24,636	5,100	20.7%	23.5%	17.0%	31.7%
29	Provo/BYU (47)	39,401	5,520	14.0%	22.0%	14.9%	31.4%
12	Provo South (48)	48,138	4,125	8.6%	20.2%	13.5%	29.1%
31	Springville/Spanish Fork (49)	41,036	7,054	17.2%	22.2%	16.9%	28.6%
37	Utah Co. South (50)	17,363	3,301	19.0%	23.1%	15.1%	33.8%
54	West Orem (45)	21,774	3,893	17.9%	27.6%	17.8%	40.2%
27	Wasatch County HD (52)	12,514	2,520	20.1%	21.8%	18.7%	25.4%
	Weber-Morgan HD	148,702	33,161	22.3%	23.6%	20.9%	26.4%
51	Ben Lomond (5)	33,215	8,015	24.1%	27.0%	21.4%	33.4%
2	Downtown Ogden (7)	21,684	3,209	14.8%	14.1%	9.5%	20.4%
52	Morgan/East Weber Co. (6)	24,131	6,380	26.4%	27.5%	22.2%	33.4%
50	Riverdale (10)	15,522	3,708	23.9%	26.7%	19.8%	34.9%
36	Roy/Hooper (9)	27,898	5,652	20.3%	23.1%	17.6%	29.6%
22	South Ogden (8)	26,255	5,527	21.1%	21.1%	15.6%	28.0%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

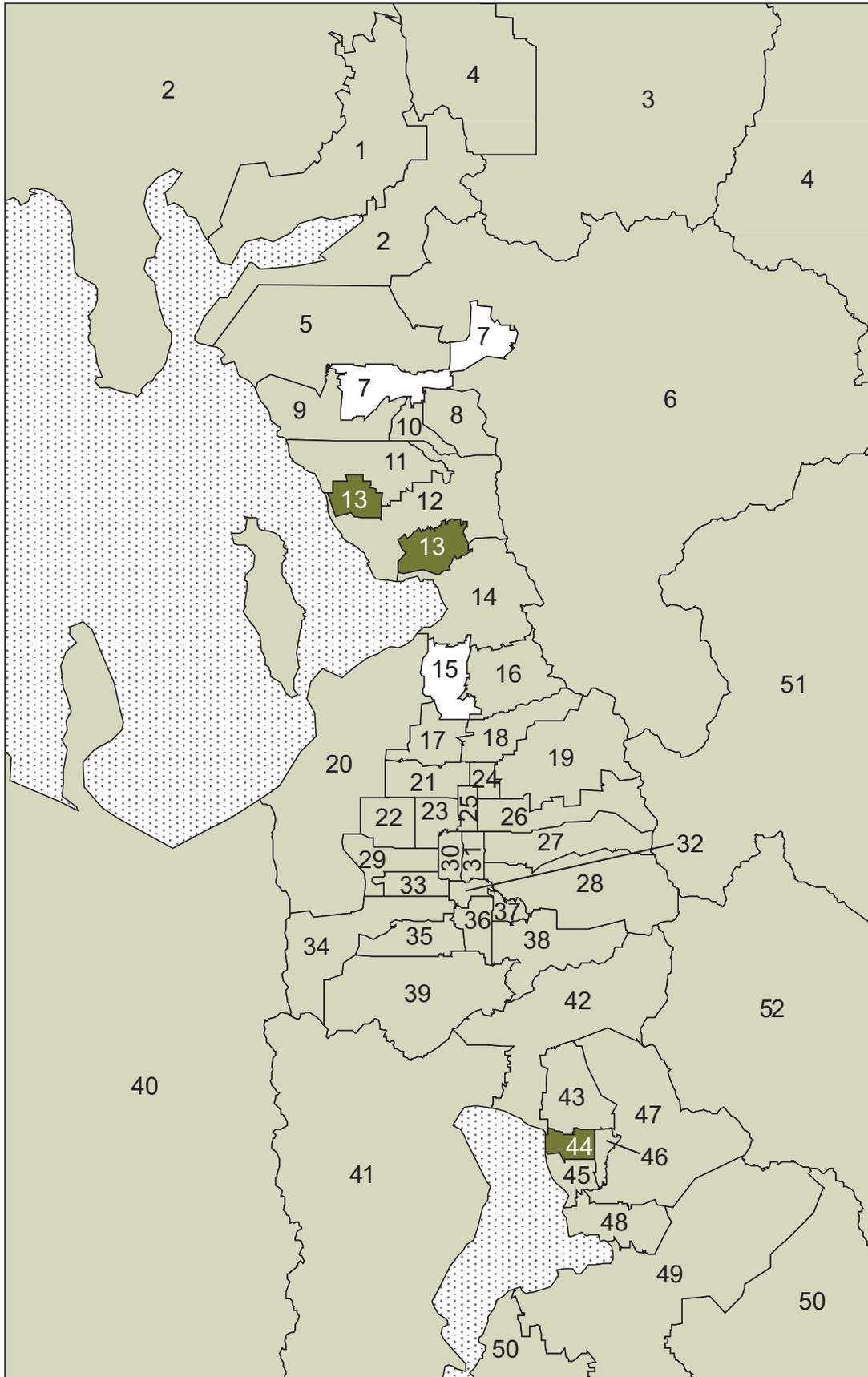
8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

Figure 8.2: Dr. Dx High Cholesterol by Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL

Figure 8.3: Dr. Dx High Cholesterol by Small Area, Wasatch Front Adults 18+, 2001, 2003, 2005 (Age-adjusted)



9. ACTIVITY LIMITATION

Measure Definition: *“Are you limited in any way in any activities because of physical, mental, or emotional problems?” [Yes]*

Why is activity limitation important to public health?

The activity limitation question has historically been used by the BRFSS to screen for disability. Disability results when a physical or mental limitation is expressed in a social context. Chronic illnesses and disabilities, and their subsequent activity limitations, are a major health problem for many adults. Chronic illnesses and disabilities are often associated with reduced functioning, sensory impairments, depression, the need for extended care, loss of independence, and increased health care costs. As the population ages, the number of adults who experience activity limitation will have substantial effects on the health care system and its resources.²⁰

Risk factors for activity limitation

Generally, females are more likely to experience activity limitation compared to males, and the older an individual is the more likely he or she will experience activity limitation. Among racial/ethnic groups, Asian and Pacific Islander persons reported the lowest rate of activity limitation, whereas Native American, non-Hispanic Black, and non-Hispanic White persons have reported higher rates. Education is inversely related to activity limitation; the more education someone has, the less likely he or she is to experience activity limitation.²¹

The major causes of activity limitation vary with age. In general, persons aged 18 to 44 years have reported back disorders as the most prevalent cause of activity limitation compared to those over 45 years of age who generally report heart disease as the most prevalent cause of activity limitation.²²

In Utah, 25.5% of females reported activity limitation compared to 23.0% of males, and persons aged 65 and older reported the highest percentage of activity limitation (31.5%) for any age group. Generally, married people experienced less activity limitation (22.4%) compared to people who were separated (38.6%), divorced (31.5%), widowed (31.1%), or never married (30.8%). Twice as many people with an annual household income of less than \$20,000 reported activity limitation (44.8%) compared to 20.0% for those with an annual household income of \$50,000 or more.

Activity limitation in Utah

The age-adjusted rate of Utah respondents who reported activity limitation from 2001–2005 was 18.6%. In 2003, more than 283,000 Utah adults reported being limited because of a physical, mental, or emotional problem, which is equivalent to the population of Davis County. Summit County health district reported an age-adjusted rate of activity limitation that was lower than the state rate (13.6%), while Southeastern Utah health district reported a higher prevalence of activity limitation (21.9%) than the state rate.

Within the local health districts there were small areas with lower and higher prevalence of activity limitation relative to the age-adjusted state rate. For example, adults living in Rose Park (7.5%) and Other Box Elder County (10.7%) reported a lower prevalence of activity limitation than the state rate. Adults living in the Southeastern Utah health district (21.9%), Juab, Millard, and Sanpete Counties (22.5%), Sandy Center (24.1%), Carbon and Emery Counties (24.2%), West Jordan North (24.5%), and Ben Lomond (24.6%) reported a higher prevalence of activity limitation compared to the state rate.

Utah Goal: No goal listed.

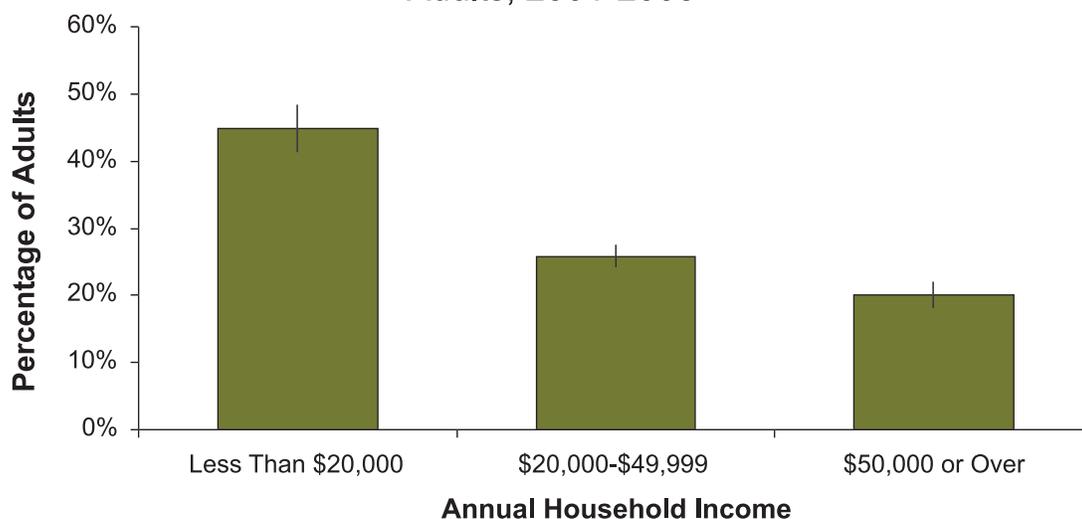
HP2010 Goal 1: Overarching – Improve the quality and years of healthy life and eliminate health disparities.

9. ACTIVITY LIMITATION

Activity limitation in Utah (continued)

Activity limitation varied significantly by age. For each successive age group (18–34, 35–49, 50–64, and 65 and over), the percentage of activity limitation increased significantly. A total of 10.4% of young adults (aged 18–34) experienced activity limitation and 31.5% of seniors aged 65 years and older experienced activity limitation. Activity limitation also varied by income. Those with a higher household income experienced less activity limitation compared to those with a lower household income. A total of 44.8% of respondents in households with an income of less than \$20,000 experienced activity limitation compared to 20.0% of households with an income of \$50,000 or greater. Because the BRFSS is a cross-sectional survey, the characteristics studied were assessed at a single point in time. Thus, in some cases, it is not possible to determine whether the characteristic preceded or followed an individual's report of fair or poor health.³

Figure 9.A: Activity Limitation by Income, Utah Adults, 2001-2005



Prevention/Resources

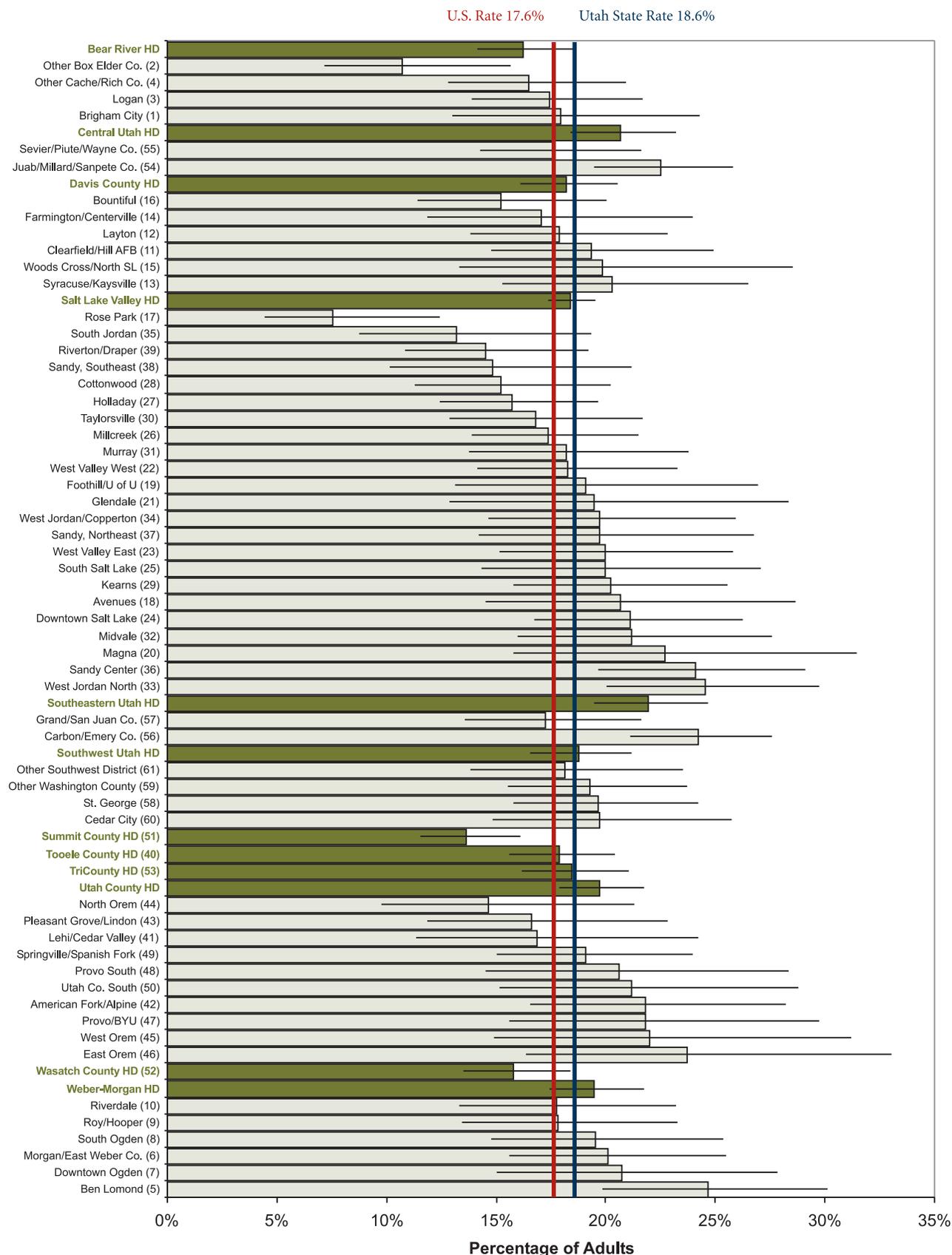
Physical activity and managing weight are a vital part of a healthy lifestyle for people who report activity limitations. Physical activity and weight management not only promote health and prevent disease, but also help to reduce the number of secondary conditions that can result from a disease or disability.

For more information about encouraging physical activity, contact the following agencies: Services for People With Disabilities (801-538-4200 or toll free at 1-800-837-6811, <http://www.hsdspd.utah.gov>); Aging Services Administrative Office (801-538-3910 or toll free at 1-877-424-4640, <http://www.hsdaas.utah.gov>); Utah Department of Health (801-538-6141, <http://health.utah.gov/bhp/>); Utah Walks (801-538-6241, www.utahwalks.org); Heart Disease and Stroke Prevention Program (801-538-6142, www.hearthishighway.org); Utah Council for Worksite Health Promotion (801-538-6256, <http://health.utah.gov/worksitewellness/>); Utah State Parks and Recreation (801-538-7220, www.stateparks.utah.gov); Utah's Local Health Departments (<http://health.utah.gov/lhd/lhd-directory.pdf>); and Jordan River Parkway (801-468-2299, <http://www.parks-recreation.org/parks/html/jordan.html>).

Obtaining and maintaining mental health is also important for people who report activity limitation. For more information about mental health, contact the following agencies: The Utah Division of Substance Abuse and Mental Health (<http://www.dsamh.utah.gov>) and the U.S. Substance Abuse and Mental Health Services Administration (<http://www.samhsa.gov>).

9. ACTIVITY LIMITATION

Figure 9.1: Percentage of Adults Reporting Activity Limitation by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



9. ACTIVITY LIMITATION

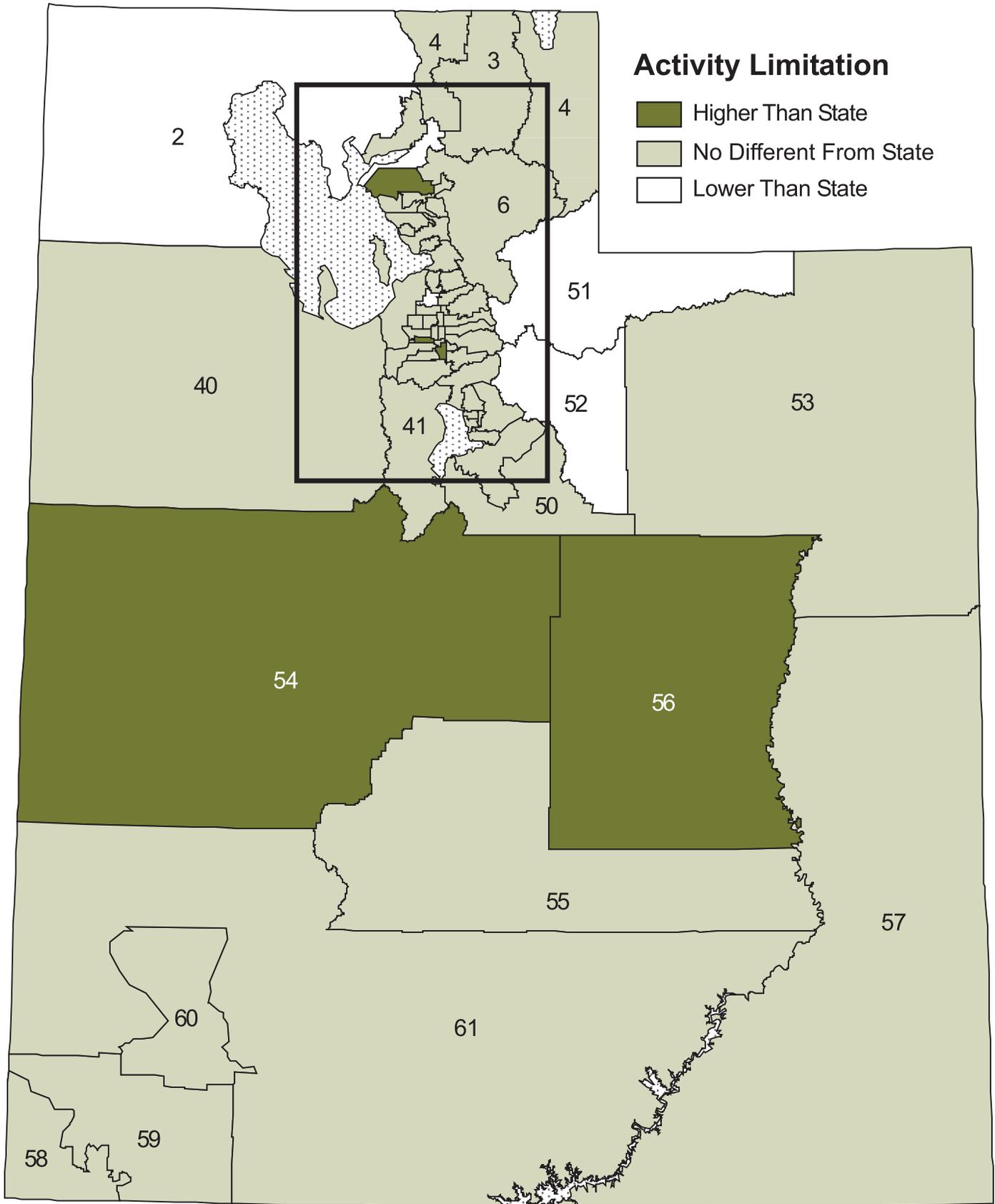
Table 9: Activity Limitation by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Reporting Activity Limitation	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	38,442,239	17.7%	17.6%	17.4%	17.7%
	State of Utah	1,657,454	283,425	17.1%	18.6%	18.0%	19.3%
	Bear River HD	98,027	14,322	14.6%	16.2%	14.2%	18.6%
25	Brigham City (1)	14,566	2,382	16.4%	17.9%	13.0%	24.3%
19	Logan (3)	45,904	6,817	14.9%	17.5%	13.9%	21.7%
2	Other Box Elder Co. (2)	14,636	1,595	10.9%	10.7%	7.2%	15.7%
12	Other Cache/Rich Co. (4)	22,921	3,349	14.6%	16.5%	12.8%	20.9%
	Central Utah HD	47,558	9,611	20.2%	20.7%	18.3%	23.2%
55	Juab/Millard/Sanpete Co. (54)	31,637	6,821	21.6%	22.5%	19.5%	25.8%
20	Sevier/Piute/Wayne Co. (55)	15,921	2,836	17.8%	17.6%	14.3%	21.6%
	Davis County HD	175,027	29,352	16.8%	18.2%	16.1%	20.5%
9	Bountiful (16)	33,318	4,811	14.4%	15.2%	11.4%	20.1%
33	Clearfield/Hill AFB (11)	37,329	6,383	17.1%	19.3%	14.7%	24.9%
16	Farmington/Centerville (14)	19,034	2,830	14.9%	17.1%	11.9%	23.9%
23	Layton (12)	46,815	7,650	16.3%	17.9%	13.8%	22.8%
45	Syracuse/Kaysville (13)	24,542	4,337	17.7%	20.3%	15.3%	26.5%
40	Woods Cross/North SL (15)	13,989	2,963	21.2%	19.8%	13.3%	28.5%
	Salt Lake Valley HD	658,810	110,944	16.8%	18.4%	17.3%	19.5%
47	Avenues (18)	18,959	3,888	20.5%	20.7%	14.5%	28.7%
8	Cottonwood (28)	33,297	5,221	15.7%	15.2%	11.3%	20.2%
49	Downtown Salt Lake (24)	42,808	8,125	19.0%	21.1%	16.8%	26.2%
31	Foothill/U of U (19)	17,778	3,396	19.1%	19.1%	13.1%	27.0%
34	Glendale (21)	18,642	3,305	17.7%	19.5%	12.9%	28.3%
10	Holladay (27)	35,956	6,458	18.0%	15.7%	12.4%	19.7%
44	Kearns (29)	42,995	7,232	16.8%	20.2%	15.8%	25.5%
56	Magna (20)	15,623	3,659	23.4%	22.7%	15.8%	31.5%
51	Midvale (32)	21,672	3,821	17.6%	21.2%	16.0%	27.6%
18	Millcreek (26)	44,008	7,794	17.7%	17.4%	13.9%	21.5%
27	Murray (31)	24,072	4,393	18.3%	18.2%	13.7%	23.8%
5	Riverton/Draper (39)	41,391	5,286	12.8%	14.5%	10.8%	19.2%
1	Rose Park (17)	22,639	1,580	7.0%	7.5%	4.5%	12.4%
58	Sandy Center (36)	36,106	8,073	22.4%	24.1%	19.6%	29.1%
39	Sandy, Northeast (37)	18,245	3,457	19.0%	19.7%	14.2%	26.7%
7	Sandy, Southeast (38)	20,781	2,402	11.6%	14.8%	10.1%	21.2%
3	South Jordan (35)	20,931	2,909	13.9%	13.2%	8.8%	19.3%
42	South Salt Lake (25)	18,456	3,551	19.2%	20.0%	14.4%	27.1%
14	Taylorsville (30)	27,372	4,166	15.2%	16.8%	12.9%	21.7%
60	West Jordan North (33)	30,391	5,829	19.2%	24.5%	20.0%	29.7%
37	West Jordan/Copperton (34)	26,360	3,870	14.7%	19.7%	14.7%	25.9%
41	West Valley East (23)	35,527	6,544	18.4%	19.9%	15.2%	25.8%
28	West Valley West (22)	44,794	6,836	15.3%	18.3%	14.2%	23.3%
	Southeastern Utah HD	36,828	8,080	21.9%	21.9%	19.4%	24.6%
59	Carbon/Emery Co. (56)	21,451	5,258	24.5%	24.2%	21.1%	27.6%
17	Grand/San Juan Co. (57)	15,377	2,626	17.1%	17.2%	13.6%	21.7%
	Southwest Utah HD	116,150	22,034	19.0%	18.8%	16.6%	21.2%
38	Cedar City (60)	22,401	3,667	16.4%	19.7%	14.8%	25.8%
26	Other Southwest District (61)	15,384	3,128	20.3%	18.2%	13.8%	23.5%
32	Other Washington County (59)	32,503	6,348	19.5%	19.3%	15.5%	23.7%
36	St. George (58)	45,862	9,062	19.8%	19.7%	15.8%	24.2%
4	Summit County HD (51)	24,525	2,784	11.4%	13.6%	11.5%	16.1%
24	Tooele County HD (40)	32,458	5,258	16.2%	17.9%	15.6%	20.4%
29	TriCounty HD (53)	28,023	5,229	18.7%	18.5%	16.2%	21.0%
	Utah County HD	278,832	46,230	16.6%	19.8%	17.9%	21.8%
52	American Fork/Alpine (42)	26,819	5,090	19.0%	21.8%	16.6%	28.2%
57	East Orem (46)	14,955	3,126	20.9%	23.7%	16.4%	33.0%
15	Lehi/Cedar Valley (41)	18,752	2,657	14.2%	16.9%	11.4%	24.3%
6	North Orem (44)	25,965	2,763	10.6%	14.6%	9.8%	21.3%
13	Pleasant Grove/Lindon (43)	24,636	3,752	15.2%	16.6%	11.8%	22.8%
53	Provo/BYU (47)	39,401	8,081	20.5%	21.8%	15.6%	29.7%
46	Provo South (48)	48,138	4,626	9.6%	20.6%	14.5%	28.4%
30	Springville/Spanish Fork (49)	41,036	7,288	17.8%	19.1%	15.0%	24.0%
50	Utah Co. South (50)	17,363	3,219	18.5%	21.2%	15.1%	28.8%
54	West Orem (45)	21,774	4,925	22.6%	22.0%	14.9%	31.2%
11	Wasatch County HD (52)	12,514	1,858	14.9%	15.8%	13.5%	18.4%
	Weber-Morgan HD	148,702	27,703	18.6%	19.5%	17.5%	21.8%
61	Ben Lomond (5)	33,215	7,257	21.9%	24.6%	19.9%	30.1%
48	Downtown Ogden (7)	21,684	3,944	18.2%	20.7%	15.1%	27.8%
43	Morgan/East Weber Co. (6)	24,131	4,674	19.4%	20.1%	15.6%	25.5%
21	Riverdale (10)	15,522	2,631	17.0%	17.7%	13.3%	23.2%
22	Roy/Hooper (9)	27,898	4,126	14.8%	17.8%	13.4%	23.3%
35	South Ogden (8)	26,255	5,122	19.5%	19.5%	14.8%	25.4%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

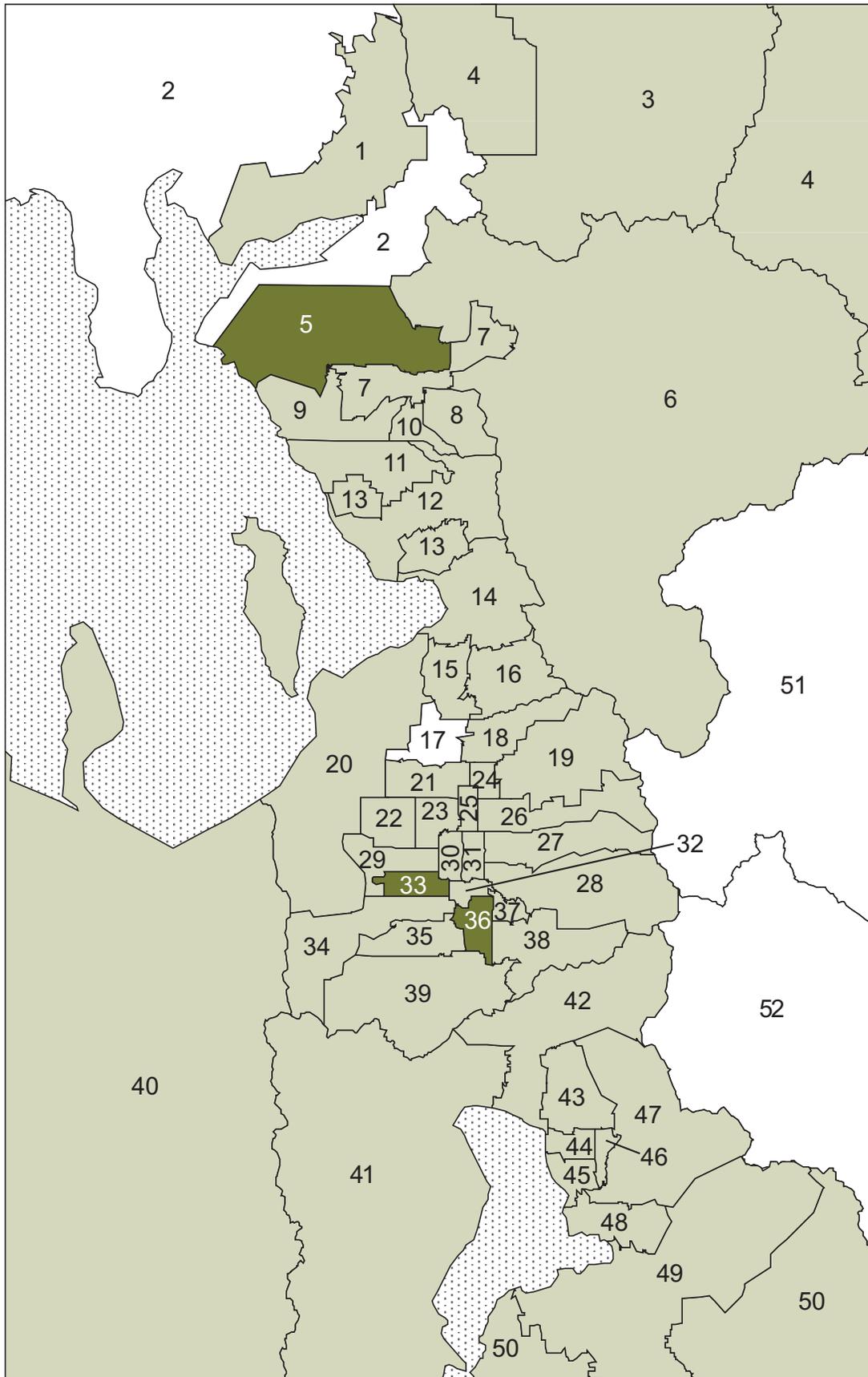
9. ACTIVITY LIMITATION

Figure 9.2: Activity Limitation by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



9. ACTIVITY LIMITATION

Figure 9.3: Activity Limitation by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



10. HEALTH CARE COVERAGE

Measure Definition: *“Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?” [Yes]*

Why is health care coverage important to public health?

Having health care coverage encourages individuals to seek and obtain needed health care. Individuals with health care coverage are more likely than those without health care coverage to have a regular and accessible source of health care. Due to the high cost of health care, persons who do not have health care coverage are less likely to get timely medical care compared to those with health care coverage. Not receiving timely medical care can result in more severe health problems and unnecessary high-cost health care such as hospitalizations and emergency department visits.

Risk factors for no health care coverage

Analysis of national data from the Behavioral Risk Factor Surveillance Survey for 1994 and 1995 combined showed a correlation between a lack of health care coverage and increased reporting of fair to poor health, current cigarette smoking, and physical inactivity.²³ This study showed that in Utah, significantly more adults without health care coverage were current smokers and/or were physically inactive during the previous 12 months. Higher levels of cigarette smoking and physical inactivity are both important risk factors for many chronic diseases.

Delayed access to care can have a significant effect on clinical outcomes. Results of a Massachusetts study showed that patients who were poor or uninsured were significantly more likely to report delays in getting care than people with health care insurance.²⁴ Additionally, delayed access to care for conditions that eventually lead to hospitalization were associated with longer hospital stays and potentially poorer health outcomes. Therefore, it is essential that the percentage of adults without health care coverage be decreased so that delays in access to care can be reduced. Population factors that affect access to health care include uninsured rate, poverty rate, unemployment rate, percent minority population, percent metropolitan population, percent employed in service and trade industries, percent employed in firms with fewer than 100 employees, generosity/inclusiveness of public insurance programs, overall HMO penetration, Medicaid managed care penetration, and percent of population underserved by primary care physicians.²⁵

Health care coverage in Utah

Utah had a significantly lower percentage of uninsured adults compared to the U.S. (age-adjusted rates 13.4% and 15.5% respectively). Approximately 14.8% of Utah adults, or 245,000 persons 18 or older, reported they were uninsured at some time between 2001–2005. This percentage of uninsured adults has remained relatively constant from 2001–2005. The small area with the highest age-adjusted percentage of uninsured adults was Glendale, with 31%, or approximately 5,900 uninsured adults and the small area with the lowest percentage of uninsured adults was Woods Cross/North Salt Lake, with 5.1%, or approximately 800 uninsured adults. There were 17 small areas that had a significantly higher percentage of uninsured adults compared to the state rate. These were Juab/Millard/Sanpete Counties and Sevier/Piute/Wayne Counties, which comprise all of the Central Utah health district; Glendale, Rose Park, South Salt Lake, West Valley East, Downtown Salt Lake, and Kearns in the Salt Lake Valley health district; Grand/San Juan Counties and Carbon/Emery Counties, which

Utah Objective: No objective listed.

HP2010 Objective (related) 1-1: Increase the proportion of persons under age 65 years with health insurance to 100% (age-adjusted to the U.S. 2000 standard population).

10. HEALTH CARE COVERAGE

Health care coverage in Utah (continued)

comprise all of the Southeastern Utah health district; Other Southwest District, Other Washington County, and St. George, which comprise most of the Southwest Utah health district; TriCounty health district; North Orem in the Utah County health district; Wasatch County health district; and Downtown Ogden in the Weber-Morgan health district.

From 2001–2005, significantly more women had health care coverage compared to men (86.2% for women and 83.2% for men). Significantly more adults with a higher income (\$25,000 or more: 91.2%) had health care coverage compared to adults with lower incomes of \$15,000 to \$24,999 (70.7%) or less than \$15,000 (65.2%). Additionally, significantly more White, non-Hispanic (87.6%) and non-White, non-Hispanic (79.4%) adults had health care coverage compared to Hispanic adults (60.6%). Generally, the percentage of adults with health care coverage increased with age from 74.7% for adults aged 18–24 to 98.2% for adults 65 and over; the differences between consecutive age groups were not significant.

The 2003 and 2004 BRFSS included a question about veteran status and showed that approximately 10.0% of Utah adults were veterans. Interestingly, 8.5% of Utah’s veterans reported that they did not have health care coverage, and 14.3% of veterans reported receiving all or some of their health care from Veterans Affairs (VA) facilities in the last 12 months.

Figure 10.A: Health Care Coverage by Income, Utah Adults, 2001-2005

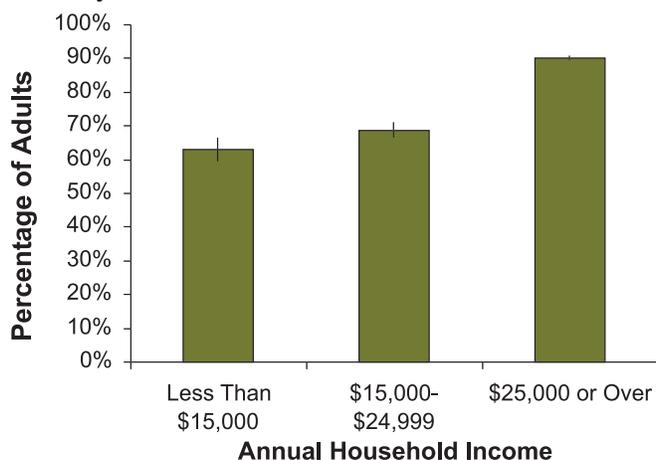
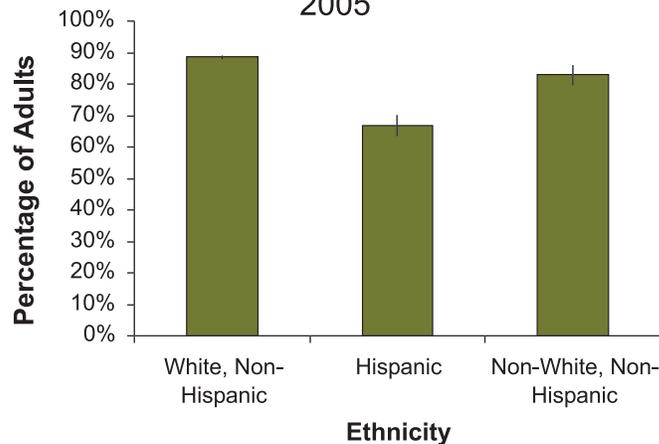


Figure 10.B: Health Care Coverage by Ethnicity, Utah Adults, 2001-2005

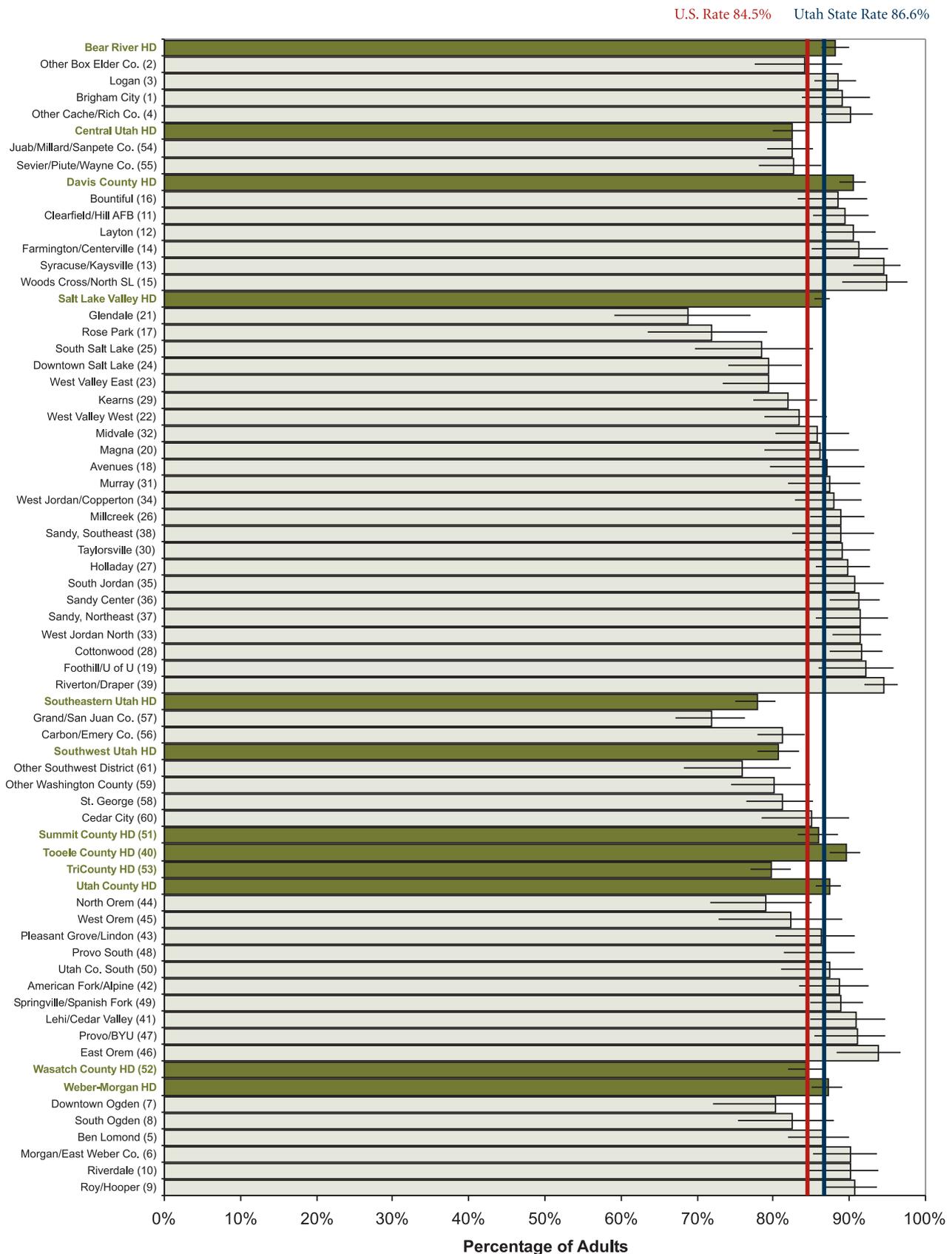


Prevention/Resources

The Utah Medicaid Program pays bills for people who qualify for a category of Medicaid (including children, adults, and families), who have a low income or cannot afford the cost of health care, or who have resources (assets) under the federal limit for the category of Medicaid. Information on Medicaid can be found at <http://health.utah.gov/medicaid/> or call 1-800-662-9651. Federally Qualified Health Centers are clinics that offer low-cost medical care regardless of whether the patient qualifies for Medicaid or has health insurance. A list of these clinics can be found at <http://health.utah.gov/medicaid/pdfs/resources.pdf>. The Primary Care Network (PCN) is health care coverage for adults who qualify. Uninsured adults aged 19–64 may qualify for coverage. Go to <http://health.utah.gov/pcn/> for more information or call 1-888-222-2542.

10. HEALTH CARE COVERAGE

Figure 10.1: Percentage of Adults Reporting Health Care Coverage by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



10. HEALTH CARE COVERAGE

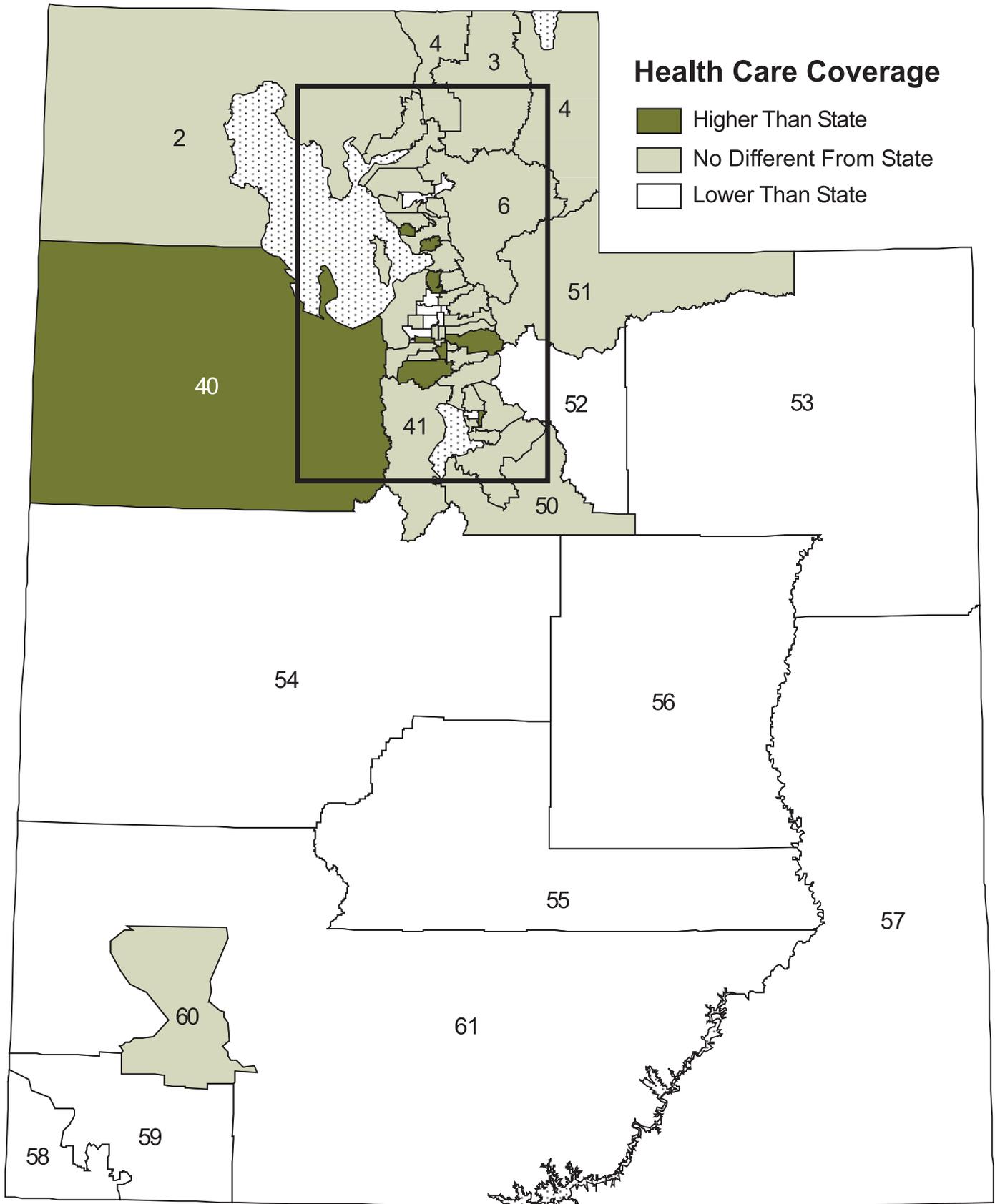
Table 10: Health Care Coverage by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Health Care Coverage	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	184,261,381	84.6%	84.5%	84.4%	84.6%
	State of Utah	1,657,454	1,412,482	85.2%	86.6%	86.0%	87.2%
	Bear River HD	98,027	83,372	85.1%	88.2%	86.3%	89.9%
39	Brigham City (1)	14,566	12,448	85.5%	89.0%	83.7%	92.7%
33	Logan (3)	45,904	38,004	82.8%	88.5%	85.4%	90.9%
20	Other Box Elder Co. (2)	14,636	12,397	84.7%	84.1%	77.5%	89.0%
46	Other Cache/Rich Co. (4)	22,921	20,368	88.9%	90.2%	86.3%	93.1%
	Central Utah HD	47,558	39,193	82.4%	82.4%	79.9%	84.7%
16	Juab/Millard/Sanpete Co. (54)	31,637	25,974	82.1%	82.4%	79.3%	85.2%
18	Sevier/Piute/Wayne Co. (55)	15,921	13,205	82.9%	82.7%	78.2%	86.4%
	Davis County HD	175,027	156,754	89.6%	90.6%	88.7%	92.2%
34	Bountiful (16)	33,318	29,217	87.7%	88.5%	83.2%	92.3%
41	Clearfield/Hill AFB (11)	37,329	32,614	87.4%	89.5%	85.2%	92.6%
52	Farmington/Centerville (14)	19,034	17,304	90.9%	91.3%	85.0%	95.1%
47	Layton (12)	46,815	41,324	88.3%	90.4%	86.3%	93.4%
59	Syracuse/Kaysville (13)	24,542	23,045	93.9%	94.5%	90.6%	96.8%
61	Woods Cross/North SL (15)	13,989	13,183	94.2%	94.9%	89.1%	97.7%
	Salt Lake Valley HD	658,810	560,977	85.2%	86.5%	85.5%	87.4%
29	Avenues (18)	18,959	16,644	87.8%	87.0%	79.6%	92.0%
56	Cottonwood (28)	33,297	30,447	91.4%	91.6%	87.4%	94.4%
7	Downtown Salt Lake (24)	42,808	32,705	76.4%	79.4%	74.2%	83.8%
57	Foothill/U of U (19)	17,778	16,251	91.4%	92.2%	86.0%	95.8%
1	Glendale (21)	18,642	12,673	68.0%	68.8%	59.2%	77.0%
43	Holladay (27)	35,956	32,288	89.8%	89.7%	85.5%	92.8%
14	Kearns (29)	42,995	33,592	78.1%	81.9%	77.3%	85.8%
25	Magna (20)	15,623	13,067	83.6%	86.1%	78.8%	91.2%
23	Midvale (32)	21,672	17,697	81.7%	85.8%	80.3%	89.9%
37	Millcreek (26)	44,008	39,308	89.3%	88.9%	84.8%	92.0%
31	Murray (31)	24,072	20,950	87.0%	87.4%	81.9%	91.4%
60	Riverton/Draper (39)	41,391	38,688	93.5%	94.5%	91.9%	96.4%
3	Rose Park (17)	22,639	15,444	68.2%	72.0%	63.4%	79.2%
53	Sandy Center (36)	36,106	32,640	90.4%	91.3%	87.5%	94.0%
54	Sandy, Northeast (37)	18,245	16,548	90.7%	91.5%	85.7%	95.1%
38	Sandy, Southeast (38)	20,781	18,801	90.5%	88.9%	82.5%	93.2%
48	South Jordan (35)	20,931	18,775	89.7%	90.6%	84.6%	94.5%
5	South Salt Lake (25)	18,456	14,281	77.4%	78.5%	69.8%	85.2%
40	Taylorsville (30)	27,372	24,112	88.1%	89.1%	84.1%	92.6%
55	West Jordan North (33)	30,391	27,802	91.5%	91.5%	87.7%	94.2%
32	West Jordan/Copperton (34)	26,360	22,609	85.8%	87.9%	82.9%	91.6%
8	West Valley East (23)	35,527	27,793	78.2%	79.4%	73.4%	84.4%
19	West Valley West (22)	44,794	35,732	79.8%	83.3%	78.9%	87.0%
	Southeastern Utah HD	36,828	28,744	78.1%	77.9%	75.1%	80.4%
12	Carbon/Emery Co. (56)	21,451	17,571	81.9%	81.2%	78.0%	84.0%
2	Grand/San Juan Co. (57)	15,377	10,870	70.7%	72.0%	67.1%	76.4%
	Southwest Utah HD	116,150	93,965	80.9%	80.8%	77.9%	83.4%
22	Cedar City (60)	22,401	18,176	81.1%	85.0%	78.4%	89.9%
4	Other Southwest District (61)	15,384	12,183	79.2%	76.0%	68.3%	82.3%
10	Other Washington County (59)	32,503	25,843	79.5%	80.2%	74.4%	84.9%
13	St. George (58)	45,862	37,676	82.2%	81.3%	76.4%	85.3%
24	Summit County HD (51)	24,525	20,949	85.4%	86.0%	83.1%	88.5%
42	Tooele County HD (40)	32,458	28,813	88.8%	89.6%	87.5%	91.4%
9	TriCounty HD (53)	28,023	22,309	79.6%	79.8%	77.1%	82.3%
	Utah County HD	278,832	238,680	85.6%	87.4%	85.6%	89.0%
35	American Fork/Alpine (42)	26,819	23,322	87.0%	88.7%	83.4%	92.5%
58	East Orem (46)	14,955	14,131	94.5%	93.7%	88.3%	96.7%
50	Lehi/Cedar Valley (41)	18,752	16,916	90.2%	90.9%	84.9%	94.6%
6	North Orem (44)	25,965	20,100	77.4%	79.1%	71.6%	85.0%
26	Pleasant Grove/Lindon (43)	24,636	20,845	84.6%	86.3%	80.2%	90.7%
51	Provo/BYU (47)	39,401	35,193	89.3%	91.1%	85.3%	94.8%
28	Provo South (48)	48,138	40,195	83.5%	86.6%	81.4%	90.6%
36	Springville/Spanish Fork (49)	41,036	35,841	87.3%	88.9%	84.9%	91.9%
30	Utah Co. South (50)	17,363	14,578	84.0%	87.3%	81.0%	91.8%
15	West Orem (45)	21,774	17,600	80.8%	82.3%	72.8%	89.1%
21	Wasatch County HD (52)	12,514	10,488	83.8%	84.4%	82.0%	86.6%
	Weber-Morgan HD	148,702	128,107	86.2%	87.2%	85.1%	89.0%
27	Ben Lomond (5)	33,215	28,216	85.0%	86.4%	82.0%	89.9%
11	Downtown Ogden (7)	21,684	16,979	78.3%	80.3%	72.1%	86.5%
44	Morgan/East Weber Co. (6)	24,131	21,646	89.7%	90.1%	85.2%	93.6%
45	Riverdale (10)	15,522	13,796	88.9%	90.2%	84.7%	93.9%
49	Roy/Hooper (9)	27,898	25,066	89.9%	90.7%	86.6%	93.6%
17	South Ogden (8)	26,255	22,004	83.8%	82.5%	75.4%	87.9%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

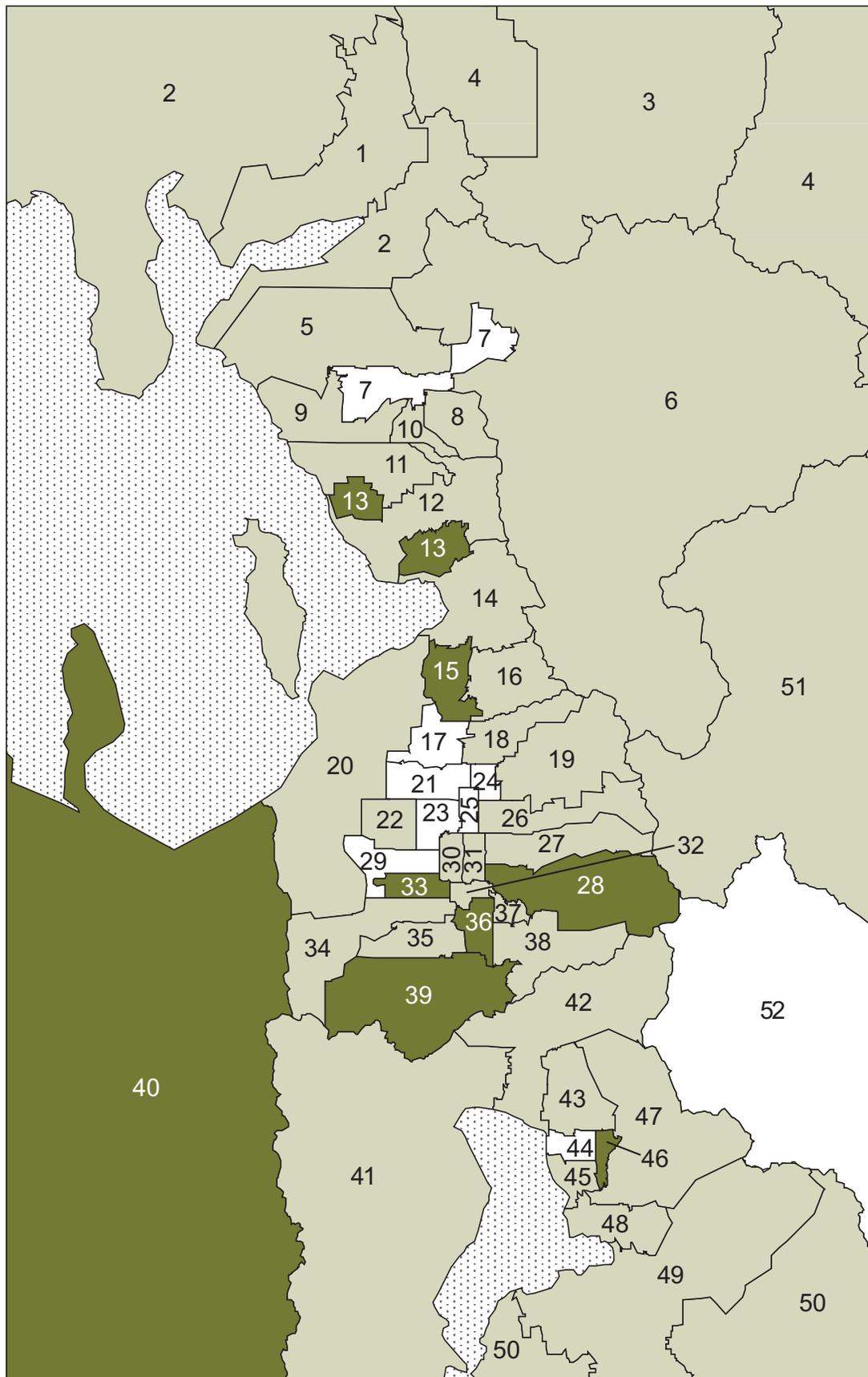
10. HEALTH CARE COVERAGE

Figure 10.2: Health Care Coverage by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



10. HEALTH CARE COVERAGE

Figure 10.3: Health Care Coverage by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



11. PRIMARY CARE PROVIDER

Definition Measure: *“Do you have one person you think of as your personal doctor or health care provider? If no, is there more than one, or is there no person who you think of as your personal doctor or health care provider?”* [**Yes to having one or more than one personal doctor or health care provider**]

Why is having a primary care provider important to public health?

Individuals with a primary care provider are more likely to obtain preventive health care services, to have access to care, to receive continuous care, and to have lower rates of hospitalization, as well as lower health care costs.^{1,26} Preventive health care services may include: clinical breast exam, mammogram, prostate exam, colon cancer screening, Pap test, cholesterol screening, blood pressure screening, diabetes tests, and many more. Screenings are recommended in many cases to prevent a more serious diagnosis at a later date. According to Healthy People 2010 (HP2010), “Strong predictors of access to quality health care include having health insurance, a higher income level, and a regular primary care provider or other source of ongoing health care. Use of clinical preventive services, such as early prenatal care, can serve as indicators of access to quality health care services.”¹

Additionally HP2010 states that, “More than 40 million Americans do not have a particular health care provider’s office, clinic, health center, or other place where they usually go to seek health care or health-related advice. Even among privately insured persons, a significant number lacked a usual source of care or reported difficulty in accessing needed care due to financial constraints or insurance problems.”¹

According to BRFSS data 2001–2005, individuals are more likely to have a primary care provider if their activities are limited in any way because of physical, mental, or emotional problems. The survey also showed that persons who indicated that they had a primary care provider were more likely to report eating at least two fruits a day or three vegetables a day. In addition, persons who did not have a primary care provider were less likely to get recommended screenings, vaccinations, and prenatal care such as mammograms, Pap tests, prostate-specific antigen (PSA) tests, flu shots, clinical breast exams, and take folic acid daily supplements.

Risk factors for not having a primary care provider

According to BRFSS data 2001–2005, multiple factors influenced the likelihood of an individual having a primary care provider. Some of these factors included gender, age, household income, education, ethnicity, health insurance, and marital status. Males were less likely to have a primary care provider. Younger individuals were less likely to have a primary care provider as were those living in lower income households. Additionally, Hispanic persons and those with less education were less likely to have a primary care provider. Those without health care coverage were less likely to have a primary care provider. Those not married were significantly less likely to have a primary care provider. Finally, students were least likely of all occupations to have a primary care provider. There was no difference in perceived general health for those who did and did not have a primary care provider.

Primary care provider in Utah

The age-adjusted aggregated state rate for having a primary care provider from 2001–2005 was 76.4%. The related crude rate was 74.4%, meaning that approximately 425,000 adult Utahns did not have a primary care provider in 2003. However, the age-adjusted prevalence of having a primary care provider varied by local health district and ranged from a low of 71.0% to a high of 81.0% (see Figure 11.1). Central Utah had the

Utah Objective: Same as HP2010 objective.

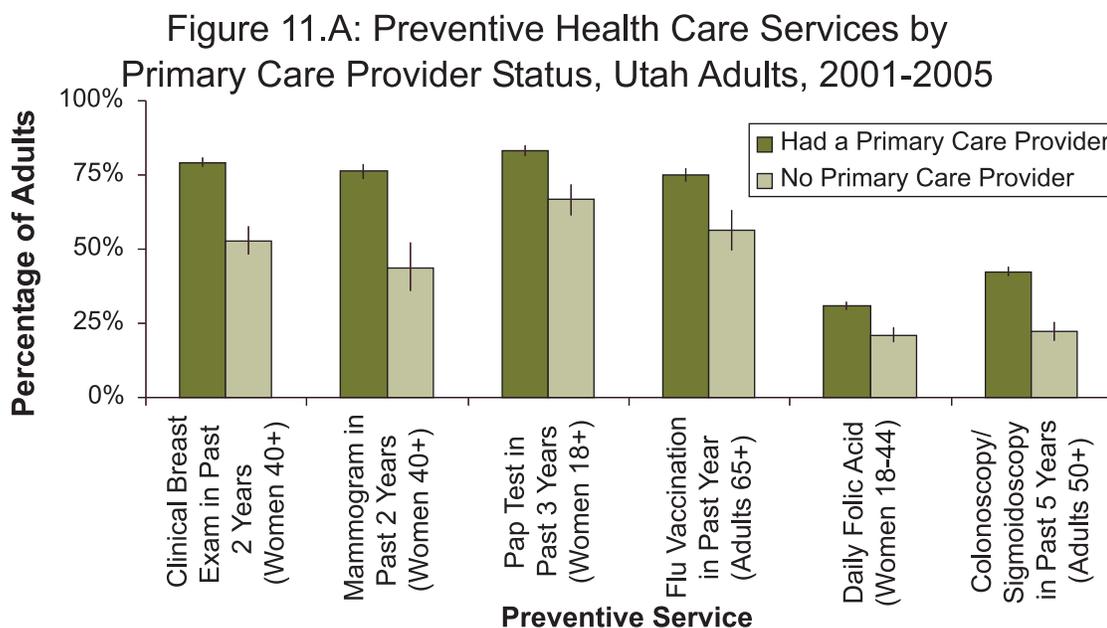
HP2010 Objective (related) 1-5: Increase the proportion of persons with a usual primary care provider to 85%.

11. PRIMARY CARE PROVIDER

Primary care provider in Utah (continued)

highest prevalence for having a primary care provider and Summit County had the lowest prevalence. Overall, the small area with the highest rate for having a primary care provider was East Orem with a rate of 92.7% and the small area with the lowest rate was South Salt Lake whose rate was 63.9%.

Statewide, persons with a primary care provider had significantly higher rates of preventive health care services than those without a personal health care provider.



Prevention/Resources

The Utah Department of Health has programs such as Medicaid, Children’s Health Insurance Program (CHIP) for children 0–18, and the Primary Care Network (PCN) to pay health care costs for low-income children and adults and those with disabilities.

To contact Medicaid in the Salt Lake City area, call (801) 538-6155. In Utah, Idaho, Wyoming, Colorado, New Mexico, Arizona, and Nevada, call toll-free 1-800-662-9651. From other states, call 1-801-538-6155. Call the Health Resource Line at 1-888-222-2542 for information on CHIP and PCN. Or visit the CHIP website at <http://www.utahchip.org/> and the PCN website at <http://health.utah.gov/pcn/>.

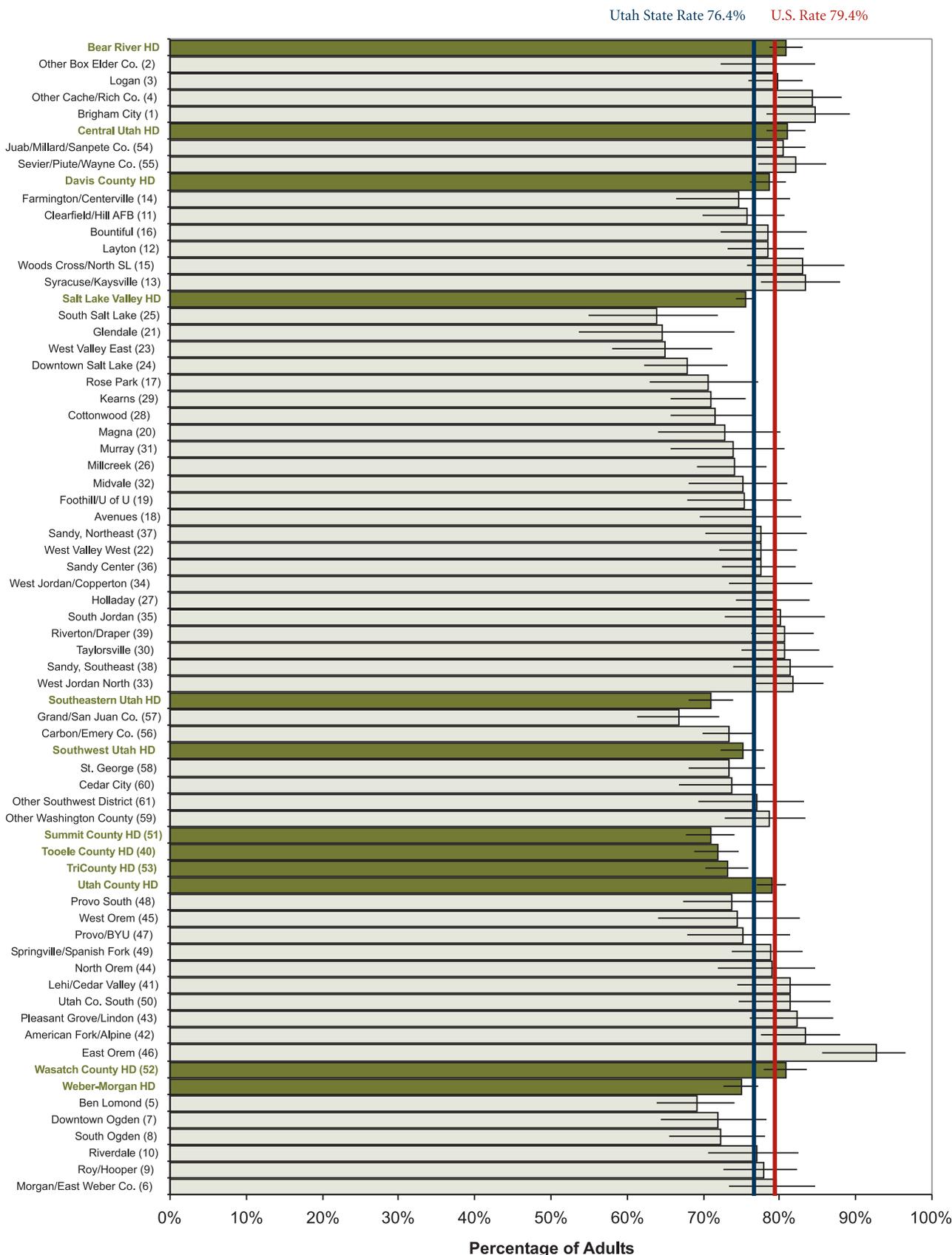
UPP (Utah’s Premium Partnership for Health Insurance) helps make health insurance more affordable for working individuals and families who do not currently have health insurance. Call 1-888-222-2542 or visit www.health.utah.gov/upp.

The Association for Utah Community Health (AUCH) is the primary care association for the state of Utah. AUCH members include Federally Qualified Health Centers (FQHC) and other providers who strive to meet the needs of the medically underserved. AUCH and its member organizations are part of a statewide and national movement to reduce barriers to health care by enhancing primary care service delivery through prevention, health promotion, and community participation. Call (801) 974-5522 or visit www.auch.org.

General Cancer Resource Guide - A comprehensive list of cancer resources is made available by the Huntsman Cancer Institute and the Utah Cancer Action Network and can be found at the following URL: <http://www.hci.utah.edu/pdf/brochures/cancerResourceGuide.pdf>.

11. PRIMARY CARE PROVIDER

Figure 11.1: Percentage of Adults Reporting a Primary Care Provider by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



11. PRIMARY CARE PROVIDER

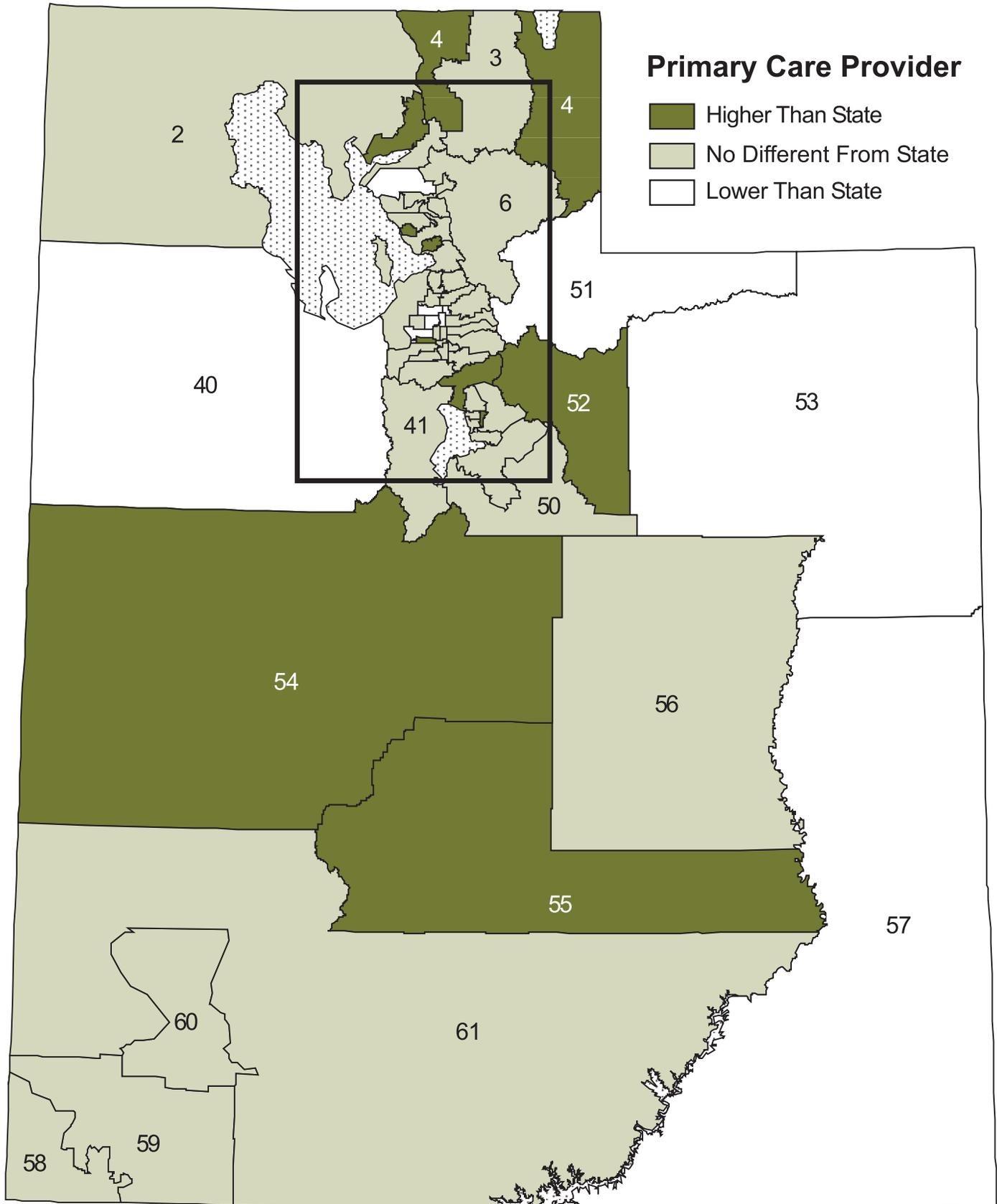
Table 11: Primary Care Provider by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Age-adjusted Rate	95% Confidence Interval	
			Reporting Primary Care Provider	Crude Rate		Lower	Upper
	U.S.	217,803,051		173,262,327	79.6%	79.4%	79.5%
	State of Utah	1,657,454		1,232,649	74.4%	76.4%	77.1%
	Bear River HD	98,027		75,530	77.1%	80.9%	83.0%
60	Brigham City (1)	14,566		12,069	82.9%	84.6%	89.3%
44	Logan (3)	45,904		31,899	69.5%	79.7%	83.1%
40	Other Box Elder Co. (2)	14,636		11,712	80.0%	79.2%	84.7%
59	Other Cache/Rich Co. (4)	22,921		19,185	83.7%	84.4%	88.1%
	Central Utah HD	47,558		38,403	80.8%	81.0%	83.5%
46	Juab/Millard/Sanpete Co. (54)	31,637		25,411	80.3%	80.4%	83.4%
54	Sevier/Piute/Wayne Co. (55)	15,921		12,976	81.5%	82.0%	86.1%
	Davis County HD	175,027		134,771	77.0%	78.6%	80.9%
35	Bountiful (16)	33,318		25,888	77.7%	78.4%	83.5%
27	Clearfield/Hill AFB (11)	37,329		27,467	73.6%	75.7%	80.6%
23	Farmington/Centerville (14)	19,034		14,232	74.8%	74.7%	81.4%
36	Layton (12)	46,815		35,514	75.9%	78.5%	83.1%
57	Syracuse/Kaysville (13)	24,542		19,997	81.5%	83.3%	87.9%
56	Woods Cross/North SL (15)	13,989		11,586	82.8%	83.1%	88.5%
	Salt Lake Valley HD	658,810		485,609	73.7%	75.6%	76.7%
28	Avenues (18)	18,959		14,487	76.4%	76.8%	82.8%
10	Cottonwood (28)	33,297		23,987	72.0%	71.6%	76.8%
5	Downtown Salt Lake (24)	42,808		27,752	64.8%	67.9%	73.1%
26	Foothill/U of U (19)	17,778		12,871	72.4%	75.4%	81.6%
2	Glendale (21)	18,642		12,121	65.0%	64.6%	74.1%
42	Holladay (27)	35,956		29,056	80.8%	79.5%	83.9%
8	Kearns (29)	42,995		29,340	68.2%	70.9%	75.6%
14	Magna (20)	15,623		10,744	68.8%	72.7%	80.0%
24	Midvale (32)	21,672		15,450	71.3%	75.1%	81.1%
21	Millcreek (26)	44,008		32,848	74.6%	74.0%	78.4%
20	Murray (31)	24,072		18,037	74.9%	73.8%	80.7%
47	Riverton/Draper (39)	41,391		32,107	77.6%	80.6%	84.4%
7	Rose Park (17)	22,639		15,021	66.4%	70.6%	77.2%
33	Sandy Center (36)	36,106		27,130	75.1%	77.6%	82.1%
31	Sandy, Northeast (37)	18,245		13,988	76.7%	77.5%	83.5%
51	Sandy, Southeast (38)	20,781		16,930	81.5%	81.3%	87.1%
45	South Jordan (35)	20,931		16,684	79.7%	80.1%	85.9%
1	South Salt Lake (25)	18,456		11,900	64.5%	63.9%	72.0%
48	Taylorsville (30)	27,372		21,909	80.0%	80.7%	85.3%
53	West Jordan North (33)	30,391		24,200	79.6%	81.8%	85.8%
41	West Jordan/Copperton (34)	26,360		20,337	77.2%	79.4%	84.3%
3	West Valley East (23)	35,527		22,439	63.2%	64.9%	71.2%
32	West Valley West (22)	44,794		33,972	75.8%	77.6%	82.2%
	Southeastern Utah HD	36,828		26,107	70.9%	71.1%	73.9%
17	Carbon/Emery Co. (56)	21,451		15,751	73.4%	73.4%	76.6%
4	Grand/San Juan Co. (57)	15,377		10,157	66.1%	66.9%	72.1%
	Southwest Utah HD	116,150		87,124	75.0%	75.2%	77.9%
18	Cedar City (60)	22,401		15,325	68.4%	73.7%	79.6%
29	Other Southwest District (61)	15,384		12,215	79.4%	77.1%	83.3%
37	Other Washington County (59)	32,503		25,479	78.4%	78.6%	83.4%
16	St. George (58)	45,862		33,975	74.1%	73.4%	78.0%
9	Summit County HD (51)	24,525		17,028	69.4%	71.0%	74.0%
12	Tooele County HD (40)	32,458		22,867	70.5%	71.8%	74.6%
15	TriCounty HD (53)	28,023		20,404	72.8%	73.2%	75.8%
	Utah County HD	278,832		205,862	73.8%	79.0%	80.9%
58	American Fork/Alpine (42)	26,819		21,667	80.8%	83.5%	88.0%
61	East Orem (46)	14,955		13,815	92.4%	92.7%	96.5%
50	Lehi/Cedar Valley (41)	18,752		15,191	81.0%	81.0%	86.7%
39	North Orem (44)	25,965		19,331	74.5%	79.0%	84.7%
55	Pleasant Grove/Lindon (43)	24,636		19,953	81.0%	82.2%	87.1%
25	Provo/BYU (47)	39,401		25,622	65.0%	75.2%	81.4%
19	Provo South (48)	48,138		26,765	55.6%	73.7%	79.2%
38	Springville/Spanish Fork (49)	41,036		31,684	77.2%	78.8%	83.1%
52	Utah Co. South (50)	17,363		13,753	79.2%	81.4%	86.7%
22	West Orem (45)	21,774		15,531	71.3%	74.5%	82.8%
49	Wasatch County HD (52)	12,514		10,027	80.1%	80.9%	83.6%
	Weber-Morgan HD	148,702		109,222	73.5%	75.0%	77.3%
6	Ben Lomond (5)	33,215		22,111	66.6%	69.2%	74.2%
11	Downtown Ogden (7)	21,684		14,927	68.8%	71.8%	78.2%
43	Morgan/East Weber Co. (6)	24,131		19,240	79.7%	79.5%	84.6%
30	Riverdale (10)	15,522		11,991	77.3%	77.1%	82.4%
34	Roy/Hooper (9)	27,898		21,183	75.9%	77.9%	82.4%
13	South Ogden (8)	26,255		18,909	72.0%	72.2%	78.1%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

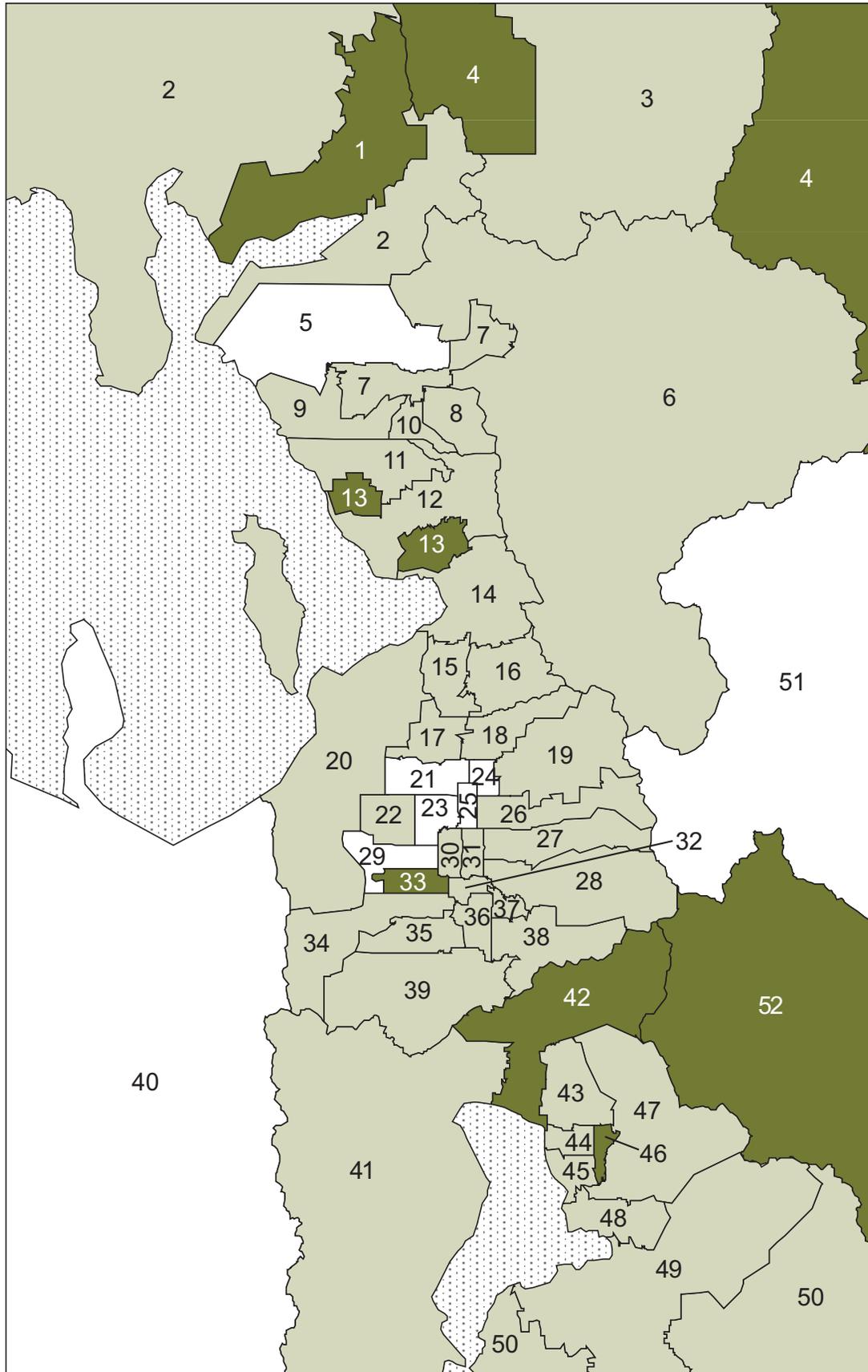
11. PRIMARY CARE PROVIDER

Figure 11.2: Primary Care Provider by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



11. PRIMARY CARE PROVIDER

Figure 11.3: Primary Care Provider by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



12. HIV TESTING

Measure Definition: *“Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation.” [Yes]*

Why is HIV testing important to public health?

We cannot tell by looking at someone whether he or she has HIV infection. Someone can look and feel perfectly healthy and still be infected. Many people who have HIV infections do not know it, and neither do their sex partners.

The HIV-antibody test is the only way to determine whether someone is infected. When any virus enters the body, the immune system responds by making proteins called antibodies. Different viruses cause the body to make different antibodies. A person makes antibodies to HIV when he or she has HIV infection. The HIV-antibody test detects HIV antibodies in a person’s blood. The test determines whether someone is infected with HIV. The test does not tell if a person has AIDS or when or whether that person will get AIDS. HIV antibodies are a sign of infection, but unlike antibodies for many other infections, they do not protect people from disease, make them immune, or prevent them from giving HIV to someone else.

The HIV-antibody test should always include before-test and after-test counseling. This counseling helps people understand the result, how to protect their own health, and (if they are infected) how to not infect other people. Counseling is a central part of the testing process, whether a person is infected or not.

Risk factors for HIV/AIDS

There is evidence that HIV, the virus that causes AIDS, has been in the United States since 1978. The following are known risk factors for HIV infection. Persons who answer yes to any of these questions should immediately seek counseling and testing. They may be at increased risk of infection if any of the following apply to them since 1978:

- Have you shared needles or syringes to inject drugs or steroids?
- If you are a male, have you had unprotected sex with other males?
- Have you had unprotected sex with someone who you know or suspect was infected with HIV?
- Have you had a sexually transmitted disease (STD)?
- Have you received a blood transfusion or clotting factor between 1978 and 1985?
- Have you had unprotected sex with someone who would answer yes to any of the above questions?

If a person has had sex with someone and didn’t know their risk behavior, or has had many sex partners, then that person has increased the chance that he or she might be HIV infected. If someone plans to become pregnant, counseling and testing is extremely important. Without treatment, HIV-infected women have about a one-in-four chance of infecting their baby during pregnancy or delivery. Medical treatment can reduce this to about a 1 in 12 chance.

HIV/AIDS in Utah

During 2005, 63 new AIDS cases were documented in Utah. The majority of these cases (63%) met the AIDS case definition based on low CD4 T-lymphocyte counts. The 63 AIDS cases reported in 2005 represent a 17% decrease from the 76 cases reported in 2004. Twenty-seven AIDS deaths were reported through December

Utah Objective: No objective listed.

HP2010 Objective (related) 13-7: (Developmental) Increase the number of HIV positive persons who know their serostatus.

12. HIV TESTING

HIV/AIDS in Utah (continued)

2005, a reported 4% decrease from the 28 deaths reported in 2004. During 2005, 71% of HIV-positive individuals and 49% of newly reported AIDS cases were in the 20–39 age group. Twenty-nine percent of newly reported AIDS cases were in the 40–49 age group. Of the 163 individuals reported with HIV and AIDS in 2005, 130 (80%) were male, and 33 (20%) were female.

During 2005, male-to-male sexual contact was the most common means of HIV/AIDS exposure reported among men of all races. Men who have sex with men and inject drugs was the second most common means of exposure, followed by injecting drug use alone. Nine percent of men reported during 2005 did not disclose a risk. The racial/ethnic breakdown of men with HIV/AIDS in 2005 shows 70% were White, 25% were Hispanic, 4% were Black, and 1% were Native American.

Thirty-three women were reported with HIV/AIDS during 2005. Heterosexual contact with an HIV-positive partner was the most common means of HIV/AIDS exposure reported by women. Injecting drug use was the second highest means of exposure. Thirty percent of women reported during 2005 did not disclose a risk. The racial/ethnic breakdown of women shows 52% were White, 21% were Black, 12% were Hispanic, 6% were Native American, and for 9% race/ethnicity was unknown.

According to the 2001–2005 BRFSS data, the overall age-adjusted percentage of Utah adults aged 18–64 who reported ever having had an HIV test was 30.4%. This was quite a bit lower than the U.S. rate of 44.2%. This age-adjusted rate varied among Utah's 12 local health districts from a low of 21.7% in Bear River to a high of 37.7% in Summit County. Bear River and Utah County had rates lower than the state rate. Four health districts, Salt Lake Valley, Southeastern Utah, Weber-Morgan, and Summit County, had rates higher than the state rate.

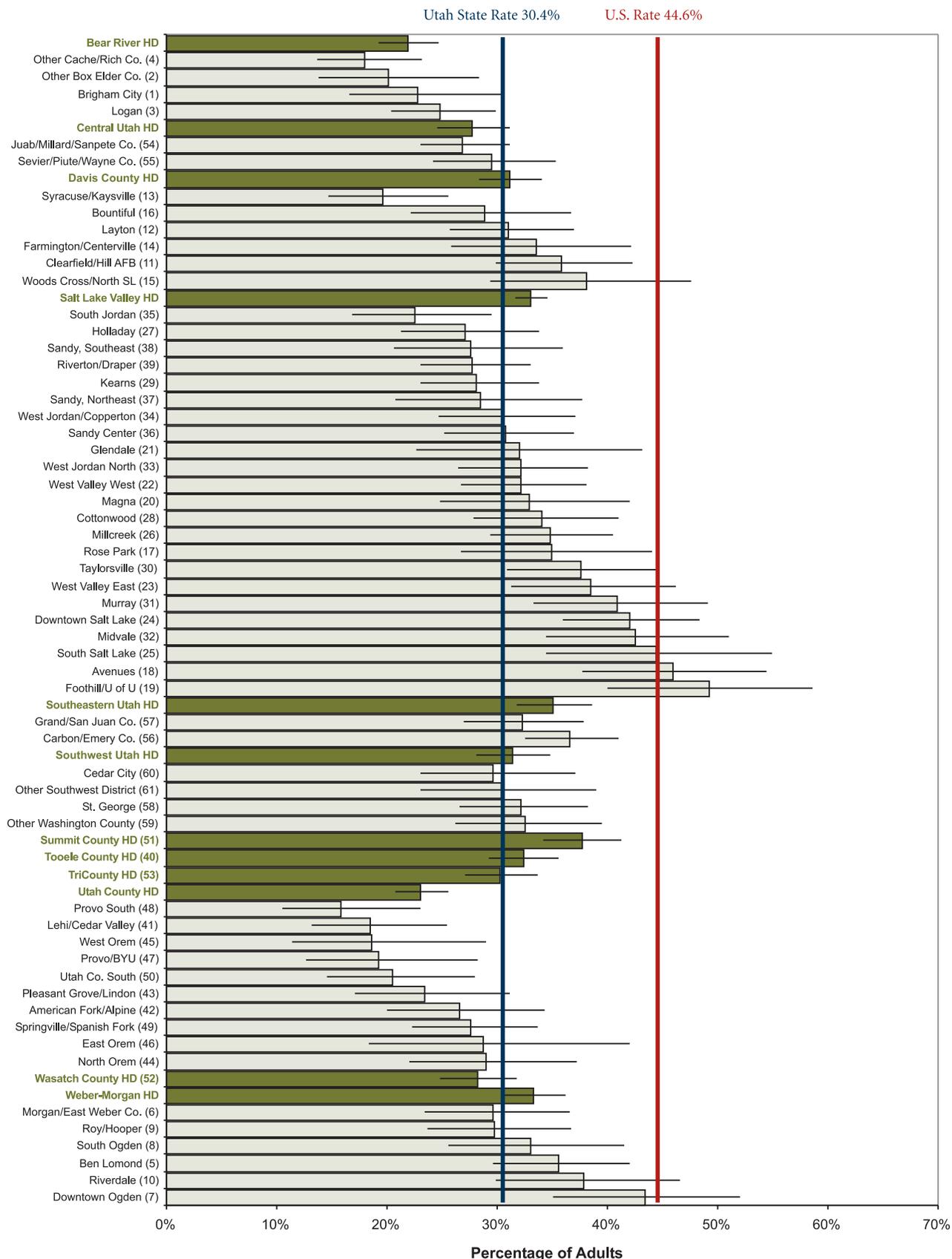
The age-adjusted percentage of Utah adults aged 18–64 who reported ever having had an HIV test varied among Utah's small areas from a low of 15.9% in Provo South to a high of 49.3% in Foothill/U of U. In Davis County health district, Syracuse/Kaysville was the only small area with a rate significantly lower than the state rate. The South Jordan small area was the only one in the Salt Lake Valley health district with a rate lower than the state. In Utah County health district, Lehi/Cedar Valley, Provo/BYU, Provo South, Utah Co. South, and West Orem had rates lower than the state rate.

Prevention/Resources

The Utah Department of Health HIV Prevention Program offers confidential conventional and rapid HIV testing at publicly funded sites throughout the state of Utah. A listing of the individual sites is provided at http://health.utah.gov/cdc/hiv_testing.htm. A listing of all HIV prevention providers in Utah and other resources is available at <http://health.utah.gov/cdc/hivprevention/resources/Prevention%20Directory%202003.pdf>. Providers are listed by organization name and interventions currently being conducted. Additional web links to other helpful organizations are included at the end of the resource directory. Information on current events can be found at www.aidsinfoutah.net.

12. HIV TESTING

Figure 12.1: Percentage of Adults Who Ever Had an HIV Test by Local Health District and Small Area, Utah Adults Aged 18–64, 2001–2005 (Age-adjusted)



12. HIV TESTING

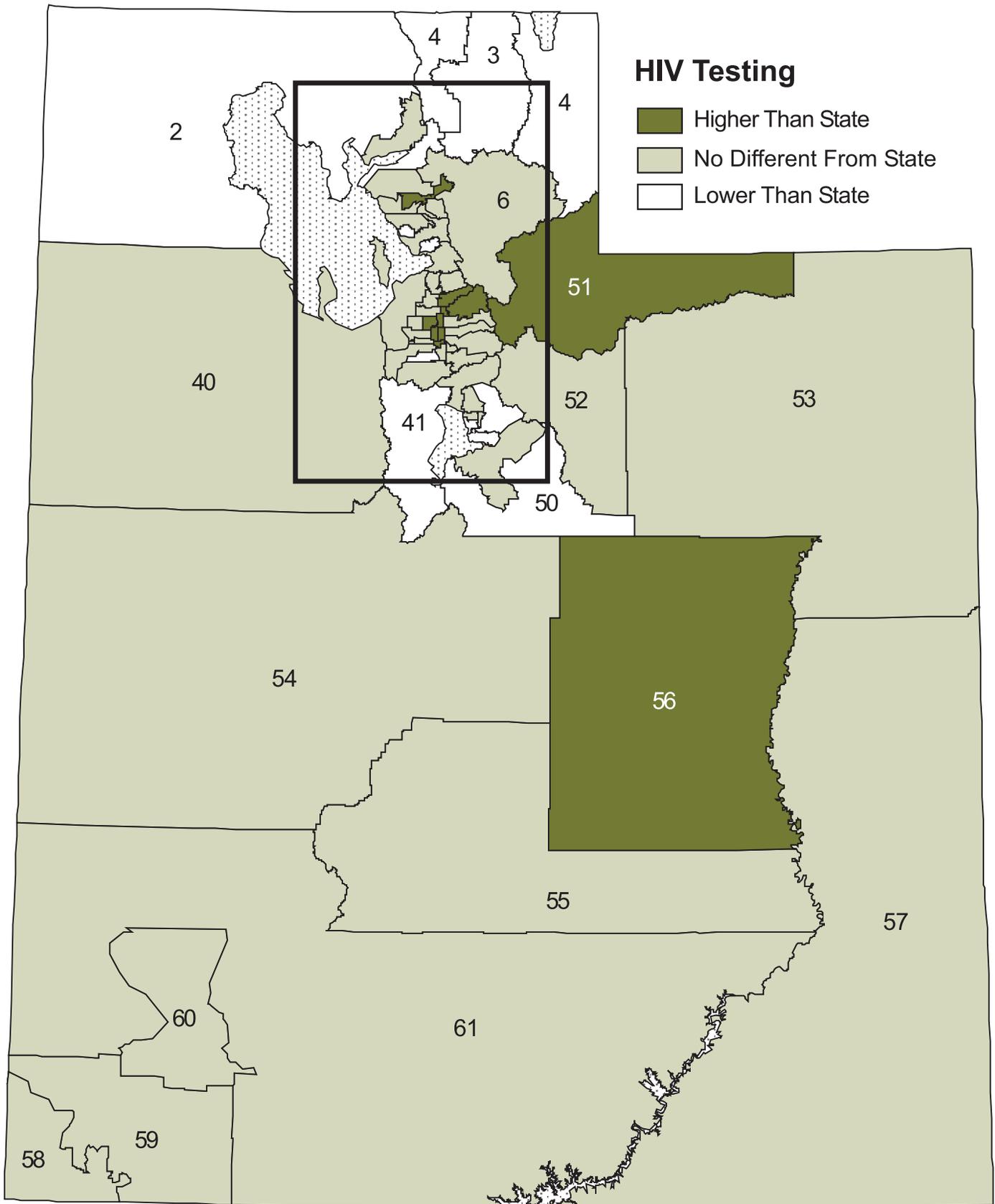
Table 12: HIV Testing by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18-64	Number of Adults Tested for HIV	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	181,850,662	80,359,808	44.2%	44.6%	44.5%	44.8%
	State of Utah	1,454,204	441,787	30.4%	30.4%	29.5%	31.2%
	Bear River HD	86,286	18,733	21.7%	21.8%	19.2%	24.7%
10	Brigham City (1)	11,991	2,857	23.8%	22.8%	16.6%	30.5%
12	Logan (3)	41,507	9,165	22.1%	24.9%	20.4%	29.9%
7	Other Box Elder Co. (2)	12,539	2,491	19.9%	20.1%	13.8%	28.4%
2	Other Cache/Rich Co. (4)	20,249	3,859	19.1%	17.9%	13.7%	23.2%
	Central Utah HD	39,461	10,812	27.4%	27.7%	24.6%	31.1%
14	Juab/Millard/Sanpete Co. (54)	26,685	7,042	26.4%	26.9%	23.1%	31.1%
25	Sevier/Piute/Wayne Co. (55)	12,776	3,741	29.3%	29.4%	24.2%	35.4%
	Davis County HD	155,669	47,993	30.8%	31.1%	28.4%	34.0%
23	Bountiful (16)	26,901	6,908	25.7%	28.9%	22.1%	36.7%
48	Clearfield/Hill AFB (11)	34,288	12,762	37.2%	35.8%	29.8%	42.2%
43	Farmington/Centerville (14)	17,177	5,474	31.9%	33.5%	25.8%	42.2%
33	Layton (12)	42,489	13,609	32.0%	31.1%	25.8%	36.9%
6	Syracuse/Kaysville (13)	22,121	4,398	19.9%	19.6%	14.7%	25.6%
53	Woods Cross/North SL (15)	12,690	4,775	37.6%	38.1%	29.4%	47.5%
	Salt Lake Valley HD	582,879	194,623	33.4%	33.1%	31.6%	34.5%
60	Avenues (18)	16,120	6,935	43.0%	45.9%	37.7%	54.4%
44	Cottonwood (28)	28,263	9,502	33.6%	34.1%	27.8%	41.0%
56	Downtown Salt Lake (24)	38,114	16,206	42.5%	42.0%	35.9%	48.4%
61	Foothill/U of U (19)	14,586	7,137	48.9%	49.3%	40.0%	58.7%
34	Glendale (21)	16,439	5,619	34.2%	32.0%	22.6%	43.2%
15	Holladay (27)	27,658	6,862	24.8%	27.1%	21.3%	33.9%
19	Kearns (29)	39,663	11,903	30.0%	28.1%	23.1%	33.8%
41	Magna (20)	14,209	5,185	36.5%	32.9%	24.9%	42.0%
57	Midvale (32)	19,004	8,658	45.6%	42.5%	34.5%	51.1%
45	Millcreek (26)	34,704	12,237	35.3%	34.8%	29.4%	40.6%
55	Murray (31)	19,835	7,571	38.2%	40.9%	33.3%	49.1%
18	Riverton/Draper (39)	38,984	11,504	29.5%	27.7%	23.0%	33.0%
46	Rose Park (17)	19,976	7,046	35.3%	34.9%	26.7%	44.1%
32	Sandy Center (36)	32,303	9,746	30.2%	30.7%	25.2%	36.9%
21	Sandy, Northeast (37)	16,593	4,578	27.6%	28.5%	20.8%	37.7%
17	Sandy, Southeast (38)	19,421	4,723	24.3%	27.6%	20.6%	36.0%
9	South Jordan (35)	19,303	4,295	22.3%	22.6%	16.8%	29.5%
59	South Salt Lake (25)	16,135	7,427	46.0%	44.4%	34.4%	54.9%
50	Taylorsville (30)	24,293	8,784	36.2%	37.6%	30.9%	44.7%
35	West Jordan North (33)	28,918	9,471	32.8%	32.1%	26.5%	38.3%
31	West Jordan/Copperton (34)	24,917	8,380	33.6%	30.5%	24.7%	37.0%
54	West Valley East (23)	31,956	12,140	38.0%	38.4%	31.2%	46.2%
37	West Valley West (22)	41,480	13,589	32.8%	32.2%	26.7%	38.2%
	Southeastern Utah HD	30,622	10,589	34.6%	35.0%	31.7%	38.5%
49	Carbon/Emery Co. (56)	17,658	6,429	36.4%	36.6%	32.5%	41.0%
38	Grand/San Juan Co. (57)	12,964	4,047	31.2%	32.2%	27.0%	37.9%
	Southwest Utah HD	92,003	28,834	31.3%	31.3%	28.0%	34.8%
27	Cedar City (60)	20,004	5,997	30.0%	29.6%	23.1%	37.1%
30	Other Southwest District (61)	12,056	3,408	28.3%	30.4%	23.1%	38.9%
40	Other Washington County (59)	25,720	8,256	32.1%	32.5%	26.3%	39.5%
36	St. George (58)	34,223	11,389	33.3%	32.1%	26.6%	38.2%
51	Summit County HD (51)	22,704	8,605	37.9%	37.7%	34.2%	41.3%
39	Tooele County HD (40)	29,082	9,705	33.4%	32.4%	29.3%	35.6%
29	TriCounty HD (53)	23,741	7,167	30.2%	30.3%	27.1%	33.6%
	Utah County HD	253,444	57,836	22.8%	23.0%	20.8%	25.5%
13	American Fork/Alpine (42)	24,031	6,409	26.7%	26.5%	19.9%	34.3%
22	East Orem (46)	13,013	3,981	30.6%	28.7%	18.3%	42.0%
3	Lehi/Cedar Valley (41)	17,417	4,372	25.1%	18.5%	13.1%	25.5%
24	North Orem (44)	23,532	6,485	27.6%	29.0%	22.0%	37.2%
11	Pleasant Grove/Lindon (43)	22,530	5,416	24.0%	23.4%	17.1%	31.2%
5	Provo/BYU (47)	35,365	4,866	13.8%	19.2%	12.6%	28.2%
1	Provo South (48)	45,671	7,257	15.9%	15.8%	10.6%	23.0%
16	Springville/Spanish Fork (49)	36,522	10,197	27.9%	27.6%	22.2%	33.6%
8	Utah Co. South (50)	15,486	3,433	22.2%	20.5%	14.6%	28.0%
4	West Orem (45)	19,879	3,807	19.2%	18.6%	11.4%	29.0%
20	Wasatch County HD (52)	11,068	3,165	28.6%	28.2%	24.8%	31.8%
	Weber-Morgan HD	127,245	41,876	32.9%	33.3%	30.5%	36.2%
47	Ben Lomond (5)	28,123	10,217	36.3%	35.6%	29.7%	42.0%
58	Downtown Ogden (7)	19,065	7,971	41.8%	43.4%	35.1%	52.1%
26	Morgan/East Weber Co. (6)	20,976	5,945	28.3%	29.6%	23.4%	36.6%
52	Riverdale (10)	12,822	4,747	37.0%	37.8%	29.8%	46.6%
28	Roy/Hooper (9)	24,632	7,367	29.9%	29.8%	23.6%	36.7%
42	South Ogden (8)	21,625	7,004	32.4%	33.1%	25.6%	41.6%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

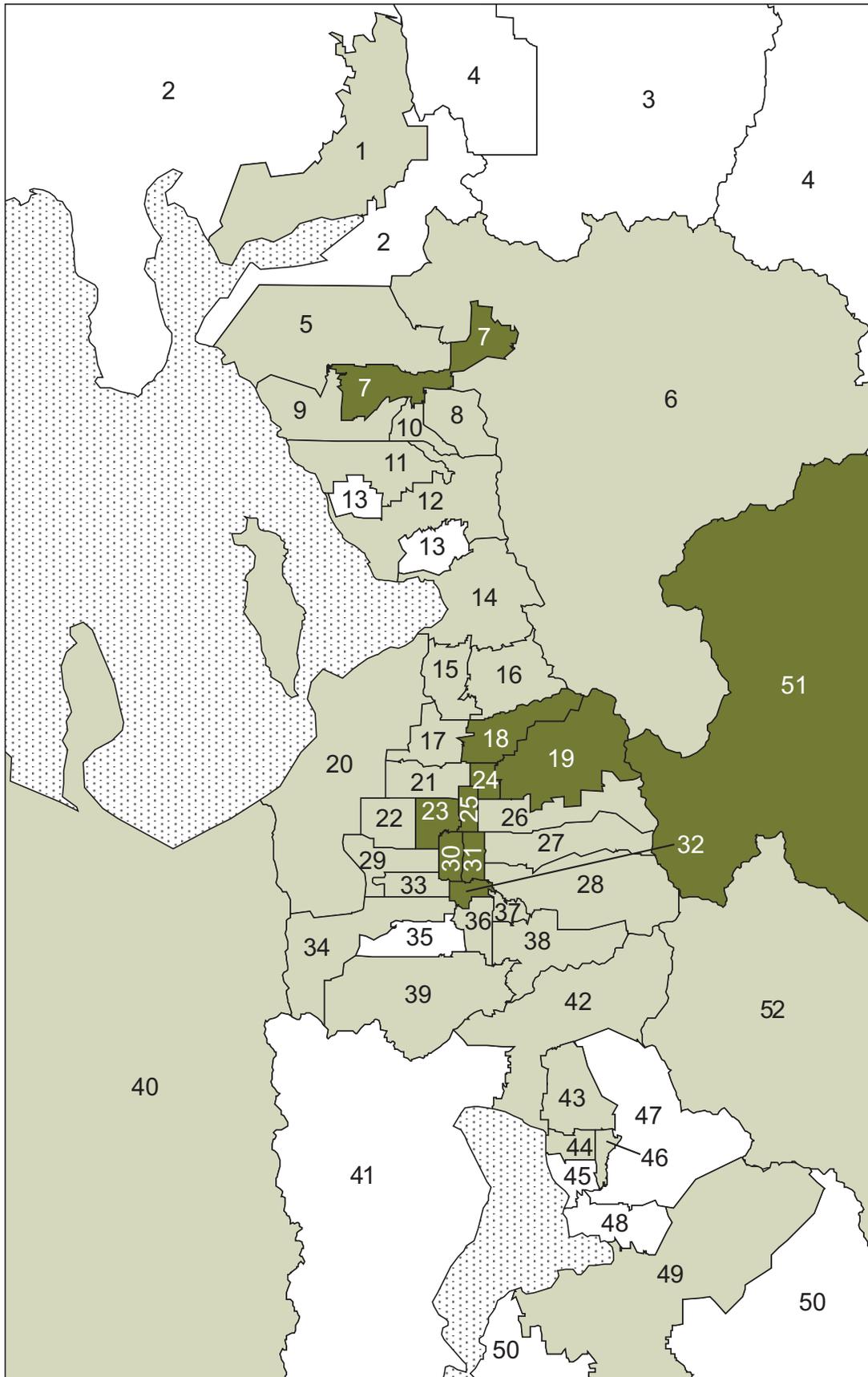
12. HIV TESTING

Figure 12.2: HIV Testing by Small Area, Utah Adults Aged 18–64, 2001–2005 (Age-adjusted)



12. HIV TESTING

Figure 12.3: HIV Testing by Small Area, Wasatch Front Adults Aged 18–64, 2001–2005 (Age-adjusted)



13. SIGMOIDOSCOPY OR COLONOSCOPY

Measure Definition: *“Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the bowel for signs of cancer or other health problems. Have you ever had either of these exams? How long has it been since you had your last sigmoidoscopy or colonoscopy?” [Yes, within the past five years]*

Why is colorectal cancer screening important to public health?

Colorectal cancer is the second leading cause of cancer-related death in the United States. The American Cancer Society (ACS) estimates that 55,170 Americans will die of colorectal cancer this year. Colorectal cancer is also one of the most commonly diagnosed cancers in the United States; approximately 148,610 new cases will be diagnosed in 2006.²⁷ Colorectal cancer is the third most common cancer in men and in women.²⁸

Reducing the number of deaths from colorectal cancer depends on detecting and removing pre-cancerous colorectal polyps, as well as detecting and treating the cancer in its early stages. Colorectal cancer can be prevented by removing pre-cancerous polyps or growths, which can be present in the colon for years before invasive cancer develops. The Centers for Disease Control and Prevention (CDC) estimates that if all adults aged 50 years or older were screened regularly, as many as 60% of deaths from colorectal cancer could be prevented.²⁸

Risk factors for colorectal cancer

The risk of developing colorectal cancer increases with advancing age, with more than 90% of cases occurring in persons aged 50 years or older. Other risk factors include inflammatory bowel disease, a personal or family history of colorectal cancer or colorectal polyps, and certain hereditary syndromes. Lifestyle factors that may contribute to increased risk of colorectal cancer include lack of regular physical activity, low fruit and vegetable intake, a low-fiber and high-fat diet, obesity, alcohol consumption, and tobacco use.²⁸

Screening is critical in the prevention and detection of colorectal cancer, as approximately 75% of these cancers occur in people with no known risk factors.²⁸

Colorectal cancer screening in Utah

Between 2001–2005, 42.9% of Utahns aged 50 and older reported having a sigmoidoscopy or colonoscopy within the past five years (rate is age-adjusted). This rate is similar to the U.S. rate.

The age-adjusted percentage of adults aged 50 and older who reported having a sigmoidoscopy or colonoscopy within the past five years varied by local health district. Reported age-adjusting screening rates for local health districts ranged from a low of 26.9% in Southeastern Utah to a high of 48.3% in Salt Lake Valley. Five local health districts had rates that differed significantly from the state. Southeastern Utah, Central Utah, TriCounty, and Utah County had rates lower than the state rate, while Salt Lake Valley was the only health district with a rate higher than the state rate.

Differences in screening rates also existed when local health districts were further divided into the pre-determined 61 small areas. Overall, adults aged 50 and older living in the small area that includes Sevier, Piute, and Wayne Counties were least likely to report having a sigmoidoscopy or colonoscopy within the past five

Utah Objective: Increase the proportion of adults aged 50 years and older who have had a sigmoidoscopy or colonoscopy within the past five years to 65% in 2010.

HP2010 Objective (related) 3-12b: Increase the proportion of adults aged 50 years and older who have ever received a sigmoidoscopy to 50% (age-adjusted to the U.S. 2000 standard population).

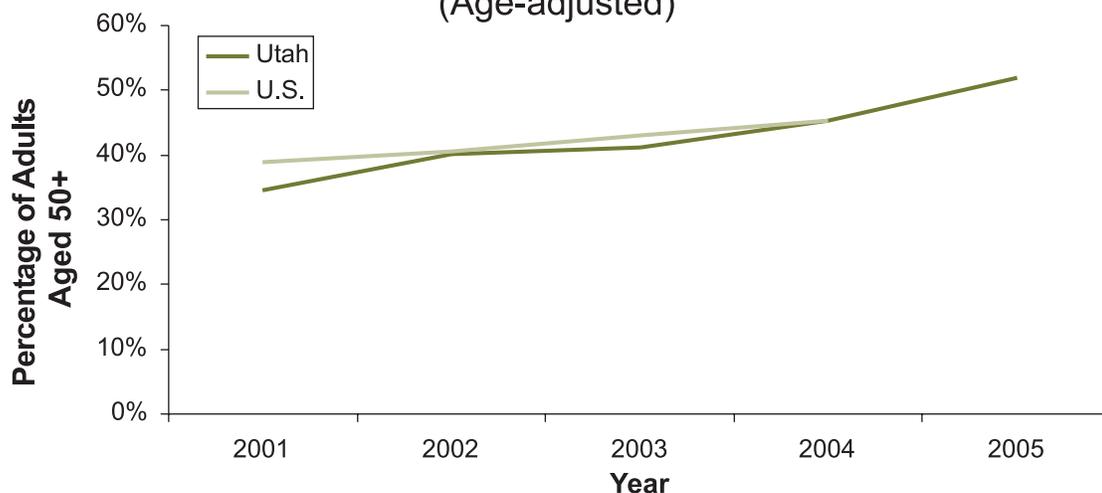
13. SIGMOIDOSCOPY OR COLONOSCOPY

Colorectal cancer screening in Utah (continued)

years (25.2%). The highest screening rate (62.1%) was reported in the Foothill/U of U area of the Salt Lake Valley health district (see Figure 13.1).

Nationally, the percentage of older adults having had a sigmoidoscopy or colonoscopy in the past five years rose from 38.8% in 2001 to 45.4% in 2004. Utah rates have increased from 34.5% in 2001 to 52.0% in 2005.

Figure 13.A: Sigmoidoscopy or Colonoscopy in Past 5 Years, Utah and U.S. Adults 50+, 2001-2005 (Age-adjusted)



Prevention/Resources

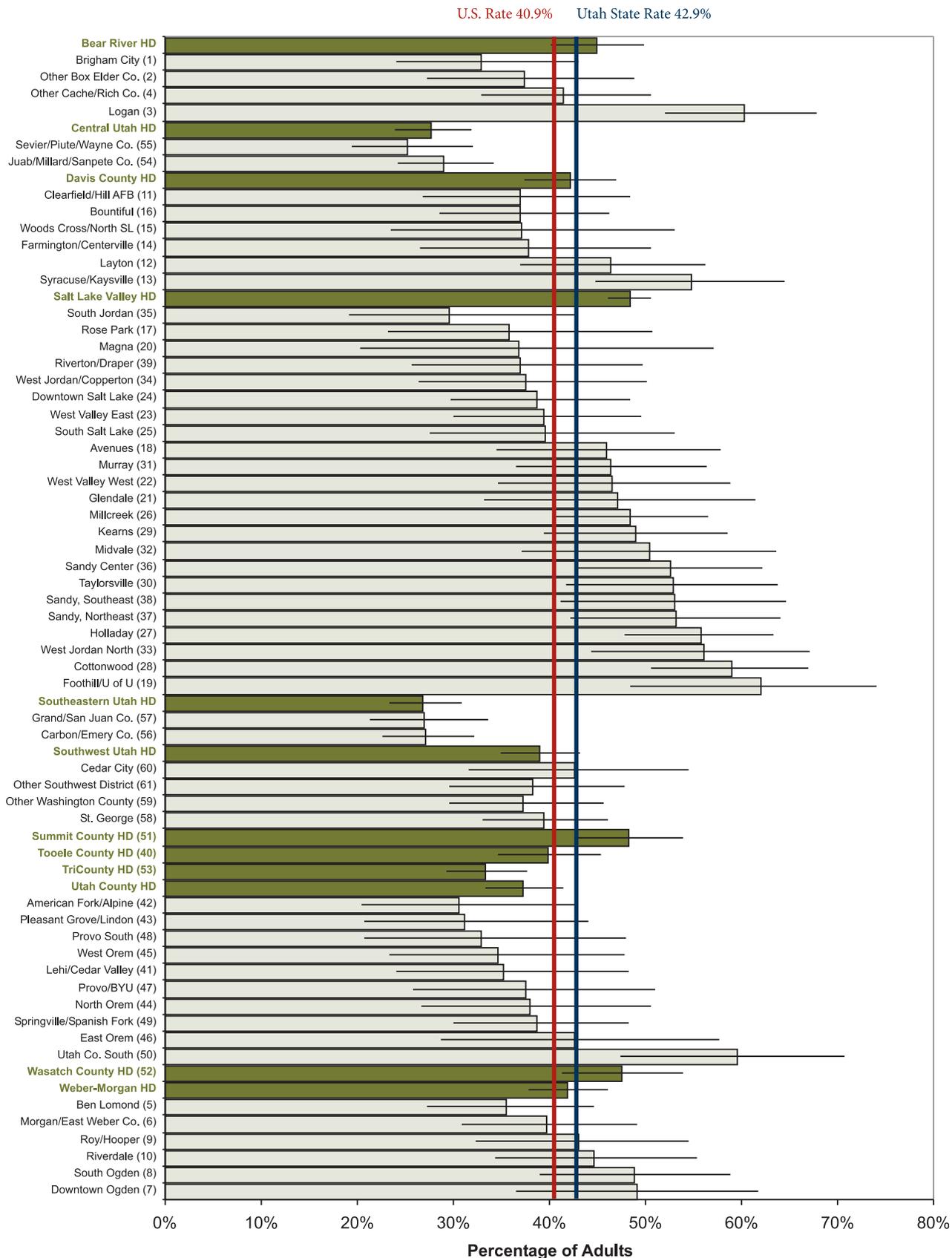
In June 2002, the Utah Cancer Control Program received a grant from the CDC to launch a statewide education campaign. Additional funds were awarded to continue the public education efforts in June 2003, 2004, and 2005. Education efforts aim to increase awareness about colorectal cancer and promote screening and early detection for Utahns aged 50 and older.

In addition, the Utah Department of Health initiated the Utah Cancer Action Network (UCAN), a statewide partnership whose goal is to reduce the burden of cancer. The mission of UCAN is to lower cancer incidence and mortality in Utah through collaborative efforts directed toward cancer prevention and control. As a result of this planning process, objectives and strategies have been developed by community partners regarding the early detection of cervical, prostate, skin, breast, and colorectal cancers, as well as the promotion of physical activity, healthy eating habits, and smoking cessation.

For more information about colorectal cancer in Utah, call UCAN's health resource line at 1-888-222-2542 or visit www.ucan.cc.

13. SIGMOIDOSCOPY OR COLONOSCOPY

Figure 13.1: Percentage of Persons Aged 50+ Who Had a Sigmoidoscopy or Colonoscopy in the Past Five Years by Local Health District and Small Area, Utah, 2001–2005 (Age-adjusted)



13. SIGMOIDOSCOPY OR COLONOSCOPY

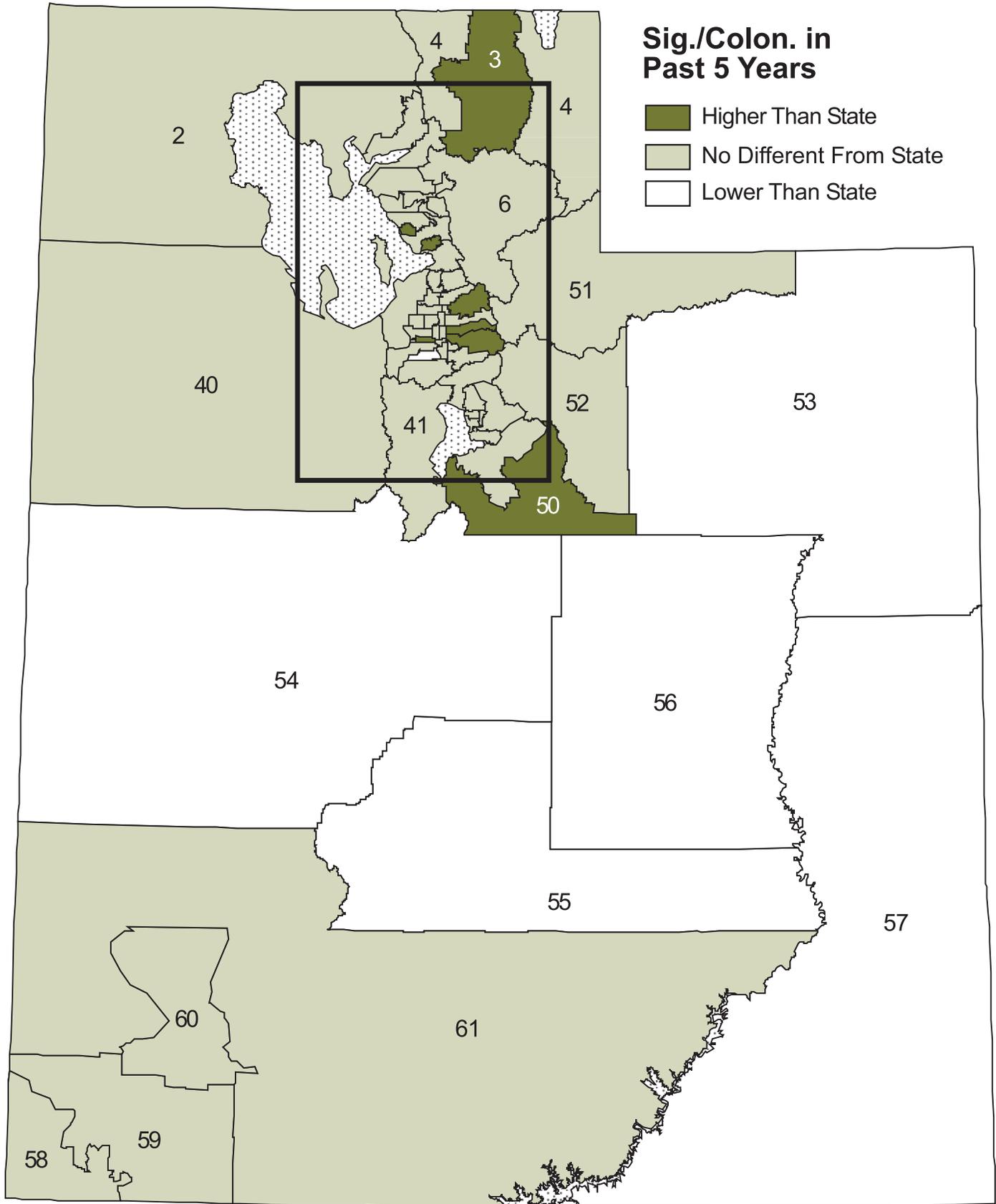
Table 13: Sig./Colon. in Past 5 Years by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 50+	Number of Adults 50+ Reporting Sig./Colon. in Past 5 Years	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	82,827,331	33,818,399	40.8%	40.9%	40.5%	41.2%
	State of Utah	496,067	209,390	42.2%	42.9%	41.5%	44.2%
	Bear River HD	26,906	12,070	44.9%	44.9%	40.2%	49.8%
8	Brigham City (1)	5,275	1,701	32.3%	32.8%	24.0%	43.1%
60	Logan (3)	9,740	5,672	58.2%	60.2%	52.1%	67.9%
21	Other Box Elder Co. (2)	4,885	1,859	38.1%	37.4%	27.3%	48.8%
34	Other Cache/Rich Co. (4)	7,006	3,000	42.8%	41.4%	32.8%	50.6%
	Central Utah HD	17,525	4,837	27.6%	27.6%	23.9%	31.8%
4	Juab/Millard/Sanpete Co. (54)	10,899	3,116	28.6%	28.9%	24.2%	34.2%
1	Sevier/Piute/Wayne Co. (55)	6,626	1,717	25.9%	25.2%	19.4%	32.0%
	Davis County HD	50,863	21,093	41.5%	42.1%	37.4%	46.9%
18	Bountiful (16)	13,201	4,891	37.1%	37.0%	28.6%	46.3%
17	Clearfield/Hill AFB (11)	8,262	3,349	40.5%	37.0%	26.8%	48.4%
24	Farmington/Centerville (14)	5,966	2,330	39.1%	37.8%	26.5%	50.6%
41	Layton (12)	12,511	6,078	48.6%	46.4%	36.9%	56.2%
55	Syracuse/Kaysville (13)	6,961	3,347	48.1%	54.8%	44.8%	64.6%
19	Woods Cross/North SL (15)	3,965	1,225	30.9%	37.0%	23.4%	53.1%
	Salt Lake Valley HD	198,437	93,404	47.1%	48.3%	46.0%	50.6%
39	Avenues (18)	6,359	2,864	45.0%	45.9%	34.5%	57.8%
58	Cottonwood (28)	13,578	7,824	57.6%	59.0%	50.6%	66.9%
27	Downtown Salt Lake (24)	10,925	4,268	39.1%	38.7%	29.8%	48.4%
61	Foothill/U of U (19)	6,557	4,129	63.0%	62.1%	48.5%	74.0%
43	Glendale (21)	5,052	2,110	41.8%	47.2%	33.2%	61.5%
56	Holladay (27)	16,222	9,172	56.5%	55.8%	47.9%	63.4%
48	Kearns (29)	10,774	5,005	46.5%	49.0%	39.4%	58.6%
15	Magna (20)	3,760	1,366	36.3%	36.8%	20.4%	57.1%
50	Midvale (32)	6,247	3,135	50.2%	50.4%	37.1%	63.6%
46	Millcreek (26)	17,219	8,596	49.9%	48.4%	40.4%	56.5%
40	Murray (31)	8,616	3,987	46.3%	46.3%	36.5%	56.4%
16	Riverton/Draper (39)	8,840	3,372	38.1%	36.9%	25.7%	49.8%
14	Rose Park (17)	6,114	2,040	33.4%	35.8%	23.3%	50.7%
51	Sandy Center (36)	11,101	5,446	49.1%	52.6%	42.7%	62.2%
54	Sandy, Northeast (37)	7,004	3,242	46.3%	53.3%	42.2%	64.0%
53	Sandy, Southeast (38)	6,974	3,422	49.1%	53.1%	41.2%	64.7%
5	South Jordan (35)	6,005	1,725	28.7%	29.6%	19.1%	42.8%
31	South Salt Lake (25)	5,181	1,952	37.7%	39.6%	27.6%	53.1%
52	Taylorsville (30)	8,173	4,405	53.9%	52.9%	41.7%	63.8%
57	West Jordan North (33)	6,410	3,397	53.0%	56.0%	44.3%	67.1%
22	West Jordan/Copperton (34)	5,281	2,178	41.2%	37.5%	26.4%	50.1%
30	West Valley East (23)	10,068	3,537	35.1%	39.4%	30.0%	49.6%
42	West Valley West (22)	11,978	5,311	44.3%	46.5%	34.6%	58.8%
	Southeastern Utah HD	14,432	3,871	26.8%	26.9%	23.3%	30.8%
3	Carbon/Emery Co. (56)	8,605	2,350	27.3%	27.2%	22.7%	32.2%
2	Grand/San Juan Co. (57)	5,827	1,508	25.9%	27.0%	21.3%	33.6%
	Southwest Utah HD	45,590	18,355	40.3%	39.0%	35.0%	43.3%
36	Cedar City (60)	5,774	2,415	41.8%	42.7%	31.7%	54.5%
26	Other Southwest District (61)	6,976	2,646	37.9%	38.2%	29.5%	47.8%
20	Other Washington County (59)	13,559	5,181	38.2%	37.3%	29.6%	45.7%
29	St. George (58)	19,281	8,534	44.3%	39.4%	33.1%	46.0%
45	Summit County HD (51)	7,344	3,472	47.3%	48.2%	42.7%	53.9%
33	Tooele County HD (40)	8,932	3,539	39.6%	39.9%	34.6%	45.4%
10	TriCounty HD (53)	10,139	3,252	32.1%	33.3%	29.2%	37.7%
	Utah County HD	62,696	22,408	35.7%	37.2%	33.3%	41.3%
6	American Fork/Alpine (42)	7,583	2,348	31.0%	30.5%	20.4%	43.0%
35	East Orem (46)	4,820	1,883	39.1%	42.6%	28.7%	57.7%
12	Lehi/Cedar Valley (41)	3,681	1,331	36.2%	35.2%	24.1%	48.3%
25	North Orem (44)	5,903	2,228	37.8%	37.9%	26.7%	50.6%
7	Pleasant Grove/Lindon (43)	5,897	1,694	28.7%	31.2%	20.8%	44.0%
23	Provo/BYU (47)	8,124	2,908	35.8%	37.5%	25.8%	51.0%
9	Provo South (48)	5,845	1,861	31.8%	32.9%	20.7%	48.0%
28	Springville/Spanish Fork (49)	11,086	3,900	35.2%	38.7%	29.9%	48.2%
59	Utah Co. South (50)	4,742	2,674	56.4%	59.6%	47.4%	70.8%
11	West Orem (45)	5,022	1,789	35.6%	34.6%	23.4%	47.8%
44	Wasatch County HD (52)	3,759	1,743	46.4%	47.5%	41.3%	53.9%
	Weber-Morgan HD	49,444	20,722	41.9%	41.9%	37.7%	46.1%
13	Ben Lomond (5)	11,154	3,952	35.4%	35.4%	27.2%	44.7%
49	Downtown Ogden (7)	6,204	2,641	42.6%	49.1%	36.5%	61.7%
32	Morgan/East Weber Co. (6)	8,550	3,486	40.8%	39.7%	30.9%	49.2%
38	Riverdale (10)	5,708	2,642	46.3%	44.6%	34.3%	55.4%
37	Roy/Hooper (9)	8,267	3,552	43.0%	43.0%	32.3%	54.5%
47	South Ogden (8)	9,565	4,652	48.6%	48.9%	38.9%	58.9%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

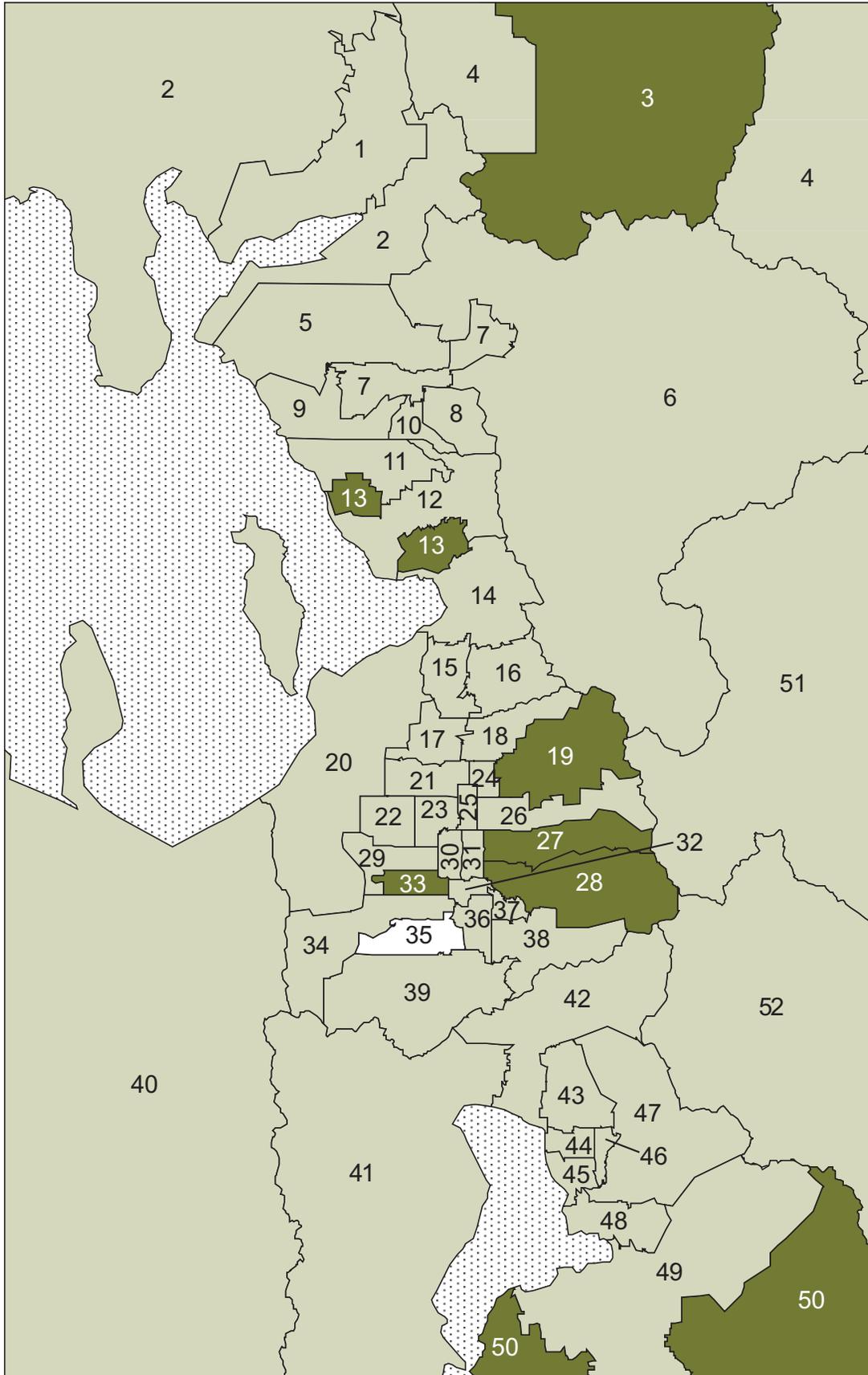
13. SIGMOIDOSCOPY OR COLONOSCOPY

Figure 13.2: Sig./Colon. in the Past Five Years by Small Area, Utah Adults Aged 50+, 2001–2005 (Age-adjusted)



13. SIGMOIDOSCOPY OR COLONOSCOPY

Figure 13.3: Sig./Colon. in Past Five Years by Small Area, Wasatch Front, Aged 50+, 2001–2005 (Age-adjusted)



14. CURRENT CIGARETTE SMOKING

Measure Definition: *“Have you smoked at least 100 cigarettes in your entire life? Do you now smoke cigarettes every day, some days, or not at all?” [Yes to smoking at least 100 cigarettes and currently smoking everyday or some days]*

Why is cigarette smoking important to public health?

Smoking remains the leading preventable cause of death in the U.S. Approximately 440,000 people die of tobacco use each year and more than 8.6 million people have at least one serious illness as a result of smoking.²⁹ Smoking increases the risk for many types of cancer including cancers of the lip, oral cavity, and pharynx; esophagus; pancreas; larynx (voice box); lung; uterine cervix; urinary bladder; and kidney. Smokers are 2–4 times more likely to develop coronary heart disease and 10 times more likely to develop peripheral vascular disease than non-smokers. Furthermore, smoking has many adverse reproductive and early childhood effects, including an increased risk for infertility, preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS). Smokeless tobacco, cigars, and pipes also have deadly consequences, including lung, larynx, esophageal, and oral cancers.³⁰

Secondhand smoke is a known human carcinogen. Exposure to secondhand smoke is associated with an increased risk for lung cancer and coronary heart disease in nonsmoking adults and with low birth weight, sudden infant death syndrome, asthma, pneumonia, ear infections, and bronchitis in children.³¹

Quitting smoking has major and immediate health benefits for people of all ages.

Risk factors for cigarette smoking

Approximately 80% of adult smokers start before the age of 18. Early initiation of tobacco use has been shown to increase the likelihood of lifetime smoking and the risk for tobacco-related illnesses and mortality.²⁹ Furthermore, tobacco use is strongly associated with socioeconomic status. U.S. and Utah data show that adults with less education and lower income levels have higher smoking rates. In addition, recent Utah surveys found that Utah’s Black, Native American, and Hispanic male adults are more likely to be smokers than the general adult population.

Youth who smoke are more likely to have friends and family members who smoke, more likely to believe that smoking makes young people look cool or fit in, and are less likely to believe that tobacco use is harmful and addictive. Furthermore, tobacco use in adolescence is associated with a range of other health-compromising behaviors, including being involved in fights, carrying weapons, and using alcohol and other drugs.³²

Current cigarette smoking in Utah

The age-adjusted aggregated state smoking rate for the years 2001–2005 was 11.7%. In 2003, approximately 198,000 adult Utahns were current cigarette smokers. Since 2003, Utah’s adult smoking rate has remained below the national Healthy People 2010 objective of 12%. The age-adjusted prevalence of cigarette smoking varied by local health district and ranged from a low of 5.8% to a high of 19.4% (see Figure 14.1). Six local health districts had rates higher than the state rate, four local health districts had rates lower than the state rate, and

Utah Objective: Reduce adult cigarette smoking among adults to 11% (age-adjusted to the U.S. 2000 standard population).

HP2010 Objective 27-1a: Reduce adult cigarette smoking among adults to 12% (age-adjusted to the U.S. 2000 standard population).

14. CURRENT CIGARETTE SMOKING

Current cigarette smoking in Utah (continued)

two local health districts had rates similar to the state rate. TriCounty had the highest prevalence of cigarette smoking and Utah County had the lowest prevalence.

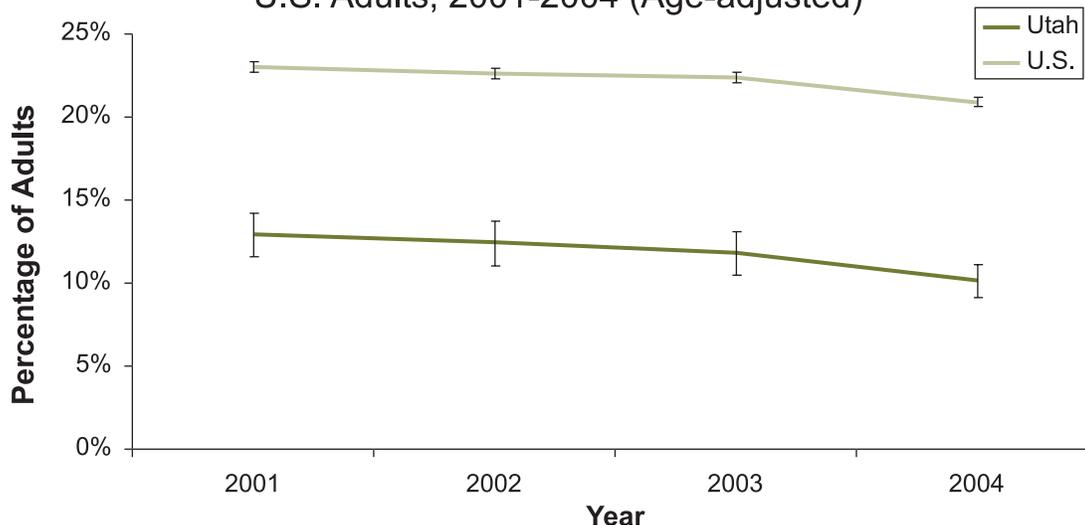
Cigarette smoking among high school students decreased from 8.3% in 2001 to 7.4% in 2005 (Utah Youth Tobacco Survey). In 2005, approximately 10,000 Utah students in Grades 9–12 were current smokers.

When local health districts were separated into their predetermined small areas, data showed that within a local health district some small areas had dramatically higher or lower age-adjusted prevalence rates relative to the district's prevalence rate. For example, in Utah County health district (prevalence 5.8%) the small area prevalence ranged from a low of 0.7% in Provo/BYU to a high of 11.6% in Springville/Spanish Fork; the differences between these small areas were statistically significant. See Figure 14.1 and Table 14 for rates of other small areas.

Overall, the small area with the highest rate of cigarette smoking was South Salt Lake with a rate of 26.0%. The small area with the lowest smoking rate in Utah was Provo/BYU with a rate of 0.7%.

Statewide and U.S. current cigarette smoking has decreased over time from 2001–2005. Since 2003 the state of Utah has met the HP2010 and state objectives to reduce the cigarette smoking rate to less than 12%.

Figure 14.A: Current Cigarette Smoking, Utah and U.S. Adults, 2001-2004 (Age-adjusted)

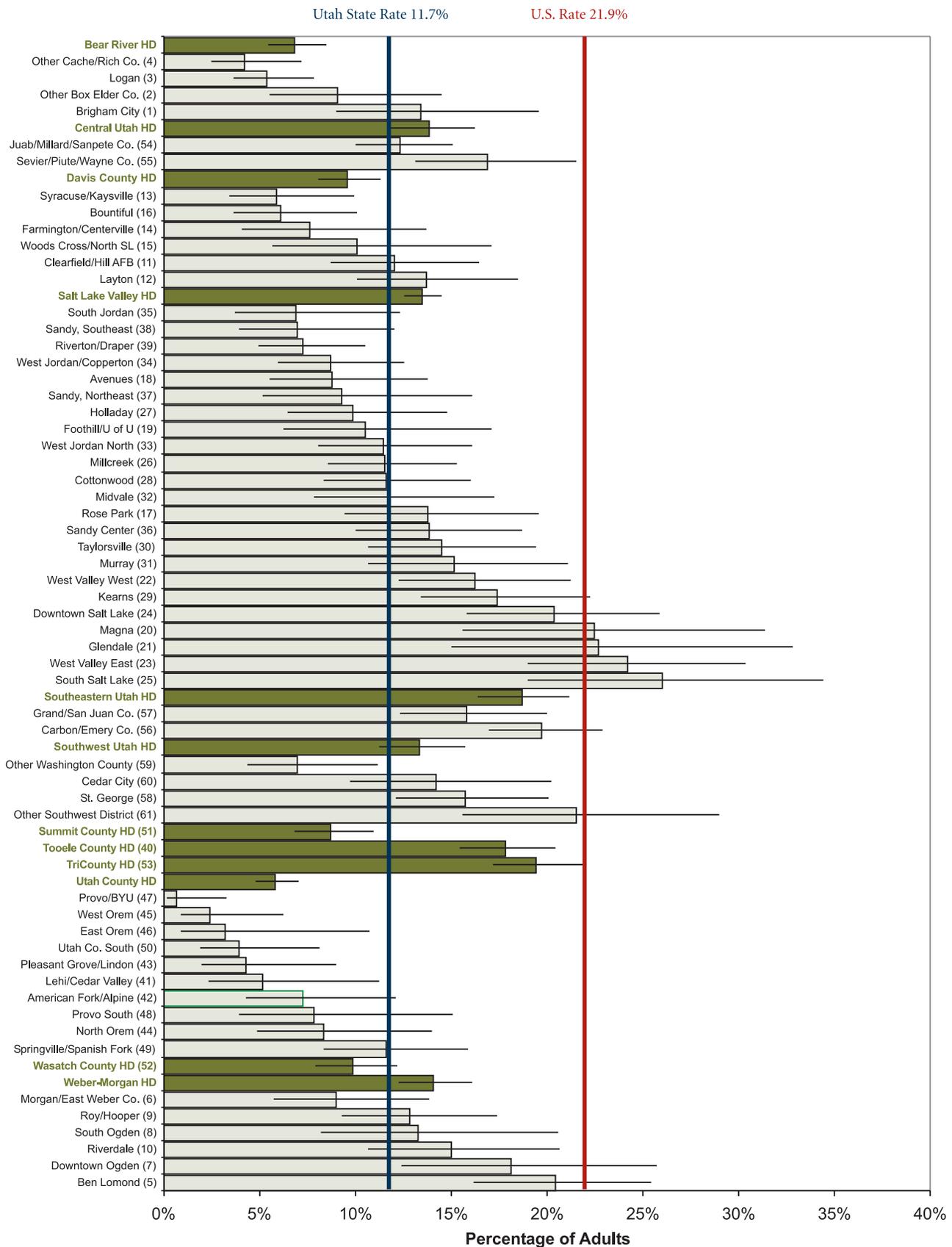


Prevention/Resources

The Tobacco Prevention and Control Program (TPCP) at the Utah Department of Health and its partners offer comprehensive programs to help smokers quit and prevent youth from starting to use tobacco. These programs include The TRUTH anti-tobacco marketing campaign, telephone-, web-, and group-based tobacco cessation services, and tobacco prevention programs in schools and communities. Efforts to improve tobacco policies aim to protect nonsmokers from secondhand smoke and strengthen tobacco-free norms. For more information about tobacco prevention and control programs in Utah, call the Tobacco Free Resource Line at 1-877-220-3466. To get help with quitting tobacco use, call the Utah Tobacco Quit Line at 1-888-567-TRUTH or visit Utah's online tobacco cessation support program www.utah.quitnet.com.

14. CURRENT CIGARETTE SMOKING

Figure 14.1: Percentage of Adults Reporting Current Cigarette Smoking by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



14. CURRENT CIGARETTE SMOKING

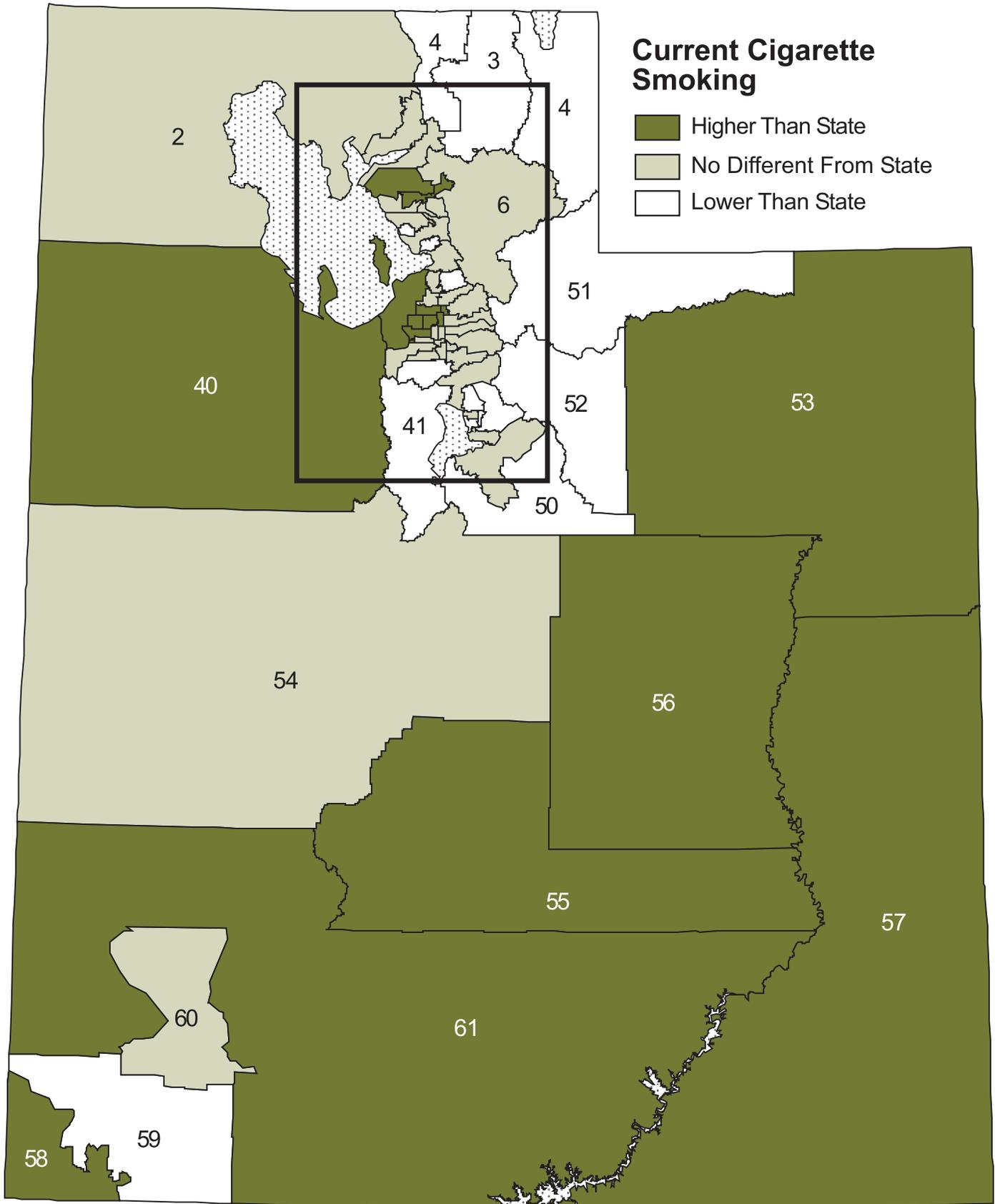
Table 14: Current Cigarette Smoking by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adult Current Cigarette Smokers	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	47,546,406	21.8%	21.9%	21.8%	22.0%
	State of Utah	1,657,454	197,734	11.9%	11.7%	11.2%	12.2%
	Bear River HD	98,027	6,950	7.1%	6.8%	5.5%	8.5%
38	Brigham City (1)	14,566	2,019	13.9%	13.4%	9.0%	19.5%
8	Logan (3)	45,904	2,612	5.7%	5.4%	3.6%	7.8%
23	Other Box Elder Co. (2)	14,636	1,292	8.8%	9.1%	5.5%	14.5%
5	Other Cache/Rich Co. (4)	22,921	1,038	4.5%	4.2%	2.4%	7.2%
	Central Utah HD	47,558	6,435	13.5%	13.8%	11.8%	16.2%
35	Juab/Millard/Sanpete Co. (54)	31,637	3,790	12.0%	12.3%	10.0%	15.1%
49	Sevier/Piute/Wayne Co. (55)	15,921	2,592	16.3%	16.9%	13.1%	21.5%
	Davis County HD	175,027	17,485	10.0%	9.5%	8.0%	11.3%
10	Bountiful (16)	33,318	1,633	4.9%	6.1%	3.6%	10.1%
34	Clearfield/Hill AFB (11)	37,329	4,562	12.2%	12.0%	8.7%	16.5%
16	Farmington/Centerville (14)	19,034	1,317	6.9%	7.6%	4.1%	13.7%
39	Layton (12)	46,815	6,891	14.7%	13.7%	10.0%	18.5%
9	Syracuse/Kaysville (13)	24,542	1,610	6.6%	5.9%	3.4%	9.9%
27	Woods Cross/North SL (15)	13,989	1,382	9.9%	10.0%	5.7%	17.1%
	Salt Lake Valley HD	658,810	92,431	14.0%	13.5%	12.5%	14.5%
21	Avenues (18)	18,959	1,750	9.2%	8.8%	5.5%	13.8%
32	Cottonwood (28)	33,297	3,896	11.7%	11.6%	8.3%	16.0%
55	Downtown Salt Lake (24)	42,808	9,375	21.9%	20.4%	15.8%	25.9%
28	Foothill/U of U (19)	17,778	2,160	12.2%	10.5%	6.3%	17.1%
59	Glendale (21)	18,642	4,317	23.2%	22.7%	15.0%	32.8%
26	Holladay (27)	35,956	3,365	9.4%	9.8%	6.4%	14.8%
50	Kearns (29)	42,995	8,040	18.7%	17.4%	13.4%	22.3%
58	Magna (20)	15,623	3,340	21.4%	22.5%	15.6%	31.4%
33	Midvale (32)	21,672	2,759	12.7%	11.8%	7.9%	17.3%
30	Millcreek (26)	44,008	4,656	10.6%	11.5%	8.6%	15.3%
45	Murray (31)	24,072	3,558	14.8%	15.2%	10.7%	21.1%
14	Riverton/Draper (39)	41,391	3,320	8.0%	7.2%	4.9%	10.5%
40	Rose Park (17)	22,639	3,523	15.6%	13.7%	9.4%	19.6%
41	Sandy Center (36)	36,106	5,661	15.7%	13.8%	10.0%	18.7%
24	Sandy, Northeast (37)	18,245	1,633	9.0%	9.3%	5.2%	16.1%
12	Sandy, Southeast (38)	20,781	1,692	8.1%	7.0%	3.9%	12.0%
11	South Jordan (35)	20,931	1,576	7.5%	6.9%	3.7%	12.4%
61	South Salt Lake (25)	18,456	4,808	26.1%	26.0%	19.0%	34.4%
43	Taylorsville (30)	27,372	4,089	14.9%	14.5%	10.7%	19.4%
29	West Jordan North (33)	30,391	3,738	12.3%	11.5%	8.0%	16.1%
20	West Jordan/Copperton (34)	26,360	2,473	9.4%	8.7%	5.9%	12.5%
60	West Valley East (23)	35,527	8,626	24.3%	24.2%	19.0%	30.3%
48	West Valley West (22)	44,794	7,499	16.7%	16.2%	12.2%	21.3%
	Southeastern Utah HD	36,828	6,817	18.5%	18.6%	16.3%	21.1%
54	Carbon/Emery Co. (56)	21,451	4,207	19.6%	19.7%	16.9%	22.9%
47	Grand/San Juan Co. (57)	15,377	2,522	16.4%	15.8%	12.3%	20.0%
	Southwest Utah HD	116,150	14,449	12.4%	13.4%	11.3%	15.7%
42	Cedar City (60)	22,401	3,015	13.5%	14.2%	9.7%	20.2%
57	Other Southwest District (61)	15,384	3,126	20.3%	21.5%	15.6%	29.0%
13	Other Washington County (59)	32,503	2,275	7.0%	7.0%	4.3%	11.1%
46	St. George (58)	45,862	5,962	13.0%	15.7%	12.1%	20.1%
19	Summit County HD (51)	24,525	2,222	9.1%	8.7%	6.8%	11.0%
51	Tooele County HD (40)	32,458	5,735	17.7%	17.8%	15.4%	20.5%
53	TriCounty HD (53)	28,023	5,523	19.7%	19.4%	17.2%	21.9%
	Utah County HD	278,832	16,005	5.7%	5.8%	4.8%	7.0%
15	American Fork/Alpine (42)	26,819	2,261	8.4%	7.3%	4.3%	12.1%
3	East Orem (46)	14,955	307	2.1%	3.2%	0.9%	10.7%
7	Lehi/Cedar Valley (41)	18,752	767	4.1%	5.2%	2.3%	11.2%
18	North Orem (44)	25,965	2,430	9.4%	8.3%	4.8%	14.0%
6	Pleasant Grove/Lindon (43)	24,636	1,109	4.5%	4.3%	2.0%	9.0%
1	Provo/BYU (47)	39,401	303	0.8%	0.7%	0.1%	3.2%
17	Provo South (48)	48,138	1,781	3.7%	7.8%	3.9%	15.1%
31	Springville/Spanish Fork (49)	41,036	4,695	11.4%	11.6%	8.4%	15.9%
4	Utah Co. South (50)	17,363	719	4.1%	3.9%	1.9%	8.1%
2	West Orem (45)	21,774	682	3.1%	2.4%	0.9%	6.2%
25	Wasatch County HD (52)	12,514	1,284	10.3%	9.8%	7.9%	12.2%
	Weber-Morgan HD	148,702	20,908	14.1%	14.1%	12.2%	16.1%
56	Ben Lomond (5)	33,215	6,334	19.1%	20.4%	16.2%	25.4%
52	Downtown Ogden (7)	21,684	3,999	18.4%	18.1%	12.4%	25.8%
22	Morgan/East Weber Co. (6)	24,131	2,150	8.9%	9.0%	5.7%	13.9%
44	Riverdale (10)	15,522	2,426	15.6%	15.0%	10.6%	20.7%
36	Roy/Hooper (9)	27,898	3,710	13.3%	12.8%	9.3%	17.4%
37	South Ogden (8)	26,255	3,235	12.3%	13.2%	8.2%	20.6%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

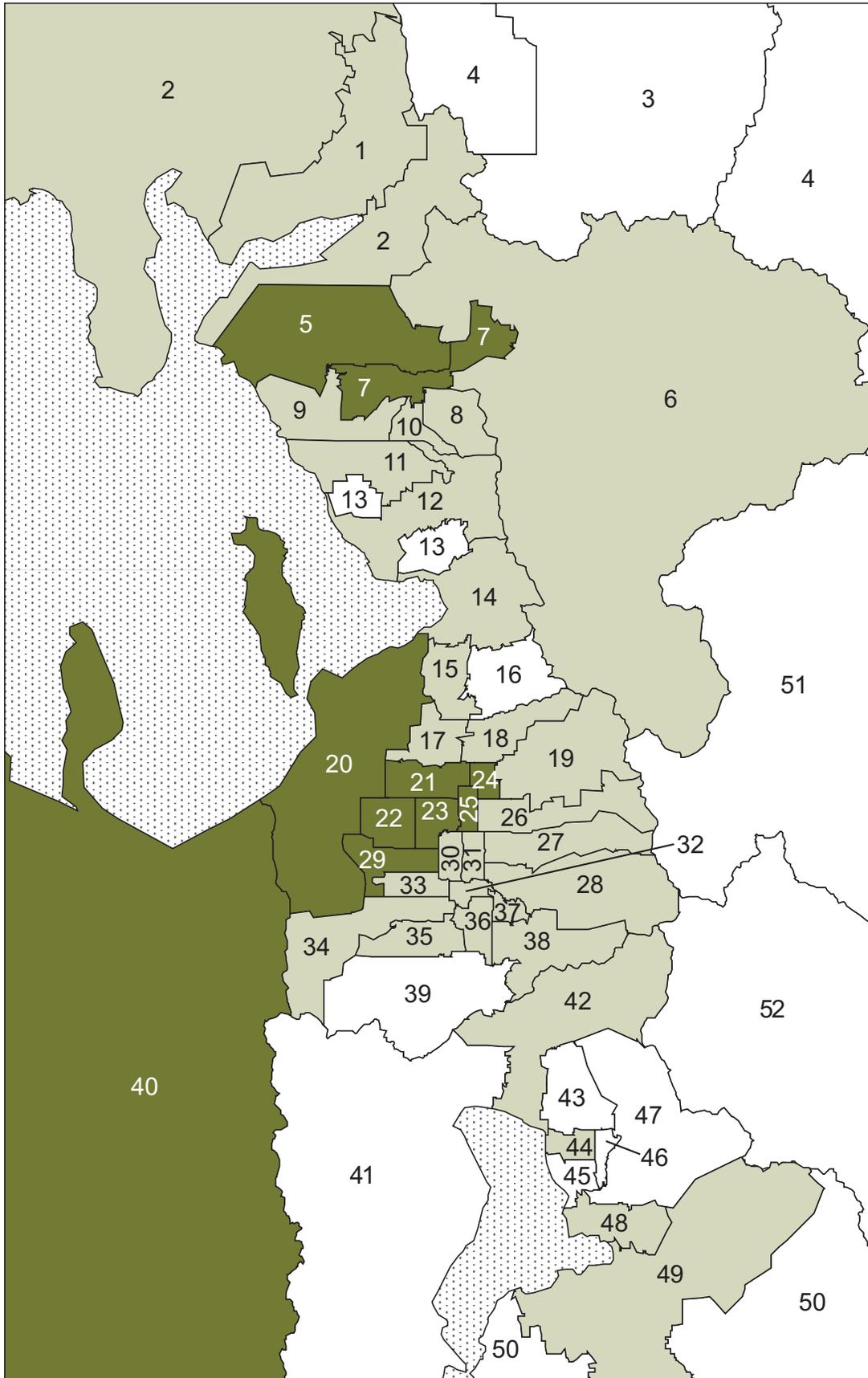
14. CURRENT CIGARETTE SMOKING

Figure 14.2: Current Cigarette Smoking by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



14. CURRENT CIGARETTE SMOKING

Figure 14.3: Current Cigarette Smoking by Small Area, Wasatch Front, Aged 18+, 2001–2005 (Age-adjusted)



15. BINGE DRINKING

Measure Definition: *“Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?” [One or more times]*

Why is binge drinking important to public health?

Binge drinking is defined as consuming five or more alcoholic beverages on one occasion. A drink is defined as one can of beer (12 ounces), one glass of wine (5 ounces), one can or bottle of wine cooler, one cocktail, or one shot liquor (1.5 ounces of 80-proof distilled spirits).

Binge drinking is an indicator of potentially serious alcohol abuse and is related to driving under the influence of alcohol. It is a national problem, especially among males and young adults. Alcohol abuse is strongly associated with injuries (both intended and unintended), violence, chronic liver disease, fetal alcohol syndrome, and the risk of other acute and chronic health problems. Binge drinking among women of childbearing age is problematic because of the risk for prenatal alcohol exposure. Birth defects associated with prenatal alcohol exposure can occur during the first six to eight weeks of pregnancy, before a woman knows that she is pregnant. According to Centers for Disease Control and Prevention (CDC) estimates, approximately 76,000 deaths in the U.S. in 2001 were attributable to excessive alcohol use.

Risk factors for binge drinking

Generally, younger adults and males are at higher risk for binge drinking than older adults and females. Additionally, adults with less education tend to be at higher risk for binge drinking. Just over 40% of binge drinkers report that they are current cigarette smokers, thus compounding their risk for adverse health outcomes.

Binge drinking in Utah

The age-adjusted aggregated state binge drinking rate was significantly lower than the U.S. rate (8.9% versus 15.2%). This means that approximately 158,000 adult Utahns engaged in binge drinking in 2003. The prevalence of binge drinking varied by local health district and ranged from a low of 3.5% to a high of 17.3%. Four local health districts had age-adjusted rates higher than the state rate, three local health districts had rates lower than the state rate, and five local health districts had rates similar to the state rate. Summit County (17.3%) had the highest prevalence for binge drinking and Utah County (3.5%) had the lowest prevalence.

In terms of small areas, 11 showed age-adjusted binge drinking rates that were higher than the state rate and 10 showed rates that were lower than the state rate. The small areas with binge drinking rates higher than the state rate were Avenues, Cottonwood, Downtown Salt Lake, Foothill/U of U, Kearns, South Salt Lake, West Valley East, Carbon/Emery Co., Other Southwest District, Summit County, and Tooele County. Seven of these small areas are in the Salt Lake Valley health district. The small areas with binge drinking rates lower than the state rate were Other Cache/Rich Counties, Logan, Bountiful, American Fork/Alpine, East Orem, Provo/BYU, West Orem, Provo South, Utah County South, and Downtown Ogden. Six of these small areas are in the Utah County health district.

Overall, the small area with the highest rate of binge drinking was South Salt Lake with a rate of 22.9% and the small area with the lowest rate was East Orem with a rate of 0.9%.

Utah Objective: No objective listed.

HP2010 Objective 26-11c: Reduce the proportion of adults aged 18 years and older engaging in binge drinking of alcoholic beverages to 6.0%.

15. BINGE DRINKING

Binge drinking in Utah (continued)

Adults who did not graduate from high school reported the highest rate of binge drinking (17.5%) compared to all other education categories; college graduates reported the lowest rate of binge drinking (6.3%). A higher percentage of Hispanic adults reported binge drinking (15.7%) compared to White, non-Hispanic adults (8.8%). The rate of binge drinking for non-White, non-Hispanic adults was 13.3%.

Figure 15.A: Binge Drinking by Ethnicity, Utah Adults, 2001-2005

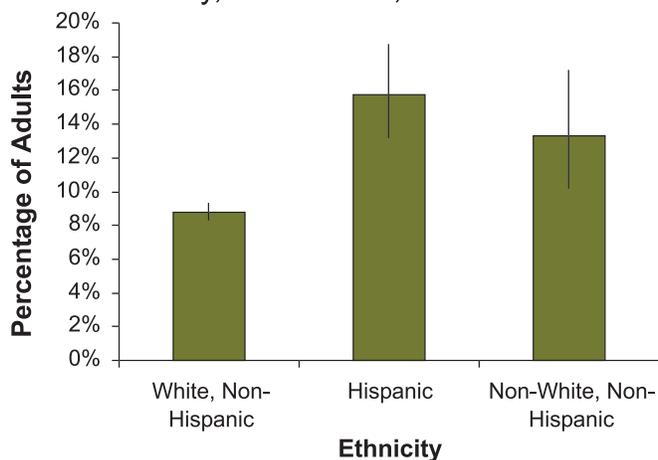
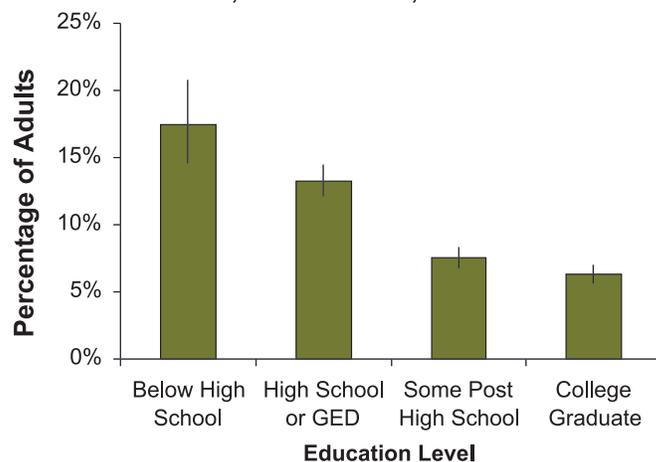


Figure 15.B: Binge Drinking by Education, Utah Adults, 2001-2005

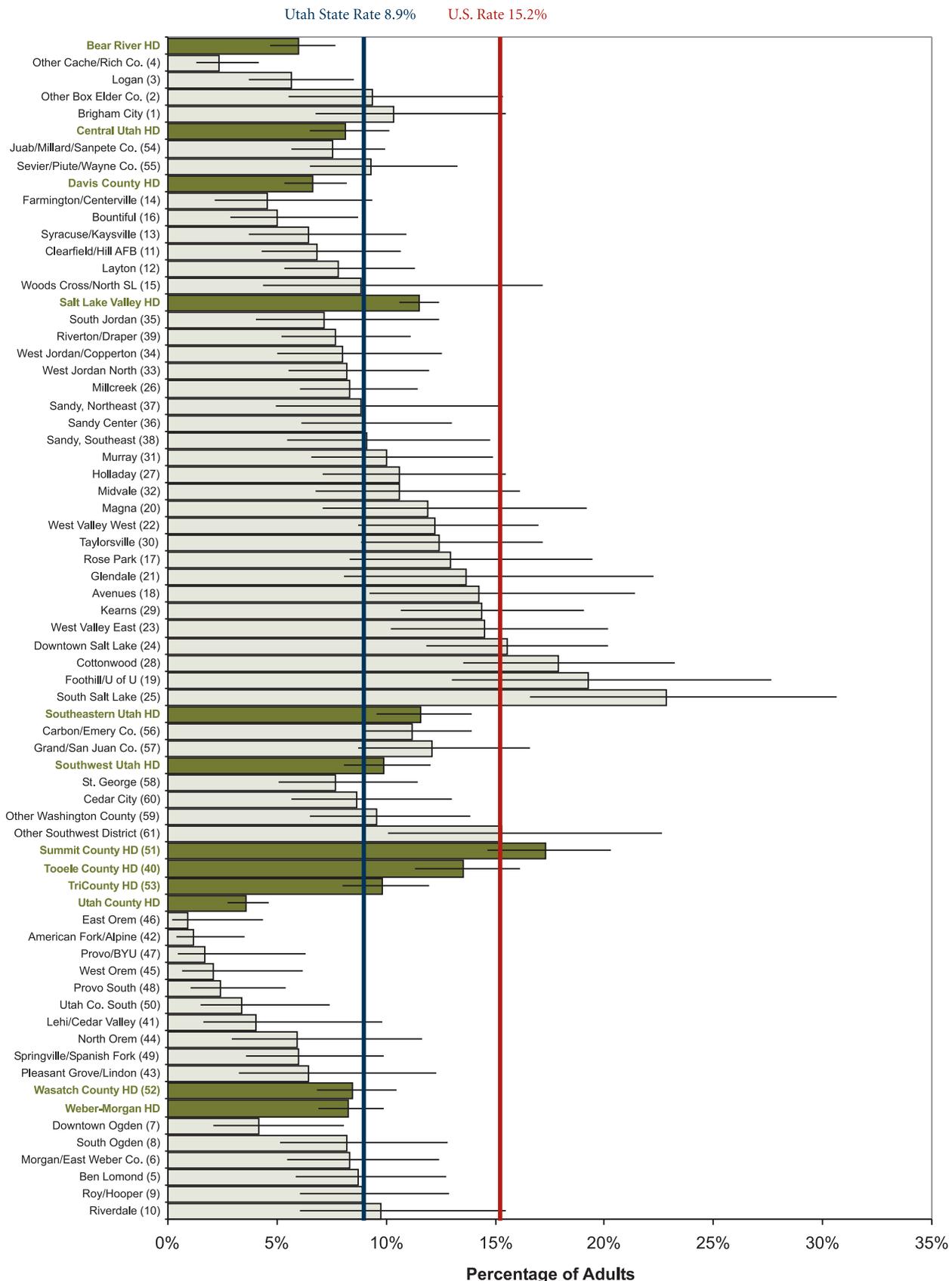


Prevention/Resources

Within Utah, there is a statewide service designed to provide referral and educational resources with respect to substance abuse. To speak with the referral service call toll-free 1-866-633-HOPE (4673). Within the Salt Lake City area, call 366-HOPE (4673). The Utah Department of Human Services, Division of Substance Abuse and Mental Health can be contacted at 801-538-3939 or accessed on the Internet at <http://www.dsamh.utah.gov>. Nationally, the United States Division of Health and Human Services (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA) can be accessed by calling the toll-free referral helpline at 1-800-662-HELP (4357). A treatment facility locator is also available on the Internet at <http://findtreatment.samhsa.gov/>.

15. BINGE DRINKING

Figure 15.1: Percentage of Adults Reporting Binge Drinking by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



15. BINGE DRINKING

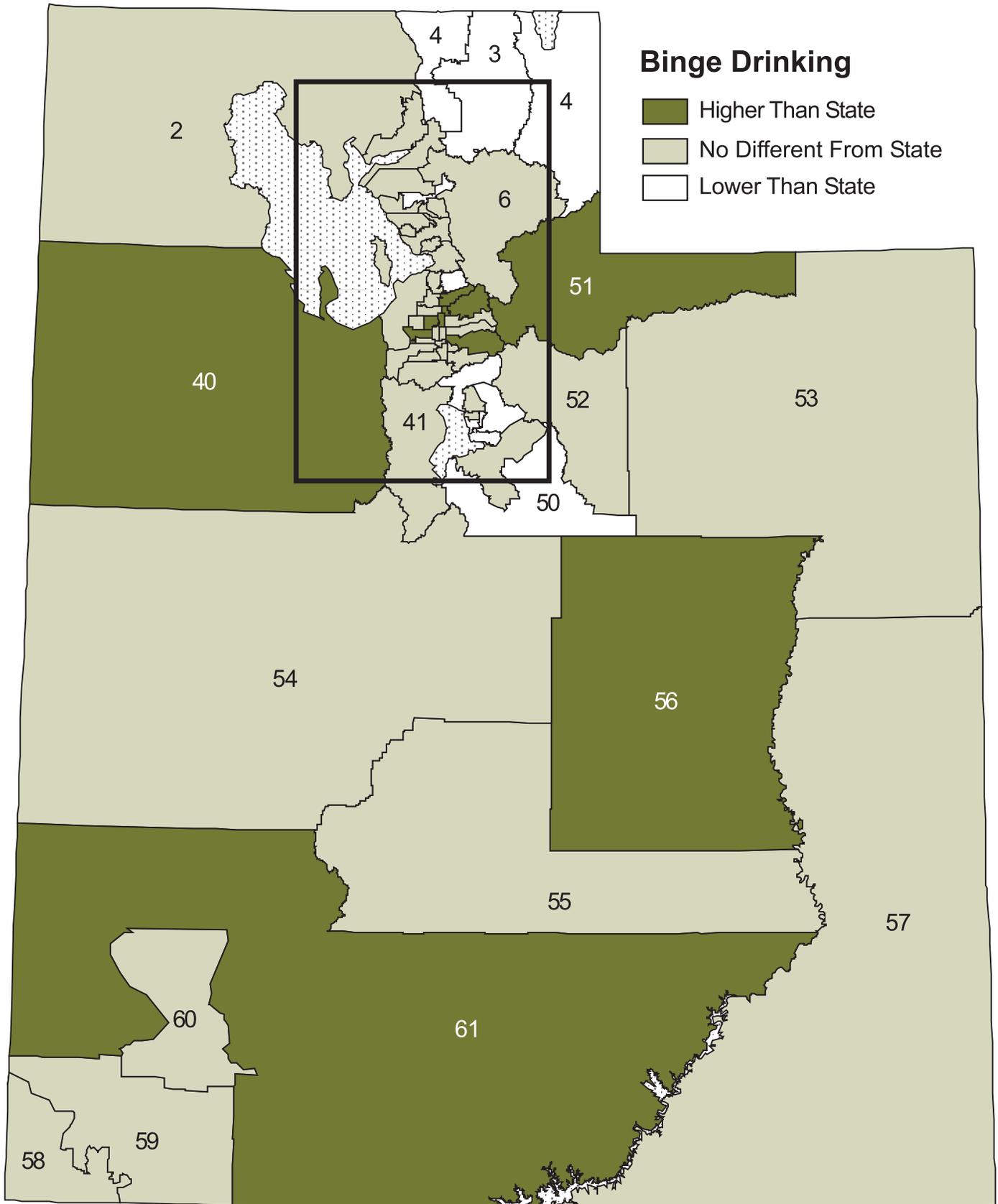
Table 15: Binge Drinking by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Age-adjusted Rate	95% Confidence Interval	
			Reporting Binge Drinking	Crude Rate		Lower	Upper
	U.S.	217,803,051	32,757,579	15.0%	15.2%	15.1%	15.3%
	State of Utah	1,657,454	157,458	9.5%	8.9%	8.4%	9.4%
	Bear River HD	98,027	6,685	6.8%	6.0%	4.7%	7.7%
42	Brigham City (1)	14,566	1,910	13.1%	10.4%	6.8%	15.5%
12	Logan (3)	45,904	3,020	6.6%	5.6%	3.7%	8.5%
37	Other Box Elder Co. (2)	14,636	1,327	9.1%	9.3%	5.5%	15.3%
5	Other Cache/Rich Co. (4)	22,921	621	2.7%	2.4%	1.3%	4.2%
	Central Utah HD	47,558	3,947	8.3%	8.1%	6.5%	10.2%
19	Juab/Millard/Sanpete Co. (54)	31,637	2,499	7.9%	7.5%	5.7%	10.0%
36	Sevier/Piute/Wayne Co. (55)	15,921	1,434	9.0%	9.3%	6.5%	13.2%
	Davis County HD	175,027	12,742	7.3%	6.6%	5.3%	8.2%
11	Bountiful (16)	33,318	1,829	5.5%	5.0%	2.9%	8.7%
17	Clearfield/Hill AFB (11)	37,329	2,968	8.0%	6.8%	4.3%	10.7%
10	Farmington/Centerville (14)	19,034	839	4.4%	4.5%	2.1%	9.4%
22	Layton (12)	46,815	4,363	9.3%	7.8%	5.3%	11.3%
15	Syracuse/Kaysville (13)	24,542	1,723	7.0%	6.4%	3.7%	10.9%
32	Woods Cross/North SL (15)	13,989	1,223	8.7%	8.8%	4.3%	17.2%
	Salt Lake Valley HD	658,810	81,495	12.4%	11.5%	10.6%	12.4%
53	Avenues (18)	18,959	2,698	14.2%	14.3%	9.2%	21.4%
59	Cottonwood (28)	33,297	5,737	17.2%	17.9%	13.5%	23.2%
57	Downtown Salt Lake (24)	42,808	7,658	17.9%	15.5%	11.8%	20.2%
60	Foothill/U of U (19)	17,778	3,198	18.0%	19.3%	13.0%	27.6%
52	Glendale (21)	18,642	2,953	15.8%	13.7%	8.1%	22.2%
43	Holladay (27)	35,956	3,322	9.2%	10.6%	7.1%	15.5%
54	Kearns (29)	42,995	6,733	15.7%	14.3%	10.7%	19.0%
46	Magna (20)	15,623	2,073	13.3%	11.9%	7.1%	19.2%
44	Midvale (32)	21,672	2,815	13.0%	10.6%	6.8%	16.1%
27	Millcreek (26)	44,008	3,587	8.2%	8.4%	6.0%	11.5%
41	Murray (31)	24,072	2,516	10.5%	10.0%	6.6%	14.9%
20	Riverton/Drapers (39)	41,391	3,949	9.5%	7.7%	5.2%	11.1%
50	Rose Park (17)	22,639	3,190	14.1%	12.9%	8.4%	19.5%
34	Sandy Center (36)	36,106	4,123	11.4%	9.0%	6.1%	13.0%
31	Sandy, Northeast (37)	18,245	1,467	8.0%	8.8%	5.0%	15.3%
35	Sandy, Southeast (38)	20,781	1,781	8.6%	9.1%	5.5%	14.8%
18	South Jordan (35)	20,931	1,746	8.3%	7.1%	4.0%	12.4%
61	South Salt Lake (25)	18,456	3,990	21.6%	22.9%	16.6%	30.7%
49	Taylorsville (30)	27,372	3,654	13.4%	12.4%	8.9%	17.2%
24	West Jordan North (33)	30,391	2,753	9.1%	8.2%	5.5%	12.0%
23	West Jordan/Copperton (34)	26,360	2,291	8.7%	8.0%	5.0%	12.6%
55	West Valley East (23)	35,527	5,244	14.8%	14.5%	10.2%	20.2%
48	West Valley West (22)	44,794	6,692	14.9%	12.2%	8.7%	17.0%
	Southeastern Utah HD	36,828	4,217	11.5%	11.5%	9.6%	13.9%
45	Carbon/Emery Co. (56)	21,451	2,377	11.1%	11.2%	9.0%	13.9%
47	Grand/San Juan Co. (57)	15,377	1,868	12.2%	12.1%	8.7%	16.6%
	Southwest Utah HD	116,150	10,988	9.5%	9.9%	8.1%	12.0%
29	Cedar City (60)	22,401	2,332	10.4%	8.6%	5.6%	13.0%
56	Other Southwest District (61)	15,384	2,045	13.3%	15.3%	10.1%	22.6%
38	Other Washington County (59)	32,503	3,088	9.5%	9.6%	6.5%	13.9%
21	St. George (58)	45,862	3,366	7.3%	7.7%	5.1%	11.4%
58	Summit County HD (51)	24,525	4,486	18.3%	17.3%	14.6%	20.3%
51	Tooele County HD (40)	32,458	4,603	14.2%	13.5%	11.3%	16.1%
40	TriCounty HD (53)	28,023	2,769	9.9%	9.8%	8.0%	12.0%
	Utah County HD	278,832	10,289	3.7%	3.5%	2.7%	4.6%
2	American Fork/Alpine (42)	26,819	351	1.3%	1.1%	0.4%	3.5%
1	East Orem (46)	14,955	132	0.9%	0.9%	0.2%	4.4%
8	Lehi/Cedar Valley (41)	18,752	729	3.9%	4.1%	1.6%	9.8%
13	North Orem (44)	25,965	1,615	6.2%	5.9%	2.9%	11.6%
16	Pleasant Grove/Lindon (43)	24,636	1,594	6.5%	6.4%	3.3%	12.3%
3	Provo/BYU (47)	39,401	567	1.4%	1.7%	0.4%	6.3%
6	Provo South (48)	48,138	1,122	2.3%	2.4%	1.1%	5.4%
14	Springville/Spanish Fork (49)	41,036	2,474	6.0%	6.0%	3.6%	9.9%
7	Utah Co. South (50)	17,363	764	4.4%	3.4%	1.5%	7.4%
4	West Orem (45)	21,774	729	3.4%	2.1%	0.7%	6.2%
28	Wasatch County HD (52)	12,514	1,139	9.1%	8.5%	6.8%	10.5%
	Weber-Morgan HD	148,702	12,878	8.7%	8.2%	6.9%	9.9%
30	Ben Lomond (5)	33,215	3,245	9.8%	8.7%	5.9%	12.8%
9	Downtown Ogden (7)	21,684	883	4.1%	4.2%	2.1%	8.1%
26	Morgan/East Weber Co. (6)	24,131	1,998	8.3%	8.3%	5.5%	12.5%
39	Riverdale (10)	15,522	1,577	10.2%	9.8%	6.0%	15.5%
33	Roy/Hooper (9)	27,898	2,873	10.3%	8.9%	6.1%	12.9%
25	South Ogden (8)	26,255	2,158	8.2%	8.2%	5.1%	12.8%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

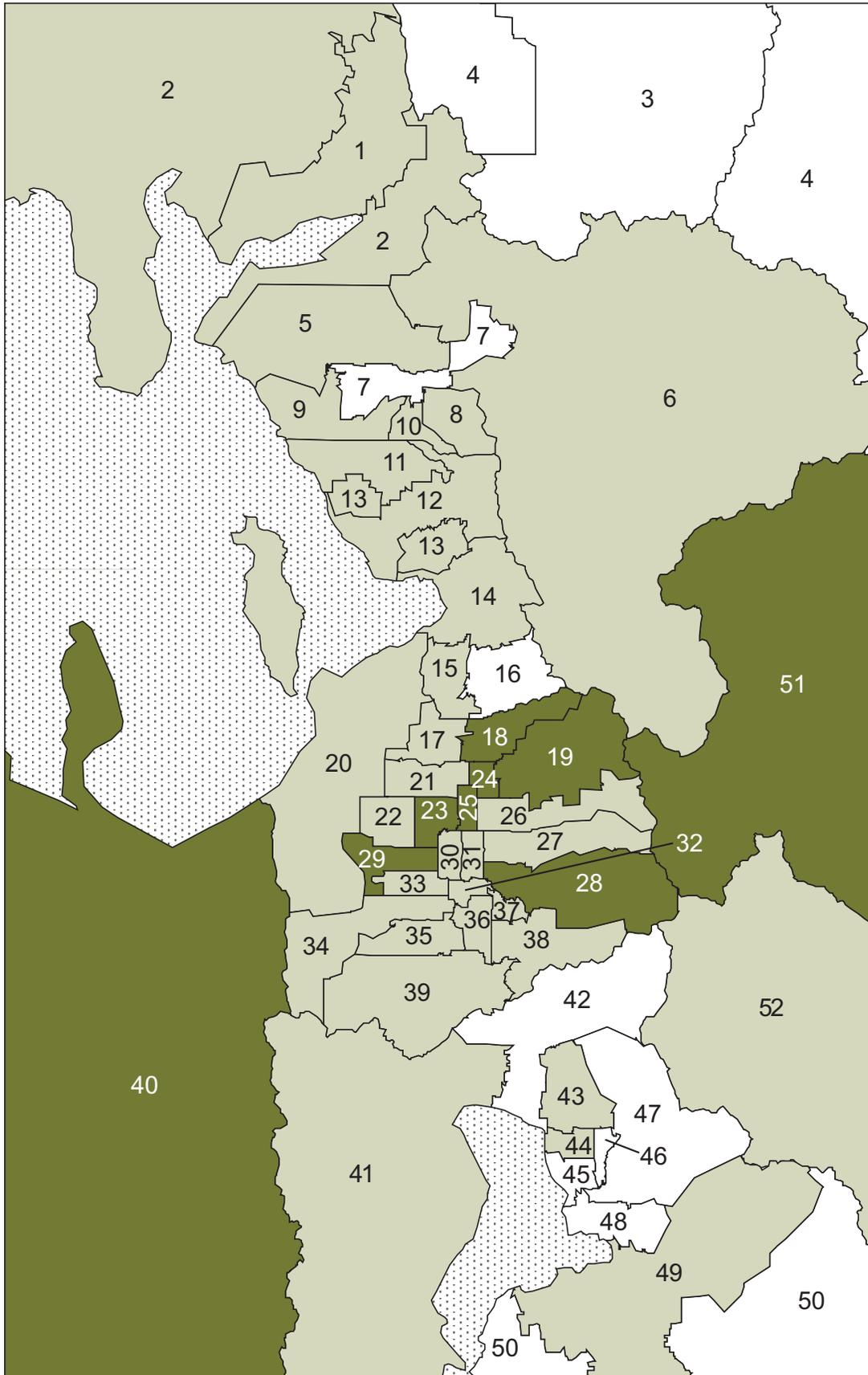
15. BINGE DRINKING

Figure 15.2: Binge Drinking by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



15. BINGE DRINKING

Figure 15.3: Binge Drinking by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



16. CHRONIC DRINKING

Measure Definition: “A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how often have you had at least one drink of any alcoholic beverage? On the days when you drank, about how many drinks did you drink on the average?” [**One or more drinks per day on average for women and two or more drinks per day on average for men**]

Why is chronic drinking important to public health?

Chronic drinking is defined as consuming one or more drinks per day on average for women and two or more drinks per day on average for men. The lower cut-point is used for women because women are generally of smaller stature than men, and absorb and metabolize alcohol differently than men. Chronic drinking is associated with a number of chronic health conditions including chronic liver disease and cirrhosis, gastrointestinal cancers, heart disease, stroke, pancreatitis, depression, and a variety of social problems.³³

Risk factors for chronic drinking

Generally, adults with an income less than \$20,000, men, and Hispanic adults are more likely to report chronic drinking. In Utah, between 2001–2005, 4.6% of adults earning between \$20,000 and \$49,999 reported chronic drinking compared to 5.6% of adults earning less than \$20,000 per year and 4.1% of adults earning \$50,000 or more per year or more. More men reported chronic drinking (5.0%) compared to women (3.3%). The prevalence of chronic drinking among White, non-Hispanic adults was 4.1% compared to 4.8% for Hispanic adults and 4.4 for non-White, non-Hispanic adults.

Some chronic drinkers are also binge drinkers and/or cigarette smokers. In Utah between 2001–2005, 73.3% of chronic drinkers were also binge drinkers. In that same period, 42.1% of chronic drinkers also were current cigarette smokers, thus compounding their risk for adverse health outcomes.

Chronic drinking in Utah

The state’s chronic drinking rate was significantly lower than the U.S. rate (2.9% versus 7.7%). More than 48,000 adult Utahns engaged in chronic drinking in 2003. The prevalence of chronic drinking varied by local health districts and ranged from a low of 0.7% (age-adjusted) to a high of 5.5%. Three local health districts had rates higher than the state rate, three local health districts had rates lower than the state rate, and six local health districts had rates similar to the state rate. Summit County (5.5%) had the highest prevalence of chronic drinking and Utah County (0.7%) had the lowest prevalence. In terms of small areas, there were eight small areas with chronic drinking rates higher than the state rate and seven small areas with chronic drinking rates lower than the state rate. The small areas with chronic drinking rates higher than the state rate were Avenues, Cottonwood, Foothill/U of U, Glendale, Kearns, South Salt Lake, Other Southwest District, and Summit County. Six of these small areas are in the Salt Lake Valley health district. The small areas with chronic drinking rates lower than the state rate were Other Cache/Rich, Farmington/Centerville, American Fork/Alpine, Lehi/Cedar Valley, Provo/BYU, Provo South, and Utah County South.

Overall, the small area with the highest rate of chronic drinking was South Salt Lake with a rate of 7.7% and the small area with the lowest rate was Utah County South with a rate of 0.0%.

Utah Objective: No objective listed.

HP2010 Objective (related) 26-13: Reduce the proportion of adults who exceed guidelines for low-risk drinking to 50%.

16. CHRONIC DRINKING

Chronic drinking in Utah (continued)

Figure 16.A: Chronic Drinking by Education, Utah Adults, 2001-2005

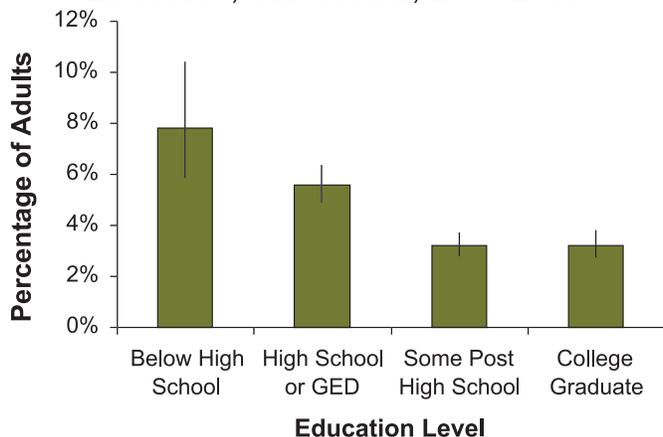
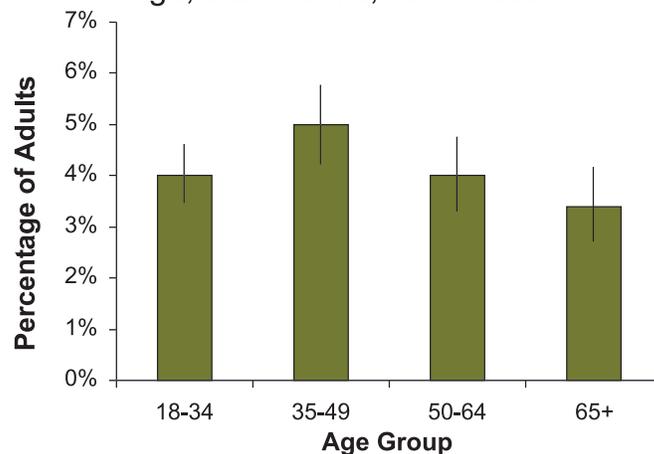


Figure 16.B: Chronic Drinking by Age, Utah Adults, 2001-2005

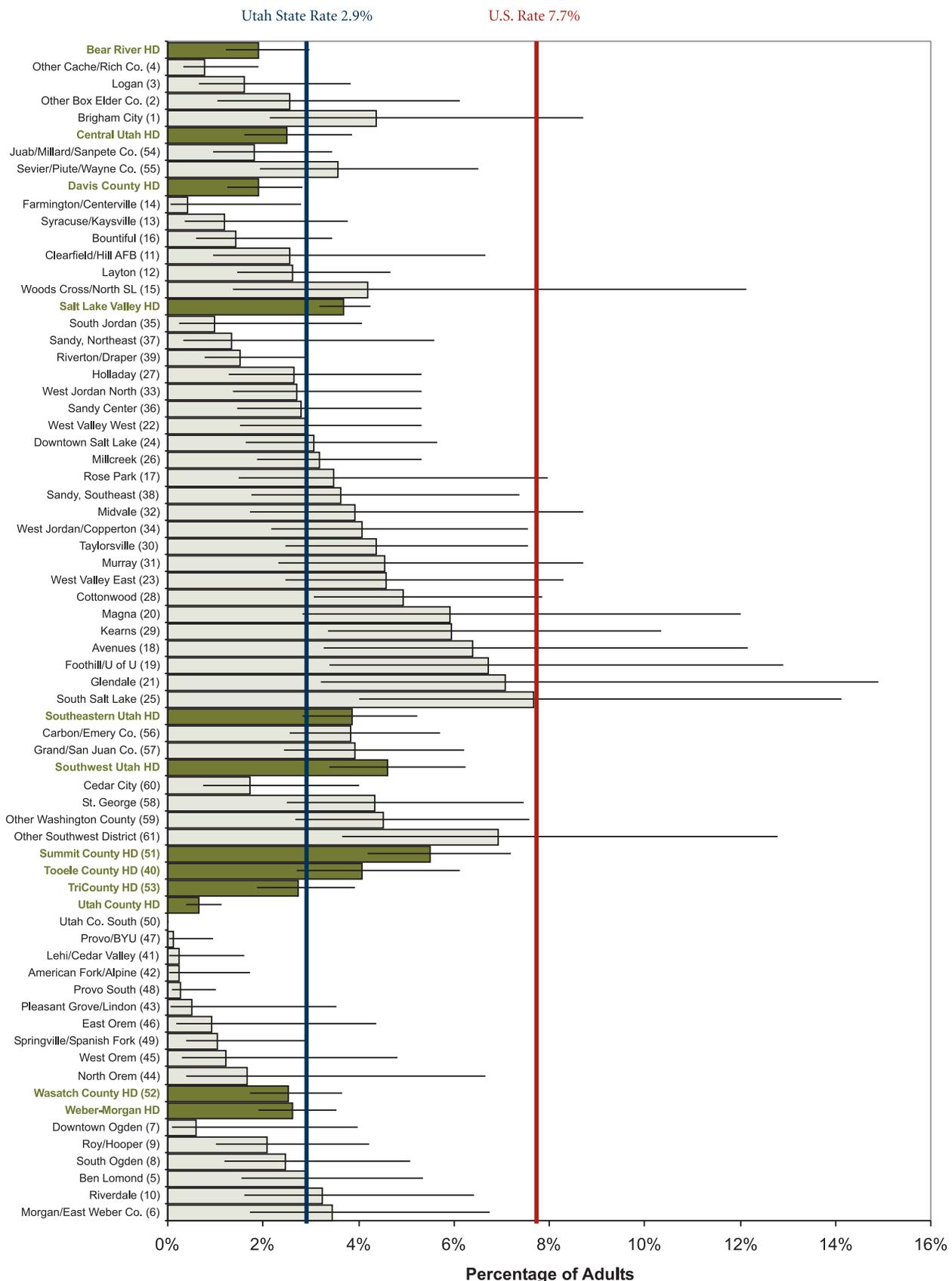


Prevention/Resources

Within Utah, there is a statewide service designed to provide referral and educational resources with respect to substance abuse. To speak with the referral service call toll-free 1-866-633-HOPE (4673). Within the Salt Lake City area, call 366-HOPE (4673). The Utah Department of Human Services, Division of Substance Abuse and Mental Health can be contacted at 801-538-3939 or accessed on the Internet at <http://www.dsamh.utah.gov>. Nationally, the United States Division of Health and Human Services (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA) can be accessed by calling the toll-free referral helpline at 1-800-662-HELP (4357). A treatment facility locator is also available on the Internet at <http://findtreatment.samhsa.gov/>.

16. CHRONIC DRINKING

Figure 16.1: Percentage of Adults Reporting Chronic Drinking by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



16. CHRONIC DRINKING

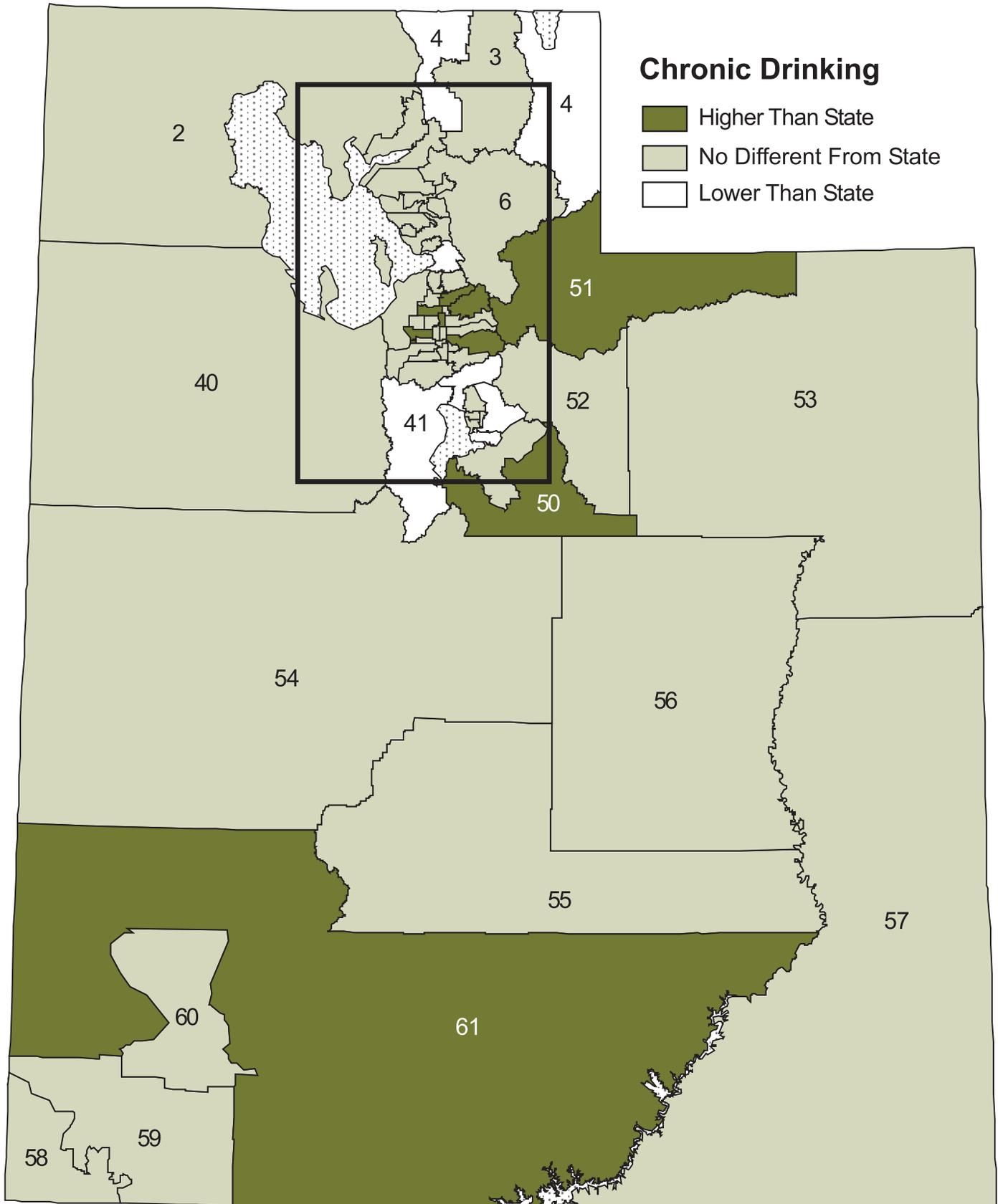
Table 16: Chronic Drinking by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Reporting Chronic Drinking	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	16,814,396	7.7%	7.7%	7.6%	7.8%
	State of Utah	1,657,454	48,729	2.9%	2.9%	2.6%	3.2%
	Bear River HD	98,027	1,921	2.0%	1.9%	1.2%	3.0%
49	Brigham City (1)	14,566	871	6.0%	4.4%	2.2%	8.7%
18	Logan (3)	45,904	523	1.1%	1.6%	0.7%	3.8%
26	Other Box Elder Co. (2)	14,636	362	2.5%	2.6%	1.0%	6.1%
9	Other Cache/Rich Co. (4)	22,921	174	0.8%	0.8%	0.3%	1.9%
	Central Utah HD	47,558	1,194	2.5%	2.5%	1.6%	3.9%
21	Juab/Millard/Sanpete Co. (54)	31,637	557	1.8%	1.8%	1.0%	3.5%
39	Sevier/Piute/Wayne Co. (55)	15,921	611	3.8%	3.6%	1.9%	6.5%
	Davis County HD	175,027	3,676	2.1%	1.9%	1.3%	2.8%
16	Bountiful (16)	33,318	450	1.4%	1.4%	0.6%	3.5%
25	Clearfield/Hill AFB (11)	37,329	825	2.2%	2.6%	1.0%	6.7%
6	Farmington/Centerville (14)	19,034	99	0.5%	0.4%	0.1%	2.8%
27	Layton (12)	46,815	1,503	3.2%	2.6%	1.5%	4.7%
13	Syracuse/Kaysville (13)	24,542	324	1.3%	1.2%	0.4%	3.8%
46	Woods Cross/North SL (15)	13,989	585	4.2%	4.2%	1.4%	12.1%
	Salt Lake Valley HD	658,810	25,035	3.8%	3.7%	3.2%	4.3%
57	Avenues (18)	18,959	1,170	6.2%	6.4%	3.3%	12.2%
53	Cottonwood (28)	33,297	1,858	5.6%	4.9%	3.1%	7.8%
34	Downtown Salt Lake (24)	42,808	1,687	3.9%	3.1%	1.6%	5.7%
58	Foothill/U of U (19)	17,778	1,260	7.1%	6.7%	3.4%	12.9%
60	Glendale (21)	18,642	1,236	6.6%	7.1%	3.2%	14.9%
28	Holladay (27)	35,956	834	2.3%	2.6%	1.3%	5.3%
56	Kearns (29)	42,995	2,335	5.4%	6.0%	3.4%	10.4%
55	Magna (20)	15,623	987	6.3%	5.9%	2.8%	12.0%
43	Midvale (32)	21,672	962	4.4%	3.9%	1.7%	8.7%
35	Millcreek (26)	44,008	1,197	2.7%	3.2%	1.9%	5.3%
51	Murray (31)	24,072	1,160	4.8%	4.6%	2.3%	8.7%
17	Riverton/Draper (39)	41,391	774	1.9%	1.5%	0.8%	2.9%
38	Rose Park (17)	22,639	881	3.9%	3.5%	1.5%	8.0%
31	Sandy Center (36)	36,106	1,105	3.1%	2.8%	1.5%	5.3%
15	Sandy, Northeast (37)	18,245	170	0.9%	1.3%	0.3%	5.6%
40	Sandy, Southeast (38)	20,781	727	3.5%	3.6%	1.8%	7.4%
11	South Jordan (35)	20,931	211	1.0%	1.0%	0.2%	4.1%
61	South Salt Lake (25)	18,456	1,312	7.1%	7.7%	4.0%	14.1%
48	Taylorsville (30)	27,372	1,213	4.4%	4.4%	2.5%	7.6%
29	West Jordan North (33)	30,391	769	2.5%	2.7%	1.4%	5.3%
44	West Jordan/Copperton (34)	26,360	920	3.5%	4.1%	2.2%	7.5%
52	West Valley East (23)	35,527	1,602	4.5%	4.6%	2.5%	8.3%
32	West Valley West (22)	44,794	1,353	3.0%	2.9%	1.5%	5.3%
	Southeastern Utah HD	36,828	1,388	3.8%	3.9%	2.8%	5.2%
41	Carbon/Emery Co. (56)	21,451	813	3.8%	3.8%	2.6%	5.7%
42	Grand/San Juan Co. (57)	15,377	577	3.8%	3.9%	2.5%	6.2%
	Southwest Utah HD	116,150	4,913	4.2%	4.6%	3.4%	6.2%
20	Cedar City (60)	22,401	547	2.4%	1.7%	0.7%	4.0%
59	Other Southwest District (61)	15,384	1,049	6.8%	6.9%	3.7%	12.8%
50	Other Washington County (59)	32,503	1,437	4.4%	4.5%	2.7%	7.6%
47	St. George (58)	45,862	1,816	4.0%	4.3%	2.5%	7.5%
54	Summit County HD (51)	24,525	1,386	5.7%	5.5%	4.2%	7.2%
45	Tooele County HD (40)	32,458	1,285	4.0%	4.1%	2.7%	6.1%
30	TriCounty HD (53)	28,023	790	2.8%	2.7%	1.9%	3.9%
	Utah County HD	278,832	2,565	0.9%	0.7%	0.4%	1.2%
4	American Fork/Alpine (42)	26,819	62	0.2%	0.2%	0.0%	1.7%
10	East Orem (46)	14,955	132	0.9%	0.9%	0.2%	4.4%
3	Lehi/Cedar Valley (41)	18,752	34	0.2%	0.2%	0.0%	1.6%
19	North Orem (44)	25,965	428	1.7%	1.7%	0.4%	6.7%
7	Pleasant Grove/Lindon (43)	24,636	145	0.6%	0.5%	0.1%	3.5%
2	Provo/BYU (47)	39,401	181	0.5%	0.1%	0.0%	1.0%
5	Provo South (48)	48,138	539	1.1%	0.3%	0.1%	1.0%
12	Springville/Spanish Fork (49)	41,036	472	1.2%	1.1%	0.4%	2.9%
1	Utah Co. South (50)	17,363	-	0.0%	0.0%	.	.
14	West Orem (45)	21,774	440	2.0%	1.2%	0.3%	4.8%
24	Wasatch County HD (52)	12,514	325	2.6%	2.5%	1.7%	3.7%
	Weber-Morgan HD	148,702	3,955	2.7%	2.6%	1.9%	3.5%
33	Ben Lomond (5)	33,215	996	3.0%	2.9%	1.6%	5.4%
8	Downtown Ogden (7)	21,684	115	0.5%	0.6%	0.1%	4.0%
37	Morgan/East Weber Co. (6)	24,131	888	3.7%	3.4%	1.7%	6.8%
36	Riverdale (10)	15,522	489	3.2%	3.2%	1.6%	6.4%
22	Roy/Hooper (9)	27,898	725	2.6%	2.1%	1.0%	4.2%
23	South Ogden (8)	26,255	651	2.5%	2.5%	1.2%	5.1%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

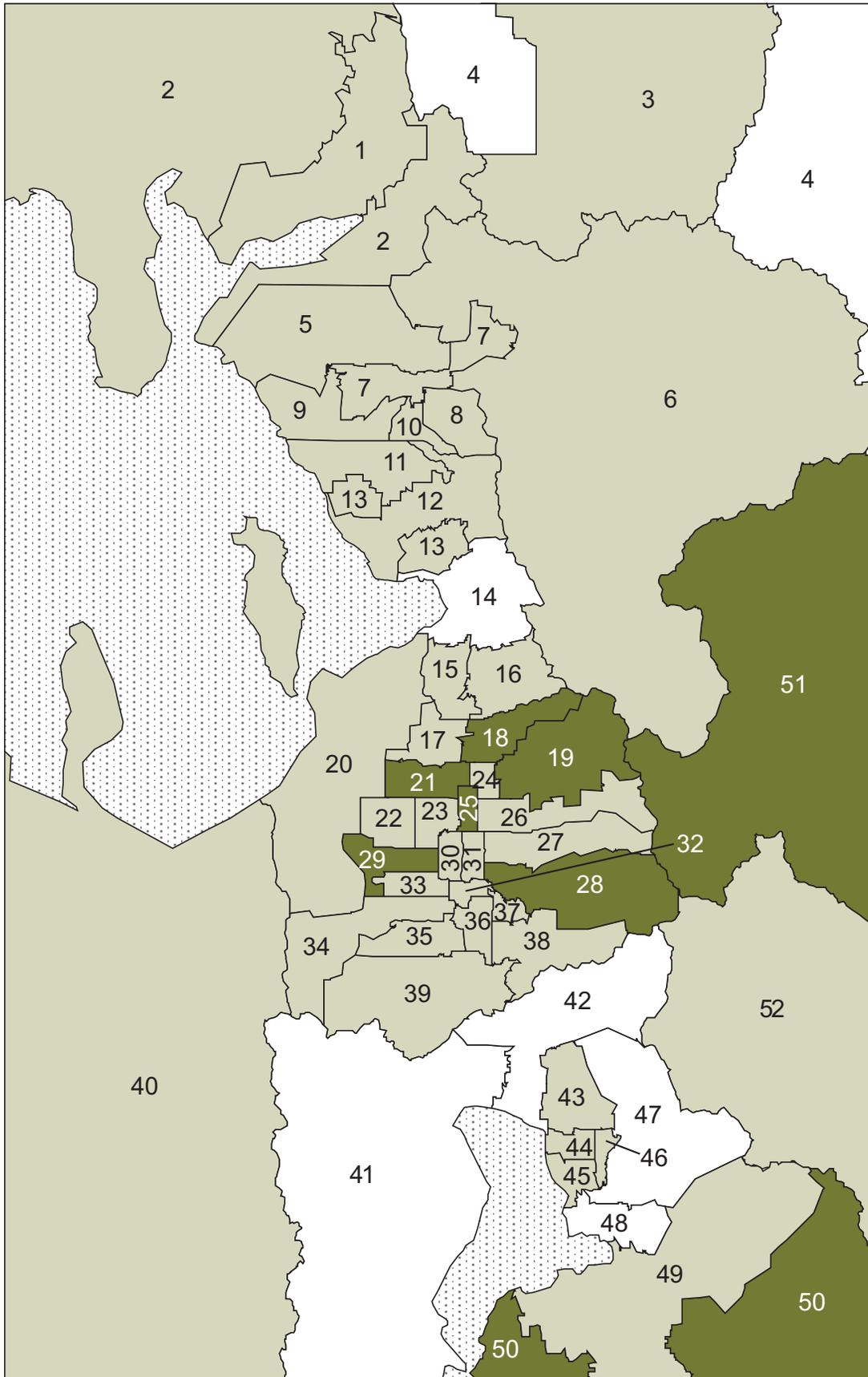
16. CHRONIC DRINKING

Figure 16.2: Chronic Drinking by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



16. CHRONIC DRINKING

Figure 16.3: Chronic Drinking by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



17. PHYSICAL INACTIVITY

Measure Definition: “During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?” [Yes]

Why is physical inactivity important to public health?

Physical inactivity is a modifiable risk factor for cardiovascular disease and a growing variety of other chronic diseases, including diabetes, cancer, obesity, hypertension, bone and joint diseases, and depression.^{9,34} One study found that over 13% of total medical expenditures for cardiovascular disease was attributable to physical inactivity.³⁵ Even small increases in physical activity have been shown to significantly reduce the risk of morbidity and mortality from chronic disease.³⁶

For this report, physical inactivity was defined as the percentage of adults aged 18 and over who reported getting no leisure-time physical activity in the past month.

Risk factors associated with physical inactivity

Workplaces are increasingly automated, many jobs are sedentary, and cars are used for short trips. The number of trips the average American adult takes on foot each year decreased 42% between 1975 and 1995.^{37,38} Individuals who live in both rural and urban areas are at risk for physical inactivity because of community design. Most communities are designed to accommodate cars and lack walkways and bikeways. People living in compact communities are more likely to walk in their leisure time than those in sprawling communities. In addition, walking for utilitarian purposes, such as to reach a destination like school, work, or shopping, is more likely in compact, mixed-use communities.^{38,39}

Physical inactivity in Utah

Nearly one in five (18.8%) adult Utahns reported physical inactivity based on data from 2001–2005. This was slightly better than the U.S. rate of nearly one in four (24.9%). Central Utah (22.5%), Southeastern Utah (23.8%), Tooele County (24.1%), and TriCounty health districts (25.6%) all had higher age-adjusted rates of physical inactivity than the state rate. Only Summit County health district (14.1%) had a rate of physical inactivity that was significantly lower than the state rate. Only Summit County health district met the Utah target of no more than 15% of adults being physically inactive.

Eighteen small areas had age-adjusted rates that met the Utah target of no more than 15% of adults who engage in no leisure-time physical activity. Woods Cross/North SL had the lowest rate of 8.7%, and Glendale had the highest rate of 31.2%. In addition to Glendale, Magna, Rose Park, Carbon/Emery Co., TriCounty health district, Utah Co. South, and Downtown Ogden had reported rates of physical inactivity greater than one fourth of their populations. Fewer than one in ten residents of Woods Cross/North SL and Foothill/U of U reported physical inactivity.

Physical inactivity increases as adults age. Utahns aged 65 and older had twice the rate of reported physical inactivity as Utahns aged 18–24 (Figure 17.A). White, non-Hispanic Utahns had lower rates of physical inactivity than Hispanic and non-White, non-Hispanic Utahns (BRFSS 2001–2005). About one third of Utahns with

Utah Objective: Reduce the proportion of adults who engage in no leisure-time physical activity to no more than 15% (age-adjusted to the 2000 standard population).

HP2010 Objective 22-1: Reduce the proportion of adults who engage in no leisure-time physical activity to no more than 20% (age-adjusted to the 2000 standard population).

17. PHYSICAL INACTIVITY

Physical inactivity in Utah (continued)

incomes of less than \$20,000 or with less than a high school education reported physical inactivity, while only 11% of those with incomes over \$50,000 or with a college degree reported physical inactivity. Those reporting seven or more days of poor mental health had twice the rate (31.1%) of physical inactivity as those reporting fewer than seven days (16.2%) of poor mental health.

Engaging in physical activity is extremely important for persons to maintain a healthy weight. When the rate of physical inactivity for Utah's 61 small areas was plotted with the rate of obesity (BMI \geq 30) for the same small areas, a strong relationship was seen. Small areas with low rates of physical inactivity tended to have lower rates of obesity and small areas with high rates of physical inactivity tended to have higher rates of obesity (Figure 17.B). It is important for individuals to remember that even small increases in physical activity can help maintain ideal weight and reduce chronic disease risk factors.

Figure 17.A: Physical Inactivity by Age and Sex, Utah Adults, 2001-2005

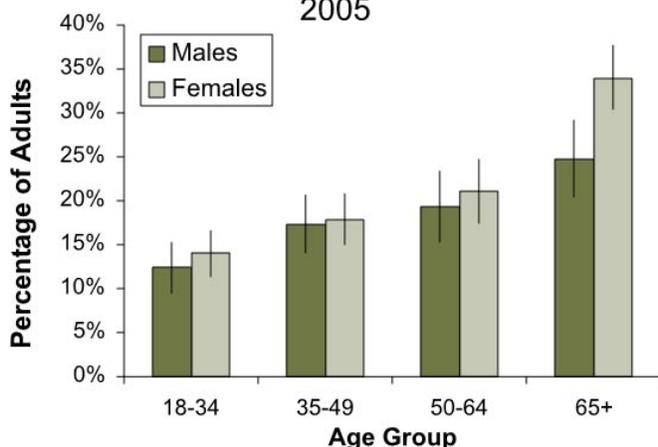
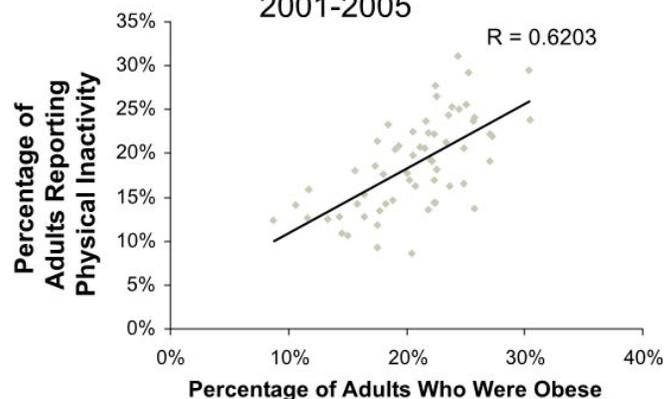


Figure 17.B: Scatterplot of Physical Inactivity and Obesity for Each Small Area, Utah Adults, 2001-2005



Prevention/Resources

A list of resources can be found in Appendix G of the report *Tipping the Scales Toward a Healthier Population in Utah* (<http://health.utah.gov/obesity/resources.html>).

UtahWalks is a website that features suggestions for creating places for people to walk and bicycle, and identifies places that already exist. For more information, visit www.utahwalks.org.

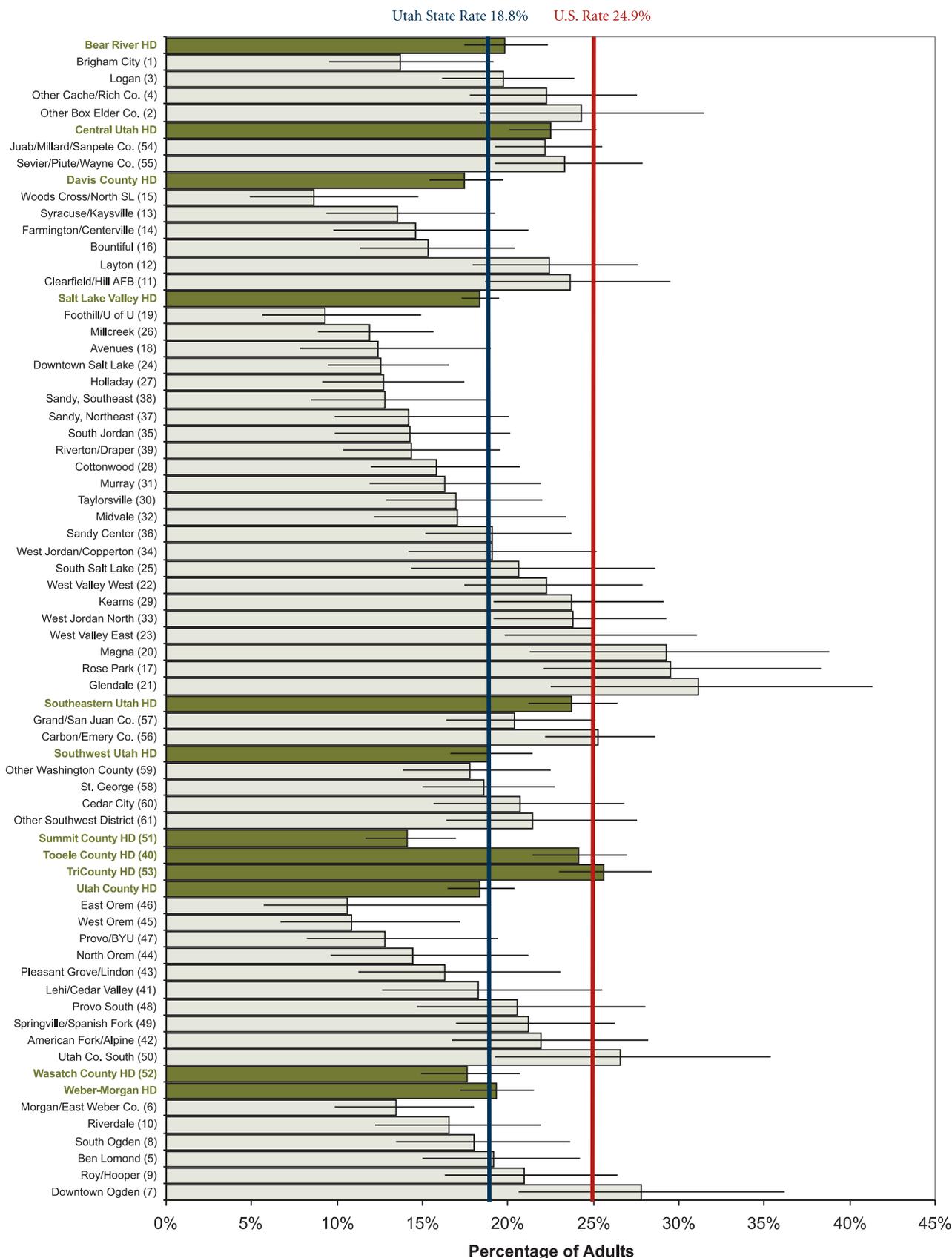
Check Your Health offers sensible, current information like Workouts on the Web to help Utah families live a healthy, active lifestyle (www.checkyourhealth.org).

CDC's Active Community Environments Initiative (ACES) promotes walking, bicycling, and the development of accessible recreation facilities. It was developed in response to data from a variety of disciplines, including public health, urban design, and transportation planning (www.cdc.gov/nccdphp/dnpa/aces.htm).

A worksite health promotion online resource directory is available at <http://health.utah.gov/worksitewellness/resources.html>.

17. PHYSICAL INACTIVITY

Figure 17.1: Percentage of Adults Reporting Physical Inactivity by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



17. PHYSICAL INACTIVITY

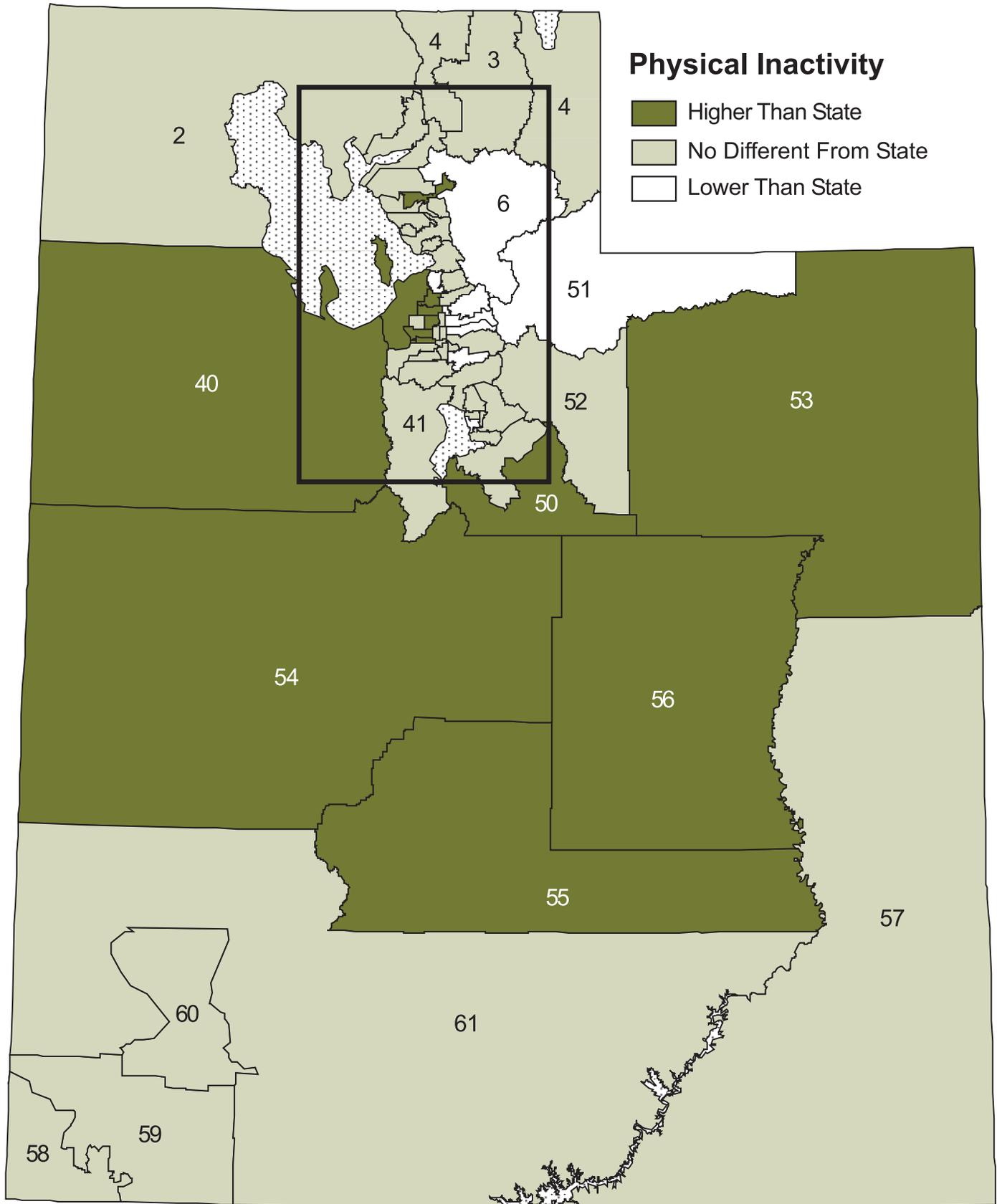
Table 17: Physical Inactivity by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Reporting Physical Inactivity		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
							Lower	Upper
	U.S.	217,803,051	54,124,058		24.9%	24.9%	24.8%	25.1%
	State of Utah	1,657,454	292,043		17.6%	18.8%	18.2%	19.5%
	Bear River HD	98,027	17,625		18.0%	19.8%	17.5%	22.3%
13	Brigham City (1)	14,566	1,962		13.5%	13.7%	9.6%	19.1%
35	Logan (3)	45,904	7,280		15.9%	19.7%	16.2%	23.9%
53	Other Box Elder Co. (2)	14,636	3,584		24.5%	24.3%	18.4%	31.5%
46	Other Cache/Rich Co. (4)	22,921	4,905		21.4%	22.3%	17.8%	27.6%
	Central Utah HD	47,558	10,563		22.2%	22.5%	20.0%	25.1%
44	Juab/Millard/Sanpete Co. (54)	31,637	6,805		21.5%	22.2%	19.2%	25.5%
48	Sevier/Piute/Wayne Co. (55)	15,921	3,735		23.5%	23.3%	19.3%	27.9%
	Davis County HD	175,027	27,917		16.0%	17.4%	15.4%	19.7%
20	Bountiful (16)	33,318	4,681		14.1%	15.3%	11.4%	20.4%
49	Clearfield/Hill AFB (11)	37,329	7,428		19.9%	23.6%	18.6%	29.5%
19	Farmington/Centerville (14)	19,034	2,452		12.9%	14.6%	9.8%	21.2%
47	Layton (12)	46,815	9,279		19.8%	22.4%	18.0%	27.6%
12	Syracuse/Kaysville (13)	24,542	3,163		12.9%	13.6%	9.4%	19.3%
1	Woods Cross/North SL (15)	13,989	1,241		8.9%	8.7%	4.9%	14.7%
	Salt Lake Valley HD	658,810	114,501		17.4%	18.4%	17.3%	19.5%
6	Avenues (18)	18,959	2,292		12.1%	12.4%	7.8%	19.0%
21	Cottonwood (28)	33,297	5,121		15.4%	15.8%	12.0%	20.7%
7	Downtown Salt Lake (24)	42,808	4,842		11.3%	12.6%	9.5%	16.6%
2	Foothill/U of U (19)	17,778	1,867		10.5%	9.3%	5.7%	14.9%
61	Glendale (21)	18,642	5,654		30.3%	31.2%	22.5%	41.3%
8	Holladay (27)	35,956	4,764		13.3%	12.7%	9.1%	17.4%
50	Kearns (29)	42,995	9,480		22.1%	23.8%	19.1%	29.1%
59	Magna (20)	15,623	3,634		23.3%	29.2%	21.3%	38.8%
26	Midvale (32)	21,672	3,543		16.4%	17.0%	12.1%	23.4%
5	Millcreek (26)	44,008	5,624		12.8%	11.9%	8.9%	15.7%
22	Murray (31)	24,072	3,837		15.9%	16.3%	11.9%	21.9%
17	Riverton/Draper (39)	41,391	5,315		12.8%	14.3%	10.3%	19.6%
60	Rose Park (17)	22,639	6,667		29.5%	29.5%	22.1%	38.3%
32	Sandy Center (36)	36,106	5,918		16.4%	19.1%	15.2%	23.7%
15	Sandy, Northeast (37)	18,245	2,412		13.2%	14.2%	9.9%	20.1%
9	Sandy, Southeast (38)	20,781	1,970		9.5%	12.8%	8.5%	18.8%
16	South Jordan (35)	20,931	2,926		14.0%	14.3%	9.9%	20.2%
38	South Salt Lake (25)	18,456	3,700		20.1%	20.6%	14.4%	28.6%
25	Taylorsville (30)	27,372	4,434		16.2%	17.0%	12.9%	22.0%
51	West Jordan North (33)	30,391	6,519		21.5%	23.8%	19.2%	29.2%
33	West Jordan/Copperton (34)	26,360	4,790		18.2%	19.1%	14.2%	25.2%
54	West Valley East (23)	35,527	8,619		24.3%	25.0%	19.8%	31.1%
45	West Valley West (22)	44,794	9,631		21.5%	22.3%	17.5%	27.9%
	Southeastern Utah HD	36,828	8,736		23.7%	23.8%	21.3%	26.6%
55	Carbon/Emery Co. (56)	21,451	5,393		25.1%	25.3%	22.2%	28.6%
36	Grand/San Juan Co. (57)	15,377	3,228		21.0%	20.4%	16.4%	25.1%
	Southwest Utah HD	116,150	21,650		18.6%	18.9%	16.7%	21.4%
39	Cedar City (60)	22,401	4,008		17.9%	20.7%	15.7%	26.9%
42	Other Southwest District (61)	15,384	3,538		23.0%	21.4%	16.4%	27.5%
28	Other Washington County (59)	32,503	5,821		17.9%	17.8%	13.9%	22.5%
31	St. George (58)	45,862	8,035		17.5%	18.5%	15.0%	22.8%
14	Summit County HD (51)	24,525	3,041		12.4%	14.1%	11.7%	16.9%
52	Tooele County HD (40)	32,458	7,274		22.4%	24.1%	21.4%	27.0%
56	TriCounty HD (53)	28,023	7,123		25.4%	25.4%	23.0%	28.4%
	Utah County HD	278,832	43,526		15.6%	18.3%	16.4%	20.3%
43	American Fork/Alpine (42)	26,819	5,364		20.0%	22.0%	16.7%	28.2%
3	East Orem (46)	14,955	1,473		9.9%	10.6%	5.7%	18.9%
30	Lehi/Cedar Valley (41)	18,752	2,933		15.6%	18.2%	12.7%	25.5%
18	North Orem (44)	25,965	3,539		13.6%	14.4%	9.6%	21.2%
23	Pleasant Grove/Lindon (43)	24,636	3,375		13.7%	16.3%	11.2%	23.1%
10	Provo/BYU (47)	39,401	4,689		11.9%	12.8%	8.2%	19.4%
37	Provo South (48)	48,138	6,219		12.9%	20.5%	14.7%	28.0%
41	Springville/Spanish Fork (49)	41,036	7,637		18.6%	21.2%	16.9%	26.2%
57	Utah Co. South (50)	17,363	4,245		24.5%	26.6%	19.3%	35.4%
4	West Orem (45)	21,774	2,552		11.7%	10.9%	6.7%	17.2%
27	Wasatch County HD (52)	12,514	2,122		17.0%	17.6%	14.9%	20.7%
	Weber-Morgan HD	148,702	27,703		18.6%	19.3%	17.3%	21.6%
34	Ben Lomond (5)	33,215	6,248		18.8%	19.2%	15.0%	24.2%
58	Downtown Ogden (7)	21,684	6,061		28.0%	27.8%	20.7%	36.2%
11	Morgan/East Weber Co. (6)	24,131	3,229		13.4%	13.4%	9.9%	18.0%
24	Riverdale (10)	15,522	2,321		15.0%	16.5%	12.3%	22.0%
40	Roy/Hooper (9)	27,898	5,276		18.9%	20.9%	16.3%	26.4%
29	South Ogden (8)	26,255	4,750		18.1%	18.0%	13.4%	23.7%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

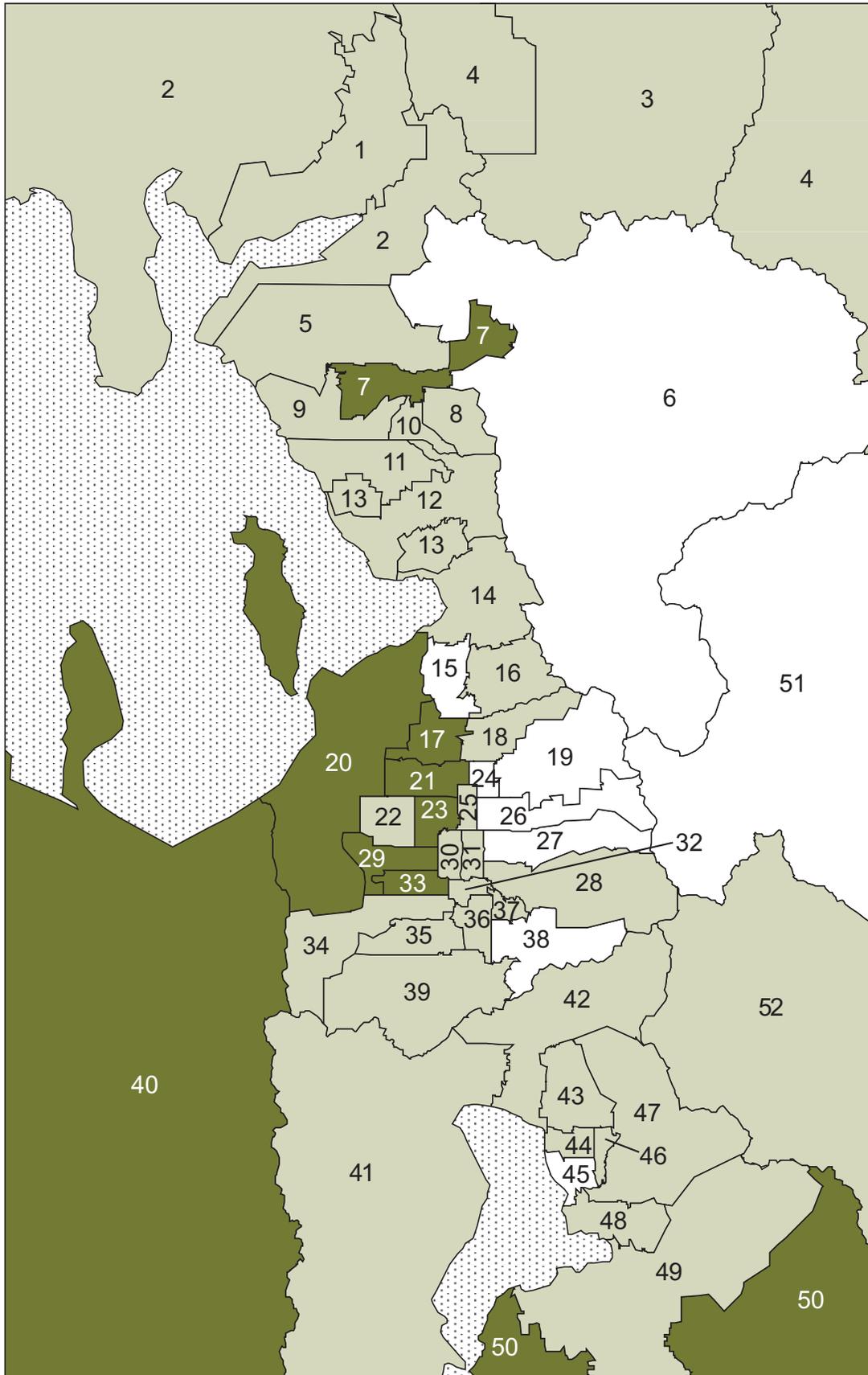
17. PHYSICAL INACTIVITY

Figure 17.2: Physical Inactivity by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



17. PHYSICAL INACTIVITY

Figure 17.3: Physical Inactivity by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



18. RECOMMENDED PHYSICAL ACTIVITY

Measure Definition: *Based on a set of questions measuring frequency and duration of physical activity (see Appendix G). [Participated in moderate physical activity for at least 30 minutes/day and 5 days/week or vigorous physical activity for at least 20 minutes/day and three days/week]*

Why is physical activity important to public health?

Physical activity has been shown to reduce the risk of coronary heart disease, hypertension, some types of cancer, and diabetes.⁹ In fact, physical activity has been shown to prevent the onset of diabetes and can be twice as effective as medication.⁴⁰ In addition, physical activity has been associated with improved quality of life among people with arthritis.⁴¹ Physical activity is also known to improve affective disorders such as depression and anxiety, and increase quality of life and independent living among the elderly.⁴²

For this report, recommended physical activity was defined as the percentage of adults aged 18 and over who reported participating in moderate physical activity for at least 30 minutes per day and five days per week or vigorous physical activity for at least 20 minutes per day and three days per week.

Risk factors associated with lack of recommended physical activity

Engaging in physical activity depends in part on the availability and proximity of community facilities and environments conducive to physical activity. Studies of adult participation in physical activity have shown that facility use generally decreases as the distance from a person's residence increases. People are unlikely to use community resources located more than a few miles away by car or more than a few minutes away by cycling or walking.³⁸ Similarly, a lack of active community environments (ACEs) has been shown to be a barrier to adults engaging in physical activity. Most communities are designed to accommodate cars and lack walkways and bikeways. Even where walkways and bikeways exist, wide roads and intersections, large parking lots, and drive-through businesses create environments that are unpleasant and unsafe for non-motorists, thus discouraging physical activity.³⁸

Physical activity in Utah

More than half (54.1%) of adult Utahns reported getting the recommended amount of physical activity based on data from 2001, 2003, and 2005. This was higher than the comparable rate for the U.S. during the same period (46.5%). The age-adjusted percentage of adults getting the recommended amount of physical activity varied only slightly by local health district. Tooele County had the lowest rate at 48.6%, and Summit County had the highest rate at 64.2%. Only Summit County had a rate that was statistically different than the state rate. None of Utah's local health districts met the Utah target of at least 65% of adults getting the recommended amount of physical activity.

There were differences within local health districts by small area. Along the Wasatch Front, Salt Lake Valley and Utah County health districts had small areas with age-adjusted rates less than 45% (Glendale, Magna, South Salt Lake, Lehi/Cedar Valley). Davis County, Salt Lake Valley, Utah County, Southwest Utah, and Weber-Morgan health districts all had small areas with rates over 60% (Farmington/Centerville, Woods Cross/North SL,

Utah Objective (related): Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to 65%.

HP2010 Objective (related) 22-2: Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to 50% (age-adjusted to the U.S. 2000 standard population).

18. RECOMMENDED PHYSICAL ACTIVITY

Physical activity in Utah (continued)

Sandy, Southeast, Foothill/U of U, Other Southwest District, East Orem, Morgan/East Weber Co., Riverdale). Foothill/U of U had the highest rate of any small area in the state at 68.4%. Magna had the lowest rate at 41.5%.

Rates of recommended physical activity did not differ by sex. However, as adults in Utah aged, the percentage of persons getting the recommended amount of physical activity declined from about 60% among those aged 18–24 to just over 40% among adults aged 65 and over (Figure 18.A). Physical activity increases with education level. Only 43.3% of adults without a high school degree reported getting the recommended amount of physical activity, while 57.6% of college graduates reported getting the recommended amount of physical activity (Figure 18.B). Overweight or obese adults with a body mass index of greater than 25, and those reporting seven or more days of poor mental health, also reported lower rates of recommended physical activity than those at an ideal weight or who reported fewer than seven days of poor mental health (not shown).

Figure 18.A: Recommended Physical Activity by Age and Sex, Utah Adults, 2001, 2003, 2005

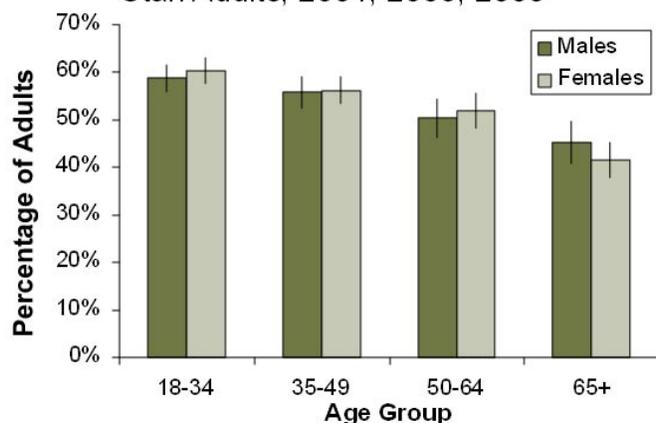
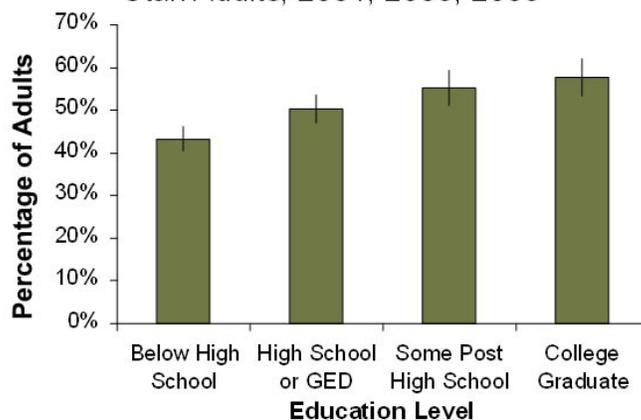


Figure 18.B: Recommended Physical Activity by Education, Utah Adults, 2001, 2003, 2005



Prevention/Resources

A list of resources can be found in Appendix G of the report *Tipping the Scales Toward a Healthier Population in Utah* (<http://health.utah.gov/obesity/resources.html>).

UtahWalks is a website that features suggestions for creating places for people to walk and bicycle, and identifies places that already exist. For more information, visit www.utahwalks.org.

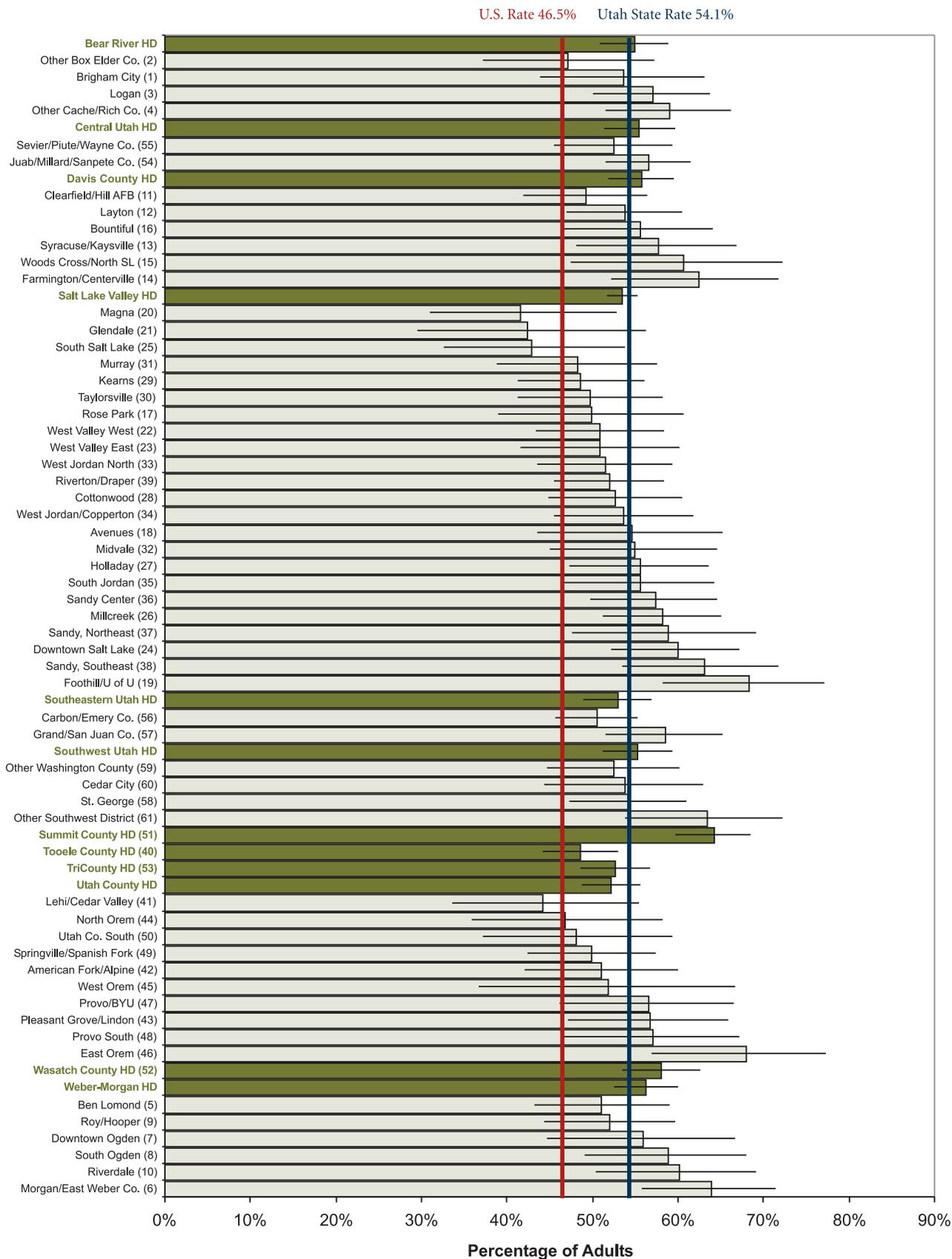
Check Your Health offers sensible, current information like Workouts on the Web to help Utah families live a healthy, active lifestyle (www.checkyourhealth.org).

CDC's Active Community Environments Initiative (ACES) promotes walking, bicycling, and the development of accessible recreation facilities. It was developed in response to data from a variety of disciplines, including public health, urban design, and transportation planning (www.cdc.gov/nccdphp/dnpa/aces.htm).

A worksite health promotion online resource directory is available at <http://health.utah.gov/worksitewellness/resources.html>.

18. RECOMMENDED PHYSICAL ACTIVITY

Figure 18.1: Percentage of Adults Reporting Recommended Physical Activity by Local Health District and Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



18. RECOMMENDED PHYSICAL ACTIVITY

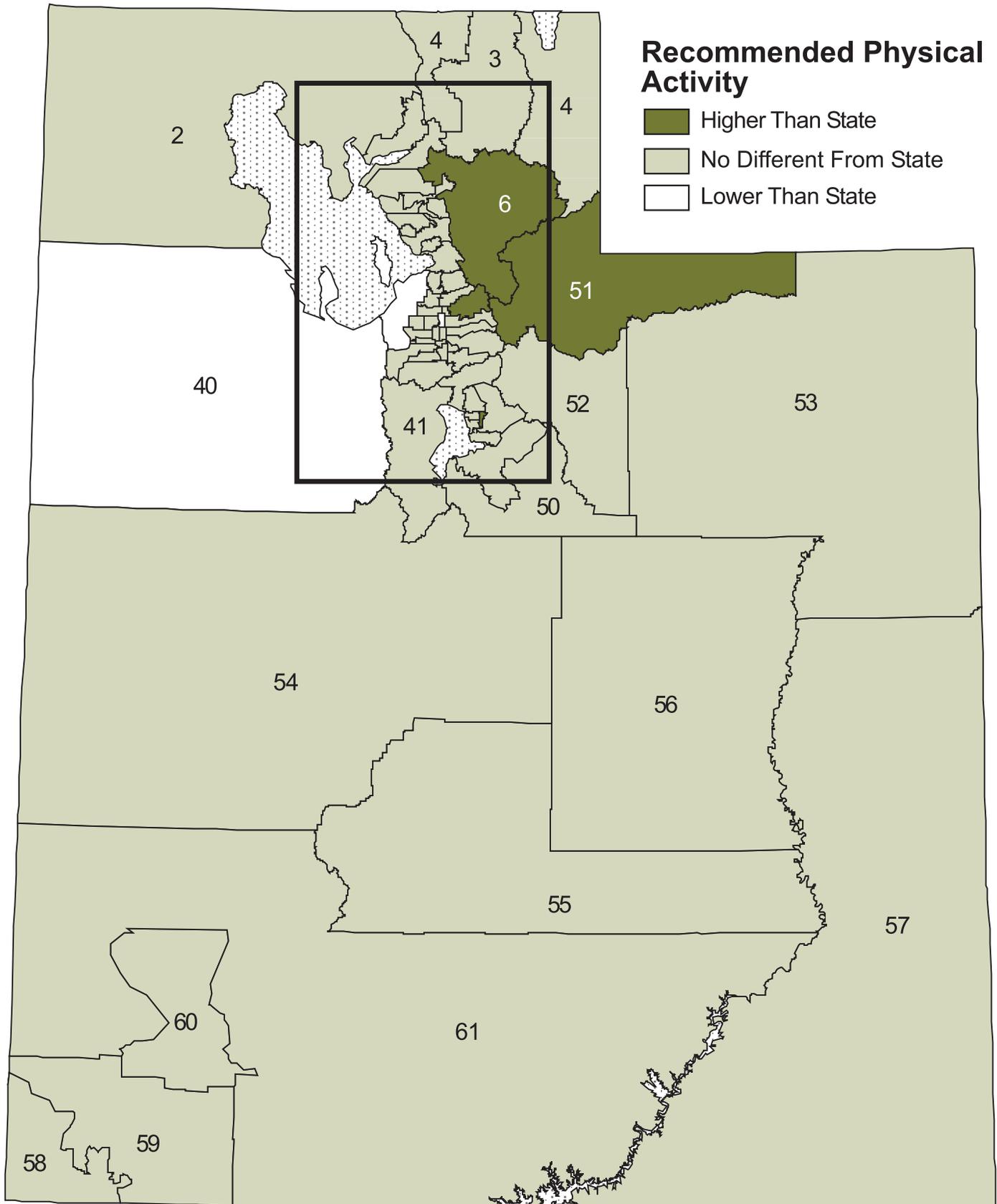
Table 18: Rec. Physical Activity by Health District, Small Area, Utah, and U.S., 2001, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
			Reporting Recommended Physical Activity				Lower	Upper
	U.S.	217,803,051	101,496,222		46.6%	46.5%	46.3%	46.7%
	State of Utah	1,657,454	916,406		55.3%	54.1%	53.0%	55.2%
	Bear River HD	98,027	56,591		57.7%	55.0%	50.9%	58.9%
28	Brigham City (1)	14,566	8,016		55.0%	53.6%	43.9%	63.1%
42	Logan (3)	45,904	28,713		62.6%	57.1%	50.1%	63.8%
6	Other Box Elder Co. (2)	14,636	6,886		47.1%	47.1%	37.2%	57.3%
51	Other Cache/Rich Co. (4)	22,921	13,180		57.5%	59.0%	51.5%	66.1%
	Central Utah HD	47,558	26,385		55.5%	55.6%	51.4%	59.7%
39	Juab/Millard/Sanpete Co. (54)	31,637	18,248		57.7%	56.5%	51.5%	61.5%
24	Sevier/Piute/Wayne Co. (55)	15,921	8,201		51.5%	52.5%	45.5%	59.4%
	Davis County HD	175,027	100,903		57.7%	55.8%	51.9%	59.5%
36	Bountiful (16)	33,318	19,191		57.6%	55.5%	46.6%	64.1%
11	Clearfield/Hill AFB (11)	37,329	20,300		54.4%	49.2%	41.9%	56.5%
55	Farmington/Centerville (14)	19,034	11,826		62.1%	62.5%	52.2%	71.7%
31	Layton (12)	46,815	27,448		58.6%	53.8%	46.9%	60.6%
45	Syracuse/Kaysville (13)	24,542	13,866		56.5%	57.8%	48.2%	66.8%
54	Woods Cross/North SL (15)	13,989	8,614		61.6%	60.6%	47.5%	72.3%
	Salt Lake Valley HD	658,810	356,877		54.2%	53.4%	51.6%	55.3%
33	Avenues (18)	18,959	9,421		49.7%	54.6%	43.5%	65.2%
27	Cottonwood (28)	33,297	17,498		52.6%	52.7%	44.8%	60.5%
52	Downtown Salt Lake (24)	42,808	26,331		61.5%	59.9%	52.2%	67.2%
61	Foothill/U of U (19)	17,778	11,904		67.0%	68.4%	58.1%	77.1%
2	Glendale (21)	18,642	10,632		57.0%	42.3%	29.5%	56.2%
35	Holladay (27)	35,956	19,873		55.3%	55.5%	47.2%	63.5%
10	Kearns (29)	42,995	21,442		49.9%	48.6%	41.2%	56.1%
1	Magna (20)	15,623	7,318		46.8%	41.5%	31.0%	52.9%
34	Midvale (32)	21,672	11,831		54.6%	55.0%	45.1%	64.5%
47	Millcreek (26)	44,008	23,980		54.5%	58.3%	51.2%	65.1%
8	Murray (31)	24,072	11,622		48.3%	48.2%	38.9%	57.6%
22	Riverton/Draper (39)	41,391	23,949		57.9%	52.0%	45.5%	58.5%
13	Rose Park (17)	22,639	10,586		46.8%	49.8%	39.0%	60.7%
44	Sandy Center (36)	36,106	21,100		58.4%	57.3%	49.8%	64.6%
49	Sandy, Northeast (37)	18,245	10,684		58.6%	58.8%	47.6%	69.2%
56	Sandy, Southeast (38)	20,781	13,767		66.3%	63.1%	53.5%	71.7%
37	South Jordan (35)	20,931	11,294		54.0%	55.6%	46.6%	64.2%
3	South Salt Lake (25)	18,456	7,860		42.6%	42.8%	32.6%	53.8%
12	Taylorsville (30)	27,372	13,900		50.8%	49.7%	41.2%	58.1%
20	West Jordan North (33)	30,391	17,052		56.1%	51.6%	43.6%	59.4%
29	West Jordan/Copperton (34)	26,360	14,472		54.9%	53.7%	45.5%	61.8%
17	West Valley East (23)	35,527	18,023		50.7%	50.9%	41.6%	60.1%
16	West Valley West (22)	44,794	23,194		51.8%	50.9%	43.4%	58.4%
	Southeastern Utah HD	36,828	19,559		53.1%	52.9%	48.9%	56.8%
15	Carbon/Emery Co. (56)	21,451	11,004		51.3%	50.5%	45.7%	55.3%
48	Grand/San Juan Co. (57)	15,377	8,774		57.1%	58.5%	51.5%	65.3%
	Southwest Utah HD	116,150	63,720		54.9%	55.3%	51.1%	59.3%
30	Cedar City (60)	22,401	12,925		57.7%	53.8%	44.4%	62.9%
57	Other Southwest District (61)	15,384	9,630		62.6%	63.5%	53.8%	72.2%
25	Other Washington County (59)	32,503	16,661		51.3%	52.5%	44.7%	60.2%
32	St. George (58)	45,862	24,330		53.1%	54.2%	47.3%	61.0%
59	Summit County HD (51)	24,525	16,052		65.5%	64.2%	59.7%	68.5%
9	Tooele County HD (40)	32,458	16,047		49.4%	48.6%	44.2%	53.1%
26	TriCounty HD (53)	28,023	15,020		53.6%	52.7%	48.5%	56.8%
	Utah County HD	278,832	152,326		54.6%	52.2%	48.9%	55.6%
18	American Fork/Alpine (42)	26,819	14,203		53.0%	51.1%	42.1%	60.0%
60	East Orem (46)	14,955	10,413		69.6%	67.9%	56.9%	77.3%
4	Lehi/Cedar Valley (41)	18,752	8,770		46.8%	44.2%	33.5%	55.4%
5	North Orem (44)	25,965	12,058		46.4%	46.8%	35.9%	58.1%
41	Pleasant Grove/Lindon (43)	24,636	14,853		60.3%	56.7%	47.1%	65.8%
40	Provo/BYU (47)	39,401	23,002		58.4%	56.6%	46.1%	66.5%
43	Provo South (48)	48,138	30,423		63.2%	57.1%	46.4%	67.2%
14	Springville/Spanish Fork (49)	41,036	21,318		52.0%	49.9%	42.5%	57.3%
7	Utah Co. South (50)	17,363	8,145		46.9%	48.2%	37.2%	59.4%
21	West Orem (45)	21,774	10,584		48.6%	51.9%	36.7%	66.7%
46	Wasatch County HD (52)	12,514	7,407		59.2%	58.1%	53.5%	62.5%
	Weber-Morgan HD	148,702	85,682		57.6%	56.2%	52.5%	59.9%
19	Ben Lomond (5)	33,215	17,033		51.3%	51.1%	43.2%	59.0%
38	Downtown Ogden (7)	21,684	11,781		54.3%	56.0%	44.7%	66.7%
58	Morgan/East Weber Co. (6)	24,131	15,881		65.8%	64.0%	55.8%	71.5%
53	Riverdale (10)	15,522	9,445		60.9%	60.2%	50.4%	69.2%
23	Roy/Hooper (9)	27,898	15,213		54.5%	52.0%	44.3%	59.6%
50	South Ogden (8)	26,255	15,532		59.2%	58.9%	49.1%	68.0%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

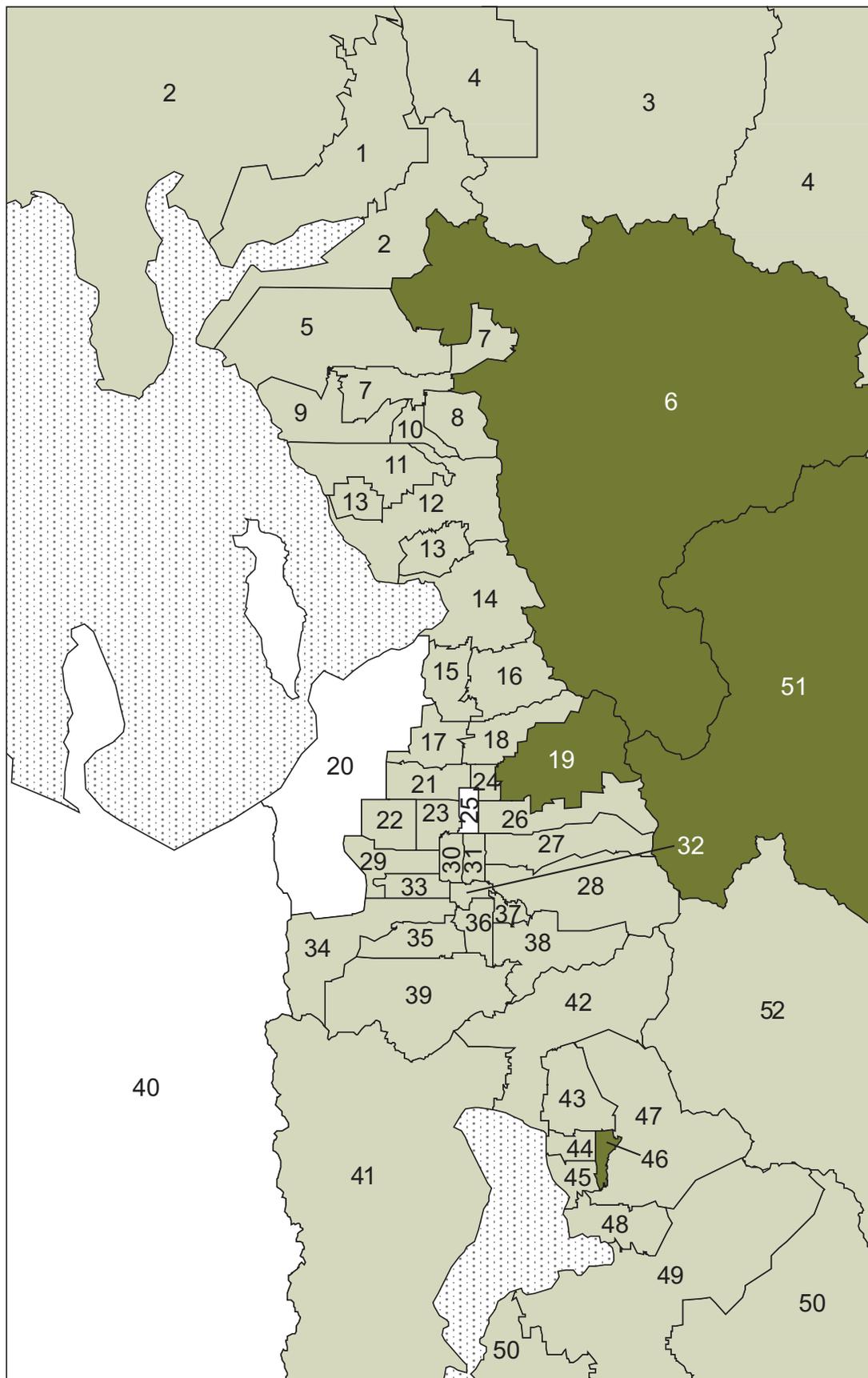
18. RECOMMENDED PHYSICAL ACTIVITY

Figure 18.2: Recommended Physical Activity by Small Area, Utah Adults Aged 18+, 2001, 2003, 2005 (Age-adjusted)



18. RECOMMENDED PHYSICAL ACTIVITY

Figure 18.3: Recommended Physical Activity by Small Area, Wasatch Front Adults, 2001, 2003, 2005 (Age-adjusted)



19. OVERWEIGHT OR OBESE

Measure Definition: “About how much do you weigh without shoes? About how tall are you without shoes?” [BMI \geq 25 calculated from reported height and weight]

Why is overweight and obesity important to public health?

Maintenance of healthy weight is a goal in the effort to reduce the burden of illness and its consequent reduction in quality of life and life expectancy. The relationship of body mass index (BMI, weight (kg)/height (m²)) to health outcomes generally supports that a BMI of less than 25 is the upper limit of the healthy weight range.^{43,44} Overweight (BMI=25 to 29.9) and obese (BMI \geq 30) individuals are at increased risk for diabetes, hypertension, stroke, heart disease, arthritis, asthma, and some cancers.¹⁸

Risk factors for overweight and obesity

Overweight and obesity may be caused by many factors. These factors include inherited, metabolic, behavioral, environmental, cultural, and socioeconomic components. Changes in modifiable and potentially modifiable factors, which include all of the above except the inherited component, may result in changed BMI as a consequence of changes in energy balance. In other words, BMI will increase as a result of increased energy consumption (calories eaten), decreased energy expenditure (calories burned), or a combination of these.

Factors shown to increase energy consumption include: increased marketing and consumption of high calorie and low nutrient foods and beverages; increased availability of high calorie and low nutrient foods and beverages in schools, workplaces, and homes; increased food and beverage portion sizes; and a decrease in meals prepared and eaten at home. Factors shown to decrease energy expenditure include decreased breastfeeding duration (for the mother) and decreased physical activity. Physical activity is negatively influenced by increased daily screen time (television, computers, video games); number of neighborhoods without sidewalks and that are perceived as unsafe; and time spent in automobiles. Also, physical activity is reduced as a result of decreased physical education in public schools and other informal physical activity opportunities.

Overweight and obesity in Utah

On average, during the years 2001–2005, more than half (57.0%) of Utah adults were overweight or obese (914,252 adults). Prevalence was higher in Utah adult males than in Utah adult females. The combined rate has increased steadily from 39.5% in 1989.

After adjusting for age, Tooele County and TriCounty health districts had a higher prevalence of overweight and obesity (63.0% and 63.8% respectively), while Summit County had a lower prevalence (42.9%) when compared to the state rate. There were also several small areas with higher and lower prevalence rates of overweight and obesity relative to the state rate. Those with higher rates include Clearfield/Hill AFB (64.4%), Kearns (64.6%), West Jordan North (66.3%), and West Valley West (65.4%). Those with lower rates include Avenues (38.9%), Bountiful (45.3%), Downtown Salt Lake (48.7%), Holladay (44.8%), Provo/BYU (46.9%), and Sandy Southeast (45.2%). Data sources other than BRFSS suggest that overweight and obesity are not limited to Utah adults. Overweight in Utah third graders increased dramatically from 1993 (boys 6.9%, girls 6.8%) to 2002 (boys 15.1%, girls 9.5%). In 2002, an estimated 25.5% of Utah kindergarten–eighth grade students were overweight or at risk of becoming overweight. The percentage of Utah high school students

Utah Objective: Same as HP2010 objective.

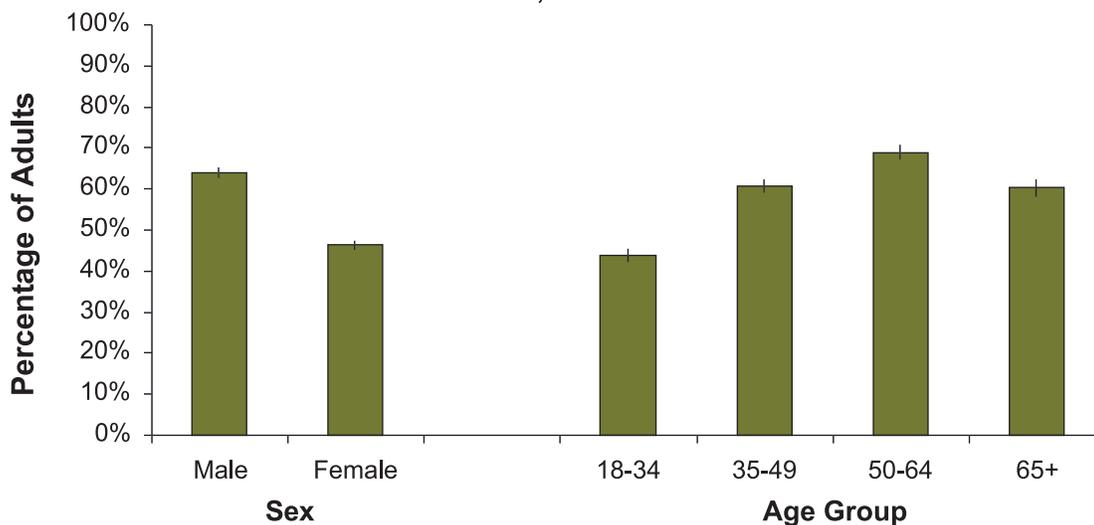
HP2010 Objective (related) 19-1: Increase the proportion of adults aged 20 years and older who are at a healthy weight to 60% (age-adjusted to the U.S. 2000 standard population).

19. OVERWEIGHT OR OBESE

Overweight and obese in Utah (continued)

who are overweight or at risk for overweight is increasing (1999, 5.4% and 9.1%, respectively; 2003, 7.0% and 11.3%, respectively).³⁸

Figure 19.A: Overweight or Obese by Sex and Age, Utah Adults, 2001-2005



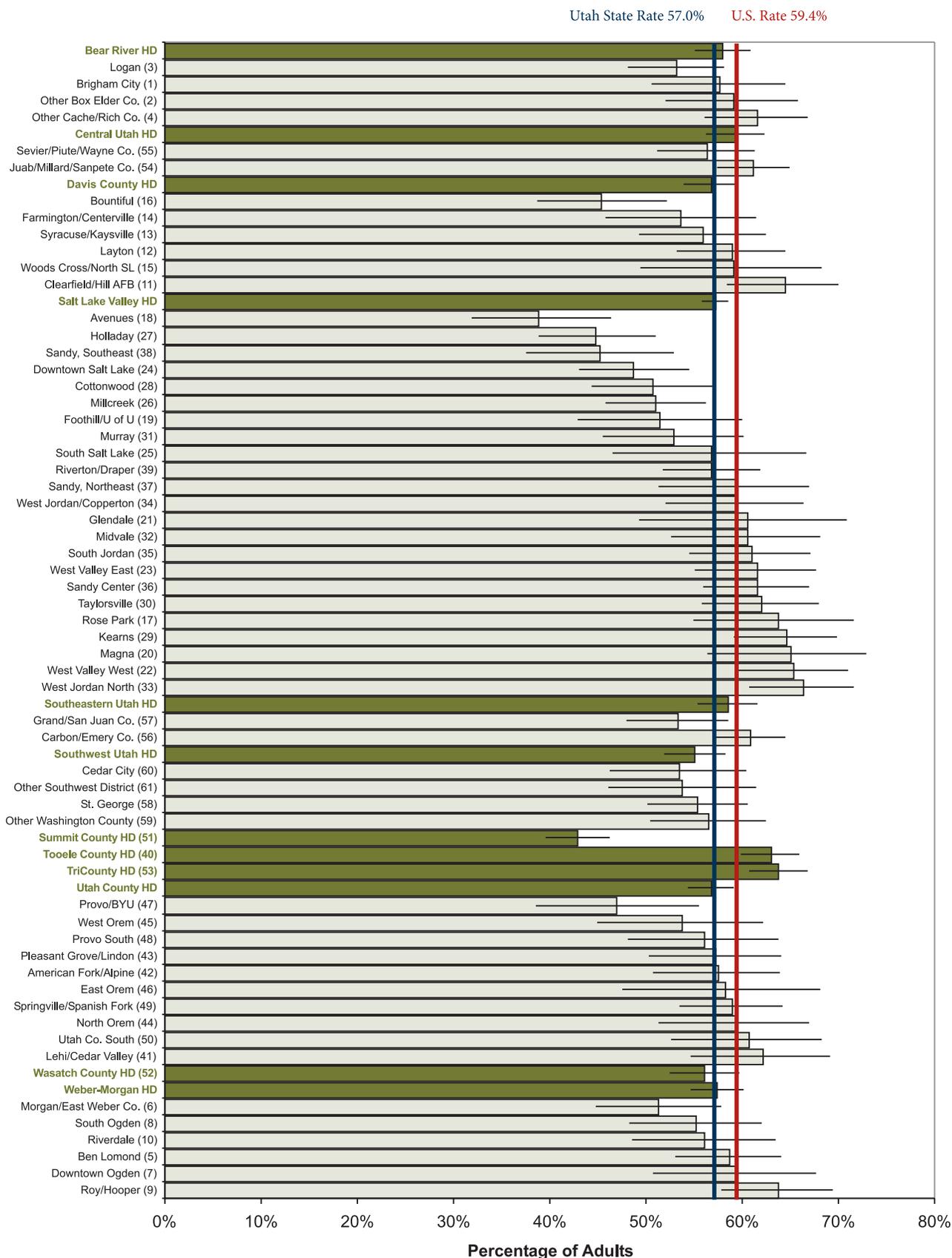
Prevention/Resources

While maintaining or achieving a healthy body weight is a challenge for many, there are clear factors that influence success and there are resources available to individuals, families, and communities to help them achieve success.

The Utah Department of Health (UDOH) Obesity website (<http://health.utah.gov/obesity/>) has comprehensive information, including *Tipping the Scales Toward a Healthier Population: A Report on Overweight and Obesity in Utah* (the report), and *Tipping the Scales Toward a Healthier Population: The Utah Blueprint to Promote Healthy Weight for Children, Youth and Adults* (the blueprint). In the report you will find comprehensive data on obesity prevalence, risk, co-existing conditions, and successes to manage a healthy weight. In the blueprint you will find Utah's objectives and strategies to impact overweight and obesity in seven critical settings: families, schools, communities, work sites, health care, media, and government. Also on this website you will find current overweight and obesity information and resources on the breaking news page. Other resources include the UDOH Gold Medal Mile program (<http://utahwalks.org/gmm/index.php>) and the UDOH Gold Medal Schools program (<http://www.hearthishighway.org/gms/>).

19. OVERWEIGHT OR OBESE

Figure 19.1: Percentage of Adults Who Were Overweight or Obese by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



19. OVERWEIGHT OR OBESE

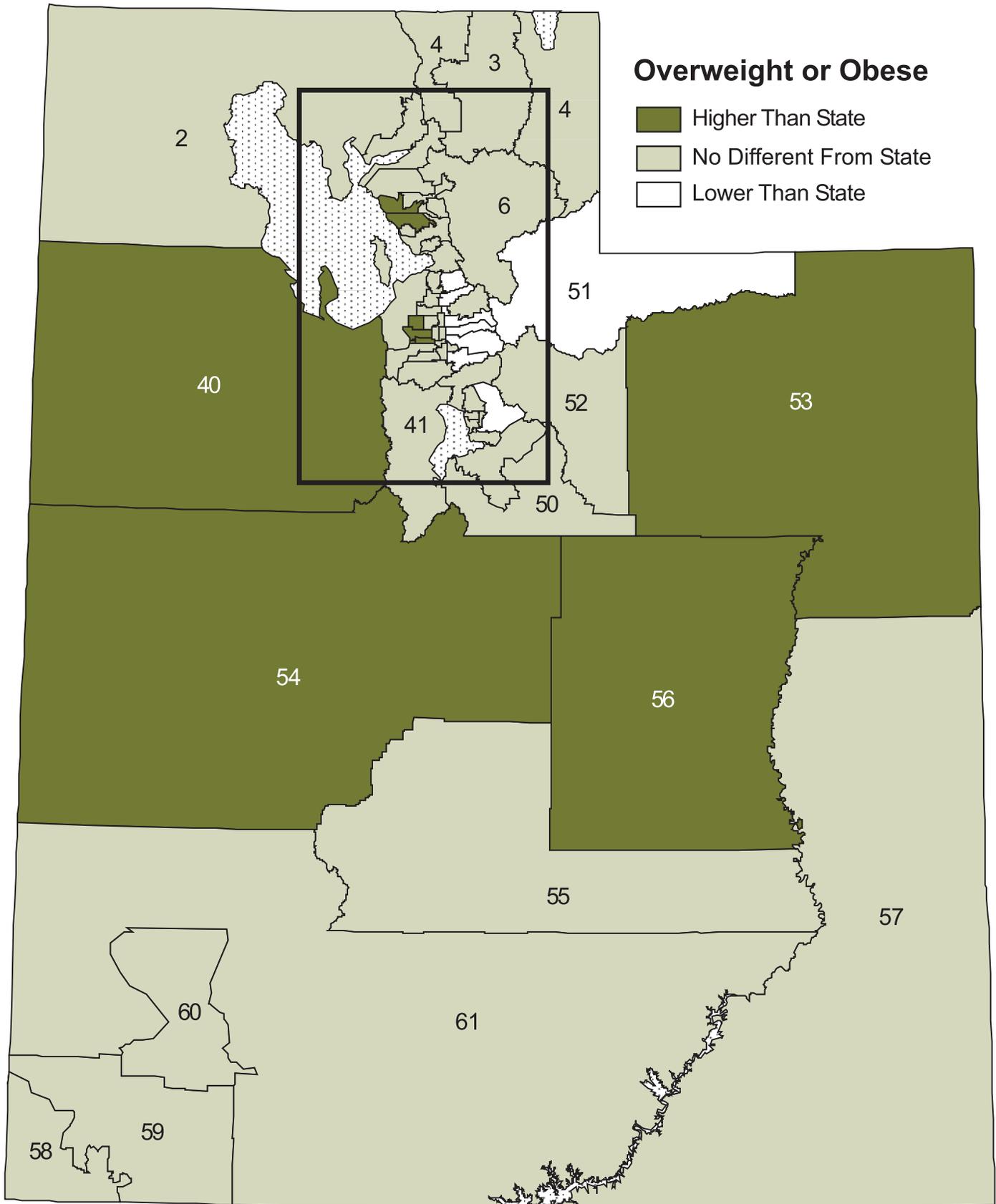
Table 19: Overweight or Obese by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Who Were Overweight/Obese	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	129,875,959	59.6%	59.4%	59.3%	59.6%
	State of Utah	1,657,454	914,252	55.2%	57.0%	56.1%	57.8%
	Bear River HD	98,027	52,739	53.8%	58.0%	55.1%	60.9%
31	Brigham City (1)	14,566	8,671	59.5%	57.7%	50.6%	64.5%
13	Logan (3)	45,904	20,634	45.0%	53.2%	48.2%	58.1%
36	Other Box Elder Co. (2)	14,636	8,643	59.1%	59.1%	52.0%	65.8%
49	Other Cache/Rich Co. (4)	22,921	14,094	61.5%	61.6%	56.1%	66.8%
	Central Utah HD	47,558	27,921	58.7%	59.3%	56.2%	62.4%
47	Juab/Millard/Sanpete Co. (54)	31,637	19,153	60.5%	61.2%	57.4%	64.9%
25	Sevier/Piute/Wayne Co. (55)	15,921	8,830	55.5%	56.3%	51.1%	61.4%
	Davis County HD	175,027	96,492	55.1%	56.8%	53.9%	59.6%
5	Bountiful (16)	33,318	15,659	47.0%	45.3%	38.7%	52.1%
57	Clearfield/Hill AFB (11)	37,329	22,890	61.3%	64.4%	58.4%	70.1%
16	Farmington/Centerville (14)	19,034	10,265	53.9%	53.7%	45.7%	61.4%
35	Layton (12)	46,815	26,095	55.7%	58.9%	53.2%	64.5%
21	Syracuse/Kaysville (13)	24,542	13,638	55.6%	55.9%	49.3%	62.4%
37	Woods Cross/North SL (15)	13,989	7,922	56.6%	59.2%	49.4%	68.3%
	Salt Lake Valley HD	658,810	370,185	56.2%	57.3%	55.9%	58.7%
1	Avenues (18)	18,959	7,267	38.3%	38.9%	31.9%	46.4%
8	Cottonwood (28)	33,297	16,908	50.8%	50.7%	44.4%	57.0%
7	Downtown Salt Lake (24)	42,808	19,893	46.5%	48.7%	43.0%	54.5%
11	Foothill/U of U (19)	17,778	9,056	50.9%	51.5%	42.9%	60.0%
42	Glendale (21)	18,642	10,810	58.0%	60.6%	49.3%	70.8%
3	Holladay (27)	35,956	16,504	45.9%	44.8%	38.8%	51.0%
58	Kearns (29)	42,995	27,366	63.7%	64.6%	59.1%	69.8%
59	Magna (20)	15,623	9,335	59.8%	65.1%	56.3%	72.9%
43	Midvale (32)	21,672	12,412	57.3%	60.7%	52.7%	68.1%
9	Millcreek (26)	44,008	22,127	50.3%	51.1%	45.9%	56.3%
12	Murray (31)	24,072	12,688	52.7%	52.9%	45.5%	60.2%
28	Riverton/Drapers (39)	41,391	23,531	56.9%	56.9%	51.7%	61.9%
54	Rose Park (17)	22,639	14,389	63.6%	63.7%	55.0%	71.6%
50	Sandy Center (36)	36,106	20,598	57.1%	61.6%	56.0%	67.0%
38	Sandy, Northeast (37)	18,245	10,792	59.2%	59.4%	51.3%	67.0%
4	Sandy, Southeast (38)	20,781	9,516	45.8%	45.2%	37.6%	52.9%
46	South Jordan (35)	20,931	12,753	60.9%	61.0%	54.5%	67.1%
27	South Salt Lake (25)	18,456	10,549	57.2%	56.8%	46.5%	66.6%
51	Taylorsville (30)	27,372	16,535	60.4%	62.1%	55.8%	68.0%
61	West Jordan North (33)	30,391	18,891	62.2%	66.3%	60.7%	71.5%
39	West Jordan/Copperton (34)	26,360	15,993	60.7%	59.4%	52.1%	66.3%
48	West Valley East (23)	35,527	22,325	62.8%	61.6%	55.0%	67.7%
60	West Valley West (22)	44,794	29,851	66.6%	65.4%	59.4%	71.0%
	Southeastern Utah HD	36,828	21,695	58.9%	58.6%	55.5%	61.6%
45	Carbon/Emery Co. (56)	21,451	13,156	61.3%	60.9%	57.1%	64.5%
14	Grand/San Juan Co. (57)	15,377	8,345	54.3%	53.4%	48.0%	58.6%
	Southwest Utah HD	116,150	63,104	54.3%	55.0%	51.8%	58.2%
15	Cedar City (60)	22,401	11,160	49.8%	53.4%	46.3%	60.5%
18	Other Southwest District (61)	15,384	8,707	56.6%	53.8%	46.0%	61.4%
26	Other Washington County (59)	32,503	18,380	56.6%	56.5%	50.4%	62.5%
20	St. George (58)	45,862	24,761	54.0%	55.4%	50.2%	60.5%
2	Summit County HD (51)	24,525	10,359	42.2%	42.9%	39.5%	46.3%
53	Tooele County HD (40)	32,458	20,179	62.2%	63.0%	59.9%	65.9%
56	TriCounty HD (53)	28,023	18,013	64.3%	63.8%	60.7%	66.8%
	Utah County HD	278,832	141,228	50.7%	56.7%	54.3%	59.1%
30	American Fork/Alpine (42)	26,819	14,694	54.8%	57.5%	50.8%	63.9%
32	East Orem (46)	14,955	8,832	59.1%	58.2%	47.6%	68.2%
52	Lehi/Cedar Valley (41)	18,752	10,377	55.3%	62.2%	54.7%	69.2%
40	North Orem (44)	25,965	14,730	56.7%	59.4%	51.3%	67.0%
29	Pleasant Grove/Lindon (43)	24,636	13,242	53.8%	57.3%	50.2%	64.0%
6	Provo/BYU (47)	39,401	14,945	37.9%	46.9%	38.5%	55.6%
23	Provo South (48)	48,138	19,467	40.4%	56.1%	48.1%	63.8%
34	Springville/Spanish Fork (49)	41,036	22,960	56.0%	58.9%	53.4%	64.2%
44	Utah Co. South (50)	17,363	10,025	57.7%	60.8%	52.7%	68.3%
17	West Orem (45)	21,774	9,866	45.3%	53.7%	45.0%	62.2%
22	Wasatch County HD (52)	12,514	6,978	55.8%	56.1%	52.4%	59.6%
	Weber-Morgan HD	148,702	84,403	56.8%	57.5%	54.8%	60.3%
33	Ben Lomond (5)	33,215	18,806	56.6%	58.7%	53.0%	64.1%
41	Downtown Ogden (7)	21,684	12,798	59.0%	59.5%	50.8%	67.7%
10	Morgan/East Weber Co. (6)	24,131	12,560	52.1%	51.3%	44.7%	57.9%
24	Riverdale (10)	15,522	8,354	53.8%	56.1%	48.5%	63.5%
55	Roy/Hooper (9)	27,898	17,821	63.9%	63.8%	57.8%	69.4%
19	South Ogden (8)	26,255	14,033	53.5%	55.2%	48.2%	62.0%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

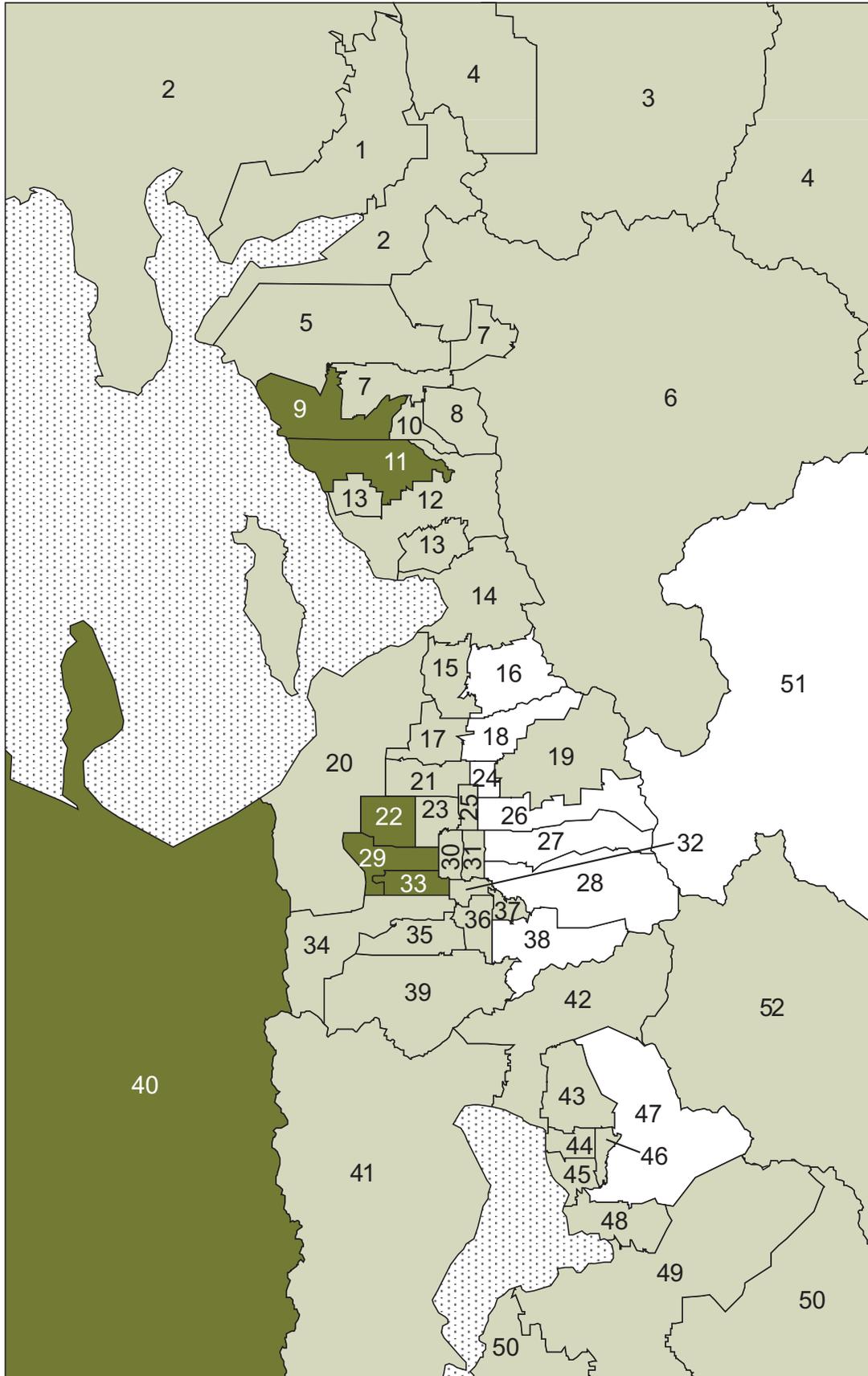
19. OVERWEIGHT OR OBESE

Figure 19.2: Overweight or Obese by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



19. OVERWEIGHT OR OBESE

Figure 19.3: Overweight or Obese by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



20. OBESSE

Measure Definition: *“About how much do you weigh without shoes? About how tall are you without shoes?” [BMI \geq 30 calculated from reported height and weight]*

Why is obesity important to public health?

Maintenance of a healthy weight is a major goal in the effort to reduce the burden of illness and its consequent reduction in quality of life and life expectancy. The relationship of body mass index (BMI, weight (kg)/height (m²)) to health outcomes generally supports that a BMI of less than 25 is the upper limit of the healthy weight range.^{43,44} Obese (BMI \geq 30) individuals are at increased risk for diabetes, hypertension, stroke, heart disease, arthritis, asthma, and some cancers. Nationally an estimated 300,000 deaths per year may be attributable to obesity, and individuals who are obese have a 50% to 100% increased risk of premature death from all causes compared to individuals with a healthy weight.¹⁸

Risk factors for obesity

Obesity is caused by an energy imbalance due to consumption of too many calories and/or expenditure of too few calories. Factors that may contribute include inherited, metabolic, behavioral, environmental, cultural, and socioeconomic components. Changes to potentially modifiable factors, which include all of the above except the inherited component, may result in changed BMI as a consequence of changes in energy balance.

Overweight adolescents have a 70% chance of becoming overweight or obese adults.¹⁸ This rate increases to 80% if one or more parents are overweight or obese.¹⁸ The risk of being an obese adult is 1.3 times higher for those who were overweight at one or two years of age compared with those who were not overweight at that age.⁴⁵ The risk for being an obese adult is 17.5 times higher for those who are overweight at 15 to 17 years of age.⁴⁵

Obesity in Utah

On average, during the years 2001–2005, about one in five Utah adults were obese (19.9%, or 329,005 Utah adults). Prevalence was higher in Utah adult males than in Utah adult females. The combined rate has increased steadily from 10.4% in 1989 to 22.1% in 2005, an increase of 112%.

These trends are similar to those observed nationally. In the U.S., the mean obesity rate has increased from 11.3% in 1989 to 24.4% in 2005, an increase of 116%.

After adjusting for age, Tooele County and TriCounty health districts had a higher prevalence of obesity (25.8% and 25.1% respectively), while Summit County had a lower prevalence of obesity (10.7%) when compared to the state rate. There were also several small areas with higher and lower prevalence rates of obesity relative to the state rate. Those with higher rates included American Fork/Alpine (27.3%), Rose Park (30.4%), Sandy Center (27.1%), and West Jordan North (30.5%). Those with lower rates included Avenues (8.7%), Cottonwood (11.8%), Downtown Salt Lake (13.3%), and Holladay (11.7%).

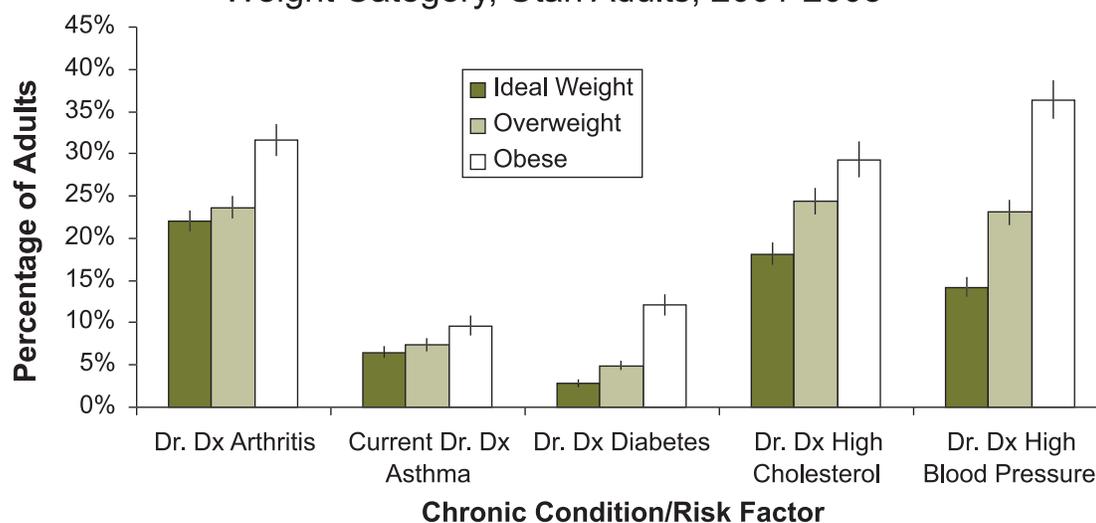
Utah Objective: Same as HP2010 objective.

HP2010 Objective 19-2 (related): Reduce the proportion of adults aged 20 years and older who are obese to 15% (age-adjusted to the U.S. 2000 standard population).

20. OBESE

Obesity in Utah (continued)

Figure 20.A: Chronic Conditions or Risk Factors by Weight Category, Utah Adults, 2001-2005

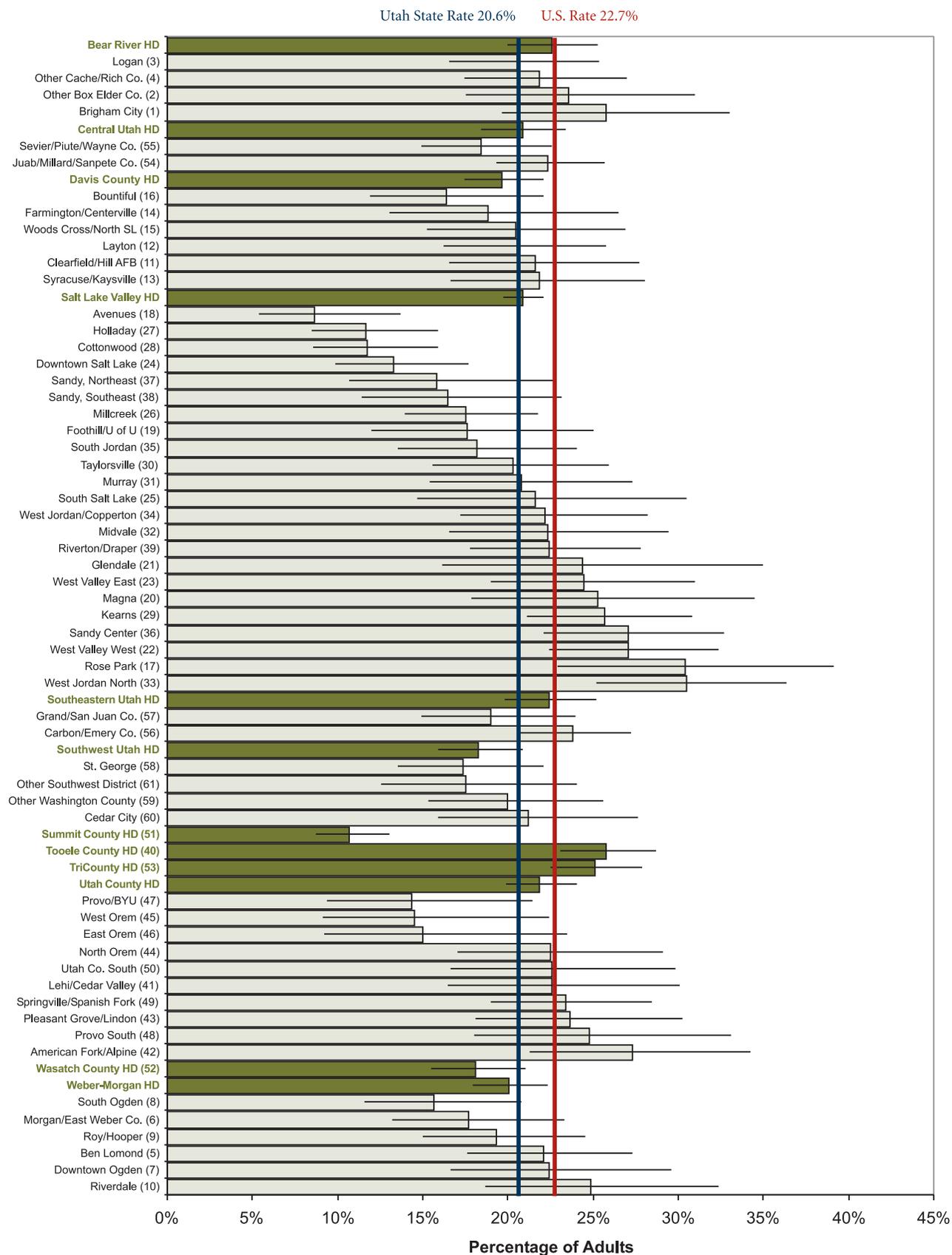


Prevention/Resources

The Utah Department of Health (UDOH) Obesity website (<http://health.utah.gov/obesity/>) has comprehensive information, including *Tipping the Scales Toward a Healthier Population: A Report on Overweight and Obesity in Utah* (the Report), and *Tipping the Scales Toward a Healthier Population: The Utah Blueprint to Promote Healthy Weight for Children, Youth and Adults* (the Blueprint). In the Report you will find comprehensive data on obesity prevalence, risk, co-existing conditions, and successes to manage a healthy weight. In the Blueprint you will find Utah's objectives and strategies to impact overweight and obesity in seven critical settings: families, schools, communities, work sites, health care, media, and government. Also on this website you will find current overweight and obesity information and resources on the breaking news page. Other resources include the UDOH Gold Medal Mile program (<http://utahwalks.org/gmm/index.php>) and the UDOH Gold Medal Schools program (<http://www.hearthighway.org/gms/>)

20. OBESE

Figure 20.1: Percentage of Adults Who Were Obese by Local Health District and Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



20. OBESE

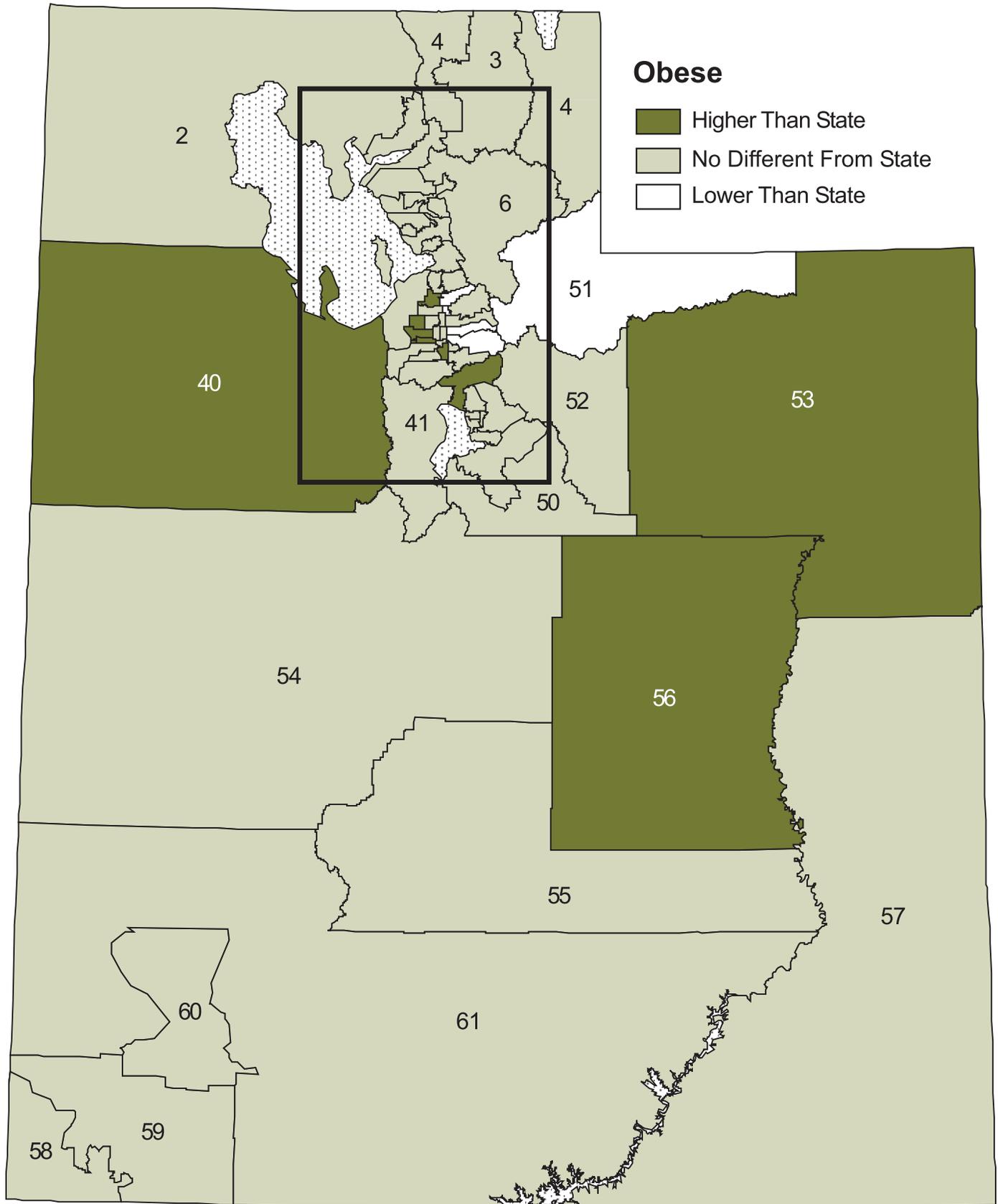
Table 20: Obese by Health District, Small Area, Utah, and U.S., 2001-2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Who Were Obese	Crude Rate	Age-adjusted Rate	95% Confidence Interval	
						Lower	Upper
	U.S.	217,803,051	49,789,777	22.9%	22.7%	22.6%	22.9%
	State of Utah	1,657,454	329,005	19.9%	20.6%	19.9%	21.3%
	Bear River HD	98,027	20,213	20.6%	22.5%	20.0%	25.3%
55	Brigham City (1)	14,566	3,905	26.8%	25.8%	19.7%	33.0%
28	Logan (3)	45,904	7,478	16.3%	20.6%	16.5%	25.3%
45	Other Box Elder Co. (2)	14,636	3,391	23.2%	23.6%	17.5%	31.0%
34	Other Cache/Rich Co. (4)	22,921	5,038	22.0%	21.8%	17.4%	27.0%
	Central Utah HD	47,558	9,626	20.2%	20.8%	18.5%	23.4%
38	Juab/Millard/Sanpete Co. (54)	31,637	6,815	21.5%	22.3%	19.3%	25.7%
20	Sevier/Piute/Wayne Co. (55)	15,921	2,855	17.9%	18.4%	14.9%	22.6%
	Davis County HD	175,027	32,520	18.6%	19.6%	17.4%	22.1%
11	Bountiful (16)	33,318	5,454	16.4%	16.4%	11.9%	22.1%
32	Clearfield/Hill AFB (11)	37,329	7,779	20.8%	21.6%	16.6%	27.7%
21	Farmington/Centerville (14)	19,034	3,736	19.6%	18.9%	13.0%	26.5%
27	Layton (12)	46,815	8,272	17.7%	20.6%	16.2%	25.8%
33	Syracuse/Kaysville (13)	24,542	5,038	20.5%	21.8%	16.7%	28.0%
26	Woods Cross/North SL (15)	13,989	2,186	15.6%	20.4%	15.2%	26.9%
	Salt Lake Valley HD	658,810	134,331	20.4%	20.9%	19.8%	22.1%
1	Avenues (18)	18,959	1,653	8.7%	8.7%	5.4%	13.7%
4	Cottonwood (28)	33,297	4,002	12.0%	11.8%	8.6%	15.9%
5	Downtown Salt Lake (24)	42,808	5,415	12.7%	13.3%	9.9%	17.7%
16	Foothill/U of U (19)	17,778	3,013	17.0%	17.6%	12.0%	25.0%
48	Glendale (21)	18,642	4,634	24.9%	24.4%	16.2%	35.0%
3	Holladay (27)	35,956	4,570	12.7%	11.7%	8.5%	15.9%
54	Kearns (29)	42,995	10,581	24.6%	25.7%	21.1%	30.8%
53	Magna (20)	15,623	3,759	24.1%	25.3%	17.9%	34.4%
37	Midvale (32)	21,672	4,577	21.1%	22.3%	16.5%	29.4%
14	Millcreek (26)	44,008	7,534	17.1%	17.5%	13.9%	21.8%
29	Murray (31)	24,072	4,896	20.3%	20.7%	15.4%	27.3%
39	Riverton/Draper (39)	41,391	8,796	21.3%	22.4%	17.8%	27.8%
60	Rose Park (17)	22,639	6,740	29.8%	30.4%	22.9%	39.1%
57	Sandy Center (36)	36,106	8,554	23.7%	27.1%	22.1%	32.7%
10	Sandy, Northeast (37)	18,245	2,810	15.4%	15.8%	10.7%	22.8%
12	Sandy, Southeast (38)	20,781	3,387	16.3%	16.5%	11.4%	23.2%
19	South Jordan (35)	20,931	4,172	19.9%	18.2%	13.5%	24.0%
31	South Salt Lake (25)	18,456	4,097	22.2%	21.6%	14.7%	30.5%
25	Taylorsville (30)	27,372	5,639	20.6%	20.3%	15.6%	26.0%
61	West Jordan North (33)	30,391	8,482	27.9%	30.5%	25.2%	36.3%
36	West Jordan/Copperton (34)	26,360	5,973	22.7%	22.2%	17.2%	28.2%
49	West Valley East (23)	35,527	8,807	24.8%	24.5%	19.0%	31.0%
58	West Valley West (22)	44,794	12,542	28.0%	27.1%	22.4%	32.4%
	Southeastern Utah HD	36,828	8,330	22.6%	22.4%	19.8%	25.2%
47	Carbon/Emery Co. (56)	21,451	5,174	24.1%	23.8%	20.7%	27.2%
22	Grand/San Juan Co. (57)	15,377	3,035	19.7%	19.0%	14.9%	24.0%
	Southwest Utah HD	116,150	20,977	18.1%	18.2%	15.9%	20.8%
30	Cedar City (60)	22,401	3,882	17.3%	21.2%	15.9%	27.6%
15	Other Southwest District (61)	15,384	2,980	19.4%	17.6%	12.5%	24.0%
24	Other Washington County (59)	32,503	6,582	20.3%	20.0%	15.4%	25.6%
13	St. George (58)	45,862	7,521	16.4%	17.4%	13.5%	22.1%
2	Summit County HD (51)	24,525	2,602	10.6%	10.7%	8.7%	13.0%
56	Tooele County HD (40)	32,458	8,407	25.9%	25.8%	23.1%	28.7%
52	TriCounty HD (53)	28,023	7,163	25.6%	25.1%	22.5%	27.9%
	Utah County HD	278,832	51,974	18.6%	21.8%	19.9%	24.0%
59	American Fork/Alpine (42)	26,819	6,968	26.0%	27.3%	21.3%	34.2%
8	East Orem (46)	14,955	1,937	13.0%	15.0%	9.3%	23.4%
43	Lehi/Cedar Valley (41)	18,752	3,692	19.7%	22.6%	16.5%	30.1%
41	North Orem (44)	25,965	5,209	20.1%	22.5%	17.1%	29.1%
46	Pleasant Grove/Lindon (43)	24,636	5,223	21.2%	23.7%	18.1%	30.3%
6	Provo/BYU (47)	39,401	4,669	11.9%	14.4%	9.3%	21.4%
50	Provo South (48)	48,138	8,183	17.0%	24.8%	18.0%	33.1%
44	Springville/Spanish Fork (49)	41,036	8,769	21.4%	23.4%	19.0%	28.5%
42	Utah Co. South (50)	17,363	3,815	22.0%	22.5%	16.6%	29.8%
7	West Orem (45)	21,774	2,474	11.4%	14.6%	9.1%	22.4%
18	Wasatch County HD (52)	12,514	2,304	18.4%	18.1%	15.5%	21.1%
	Weber-Morgan HD	148,702	30,038	20.2%	20.2%	18.1%	22.5%
35	Ben Lomond (5)	33,215	7,281	21.9%	22.1%	17.6%	27.3%
40	Downtown Ogden (7)	21,684	4,762	22.0%	22.4%	16.6%	29.6%
17	Morgan/East Weber Co. (6)	24,131	4,479	18.6%	17.7%	13.2%	23.3%
51	Riverdale (10)	15,522	3,798	24.5%	24.9%	18.7%	32.3%
23	Roy/Hooper (9)	27,898	5,401	19.4%	19.3%	15.0%	24.6%
9	South Ogden (8)	26,255	4,293	16.4%	15.7%	11.6%	20.8%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

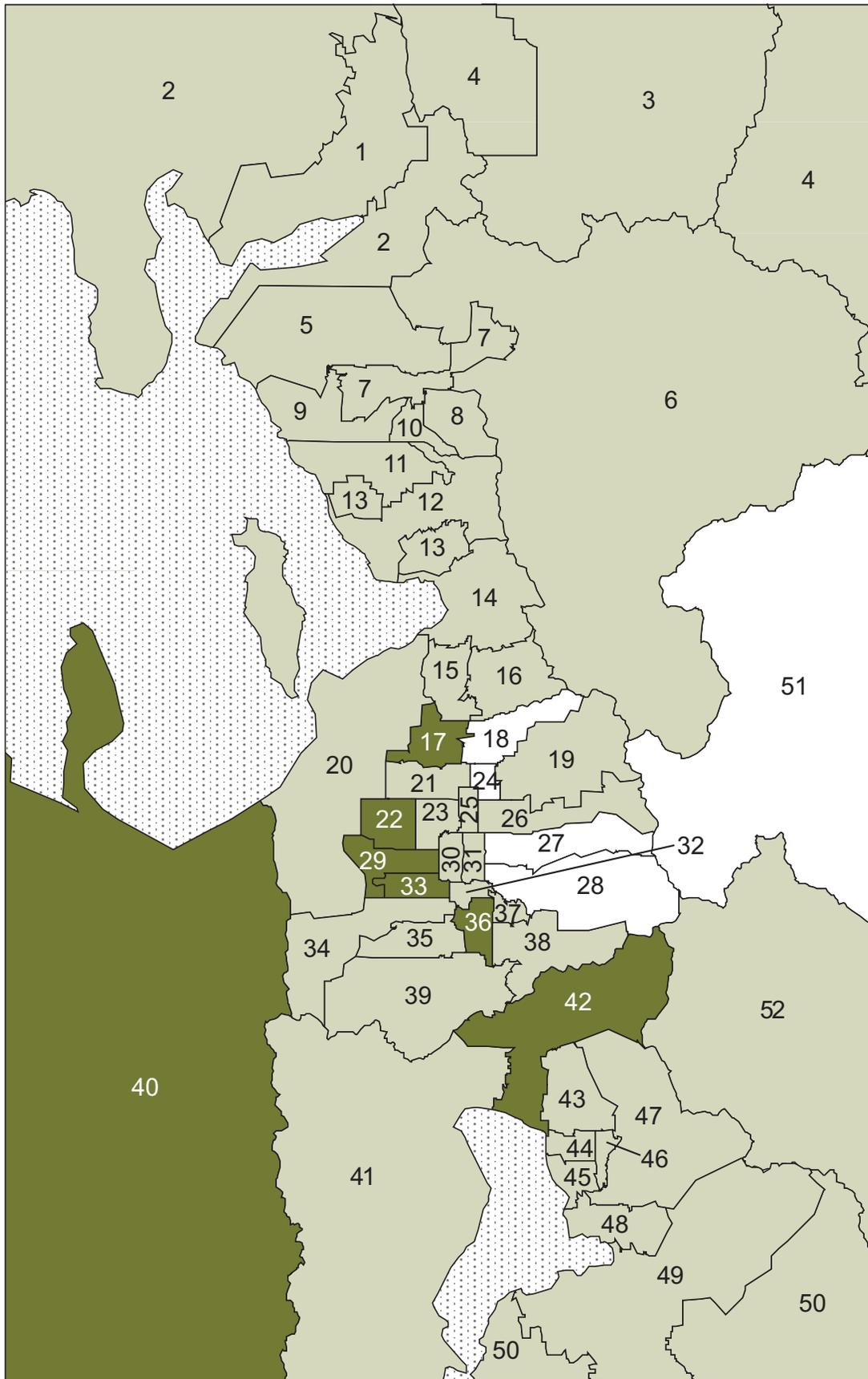
20. OBESSE

Figure 20.2: Obese by Small Area, Utah Adults Aged 18+, 2001–2005 (Age-adjusted)



20. OBESE

Figure 20.3: Obese by Small Area, Wasatch Front Adults Aged 18+, 2001–2005 (Age-adjusted)



21. TWO OR MORE FRUITS PER DAY

Measure Definition: “How often do you eat fruit? How often do you drink juices such as orange, grapefruit, or tomato juice?” [Eat at least two fruits per day]

Why is eating two or more fruits per day important to public health?

The 2005 Dietary Guidelines for Americans recommends a person eat 5 to 13 servings of fruits and vegetables each day, depending on their caloric level, for better health.¹⁷ Two cups of fruit per day are recommended for a reference 2,000-calorie intake. Fruits provide a variety of micronutrients and phytochemicals that help the body fight off infection and aid in cell reproduction, and other cell functions. The guidelines recommend that whole fruits, such as fresh, canned, frozen, or dried fruits be consumed rather than fruit juice to ensure adequate fiber intake. Fruits are good sources of nutrients such as vitamin A (carotenoids), which is found in orange fruits; vitamin C, which is found in citrus fruits, kiwi fruit, strawberries, guava, papaya, and cantaloupe; folate, which is found in oranges; and potassium, which is found in bananas, oranges, cantaloupe, honeydew melons, and many dried fruits.¹⁷

Comparisons between people who include few fruits and vegetables in their diet, and people who include generous amounts of fruits and vegetables as part of a healthful diet show that a higher intake of fruits and vegetables is likely to reduce the risk for chronic diseases, type 2 diabetes, and cancers in specific sites (oral cavity and pharynx, larynx, lung, esophagus, stomach, and colon-rectum).¹⁷ Also, diets rich in foods containing fiber, like fruits, may reduce the risk of coronary heart disease by helping to remove cholesterol from the bloodstream and reduce blood lipid levels.^{17,46}

Risk factors for fewer than two fruits per day

Only 20% of Americans eat five or more servings of vegetables and fruits a day. Teen boys, men 45 and older, and women 55 and older are the heaviest fruit and vegetable consumers. Older people consume fruits and vegetables more frequently, partially because they consume more meals at home, and men and teen boys consume larger portions. Among families with children, only 13% eat at least five or more servings. It appears that both parents and children drive this non-achievement; all members of the family eat about 10% fewer fruits and vegetables when the mother works outside the home.⁴⁷

Two or more fruits per day in Utah

Rates of people who eat at least two fruits a day have remained relatively unchanged over the past decade. Between 2001–2005, the age-adjusted percentage of Utah adults who ate at least two fruits per day was 31.2%. The rate varied by local health district, from a low of 25.3% to a high of 34.5%. None of the local health districts had an age-adjusted rate that was higher than the state rate, but four had rates lower than the state rate. Summit County and Tooele County health districts had the highest and lowest rates in the state, respectively. Seven of Utah’s 61 small areas had age-adjusted rates that were significantly lower than the state rate, and three small areas had rates that were significantly higher than the state rate. Overall, Utah’s rate was lower than the U.S. rate.

Women were significantly more likely to eat at least two fruits per day ($p < 0.001$) across all age groups. Consumption of at least two fruits per day also increased with age for people 35 years and older.

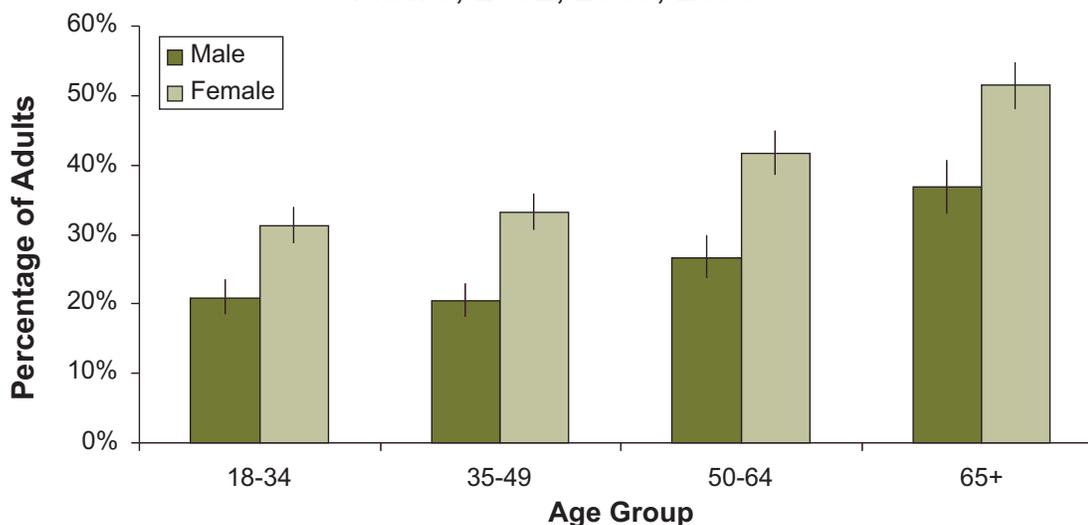
Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 19-5: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit to 75% (age-adjusted to the U.S. 2000 standard population).

21. TWO OR MORE FRUITS PER DAY

Two or more fruits per day in Utah (continued)

Figure 21.A: 2+ Fruits per Day by Age and Sex, Utah Adults, 2002, 2003, 2005

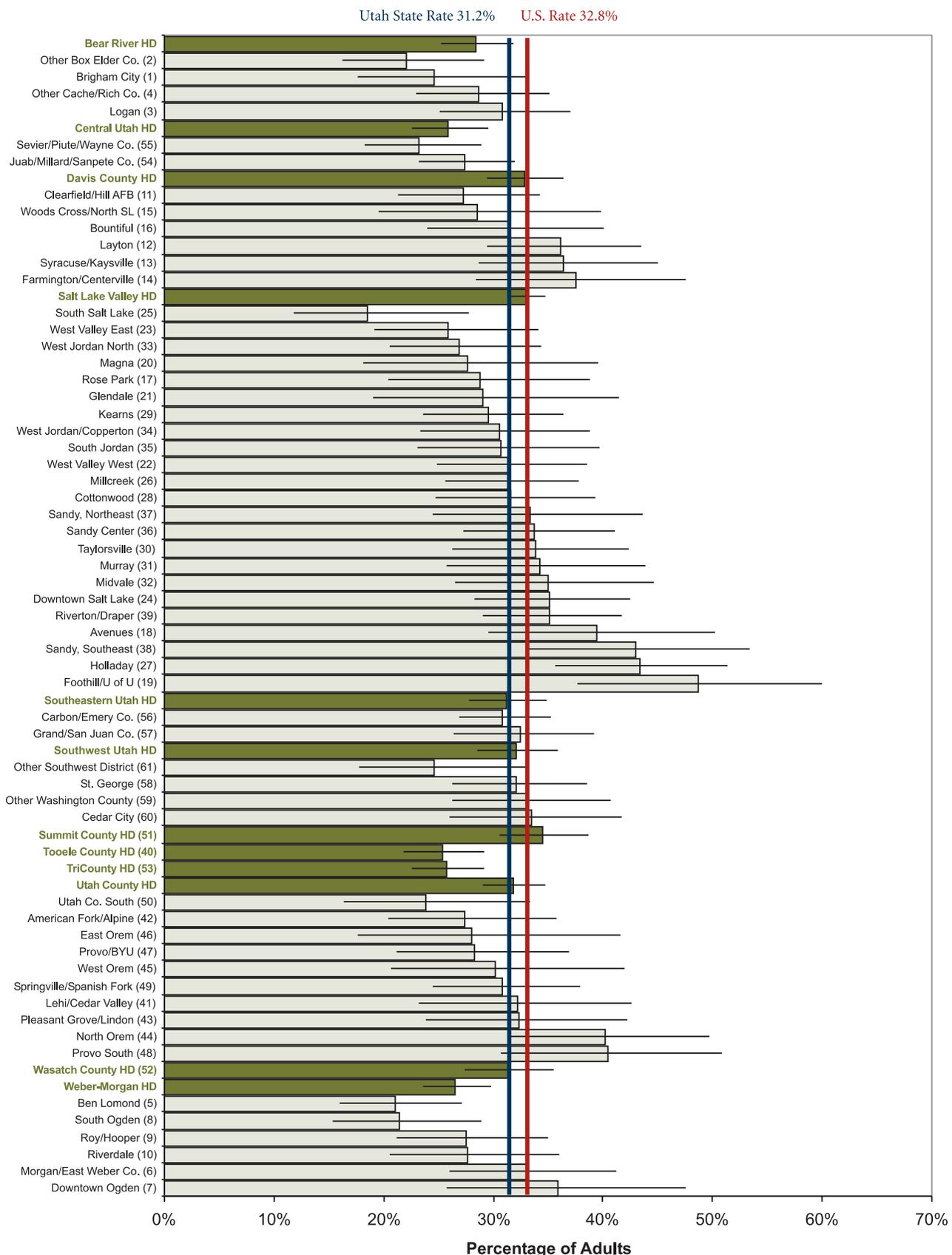


Prevention/Resources

The Heart Disease and Stroke Prevention Program at the Utah Department of Health works with various public and private partners promoting the 5 A Day message in schools, communities, health care settings, and families. The message to increase intake of vegetables is incorporated into the Gold Medal Schools Program, 5 A Day school newsletter, Grocery Store Tours for third grade students, and the website www.hearthishighway.org. The Check Your Health Campaign provides 5 A Day messages intended for families at www.checkyourhealth.org. Additional nutrition information can be found at www.mypyramid.gov.

21. TWO OR MORE FRUITS PER DAY

Figure 21.1: Percentage of Adults Who Reported Two or More Fruits per Day by Local Health District and Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



21. TWO OR MORE FRUITS PER DAY

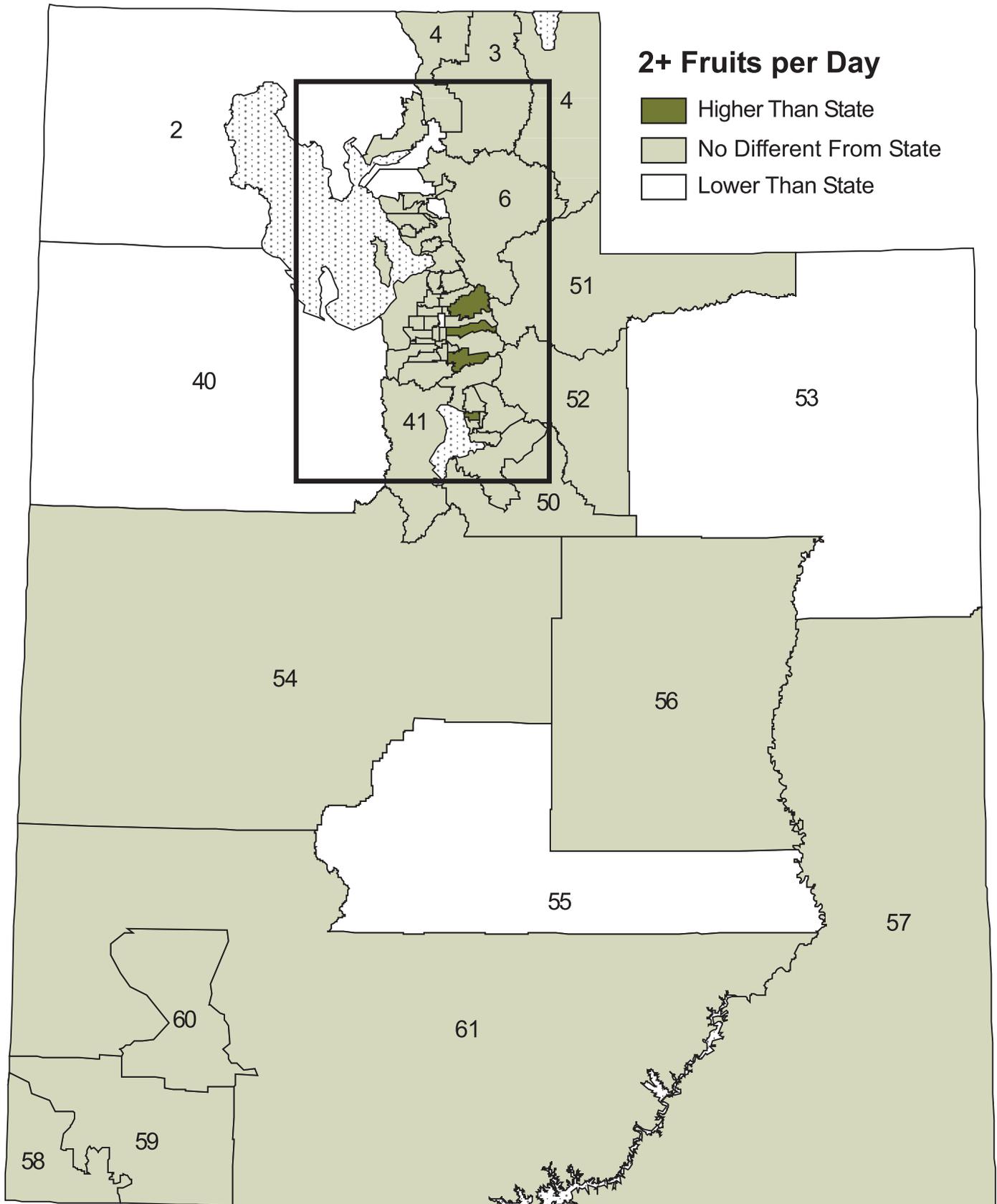
Table 21: 2+ Fruits per Day by Health District, Small Area, Utah, and U.S., 2002, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Reporting 2+ Fruits per Day		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
							Lower	Upper
	U.S.	217,803,051	71,395,840		32.8%	32.8%	32.6%	33.0%
	State of Utah	1,657,454	499,059		30.1%	31.2%	30.2%	32.3%
	Bear River HD	98,027	26,644		27.2%	28.4%	25.2%	31.9%
7	Brigham City (1)	14,566	3,330		22.9%	24.6%	17.6%	33.2%
29	Logan (3)	45,904	13,454		29.3%	30.8%	25.2%	37.1%
4	Other Box Elder Co. (2)	14,636	3,284		22.4%	22.0%	16.3%	29.1%
22	Other Cache/Rich Co. (4)	22,921	6,583		28.7%	28.6%	22.9%	35.1%
	Central Utah HD	47,558	12,237		25.7%	25.9%	22.6%	29.5%
14	Juab/Millard/Sanpete Co. (54)	31,637	8,498		26.9%	27.4%	23.2%	32.0%
5	Sevier/Piute/Wayne Co. (55)	15,921	3,780		23.7%	23.2%	18.3%	28.9%
	Davis County HD	175,027	55,134		31.5%	32.8%	29.4%	36.3%
35	Bountiful (16)	33,318	9,646		29.0%	31.5%	24.0%	40.1%
13	Clearfield/Hill AFB (11)	37,329	9,168		24.6%	27.3%	21.3%	34.2%
55	Farmington/Centerville (14)	19,034	7,496		39.4%	37.5%	28.4%	47.6%
53	Layton (12)	46,815	16,320		34.9%	36.1%	29.4%	43.5%
54	Syracuse/Kaysville (13)	24,542	8,558		34.9%	36.4%	28.6%	45.0%
21	Woods Cross/North SL (15)	13,989	4,044		28.9%	28.6%	19.5%	39.8%
	Salt Lake Valley HD	658,810	210,095		31.9%	32.9%	31.3%	34.7%
56	Avenues (18)	18,959	8,082		42.6%	39.4%	29.6%	50.3%
36	Cottonwood (28)	33,297	10,758		32.3%	31.6%	24.8%	39.3%
50	Downtown Salt Lake (24)	42,808	14,157		33.1%	35.1%	28.3%	42.5%
61	Foothill/U of U (19)	17,778	8,738		49.2%	48.8%	37.7%	60.0%
24	Glendale (21)	18,642	5,891		31.6%	29.0%	19.0%	41.5%
60	Holladay (27)	35,956	16,029		44.6%	43.3%	35.7%	51.4%
25	Kearns (29)	42,995	10,826		25.2%	29.6%	23.6%	36.4%
18	Magna (20)	15,623	4,039		25.9%	27.6%	18.2%	39.6%
49	Midvale (32)	21,672	7,290		33.6%	35.0%	26.5%	44.6%
34	Millcreek (26)	44,008	13,959		31.7%	31.4%	25.6%	37.7%
47	Murray (31)	24,072	8,115		33.7%	34.3%	25.8%	43.9%
51	Riverton/Draper (39)	41,391	13,883		33.5%	35.1%	29.0%	41.8%
23	Rose Park (17)	22,639	7,120		31.5%	28.8%	20.5%	38.9%
45	Sandy Center (36)	36,106	11,742		32.5%	33.8%	27.2%	41.0%
43	Sandy, Northeast (37)	18,245	6,240		34.2%	33.4%	24.5%	43.7%
59	Sandy, Southeast (38)	20,781	8,849		42.6%	43.0%	33.2%	53.5%
28	South Jordan (35)	20,931	6,302		30.1%	30.7%	23.1%	39.7%
1	South Salt Lake (25)	18,456	3,883		21.0%	18.5%	11.8%	27.8%
46	Taylorsville (30)	27,372	8,094		29.6%	33.8%	26.2%	42.3%
12	West Jordan North (33)	30,391	7,440		24.5%	26.9%	20.5%	34.4%
27	West Jordan/Copperton (34)	26,360	6,877		26.1%	30.5%	23.4%	38.8%
11	West Valley East (23)	35,527	8,949		25.2%	25.9%	19.1%	34.1%
33	West Valley West (22)	44,794	13,752		30.7%	31.3%	24.9%	38.6%
	Southeastern Utah HD	36,828	11,251		30.6%	31.3%	27.9%	35.0%
31	Carbon/Emery Co. (56)	21,451	6,459		30.1%	30.9%	26.8%	35.2%
40	Grand/San Juan Co. (57)	15,377	4,824		31.4%	32.5%	26.4%	39.2%
	Southwest Utah HD	116,150	38,306		33.0%	32.1%	28.5%	35.9%
44	Cedar City (60)	22,401	7,309		32.6%	33.4%	26.0%	41.8%
8	Other Southwest District (61)	15,384	4,617		30.0%	24.6%	17.7%	33.0%
41	Other Washington County (59)	32,503	10,209		31.4%	31.4%	26.3%	40.7%
37	St. George (58)	45,862	16,217		35.4%	32.1%	26.3%	38.6%
48	Summit County HD (51)	24,525	8,142		33.2%	34.5%	30.6%	38.7%
9	Tooele County HD (40)	32,458	7,761		23.9%	25.3%	21.9%	29.1%
10	TriCounty HD (53)	28,023	7,070		25.2%	25.7%	22.5%	29.2%
	Utah County HD	278,832	79,885		28.7%	31.7%	29.0%	34.7%
15	American Fork/Alpine (42)	26,819	7,386		27.5%	27.4%	20.4%	35.8%
19	East Orem (46)	14,955	2,740		18.3%	28.1%	17.6%	41.6%
38	Lehi/Cedar Valley (41)	18,752	5,429		29.0%	32.2%	23.2%	42.6%
57	North Orem (44)	25,965	8,844		34.1%	40.2%	31.4%	49.7%
39	Pleasant Grove/Lindon (43)	24,636	7,578		30.8%	32.3%	23.8%	42.2%
20	Provo/BYU (47)	39,401	11,986		30.4%	28.3%	21.1%	36.8%
58	Provo South (48)	48,138	15,245		31.7%	40.4%	30.7%	50.9%
30	Springville/Spanish Fork (49)	41,036	11,966		29.2%	30.8%	24.5%	38.0%
6	Utah Co. South (50)	17,363	3,424		19.7%	23.8%	16.4%	33.4%
26	West Orem (45)	21,774	6,195		28.5%	30.2%	20.6%	41.9%
32	Wasatch County HD (52)	12,514	3,799		30.4%	31.3%	27.3%	35.5%
	Weber-Morgan HD	148,702	38,588		26.0%	26.5%	23.5%	29.7%
2	Ben Lomond (5)	33,215	6,879		20.7%	21.0%	15.9%	27.2%
52	Downtown Ogden (7)	21,684	7,837		36.1%	35.9%	25.8%	47.6%
42	Morgan/East Weber Co. (6)	24,131	7,845		32.5%	33.1%	26.0%	41.2%
17	Riverdale (10)	15,522	4,484		28.9%	27.6%	20.5%	36.0%
16	Roy/Hooper (9)	27,898	6,757		24.2%	27.5%	21.2%	35.0%
3	South Ogden (8)	26,255	5,563		21.2%	21.4%	15.4%	28.9%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

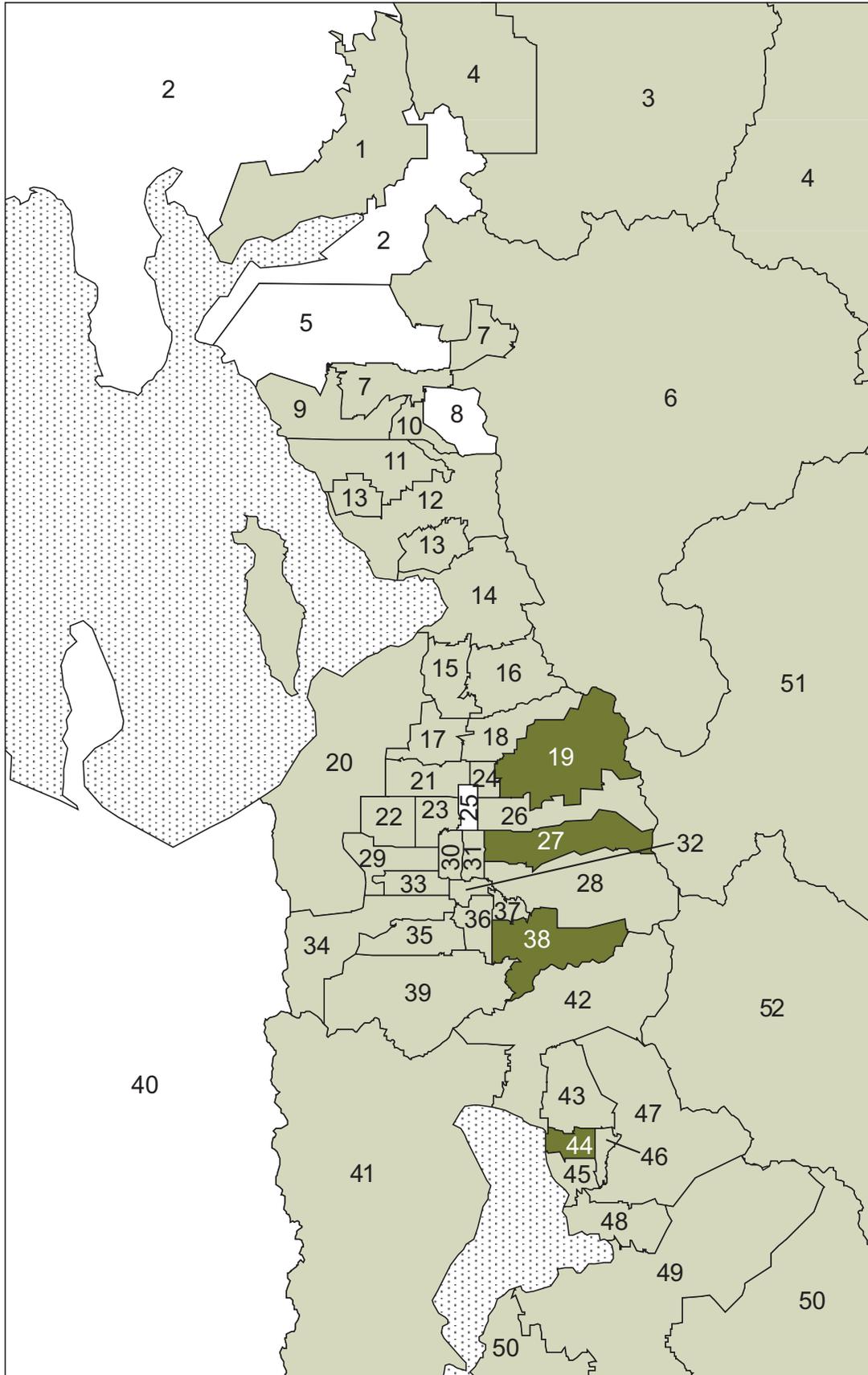
21. TWO OR MORE FRUITS PER DAY

Figure 21.2: 2+ Fruits per Day by Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



21. TWO OR MORE FRUITS PER DAY

Figure 21.3: 2+ Fruits per Day by Small Area, Wasatch Front Adults 18+, 2002, 2003, 2005 (Age-adjusted)



22. THREE OR MORE VEGETABLES PER DAY

Measure Definition: “How often do you eat vegetables including carrots, potatoes, green salad, or other vegetables?” [*Eat at least three vegetables per day*]

Why is three or more vegetables per day important to public health?

The 2005 Dietary Guidelines for Americans recommends a person eat 5 to 13 servings of fruits and vegetables each day, depending on their caloric level, for better health.¹⁷ For example, 2½ cups of vegetables per day are recommended for a reference 2,000-calorie intake. Vegetables provide a variety of micronutrients and phytochemicals that help the body fight off infection and aid in cell reproduction and other cell functions. The guidelines recommend that a variety of vegetables be consumed including vegetables from each of the five subgroups: dark green vegetables, orange vegetables, legumes (dry beans), starchy vegetables, and other vegetables.¹⁷

Comparisons between people who include few fruits and vegetables in their diet and people who include generous amounts of fruits and vegetables as part of a healthful diet show that people with a higher intake of fruits and vegetables are likely to have reduced risk for chronic diseases, type 2 diabetes, and cancers (oral cavity and pharynx, larynx, lung, esophagus, stomach, and colon-rectum).¹⁷ Additionally, diets rich in foods containing fiber, like vegetables, may reduce the risk of coronary heart disease by helping to remove cholesterol from the bloodstream thus reducing blood lipid levels.^{17,46}

Risk factors for fewer than three vegetables per day

Only 20% of Americans eat five or more servings of vegetables and fruits a day. Teen boys, men 45 and older, and women 55 and older consume more fruits and vegetables daily. Older people consume fruits and vegetables more frequently, partially because they consume more meals at home, and men and teen boys simply consume a large volume of food by consuming larger portions. Of families with children, only 13% eat at least five or more servings. It appears that both parents and children contribute to this non-achievement. Additionally, all family members eat about 10% fewer fruits and vegetables when the mother works outside the home.⁴⁷

Three or more vegetables per day in Utah

Rates of people who eat at least three vegetables a day have remained relatively unchanged over the past decade. Data collected between 2001–2005 show that the age-adjusted percentage of Utah adults who ate at least three vegetables a day was 22.2%. The rate varied by local health district, from a low of 9.7% to a high of 32.8%. Two local health districts had a rate that was significantly higher than the state rate. Summit County and Tooele County had the highest and lowest rates in the state, respectively. Nine of Utah’s 61 small areas had age-adjusted rates that were significantly lower than the state rate, and two small areas had rates that were significantly higher than the state rate. Overall, Utah’s rate was significantly lower than the U.S. rate.

Women were significantly more likely to eat at least three vegetables per day ($p < 0.001$) for all age groups. Consumption of at least three vegetables per day also increased with age.

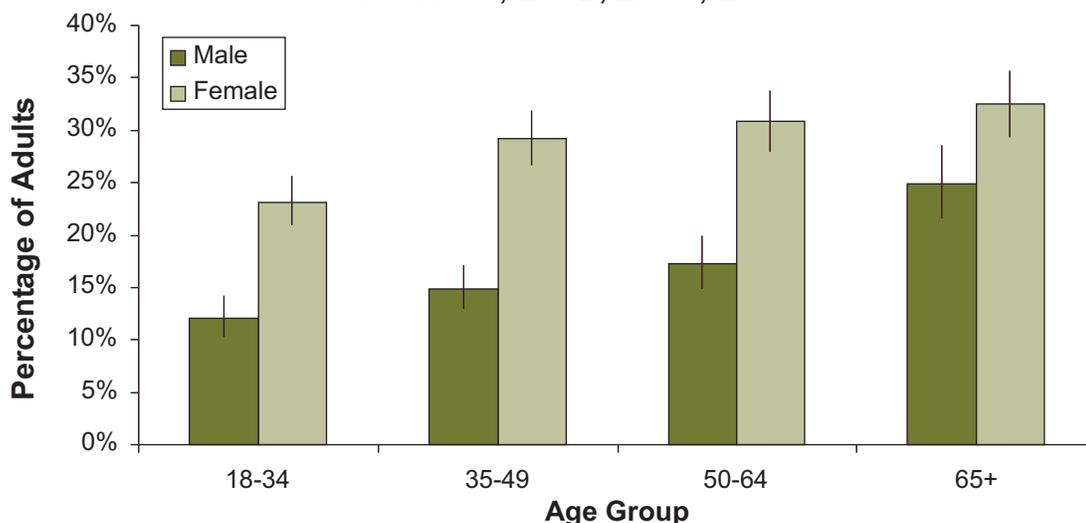
Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 19-6: Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables to 50% (age-adjusted to the U.S. 2000 standard population).

22. THREE OR MORE VEGETABLES PER DAY

Three or more vegetables per day in Utah (continued)

Figure 22.A: 3+ Vegetables per Day by Age and Sex, Utah Adults, 2002, 2003, 2005

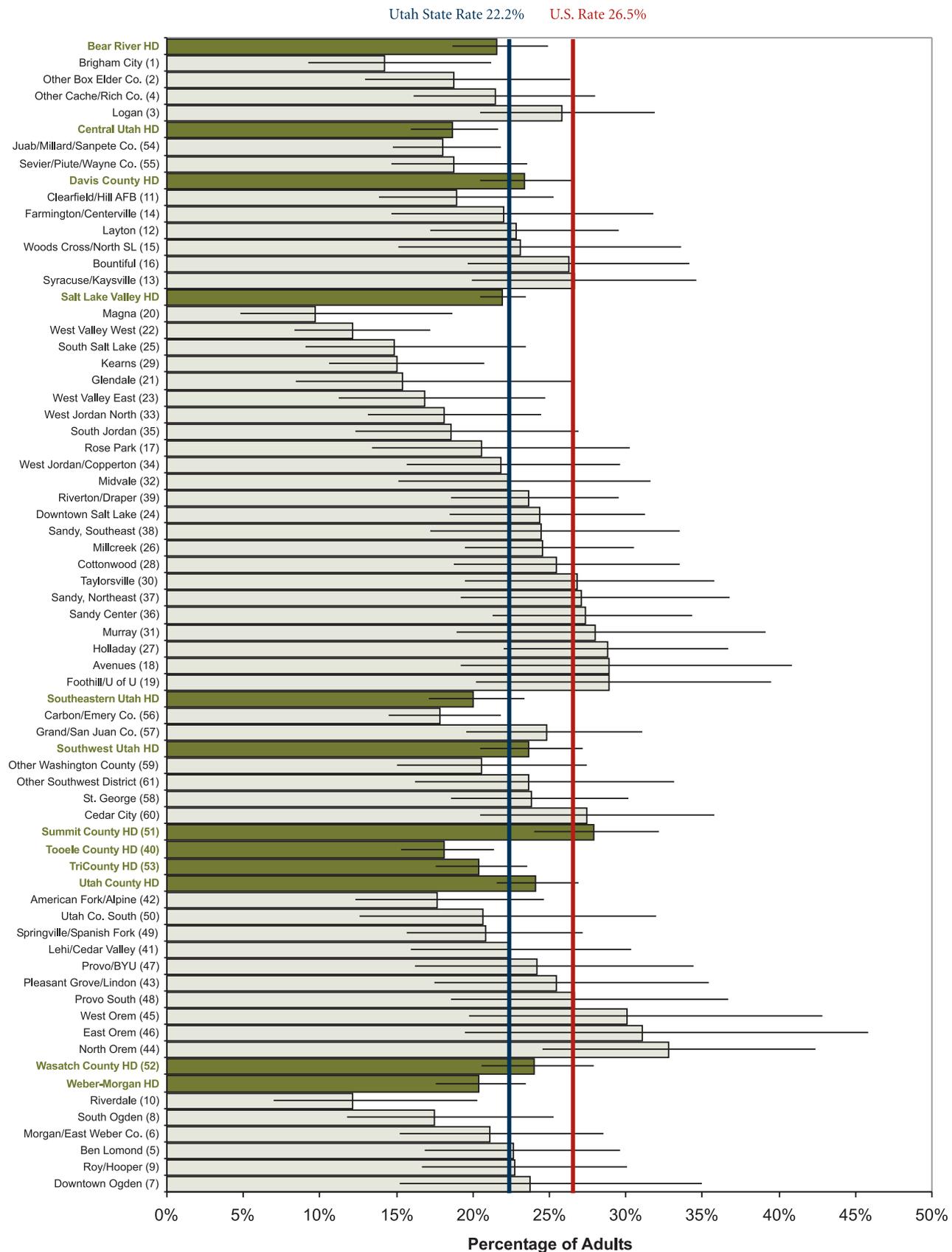


Prevention/Resources

The Heart Disease and Stroke Prevention Program at the Utah Department of Health works with various public and private partners promoting the 5 A Day message in schools, communities, health care settings, and families. The message to increase intake of vegetables is incorporated into the Gold Medal Schools Program, 5 A Day school newsletter, Grocery Store Tours for third grade students, and the website www.hearthishighway.org. The Check Your Health Campaign provides 5 A Day messages intended for families at www.checkyourhealth.org. Additional nutrition information can be found at www.mypyramid.gov.

22. THREE OR MORE VEGETABLES PER DAY

Figure 22.1: Percentage of Adults Reporting Three or More Vegetables per Day by Local Health District and Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



22. THREE OR MORE VEGETABLES PER DAY

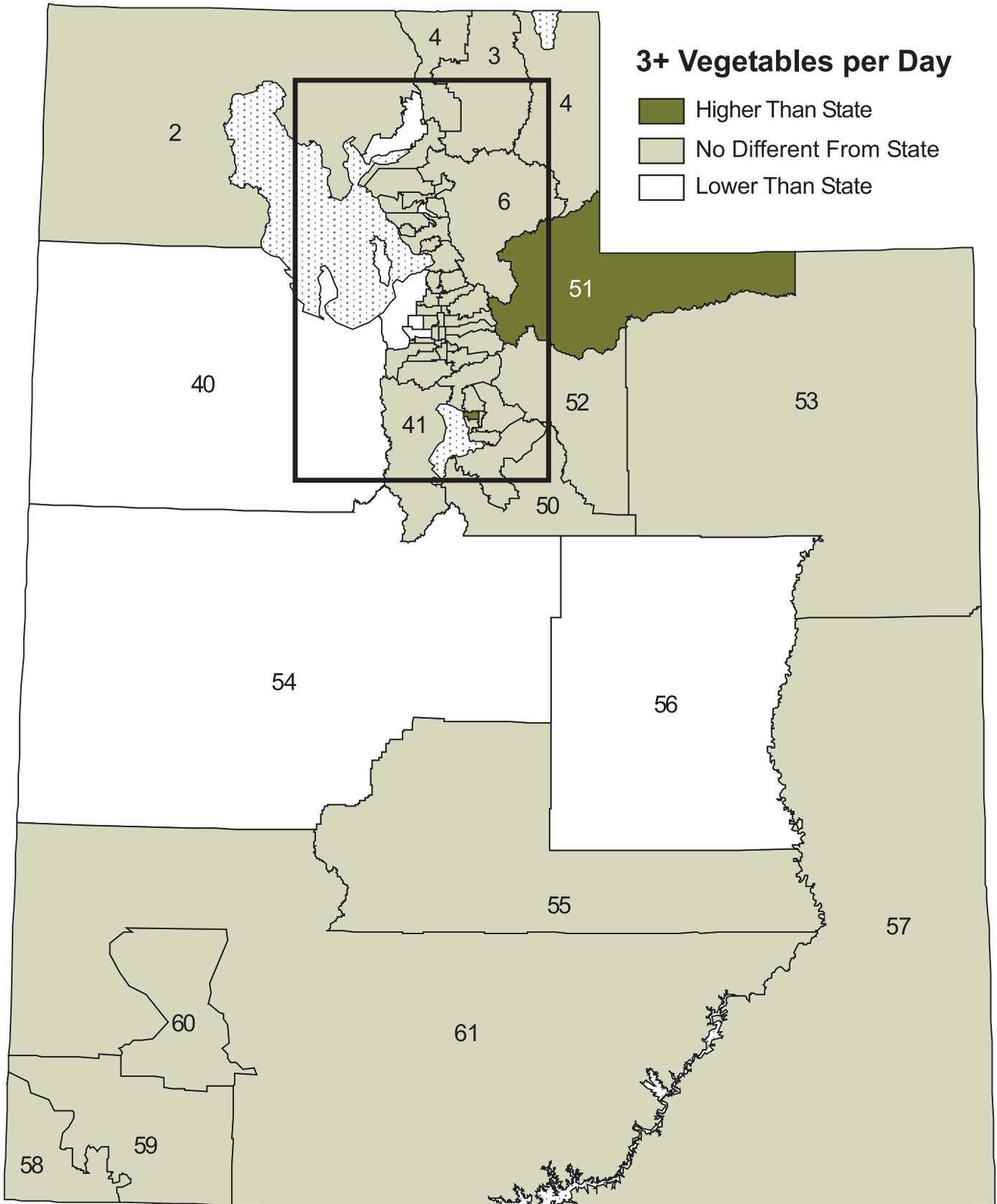
Table 22: 3+ Vegetables per Day by Health District, Small Area, Utah, and U.S., 2002, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		Age-adjusted		95% Confidence Interval	
			Reporting 3+ Vegetables per Day	Crude Rate	Rate	Lower	Upper	
	U.S.	217,803,051	57,848,490	26.6%	26.5%	26.3%	26.7%	
	State of Utah	1,657,454	354,198	21.4%	22.2%	21.3%	23.2%	
	Bear River HD	98,027	20,125	20.5%	21.6%	18.7%	24.9%	
4	Brigham City (1)	14,566	1,984	13.6%	14.2%	9.2%	21.2%	
46	Logan (3)	45,904	10,861	23.7%	25.8%	20.5%	31.9%	
17	Other Box Elder Co. (2)	14,636	2,784	19.0%	18.8%	13.0%	26.4%	
25	Other Cache/Rich Co. (4)	22,921	4,600	20.1%	21.4%	16.1%	28.0%	
	Central Utah HD	47,558	8,689	18.3%	18.6%	15.9%	21.6%	
12	Juab/Millard/Sanpete Co. (54)	31,637	5,669	17.9%	18.0%	14.8%	21.9%	
16	Sevier/Piute/Wayne Co. (55)	15,921	3,009	18.9%	18.7%	14.7%	23.5%	
	Davis County HD	175,027	38,873	22.2%	23.4%	20.5%	26.5%	
47	Bountiful (16)	33,318	8,196	24.6%	26.3%	19.7%	34.1%	
18	Clearfield/Hill AFB (11)	37,329	6,458	17.3%	18.9%	13.9%	25.3%	
27	Farmington/Centerville (14)	19,034	4,218	22.2%	22.0%	14.7%	31.8%	
32	Layton (12)	46,815	10,613	22.7%	22.8%	17.2%	29.6%	
48	Syracuse/Kaysville (13)	24,542	6,096	24.8%	26.6%	19.9%	34.6%	
33	Woods Cross/North SL (15)	13,989	3,360	24.0%	23.1%	15.1%	33.6%	
	Salt Lake Valley HD	658,810	139,141	21.1%	21.9%	20.4%	23.4%	
57	Avenues (18)	18,959	5,360	28.3%	28.9%	19.2%	40.9%	
45	Cottonwood (28)	33,297	8,264	24.8%	25.4%	18.7%	33.5%	
40	Downtown Salt Lake (24)	42,808	9,675	22.6%	24.3%	18.5%	31.3%	
58	Foothill/U of U (19)	17,778	4,425	24.9%	28.9%	20.2%	39.5%	
7	Glendale (21)	18,642	2,207	11.8%	15.4%	8.4%	26.6%	
56	Holladay (27)	35,956	10,967	30.5%	28.8%	22.0%	36.7%	
6	Kearns (29)	42,995	5,430	12.6%	15.0%	10.6%	20.7%	
1	Magna (20)	15,623	1,564	10.0%	9.7%	4.8%	18.6%	
28	Midvale (32)	21,672	4,950	22.8%	22.3%	15.1%	31.7%	
42	Millcreek (26)	44,008	10,425	23.7%	24.6%	19.5%	30.5%	
55	Murray (31)	24,072	6,473	26.9%	27.9%	18.9%	39.2%	
34	Riverton/Draper (39)	41,391	8,916	21.5%	23.6%	18.6%	29.5%	
21	Rose Park (17)	22,639	4,652	20.6%	20.6%	13.4%	30.3%	
52	Sandy Center (36)	36,106	9,525	26.4%	27.3%	21.3%	34.4%	
51	Sandy, Northeast (37)	18,245	4,461	24.5%	27.1%	19.2%	36.8%	
41	Sandy, Southeast (38)	20,781	6,070	29.2%	24.5%	17.2%	33.5%	
15	South Jordan (35)	20,931	3,954	18.9%	18.5%	12.3%	26.9%	
5	South Salt Lake (25)	18,456	3,078	16.7%	14.8%	9.0%	23.4%	
50	Taylorsville (30)	27,372	6,112	22.3%	26.8%	19.5%	35.8%	
13	West Jordan North (33)	30,391	5,759	19.0%	18.1%	13.1%	24.5%	
26	West Jordan/Copperton (34)	26,360	4,985	18.9%	21.9%	15.6%	29.7%	
8	West Valley East (23)	35,527	5,944	16.7%	16.9%	11.2%	24.7%	
2	West Valley West (22)	44,794	5,380	12.0%	12.1%	8.4%	17.2%	
	Southeastern Utah HD	36,828	7,244	19.7%	20.0%	17.0%	23.3%	
11	Carbon/Emery Co. (56)	21,451	3,805	17.7%	17.8%	14.5%	21.8%	
43	Grand/San Juan Co. (57)	15,377	3,566	23.2%	24.9%	19.6%	31.0%	
	Southwest Utah HD	116,150	27,957	24.1%	23.7%	20.5%	27.2%	
53	Cedar City (60)	22,401	5,869	26.2%	27.4%	20.4%	35.8%	
35	Other Southwest District (61)	15,384	4,080	26.5%	23.6%	16.2%	33.2%	
20	Other Washington County (59)	32,503	6,806	20.9%	20.5%	15.0%	27.4%	
37	St. George (58)	45,862	11,759	25.6%	23.9%	18.5%	30.2%	
54	Summit County HD (51)	24,525	6,624	27.0%	27.9%	24.0%	32.2%	
14	Tooele County HD (40)	32,458	5,696	17.6%	18.1%	15.3%	21.4%	
19	TriCounty HD (53)	28,023	5,644	20.1%	20.4%	17.6%	23.6%	
	Utah County HD	278,832	62,124	22.3%	24.1%	21.5%	26.9%	
10	American Fork/Alpine (42)	26,819	4,739	17.7%	17.6%	12.3%	24.7%	
60	East Orem (46)	14,955	3,872	25.9%	31.1%	19.4%	45.8%	
29	Lehi/Cedar Valley (41)	18,752	3,942	21.0%	22.4%	16.0%	30.4%	
61	North Orem (44)	25,965	7,483	28.8%	32.8%	24.5%	42.4%	
44	Pleasant Grove/Lindon (43)	24,636	5,957	24.2%	25.4%	17.5%	35.4%	
39	Provo/BYU (47)	39,401	10,453	26.5%	24.1%	16.2%	34.4%	
49	Provo South (48)	48,138	10,003	20.8%	26.7%	18.5%	36.7%	
23	Springville/Spanish Fork (49)	41,036	7,982	19.5%	20.8%	15.7%	27.1%	
22	Utah Co. South (50)	17,363	2,967	17.1%	20.6%	12.6%	32.0%	
59	West Orem (45)	21,774	5,581	25.6%	30.1%	19.8%	42.8%	
38	Wasatch County HD (52)	12,514	2,975	23.8%	24.0%	20.5%	27.9%	
	Weber-Morgan HD	148,702	29,517	19.9%	20.3%	17.5%	23.4%	
30	Ben Lomond (5)	33,215	7,191	21.7%	22.6%	16.9%	29.7%	
36	Downtown Ogden (7)	21,684	5,332	24.6%	23.7%	15.3%	35.0%	
24	Morgan/East Weber Co. (6)	24,131	4,636	19.2%	21.1%	15.2%	28.5%	
3	Riverdale (10)	15,522	2,080	13.4%	12.1%	7.0%	20.3%	
31	Roy/Hooper (9)	27,898	5,900	21.2%	22.7%	16.7%	30.1%	
9	South Ogden (8)	26,255	4,781	18.2%	17.5%	11.8%	25.2%	

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

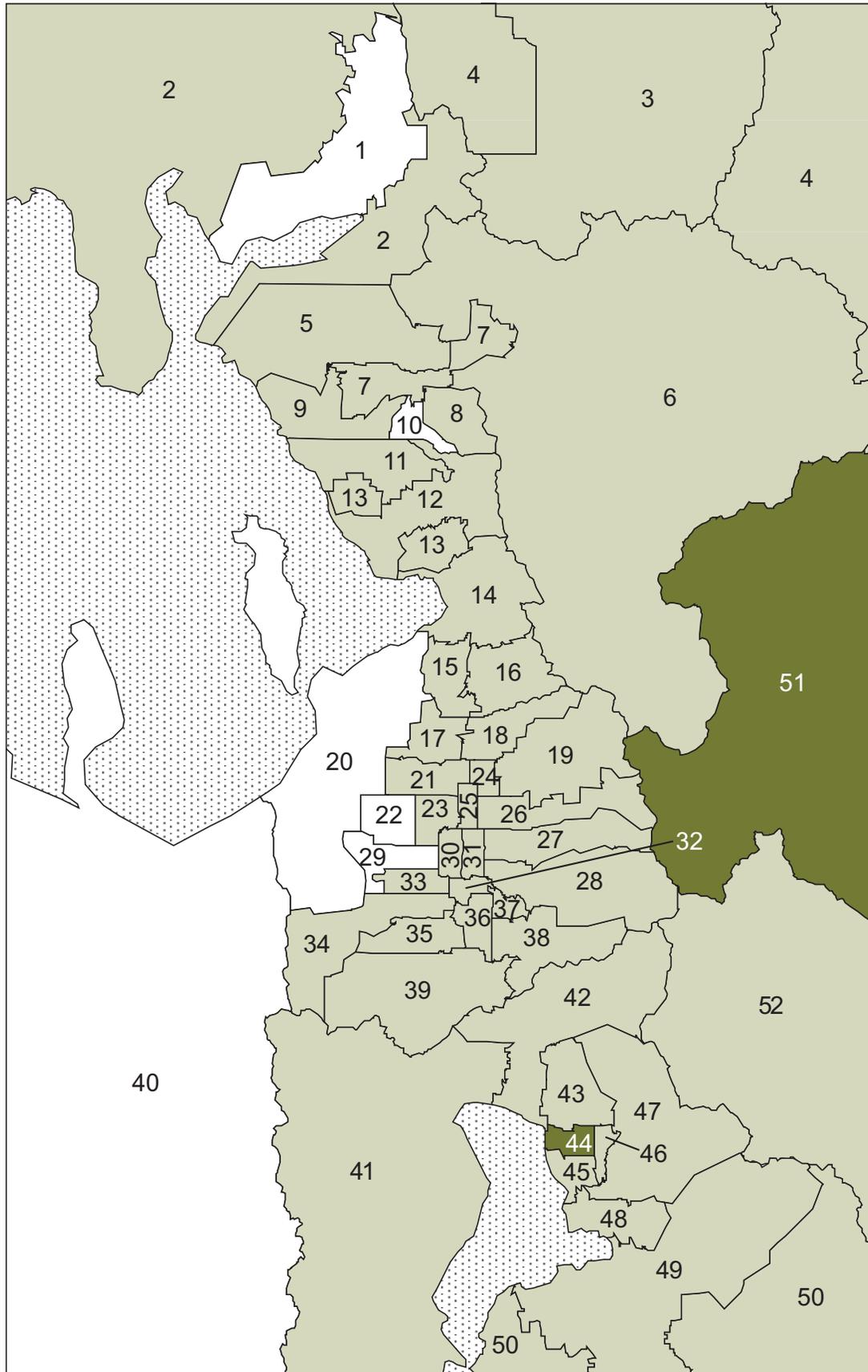
22. THREE OR MORE VEGETABLES PER DAY

Figure 22.2: 3+ Vegetables per Day by Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



22. THREE OR MORE VEGETABLES PER DAY

Figure 22.3: 3+ Vegetables per Day by Small Area, Wasatch Front Adults 18+, 2002, 2003, 2005 (Age-adjusted)





APPENDIX A:

SMALL AREA BRFSS SUMMARY TABLE

APPENDIX A: SMALL AREA BRFSS SUMMARY TABLE

	Higher Than State				No Different From State				Lower Than State				Rank by Small Area 1=Lowest 61=Highest									
	Fair or Poor Health	7+ Days Poor Physical Health	7+ Days Poor Mental Health	Dr. Dx Diabetes	Current Dr. Dx Asthma	Dr. Dx Arthritis	Dr. Dx High Blood Pressure	Dr. Dx High Cholesterol	Activity Limitation	Health Care Coverage	Primary Care Provider	HIV Testing	Sig./Colon. in Past 5 Years	Current Cigarette Smoking	Binge Drinking	Chronic Drinking	Physical Inactivity	Recommended Physical Activity	Overweight or Obese	Obese	2+ Fruits per Day	3+ Vegetables per Day
U.S.	15.9	15.1	15.1	7.1	7.7	25.6	25.4	24.8	17.6	84.5	79.4	44.6	40.9	21.9	15.2	7.7	24.9	46.5	59.4	22.7	32.8	26.5
State of Utah	12.7	14.6	15.0	5.8	7.5	24.8	22.4	22.9	18.6	86.6	76.4	30.4	42.9	11.7	8.9	2.9	18.8	54.1	57.0	20.6	31.2	22.2
Bear River HD	10.7	13.4	13.7	5.9	6.5	25.9	23.4	22.0	16.2	88.2	80.9	21.8	44.9	6.8	6.0	1.9	19.8	55.0	58.0	22.5	28.4	21.6
Brigham City (1)	14.4	14.8	15.4	6.5	5.7	30.8	31.8	20.0	17.9	89.0	84.6	22.8	32.8	13.4	10.4	4.4	13.7	53.6	57.7	25.8	24.6	14.2
	41	30	32	35	8	57	59	11	25	39	60	10	8	38	42	49	13	28	31	55	7	4
Logan (3)	9.8	12.2	11.9	4.6	7.3	20.1	15.9	22.8	17.5	88.5	79.7	24.9	60.2	5.4	5.6	1.6	19.7	57.1	53.2	20.6	30.8	25.8
	17	12	10	21	31	7	4	33	19	33	44	12	60	8	12	18	35	42	13	28	29	46
Other Box Elder Co. (2)	8.6	14.0	14.3	4.6	7.3	30.4	26.1	21.1	10.7	84.1	79.2	20.1	37.4	9.1	9.3	2.6	24.3	47.1	59.1	23.6	22.0	18.8
	8	28	25	20	29	56	49	20	2	20	40	7	21	23	37	26	53	6	36	45	4	17
Other Cache/Rich Co. (4)	11.4	13.7	13.5	9.0	5.8	25.8	25.5	21.1	16.5	90.2	84.4	17.9	41.4	4.2	2.4	0.8	22.3	59.0	61.6	21.8	28.6	21.4
	27	27	20	54	10	35	47	18	12	46	59	2	34	5	5	9	46	51	49	34	22	25
Central Utah HD	17.4	17.1	17.0	6.4	10.4	30.6	25.8	20.7	20.7	82.4	81.0	27.7	27.6	13.8	8.1	2.5	22.5	55.6	59.3	20.8	25.9	18.6
Jaub/Millard/Sanpete Co. (54)	18.2	17.0	17.2	6.9	9.8	31.7	27.1	22.0	22.5	82.4	80.4	26.9	28.9	12.3	7.5	1.8	22.2	56.5	61.2	22.3	27.4	18.0
	55	47	46	39	53	59	54	28	55	16	46	14	4	35	19	21	44	39	47	38	14	12
Sevier/Piute/Wayne Co. (55)	15.5	17.0	16.7	5.6	11.6	28.6	23.9	18.8	17.6	82.7	82.0	29.4	25.2	16.9	9.3	3.6	23.3	52.5	56.3	18.4	23.2	18.7
	45	46	41	32	58	51	37	9	20	18	54	25	1	49	36	39	48	24	25	20	5	16
Davis County HD	10.8	12.3	13.2	6.3	7.4	25.4	21.1	25.1	18.2	90.6	78.6	31.1	42.1	9.5	6.6	1.9	17.4	55.8	56.8	19.6	32.8	23.4
Bountiful (16)	10.2	13.0	12.7	4.0	8.8	23.5	19.0	26.6	15.2	88.5	78.4	28.9	37.0	6.1	5.0	1.4	15.3	55.5	45.3	16.4	31.5	26.3
	19	20	18	14	46	21	14	49	9	34	35	23	18	10	11	16	20	36	5	11	35	47
Clearfield/Hill AFB (11)	12.9	13.2	15.3	7.7	8.8	26.9	23.6	21.1	19.3	89.5	75.7	35.8	37.0	12.0	6.8	2.6	23.6	49.2	64.4	21.6	27.3	18.9
	34	21	31	43	47	43	34	19	33	41	27	48	17	34	17	25	49	11	57	32	13	18
Farmington/Centerville (14)	4.8	11.3	7.4	4.3	5.1	24.3	19.2	25.7	17.1	91.3	74.7	33.5	37.8	7.6	4.5	0.4	14.6	62.5	53.7	18.9	37.5	22.0
	3	8	2	15	4	26	17	46	16	52	23	43	24	16	10	6	19	55	16	21	55	27
Layton (12)	10.6	13.4	15.8	8.4	6.4	23.3	21.8	27.8	17.9	90.4	78.5	31.1	46.4	13.7	7.8	2.6	22.4	53.8	58.9	20.6	36.1	22.8
	21	23	33	52	17	19	28	55	23	47	36	33	41	39	22	27	47	31	35	27	53	32
Syracuse/Kaysville (13)	11.1	13.4	13.6	7.6	7.3	27.2	24.4	35.9	20.3	94.5	83.3	19.6	54.8	5.9	6.4	1.2	13.6	57.8	55.9	21.8	36.4	26.6
	26	24	21	41	30	44	39	61	45	59	57	6	55	9	15	13	12	45	21	33	54	48
Woods Cross/North SL (15)	11.5	7.9	7.5	8.1	7.8	24.6	9.4	11.6	19.8	94.9	83.1	38.1	37.0	10.0	8.8	4.2	8.7	60.6	59.2	20.4	28.6	23.1
	30	1	3	47	35	29	1	1	40	61	56	53	19	27	32	46	1	54	37	26	21	33
Salt Lake Valley HD	12.7	14.7	15.3	5.5	7.9	23.7	22.8	22.9	18.4	86.5	75.6	33.1	48.3	13.5	11.5	3.7	18.4	53.4	57.3	20.9	32.9	21.9
Avenues (18)	9.2	13.7	16.0	1.5	9.1	18.1	19.1	29.3	20.7	87.0	76.8	45.9	45.9	8.8	14.3	6.4	12.4	54.6	38.9	8.7	39.4	28.9
	13	26	34	1	50	4	16	56	47	29	28	60	39	21	53	57	6	33	1	1	56	57
Cottonwood (28)	7.1	12.4	13.6	4.0	6.9	21.0	18.5	21.8	15.2	91.6	71.6	34.1	59.0	11.6	17.9	4.9	15.8	52.7	50.7	11.8	31.6	25.4
	5	15	22	13	25	10	13	26	8	56	10	44	58	32	59	53	21	27	8	4	36	45
Downtown Salt Lake (24)	12.3	17.0	15.1	5.2	6.2	19.4	29.9	22.5	21.1	79.4	67.9	42.0	38.7	20.4	15.5	3.1	12.6	59.9	48.7	13.3	35.1	24.3
	32	48	28	28	13	5	57	32	49	7	5	56	27	55	57	34	7	52	7	5	50	40
Foothill/U of U (19)	8.7	11.5	14.7	2.8	10.6	23.4	18.2	30.0	19.1	92.2	75.4	49.3	62.1	10.5	19.3	6.7	9.3	68.4	51.5	17.6	48.8	28.9
	9	9	27	4	54	20	11	58	31	57	26	61	61	28	60	58	2	61	11	16	61	58
Glendale (21)	34.0	19.0	22.2	4.5	5.1	22.1	13.9	15.6	19.5	68.8	64.6	32.0	47.2	22.7	13.7	7.1	31.2	42.3	60.6	24.4	29.0	15.4
	61	58	60	18	3	12	3	4	34	1	2	34	43	59	52	60	61	2	42	48	24	7

Note: Age-adjusted rates. For full definitions of measures, see each section in the report.

APPENDIX A: SMALL AREA BRFSS SUMMARY TABLE

	Fair or Poor Health	7+ Days Poor Physical Health	7+ Days Poor Mental Health	Dr. Dx Diabetes	Current Dr. Dx Asthma	Dr. Dx Arthritis	Dr. Dx High Blood Pressure	Dr. Dx High Cholesterol	Activity Limitation	Health Care Coverage	Primary Care Provider	HIV Testing	Sig./Colon. in Past 5 Years	Current Cigarette Smoking	Binge Drinking	Chronic Drinking	Physical Inactivity	Recommended Physical Activity	Overweight or Obese	Obese	2+ Fruits per Day	3+ Vegetables per Day
U.S.	15.9	15.1	15.1	7.1	7.7	25.6	25.4	24.8	17.6	84.5	79.4	44.6	40.9	21.9	15.2	7.7	24.9	46.5	59.4	22.7	32.8	26.5
State of Utah	12.7	14.6	15.0	5.8	7.5	24.8	22.4	22.9	18.6	86.6	76.4	30.4	42.9	11.7	8.9	2.9	18.8	54.1	57.0	20.6	31.2	22.2
SL Valley HD (cont.)	12.7	14.7	15.3	5.5	7.9	23.7	22.8	22.9	18.4	86.5	75.6	33.1	48.3	13.5	11.5	3.7	18.4	53.4	57.3	20.9	32.9	21.9
Holladay (27)	5.7	10.5	12.3	3.9	8.6	22.5	17.8	18.3	15.7	89.7	79.5	27.1	55.8	9.8	10.6	2.6	12.7	55.5	44.8	11.7	43.3	28.8
	4	6	14	9	43	15	8	7	10	43	42	15	56	26	43	28	8	35	3	3	60	56
Kearns (29)	16.6	15.4	16.4	6.9	10.7	25.9	31.3	24.5	20.2	81.9	70.9	28.1	49.0	17.4	14.3	6.0	23.8	48.6	64.6	25.7	29.6	15.0
	51	37	40	38	55	38	58	40	44	14	8	19	48	50	54	56	50	10	58	54	25	6
Magna (20)	21.2	25.0	24.6	9.1	9.4	31.9	33.2	25.9	22.7	86.1	72.7	32.9	36.8	22.5	11.9	5.9	29.2	41.5	65.1	25.3	27.6	9.7
	57	61	61	56	52	60	60	47	56	25	14	41	15	58	46	55	59	1	59	53	18	1
Midvale (32)	10.8	14.8	19.7	4.4	8.5	25.2	21.2	27.6	21.2	85.8	75.1	42.5	50.4	11.8	10.6	3.9	17.0	55.0	60.7	22.3	35.0	22.3
	24	29	54	17	41	31	25	53	51	23	24	57	50	33	44	43	26	34	43	37	49	28
Millcreek (26)	9.0	12.5	13.1	4.4	6.8	22.8	21.1	20.3	17.4	88.9	74.0	34.8	48.4	11.5	8.4	3.2	11.9	58.3	51.1	17.5	31.4	24.6
	11	16	19	16	24	16	24	13	18	37	21	45	46	30	27	35	5	47	9	14	34	42
Murray (31)	11.4	12.7	15.2	4.6	14.2	22.1	23.8	25.0	18.2	87.4	73.8	40.9	46.3	15.2	10.0	4.6	16.3	48.2	52.9	20.7	34.3	27.9
	29	17	29	23	61	13	35	43	27	31	20	55	40	45	41	51	22	8	12	29	47	55
Riverton/Draper (39)	11.4	12.3	16.3	6.7	10.9	30.2	19.9	24.6	14.5	94.5	80.6	27.7	36.9	7.2	7.7	1.5	14.3	52.0	56.9	22.4	35.1	23.6
	28	13	37	36	56	55	20	41	5	60	47	18	16	14	20	17	17	22	28	39	51	34
Rose Park (17)	21.8	18.0	16.2	8.7	6.4	17.7	25.0	21.2	7.5	72.0	70.6	34.9	35.8	13.7	12.9	3.5	29.5	49.8	63.7	30.4	28.8	20.6
	59	54	36	53	16	3	44	23	1	3	7	46	14	40	50	38	60	13	54	60	23	21
Sandy Center (36)	14.5	16.3	12.2	7.7	4.9	26.0	26.8	22.9	24.1	91.3	77.6	30.7	52.6	13.8	9.0	2.8	19.1	57.3	61.6	27.1	33.8	27.3
	42	44	13	42	2	40	52	35	58	53	33	32	51	41	34	31	32	44	50	57	45	52
Sandy, Northeast (37)	9.1	13.0	12.6	2.8	11.1	26.7	21.5	29.8	19.7	91.5	77.5	28.5	53.3	9.3	8.8	1.3	14.2	58.8	59.4	15.8	33.4	27.1
	12	19	17	3	57	41	27	57	39	54	31	21	54	24	31	15	15	49	38	10	43	51
Sandy, Southeast (38)	9.0	9.1	11.1	4.5	6.2	16.5	12.8	16.5	14.8	88.9	81.3	27.6	53.1	7.0	9.1	3.6	12.8	63.1	45.2	16.1	43.0	24.5
	10	2	6	19	14	2	2	5	7	38	51	17	53	12	35	40	9	56	4	12	59	41
South Jordan (35)	4.4	10.5	8.5	4.9	6.7	19.6	25.2	26.3	13.2	90.6	80.1	22.6	29.6	6.9	7.1	1.0	14.3	55.6	61.0	18.2	30.7	18.5
	2	5	4	27	21	6	46	48	3	48	45	9	5	11	18	11	16	37	46	19	28	15
South Salt Lake (25)	23.1	18.3	20.7	9.1	7.2	20.5	26.4	21.0	20.0	78.5	63.9	44.4	39.6	26.0	22.9	7.7	20.6	42.8	56.8	21.6	18.5	14.8
	60	55	58	55	28	8	51	17	42	5	1	59	31	61	61	61	38	3	27	31	1	5
Taylorsville (30)	9.5	13.2	15.3	4.8	13.4	23.9	22.3	22.8	16.8	89.1	80.7	37.6	52.9	14.5	12.4	4.4	17.0	49.7	62.1	20.3	33.8	26.8
	16	22	30	26	60	25	32	34	14	40	48	50	52	43	49	48	25	12	51	25	46	50
West Jordan North (33)	16.1	22.5	13.9	9.8	6.4	27.5	25.7	25.4	24.5	91.5	81.8	32.1	56.0	11.5	8.2	2.7	23.8	51.6	66.3	30.5	26.9	18.1
	46	60	23	59	18	48	48	44	60	55	53	35	57	29	24	29	51	20	61	61	12	13
West Jordan/Copperton (34)	10.7	15.5	16.0	7.6	6.9	23.8	20.4	20.6	19.7	87.9	79.4	30.5	37.5	8.7	8.0	4.1	19.1	53.7	59.4	22.2	30.5	21.9
	23	38	35	40	26	23	21	15	37	32	41	31	22	20	23	44	33	29	39	36	27	26
West Valley East (23)	16.3	15.0	18.1	4.6	8.8	22.3	19.7	23.5	19.9	79.4	64.9	38.4	39.4	24.2	14.5	4.6	25.0	50.9	61.6	24.5	25.9	16.9
	47	32	50	24	45	14	19	38	41	8	3	54	30	60	55	52	54	17	48	49	11	8
West Valley West (22)	19.3	16.1	16.9	9.2	5.4	24.3	21.4	20.9	18.3	83.3	77.6	32.2	46.5	16.2	12.2	2.9	22.3	50.9	65.4	27.1	31.3	12.1
	56	41	43	57	6	27	26	16	28	19	32	37	42	48	48	32	45	16	60	58	33	2

Note: Age-adjusted rates. For full definitions of measures, see each section in the report.

APPENDIX A: SMALL AREA BRFSS SUMMARY TABLE

	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; background-color: #4F7942; margin-right: 5px;"></div> Higher Than State </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; background-color: #C8C8C8; margin-right: 5px;"></div> No Different From State </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> Lower Than State </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> Rank by Small Area 1=Lowest 61=Highest </div> </div>																										Fair or Poor Health	7+ Days Poor Physical Health	7+ Days Poor Mental Health	Dr. Dx Diabetes	Current Dr. Dx Asthma	Dr. Dx Arthritis	Dr. Dx High Blood Pressure	Dr. Dx High Cholesterol	Activity Limitation	Health Care Coverage	Primary Care Provider	HIV Testing	Sig./Colon. in Past 5 Years	Current Cigarette Smoking	Binge Drinking	Chronic Drinking	Physical Inactivity	Recommended Physical Activity	Overweight or Obese	Obese	2+ Fruits per Day	3+ Vegetables per Day
	U.S.	15.9	15.1	15.1	7.1	7.7	25.6	25.4	24.8	17.6	84.5	79.4	44.6	40.9	21.9	15.2	7.7	24.9	46.5	59.4	22.7	32.8	26.5																									
State of Utah	12.7	14.6	15.0	5.8	7.5	24.8	22.4	22.9	18.6	86.6	76.4	30.4	42.9	11.7	8.9	2.9	18.8	54.1	57.0	20.6	31.2	22.2																										
Southeastern Utah HD	16.9	18.9	15.7	5.9	8.3	25.9	25.7	20.4	21.9	77.9	71.1	35.0	26.9	18.6	11.5	3.9	23.8	52.9	58.6	22.4	31.3	20.0																										
Carbon/Emery Co. (56)	16.9	19.0	17.0	6.2	8.7	27.4	27.0	21.6	24.2	81.2	73.4	36.6	27.2	19.7	11.2	3.8	25.3	50.5	60.9	23.8	30.9	17.8																										
	53	57	44	33	44	46	53	25	59	12	17	49	3	54	45	41	55	15	45	47	31	11																										
Grand/San Juan Co. (57)	16.6	18.0	12.6	5.4	7.7	23.2	24.5	18.1	17.2	72.0	66.9	32.2	27.0	15.8	12.1	3.9	20.4	58.5	53.4	19.0	32.5	24.9																										
	52	53	15	31	33	18	41	6	17	2	4	38	2	47	47	42	36	48	14	22	40	43																										
Southwest Utah HD	14.3	16.4	18.0	5.3	7.0	26.5	23.7	22.0	18.8	80.8	75.2	31.3	39.0	13.4	9.9	4.6	18.9	55.3	55.0	18.2	32.1	23.7																										
Cedar City (60)	16.4	15.3	14.7	9.2	8.1	29.3	34.7	21.5	19.7	85.0	73.7	29.6	42.7	14.2	8.6	1.7	20.7	53.8	53.4	21.2	33.4	27.4																										
	48	34	26	58	38	53	61	24	38	22	18	27	36	42	29	20	39	30	15	30	44	53																										
Other Southwest District (61)	17.1	20.3	21.5	6.7	9.1	27.7	28.5	19.7	18.2	76.0	77.1	30.4	38.2	21.5	15.3	6.9	21.4	63.5	53.8	17.6	24.6	23.6																										
	54	59	59	37	51	50	55	10	26	4	29	30	26	57	56	59	42	57	18	15	8	35																										
Other Washington County (59)	13.3	18.4	17.3	5.4	6.6	26.7	22.0	21.1	19.3	80.2	78.6	32.5	37.3	7.0	9.6	4.5	17.8	52.5	56.5	20.0	33.1	20.5																										
	36	56	47	30	20	42	30	21	32	10	37	40	20	13	38	50	28	25	26	24	41	20																										
St. George (58)	14.0	16.1	20.1	3.7	5.9	24.4	20.5	25.5	19.7	81.8	73.4	32.1	39.4	15.7	7.7	4.3	18.5	54.2	55.4	17.4	32.1	23.9																										
	39	42	57	8	11	28	22	45	36	13	16	36	29	46	21	47	31	32	20	13	37	37																										
Summit County HD (51)	9.3	12.3	11.2	3.1	8.5	20.6	17.7	22.1	13.6	86.0	71.0	37.7	48.2	8.7	17.3	5.5	14.1	64.2	42.9	10.7	34.5	27.9																										
	14	14	8	5	42	9	7	30	4	24	9	51	45	19	58	54	14	59	2	2	48	54																										
Tooele County HD (40)	13.6	15.4	16.3	8.2	8.9	25.9	29.5	25.0	17.9	89.6	71.8	32.4	39.9	17.8	13.5	4.1	24.1	48.6	63.0	25.8	25.3	18.1																										
	38	36	39	48	48	37	56	42	24	42	12	39	33	51	51	45	52	9	53	56	9	14																										
TriCounty HD (53)	16.5	15.7	16.8	6.5	8.4	25.9	25.0	20.6	18.5	79.8	73.2	30.3	33.3	19.4	9.8	2.7	25.6	52.7	63.8	25.1	25.7	20.4																										
	49	40	42	34	40	39	45	14	29	9	15	29	10	53	40	30	56	26	56	52	10	19																										
Utah County HD	11.5	13.8	14.1	7.1	6.1	23.6	20.6	22.6	19.8	87.4	79.0	23.0	37.2	5.8	3.5	0.7	18.3	52.2	56.7	21.8	31.7	24.1																										
American Fork/Alpine (42)	14.1	16.2	7.2	8.0	5.7	15.1	24.3	18.5	21.8	88.7	83.5	26.5	30.5	7.3	1.1	0.2	22.0	51.1	57.5	27.3	27.4	17.6																										
	40	43	1	44	9	1	38	8	52	35	58	13	6	15	2	4	43	18	30	59	15	10																										
East Orem (46)	9.4	17.3	19.9	8.0	6.8	23.2	18.2	32.1	23.7	93.7	92.7	28.7	42.6	3.2	0.9	0.9	10.6	67.9	58.2	15.0	28.1	31.1																										
	15	49	56	45	23	17	12	60	57	58	61	22	35	3	1	10	3	60	32	8	19	60																										
Lehi/Cedar Valley (41)	8.5	11.0	12.1	3.5	5.3	27.6	19.0	15.1	16.9	90.9	81.3	18.5	35.2	5.2	4.1	0.2	18.2	44.2	62.2	22.6	32.2	22.4																										
	7	7	12	6	5	49	15	3	15	50	50	3	12	7	8	3	30	4	52	43	38	29																										
North Orem (44)	15.4	12.8	18.3	8.2	3.3	36.1	16.7	31.9	14.6	79.1	79.0	29.0	37.9	8.3	5.9	1.7	14.4	46.8	59.4	22.5	40.2	32.8																										
	44	18	51	50	1	61	6	59	6	6	39	24	25	18	13	19	18	5	40	41	57	61																										
Pleasant Grove/Lindon (43)	4.2	9.7	9.3	10.5	6.5	27.2	23.8	23.5	16.6	86.3	82.2	23.4	31.2	4.3	6.4	0.5	16.3	56.7	57.3	23.7	32.3	25.4																										
	1	4	5	61	19	45	36	39	13	26	55	11	7	6	16	7	23	41	29	46	39	44																										
Provo/BYU (47)	8.1	15.2	11.1	3.9	7.3	23.7	18.1	22.0	21.8	91.1	75.2	19.2	37.5	0.7	1.7	0.1	12.8	56.6	46.9	14.4	28.3	24.1																										
	6	33	7	12	32	22	10	29	53	51	25	5	23	1	3	2	10	40	6	6	20	39																										
Provo South (48)	11.9	16.3	17.7	8.3	6.3	25.8	24.8	20.2	20.6	86.6	73.7	15.8	32.9	7.8	2.4	0.3	20.5	57.1	56.1	24.8	40.4	26.7																										
	31	45	49	51	15	36	42	12	46	28	19	1	9	17	6	5	37	43	23	50	58	49																										
Springville/Spanish Fork (49)	14.9	14.9	19.0	8.1	6.0	23.9	23.4	22.2	19.1	88.9	78.8	27.6	38.7	11.6	6.0	1.1	21.2	49.9	58.9	23.4	30.8	20.8																										
	43	31	52	46	12	24	33	31	30	36	38	16	28	31	14	12	41	14	34	44	30	23																										

Note: Age-adjusted rates. For full definitions of measures, see each section in the report.

APPENDIX A: SMALL AREA BRFSS SUMMARY TABLE

<div style="display: flex; flex-direction: column; gap: 5px;"> <div> Higher Than State</div> <div> No Different From State</div> <div> Lower Than State</div> <div><i>Rank by Small Area 1=Lowest 61=Highest</i></div> </div>	Fair or Poor Health	7+ Days Poor Physical Health	7+ Days Poor Mental Health	Dr. Dx Diabetes	Current Dr. Dx Asthma	Dr. Dx Arthritis	Dr. Dx High Blood Pressure	Dr. Dx High Cholesterol	Activity Limitation	Health Care Coverage	Primary Care Provider	HIV Testing	Sig./Colon. in Past 5 Years	Current Cigarette Smoking	Binge Drinking	Chronic Drinking	Physical Inactivity	Recommended Physical Activity	Overweight or Obese	Obese	2+ Fruits per Day	3+ Vegetables per Day
	U.S.	15.9	15.1	15.1	7.1	7.7	25.6	25.4	24.8	17.6	84.5	79.4	44.6	40.9	21.9	15.2	7.7	24.9	46.5	59.4	22.7	32.8
State of Utah	12.7	14.6	15.0	5.8	7.5	24.8	22.4	22.9	18.6	86.6	76.4	30.4	42.9	11.7	8.9	2.9	18.8	54.1	57.0	20.6	31.2	22.2
Utah Cnty HD (cont.)	11.5	13.8	14.1	7.1	6.1	23.6	20.6	22.6	19.8	87.4	79.0	23.0	37.2	5.8	3.5	0.7	18.3	52.2	56.7	21.8	31.7	24.1
Utah Co. South (50)	13.5	12.0	19.8	4.6	9.0	25.5	22.2	23.1	21.2	87.3	81.4	20.5	59.6	3.9	3.4	0.0	26.6	48.2	60.8	22.5	23.8	20.6
	37	11	55	22	49	34	31	37	50	30	52	8	59	4	7	1	57	7	44	42	6	22
West Orem (45)	9.8	9.5	14.1	5.4	5.5	21.5	16.4	27.6	22.0	82.3	74.5	18.6	34.6	2.4	2.1	1.2	10.9	51.9	53.7	14.6	30.2	30.1
	18	3	24	29	7	11	5	54	54	15	22	4	11	2	4	14	4	21	17	7	26	59
Wasatch County HD (52)	10.9	13.5	12.6	3.9	7.1	25.3	24.4	21.8	15.8	84.4	80.9	28.2	47.5	9.8	8.5	2.5	17.6	58.1	56.1	18.1	31.3	24.0
	25	25	16	10	27	32	40	27	11	21	49	20	44	25	28	24	27	46	22	18	32	38
Weber-Morgan HD	13.6	15.9	15.1	5.0	8.1	27.7	21.4	23.6	19.5	87.2	75.0	33.3	41.9	14.1	8.2	2.6	19.3	56.2	57.5	20.2	26.5	20.3
Ben Lomond (5)	16.5	17.4	19.1	8.2	6.8	31.1	19.7	27.0	24.6	86.4	69.2	35.6	35.4	20.4	8.7	2.9	19.2	51.1	58.7	22.1	21.0	22.6
	50	50	53	49	22	58	18	51	61	27	6	47	13	56	30	33	34	19	33	35	2	30
Downtown Ogden (7)	21.3	18.0	11.6	10.2	12.8	29.5	18.0	14.1	20.7	80.3	71.8	43.4	49.1	18.1	4.2	0.6	27.8	56.0	59.5	22.4	35.9	23.7
	58	51	9	60	59	54	9	2	48	11	11	58	49	52	9	8	58	38	41	40	52	36
Morgan/East Weber Co. (6)	10.5	18.0	16.3	3.5	7.7	24.8	21.9	27.5	20.1	90.1	79.5	29.6	39.7	9.0	8.3	3.4	13.4	64.0	51.3	17.7	33.1	21.1
	20	52	38	7	34	30	29	52	43	44	43	26	32	22	26	37	11	58	10	17	42	24
Riverdale (10)	12.9	15.4	17.1	3.9	8.1	27.5	26.3	26.7	17.7	90.2	77.1	37.8	44.6	15.0	9.8	3.2	16.5	60.2	56.1	24.9	27.6	12.1
	35	35	45	11	37	47	50	50	21	45	30	52	38	44	39	36	24	53	24	51	17	3
Roy/Hooper (9)	12.3	11.6	12.1	2.7	8.1	29.2	20.6	23.1	17.8	90.7	77.9	29.8	43.0	12.8	8.9	2.1	20.9	52.0	63.8	19.3	27.5	22.7
	33	10	11	2	39	52	23	36	22	49	34	28	37	36	33	22	40	23	55	23	16	31
South Ogden (8)	10.6	15.5	17.3	4.7	7.9	25.4	25.0	21.1	19.5	82.5	72.2	33.1	48.9	13.2	8.2	2.5	18.0	58.9	55.2	15.7	21.4	17.5
	22	39	48	25	36	33	43	22	35	17	13	42	47	37	25	23	29	50	19	9	3	9

Note: Age-adjusted rates. For full definitions of measures, see each section in the report.



APPENDIX B:

HOW SMALL AREAS WERE DESIGNATED

APPENDIX B: HOW SMALL AREAS WERE DESIGNATED

Utah Department of Health staff developed Utah's 61 small areas in 1997 in order to facilitate the reporting of health information at the community level. ZIP code area boundaries, singly or in combination, were used to define the small areas because they are the smallest commonly-used geographic units that are also identified in most health data sources. In addition, the U.S. Postal Service ZIP code areas roughly follow political boundaries. In some sparsely populated areas of the state, however, entire counties were used to define small areas.

The size of the small areas was established by looking at the incidence rates for a variety of health events and determining the population size that would be required to yield at least 20 events over a three- to five-year period. A numerator of 20 or greater was chosen because it produces relatively stable incidence estimates and simplifies the computation of confidence intervals. The investigators found that populations of 40,000 to 60,000 would suffice. However, some areas with smaller populations were designated as small areas when low population density, community identity, or other factors suggested that it was appropriate.

Because local health districts are the primary seat of community public health in Utah, the small areas were designed not to cross local health district boundaries. Whenever possible the small areas were designed to conform to established political boundaries of cities and towns. To guard against combining ZIP code areas with extremely different economic status, the investigators examined median per capita annual income levels of each ZIP code. In many cases, local representatives, including health officers and city officials, were asked to assist in designating small area boundaries based on their knowledge of community characteristics.

Population estimates for the small areas were obtained and several health measures were analyzed and compared. The 61 small areas had an average population size in 1997 of 33,500 persons (range 15,000 to 62,500). Due to local health district boundaries or input from local area residents, population sizes were under 20,000 for six areas. In four cases, a small area encompassed an entire local health district.

Difficulties in designating Utah's small areas using ZIP code

Because ZIP code boundaries are arbitrary geographic areas designed for the convenience of postal carriers, they do not always correspond to other more meaningful boundaries, such as those of cities or towns, school districts, neighborhoods or political voting districts. ZIP code areas may be heterogeneous with respect to important health-related demographic variables such as income, education, and household composition. Additionally, ZIP code boundaries are not stable. They are subdivided as the populations within them increase. And very importantly, ZIP code and small area boundaries may not match health event (e.g., a disease or exposure) boundaries.

However imperfect ZIP code areas may be, they are routinely included on many public health data records or can be gathered easily on surveys such as the BRFSS. Also, estimates of population size and other demographic characteristics are often available for ZIP code areas. These population estimates are especially important, as they are used as denominators in the calculation of disease and mortality rates.

Statistical issues in analyzing small area data

Rates calculated from few events or in a small population typically show relatively large fluctuations with small changes in the number of events. Such fluctuations create challenges for those trying to make valid interpretations. For instance, it is difficult to assess whether rates, such as the BRFSS measures included in this report, are either higher or lower than usual, or in relation to some standard such as the state rate. There are a number of statistical approaches for detecting significant differences that are discussed in the article by Haggard, et al.⁴⁸ For this report confidence intervals were used. Confidence intervals describe the precision of an estimate and take into account the variability of the measure, the sample size and the sampling method. Five years of data were combined to increase sample size in the small areas so as to improve the precision of the BRFSS estimates.

APPENDIX B: HOW SMALL AREAS WERE DESIGNATED

One limitation in the use of confidence intervals to identify areas that are significantly different from the state is the lack of independence of the small areas and the state. The state includes the small area, so it is not technically appropriate to compare a small area to the state that includes it because they are not independent samples. Another issue is that the state rate also has a confidence interval. For this report, we considered a small area differed from the state rate when its confidence interval did not include the state rate, not taking into consideration the confidence interval for the state rate itself.

In summary

Small area analysis has many uses in public health. It can assist in targeting health promotion efforts and examining health status in small areas. It can also help to identify environmental, health system, and demographic attributes that may be related to the health of a community.

Though the method described here is not perfect, it allows for the first time the presentation of BRFSS estimates by Utah's small areas.



APPENDIX C:

SMALL AREA DEFINITIONS AND KEY MAPS

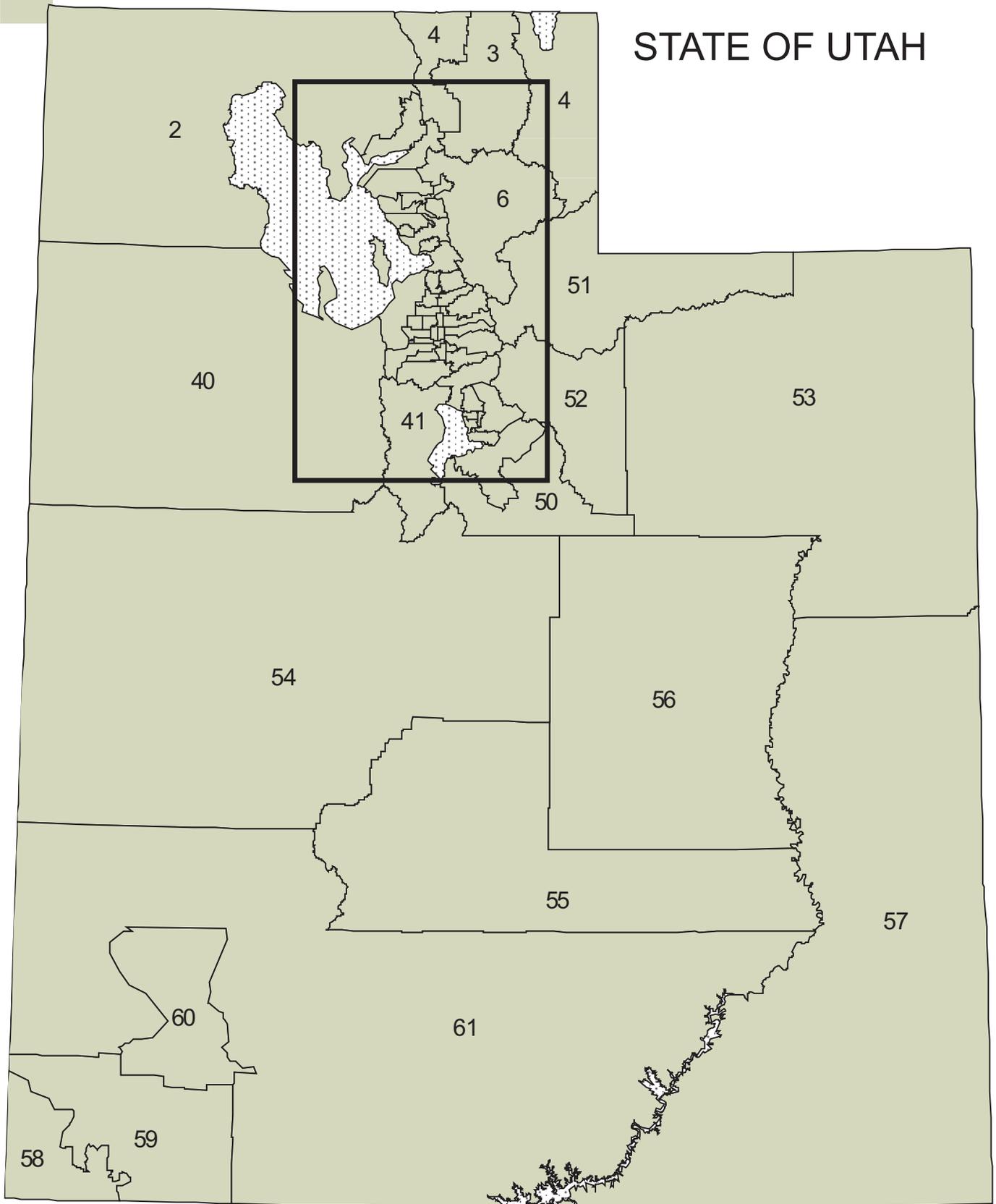
APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS

#	Small Area Name	Boundary Designation
0	State Total	All counties/ZIP codes in Utah
1	Brigham City	ZIP code 84302
2	Other Box Elder Co.	Box Elder County except ZIP code 84302
3	Logan	ZIP codes 84321, 84322, 84341, 84332
4	Other Cache/Rich Co.	Cache & Rich Co. except 84321, 84322, 84341, 84332
5	Ben Lomond	ZIP codes 84404, 84407, 84412
6	Morgan/East Weber Co.	ZIP codes 84310, 84317, 84414, 84050 or Morgan County
7	Downtown Ogden	ZIP codes 84401, 84402
8	South Ogden	ZIP codes 84403, 84408
9	Roy/Hooper	ZIP codes 84067, 84315
10	Riverdale	ZIP codes 84405 in Weber County, 84409
11	Clearfield/Hill AFB	ZIP codes 84015, 84016, 84056
12	Layton	ZIP codes 84040, 84041, 84405 in Davis County
13	Syracuse/Kaysville	ZIP codes 84037, 84075
14	Farmington/Centerville	ZIP codes 84025, 84014
15	Woods Cross/No. SL	ZIP codes 84087, 84054
16	Bountiful	ZIP codes 84010, 84011
17	Rose Park	ZIP code 84116
18	Avenues	ZIP codes 84103, 84114
19	Foothill/U of U	ZIP codes 84108, 84112, 84113
20	Magna	ZIP code 84044
21	Glendale	ZIP codes 84104, 84101, 84110, 84152
22	West Valley West	ZIP codes 84128, 84120, 84170
23	West Valley East	ZIP codes 84119, 84199
24	Downtown Salt Lake	ZIP codes 84111, 84102, 84105
25	South Salt Lake	ZIP codes 84115, 84165
26	Millcreek	ZIP codes 84106, 84151, 84109
27	Holladay	ZIP codes 84124, 84117
28	Cottonwood	ZIP code 84121
29	Kearns	ZIP code 84118
30	Taylorsville	ZIP code 84123
31	Murray	ZIP codes 84107, 84157
32	Midvale	ZIP code 84047
33	West Jordan No.	ZIP code 84084
34	W. Jordan/Copperton	ZIP codes 84088, 84006
35	South Jordan	ZIP code 84095 (ZIP code new as of 1993)
36	Sandy Center	ZIP codes 84070, 84091, 84094
37	Sandy, NE	ZIP codes 84093, 84090
38	Sandy, SE	ZIP code 84092
39	Riverton/Draper	ZIP codes 84065, 84020, 84096 (new as of 2006)
40	Tooele Co.	Tooele County
41	Lehi/Cedar Valley	ZIP codes 84043, 84013, 84005 (new in 2006), 84045 (new in 2006)

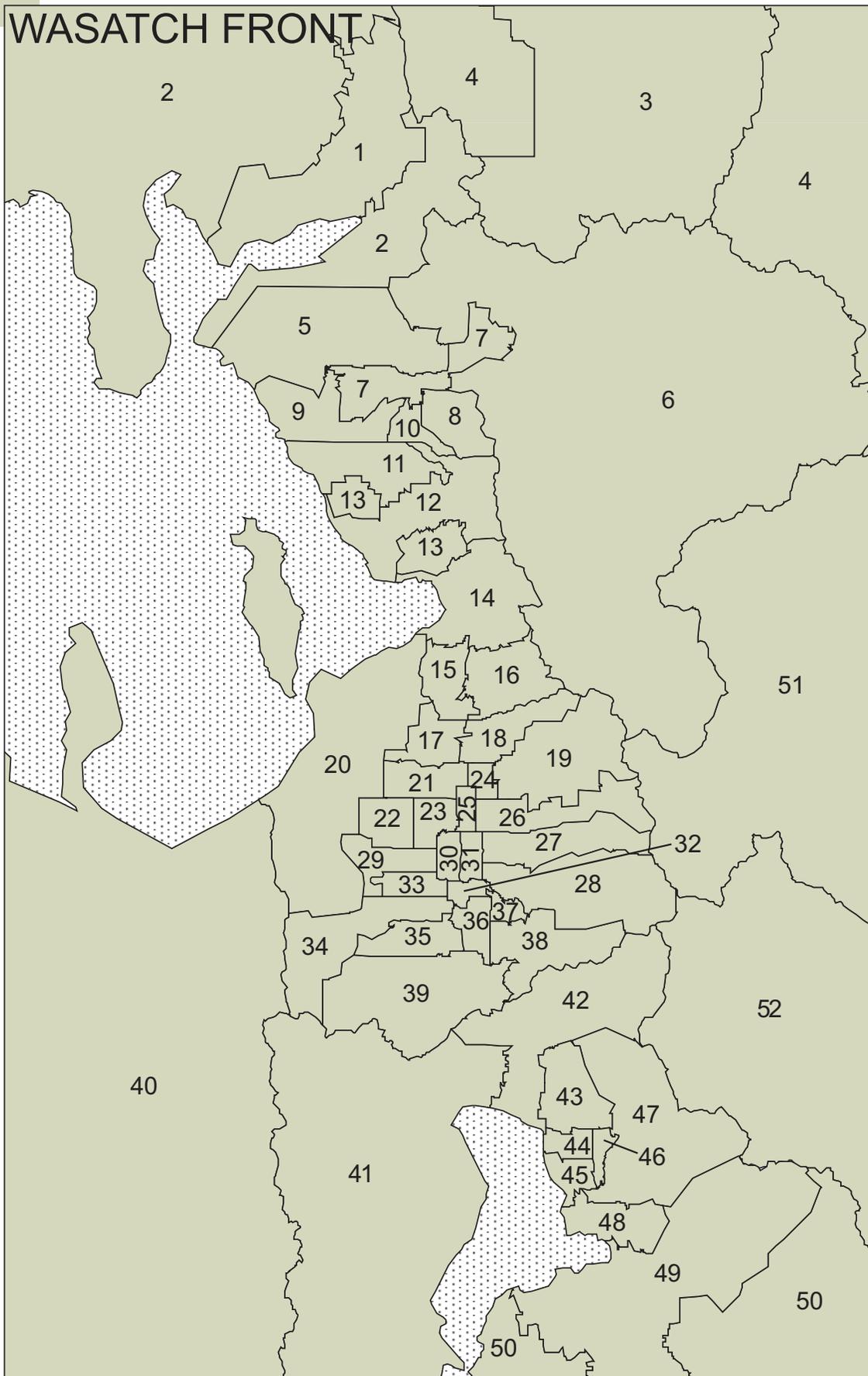
APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS

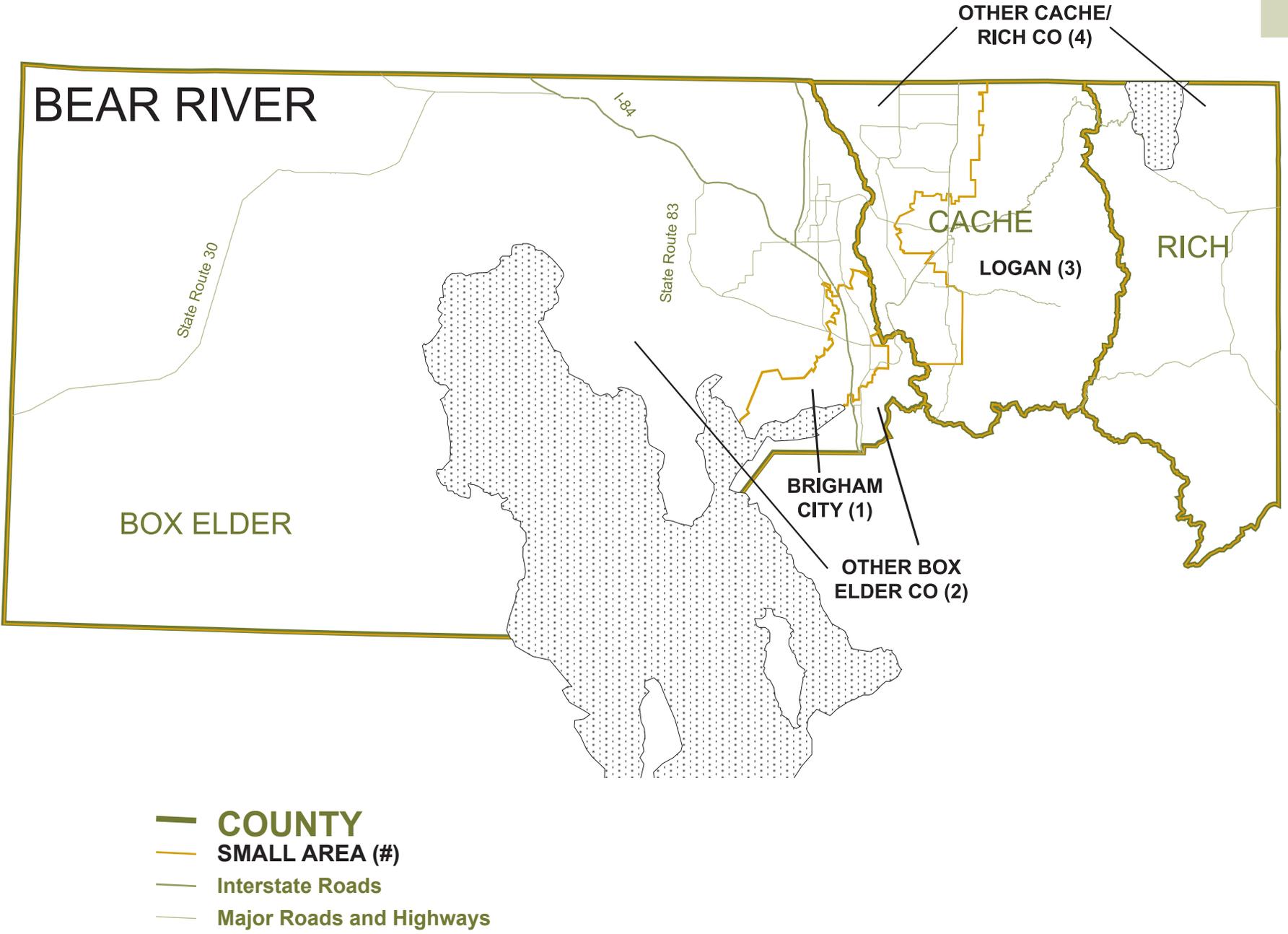
#	Small Area Name	Boundary Designation
42	American Fork/Alpine	ZIP codes 84004, 84003
43	Pleasant Grove/Lindon	ZIP codes 84062, 84042
44	North Orem	ZIP codes 84057, 84059
45	West Orem	ZIP code 84058
46	East Orem	ZIP code 84097 (new as of 1996)
47	Provo/BYU	ZIP codes 84602, 84604
48	Provo South	ZIP codes 84601, 84603, 84605, 84606
49	Springville/Spanish Fork	ZIP codes 84660, 84663, 84664, 84653
50	Utah Co. South	ZIP codes 84651, 84655, 84626, 84633
51	Summit Co.	Summit County
52	Wasatch Co.	Wasatch County
53	TriCounty LHD	Daggett, Duchesne, and Uintah Counties
54	Juab/Millard/Sanpete Co.	Juab, Millard, and Sanpete Counties
55	Sevier/Piute/Wayne Co.	Piute, Sevier, and Wayne Counties
56	Carbon/Emery Co.	Carbon and Emery Counties
57	Grand/San Juan Co.	Grand and San Juan Counties
58	St. George	ZIP codes 84770, 84771, 84790
59	Other Washington Co.	Washington County except ZIP codes 84770, 84771, 84790
60	Cedar City	ZIP code 84720
61	Other Southwest Dist.	Beaver, Garfield, Iron, and Kane Co. other than ZIP code 84720

APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS



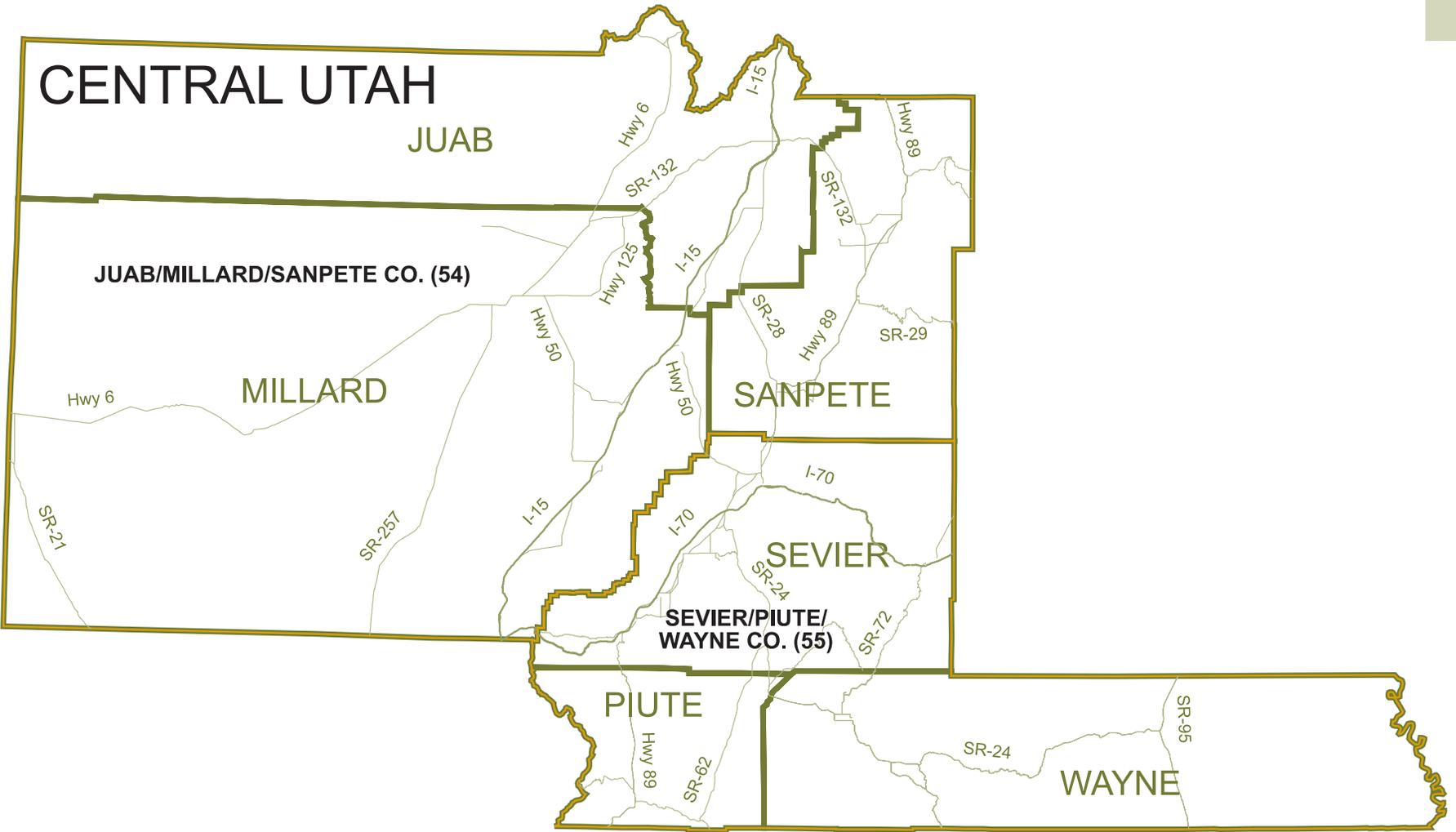
APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS





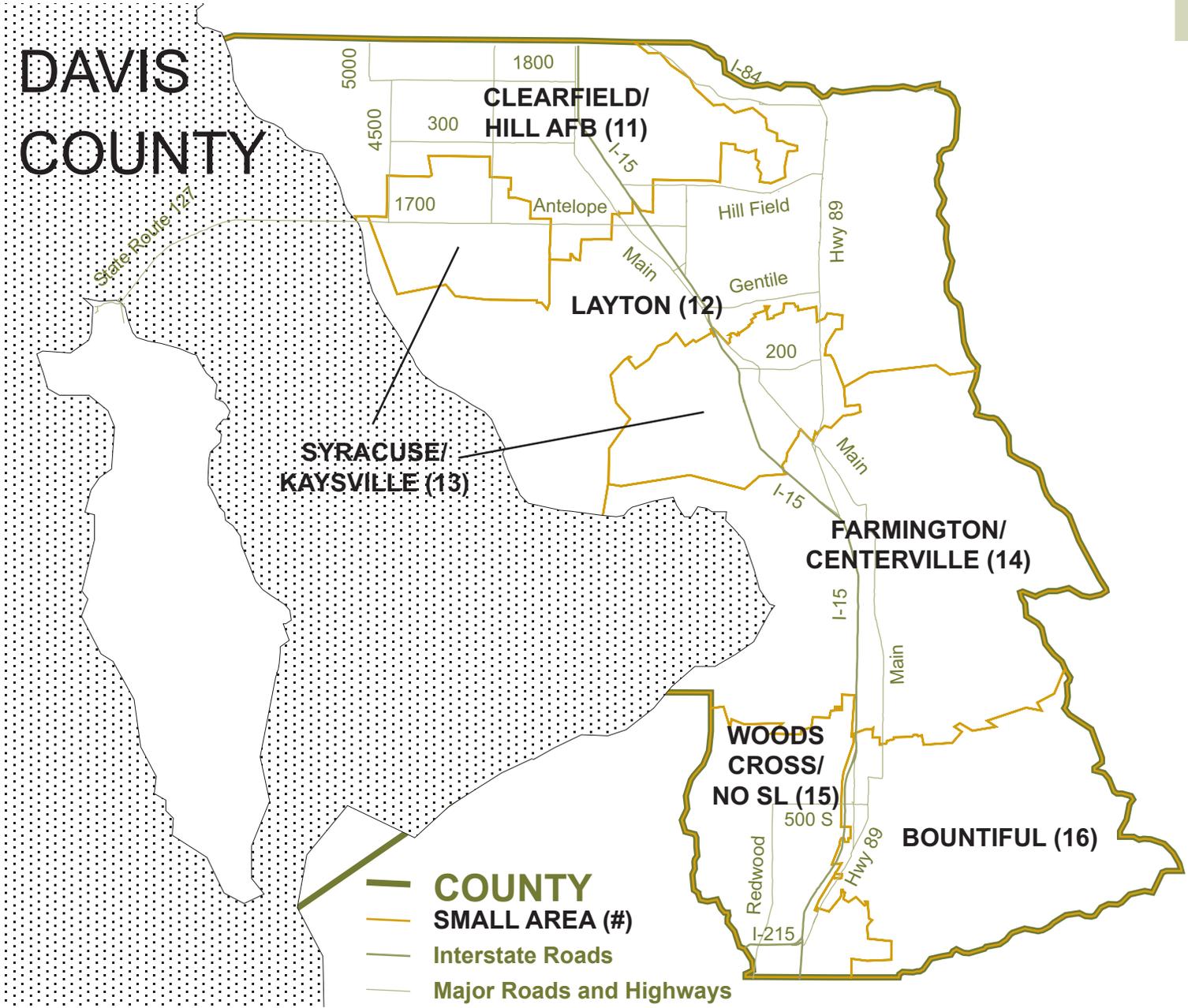
- COUNTY
- SMALL AREA (#)
- ==** Interstate Roads
- Major Roads and Highways

Note: See page 147 for a list of ZIP codes in each small area.

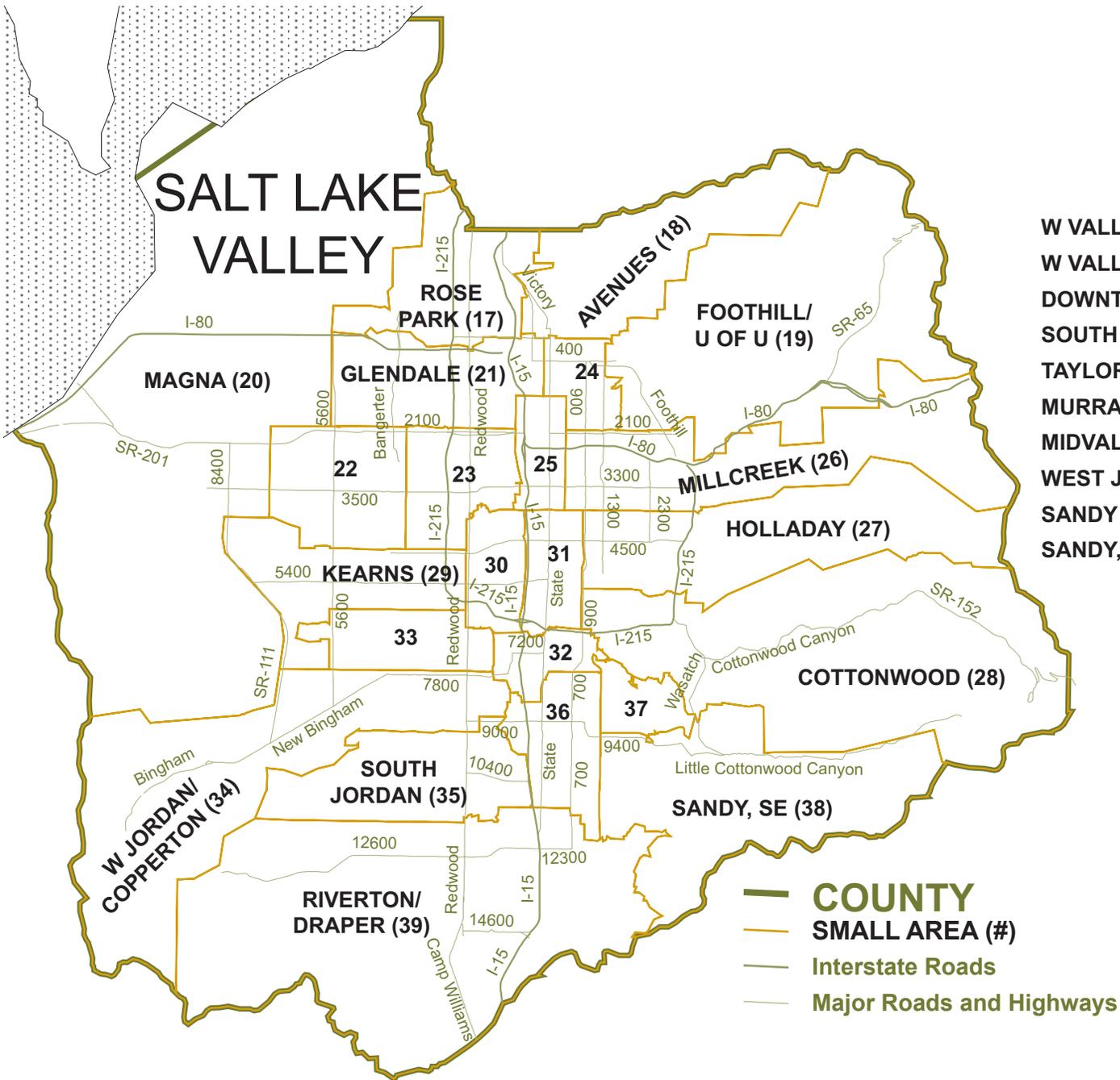


- COUNTY**
- SMALL AREA (#)**
- Interstate Roads**
- Major Roads and Highways**

Note: See page 147 for a list of ZIP codes in each small area.



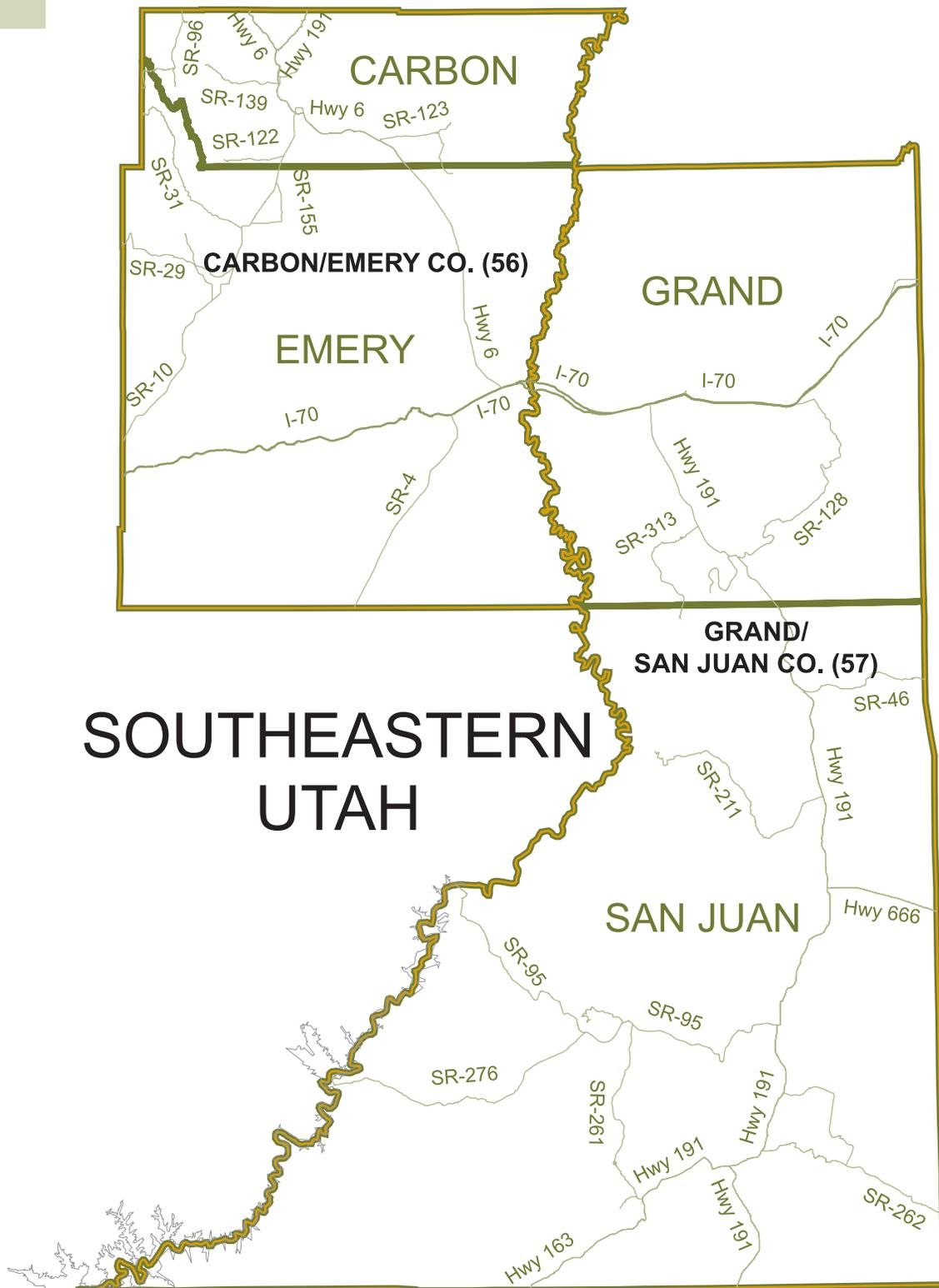
Note: See page 147 for a list of ZIP codes in each small area.



- W VALLEY WEST (22)
- W VALLEY EAST (23)
- DOWNTOWN SALT LAKE (24)
- SOUTH SALT LAKE (25)
- TAYLORSVILLE (30)
- MURRAY (31)
- MIDVALE (32)
- WEST JORDAN NO (33)
- SANDY CENTER (36)
- SANDY, NE (37)

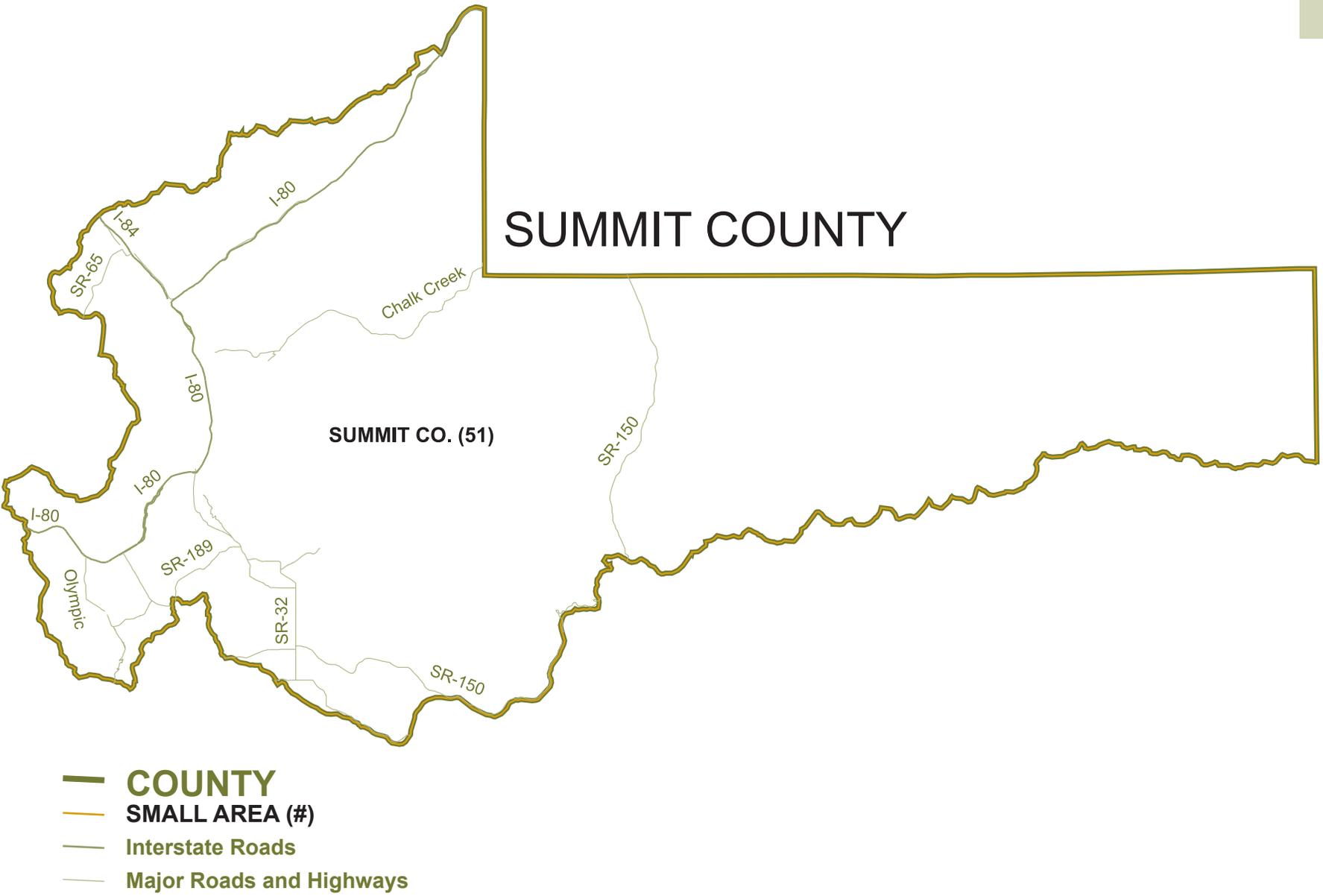
Note: See page 147 for a list of ZIP codes in each small area.

APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS

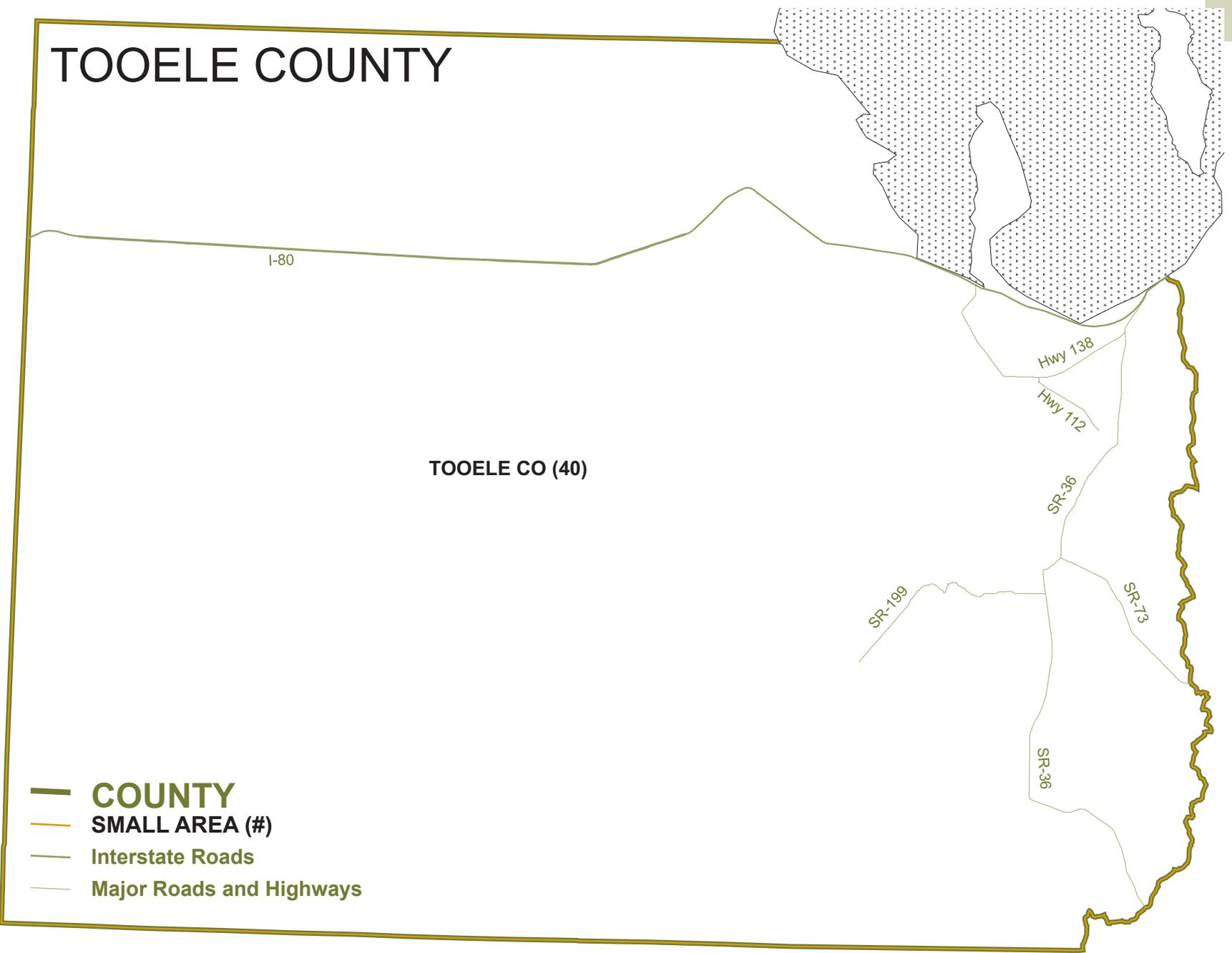


- COUNTY**
- SMALL AREA (#)**
- Interstate Roads**
- Major Roads and Highways**

Note: See page 147 for a list of ZIP codes in each small area.

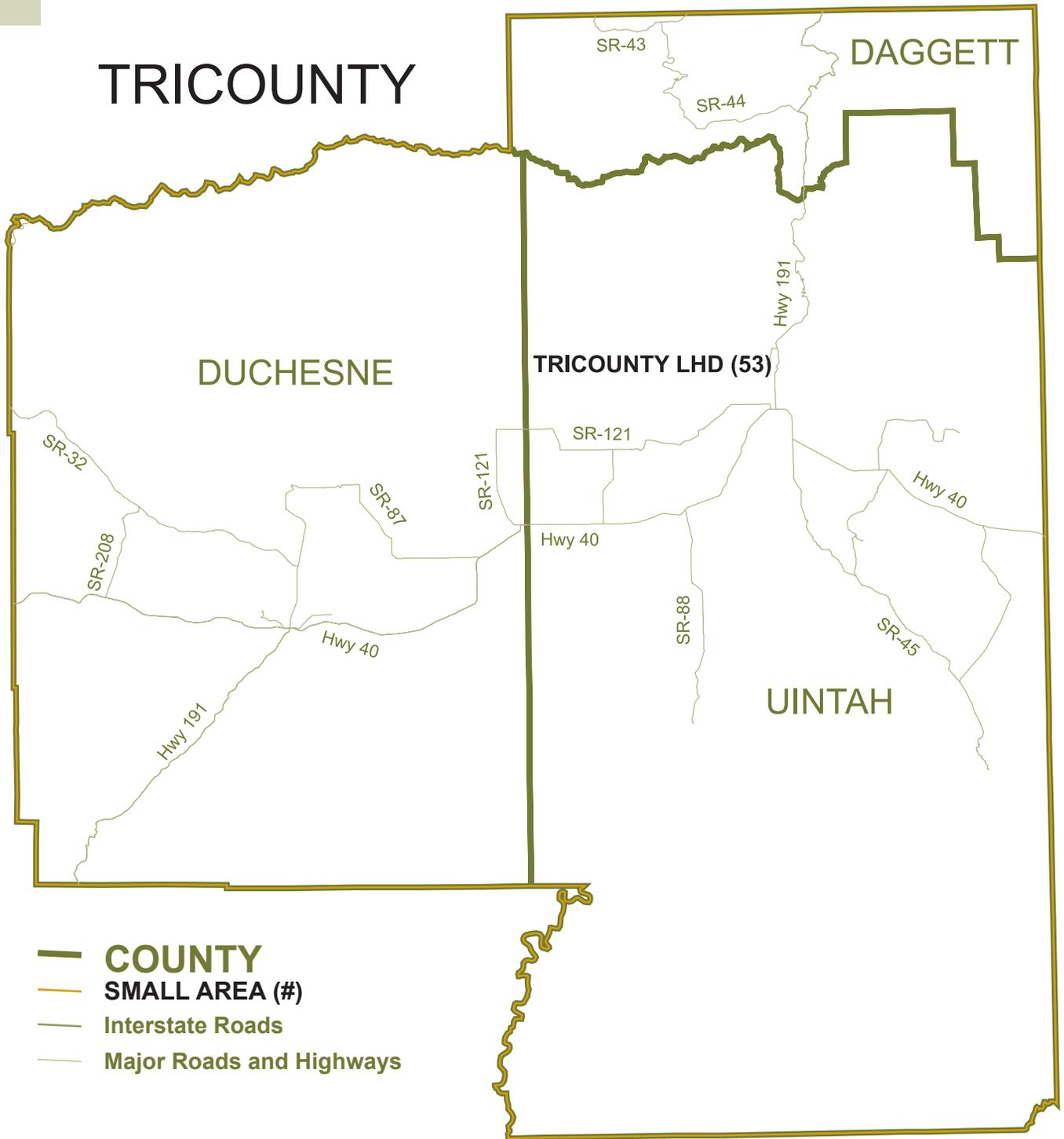


Note: See page 147 for a list of ZIP codes in each small area.



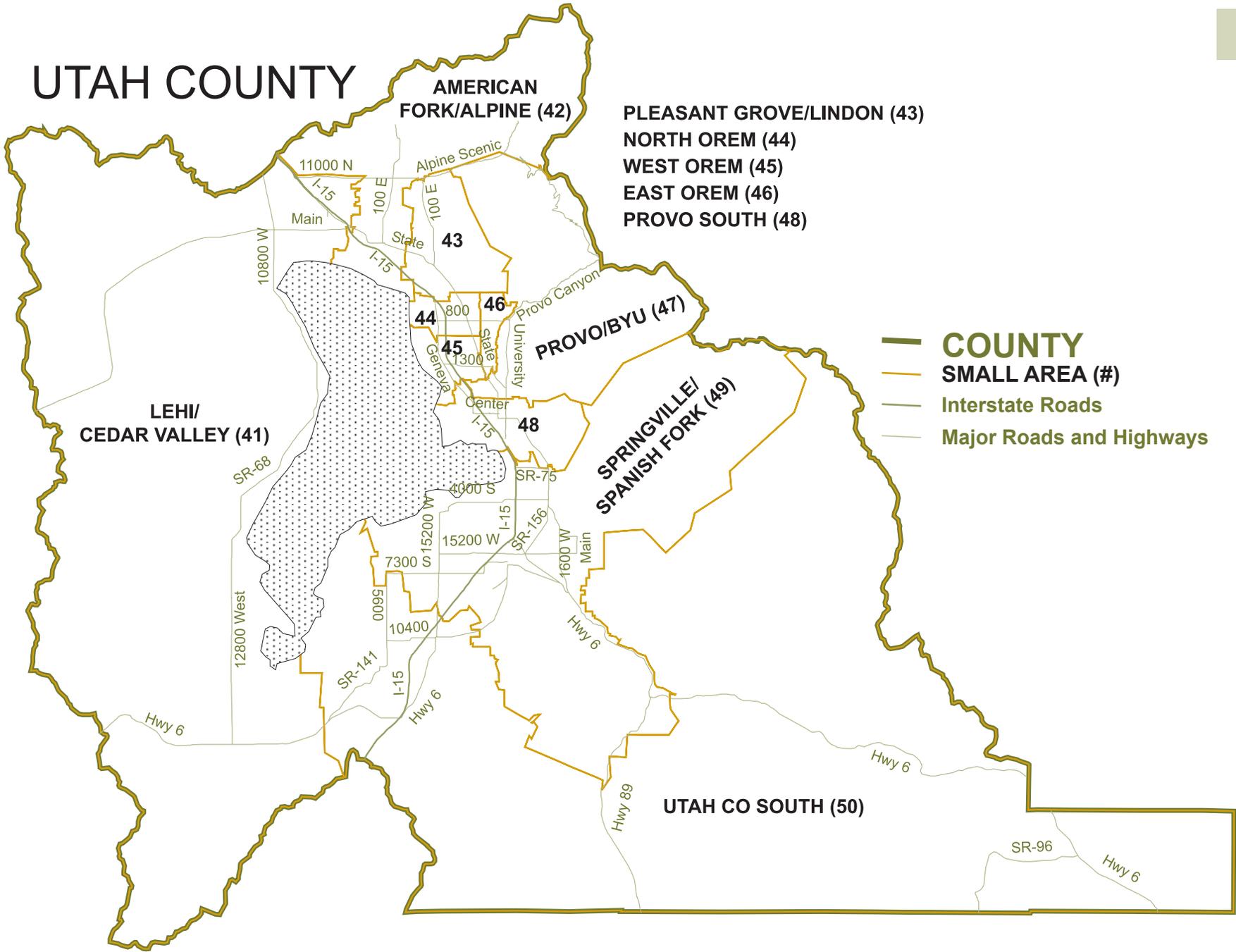
Note: See page 147 for a list of ZIP codes in each small area.

APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS



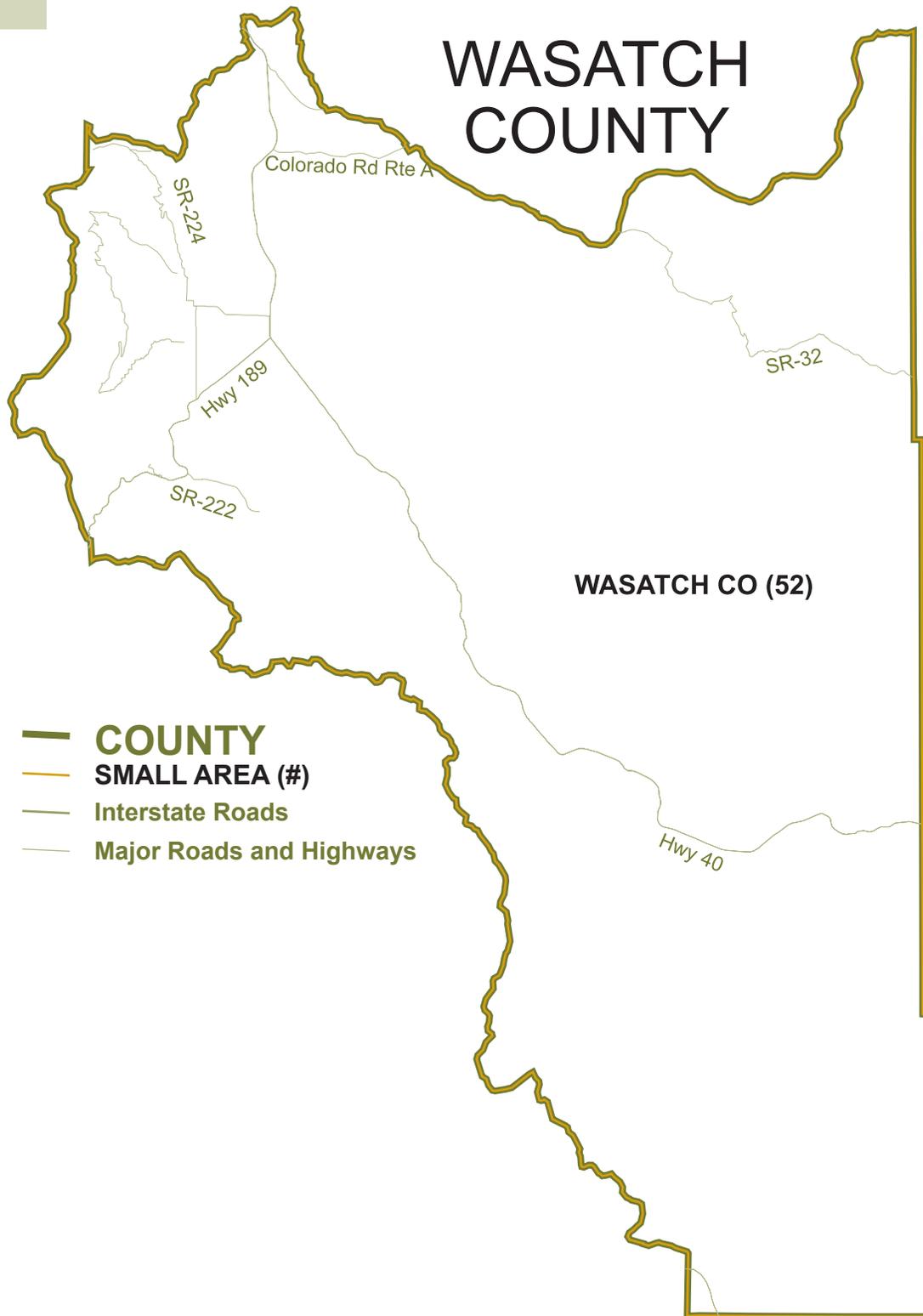
Note: See page 147 for a list of ZIP codes in each small area.

UTAH COUNTY

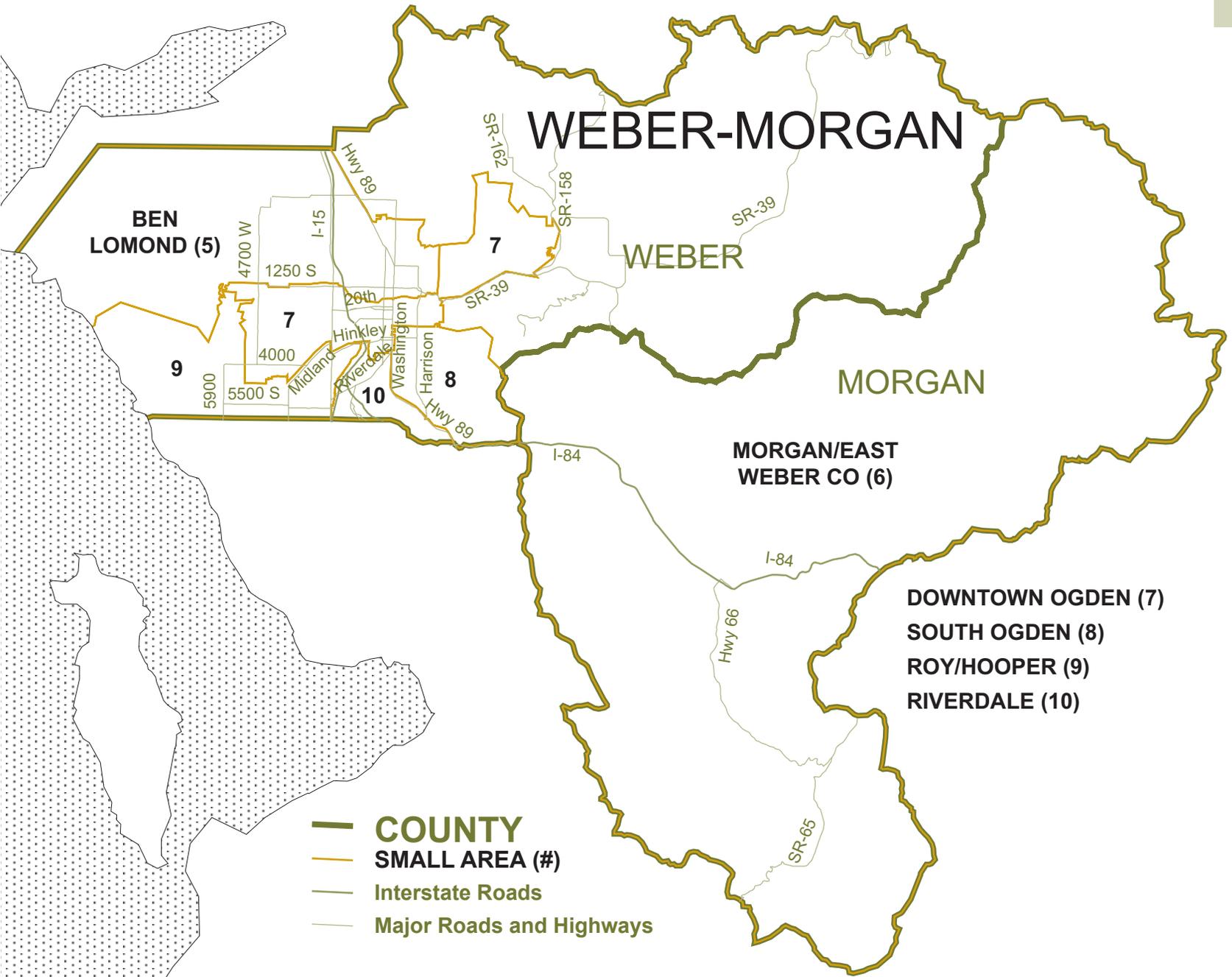


Note: See page 147 for a list of ZIP codes in each small area.

APPENDIX C: SMALL AREA DEFINITIONS & KEY MAPS



Note: See page 147 for a list of ZIP codes in each small area.



Note: See page 147 for a list of ZIP codes in each small area.



APPENDIX D:

SMALL AREA DEMOGRAPHIC SUMMARY TABLE

	Female	Aged 18-34	Aged 35-49	Aged 50-64	Aged 65+	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Married	Single Mothers	Household Income <\$20K	Household Inc. \$20K-~\$50K	Household Income ≥\$50K	Children Living in Poverty	College Degree	Females 25+ w/ College Degree	Employed	Unemployed	Homemaker	Student	Retired	16 or Older Working	Rural Area Residents
U.S.	51.5	31.6	30.4	21.5	16.5	77.4	11.4	0.8	3.7	0.1	11.0	58.8	7.2	19.7	42.7	37.6	16.6	29.0	22.8	61.7	9.9	7.9	4.5	16.1	63.9	21.0
State of Utah	50.0	42.9	27.2	17.7	12.3	90.3	0.8	1.2	1.8	0.6	8.1	68.2	5.8	14.4	43.0	42.6	10.1	29.9	22.3	65.3	6.3	11.3	5.8	11.3	69.0	11.8
Bear River HD	50.9	48.4	24.2	15.5	12.0	93.3	0.3	0.6	1.9	0.2	5.4	71.3	4.7	20.1	46.9	33.0	9.6	29.6	22.9	62.5	3.9	11.8	10.5	11.3	69.3	23.4
Brigham City (1)	50.5	36.9	26.9	18.5	17.7	92.9	0.1	1.3	0.9	0.1	6.2	71.5	5.9	12.5	44.2	43.2	8.7	23.9	17.5	63.9	4.8	12.9	3.5	14.9	63.8	8.5
	34	19	24	34	52	33	9	52	19	7	35	36	38	32	31	36	32	24	24	24	22	43	28	50	11	44
Logan (3)	51.4	60.3	18.5	11.6	9.6	91.9	0.5	0.6	3.2	0.2	5.3	62.8	4.6	30.5	43.7	25.9	11.8	36.0	32.5	56.9	4.3	10.4	20.7	7.7	70.3	3.5
	56	59	3	3	19	27	36	29	55	28	30	17	22	59	27	8	40	45	50	6	18	27	59	15	38	35
Other Box Elder Co. (2)	50.1	36.4	30.2	19.0	14.3	94.6	0.0	0.3	1.4	0.1	5.1	77.8	4.5	15.6	49.3	35.1	8.5	18.5	12.2	65.9	3.1	13.0	3.1	14.9	68.5	59.1
	26	17	45	41	42	43	1	12	31	9	27	52	17	39	42	22	30	10	12	30	8	44	23	49	25	57
Other Cache/Rich Co. (4)	50.4	39.5	29.9	18.9	11.7	95.5	0.1	0.3	0.3	0.1	5.1	82.2	4.0	9.5	53.5	37.0	8.2	29.2	19.0	69.3	3.5	12.3	2.1	12.8	71.3	43.8
	33	26	43	39	33	48	3	8	5	13	6	58	6	19	54	25	28	33	28	45	12	39	11	40	42	52
Central Utah HD	49.9	37.9	25.2	19.8	17.0	95.1	0.2	1.1	0.4	0.2	4.2	73.0	4.8	22.3	50.8	26.9	14.8	19.4	13.1	59.3	7.6	13.2	6.1	13.9	60.1	62.6
Juab/Millard/Sanpete Co. (54)	49.5	40.4	25.2	18.8	15.7	94.4	0.2	0.9	0.5	0.2	5.3	70.9	4.7	24.1	50.6	25.3	14.6	19.5	14.0	57.7	7.8	48.0	7.2	13.9	59.9	58.4
	15	29	14	38	47	42	20	42	12	26	29	33	23	54	47	6	45	14	16	7	44	48	50	45	4	56
Sevier/Piute/Wayne Co. (55)	50.7	33.0	25.4	21.9	19.8	96.8	0.2	1.3	0.2	0.1	2.1	76.9	4.9	19.1	51.2	29.7	15.0	19.2	11.4	62.0	7.1	12.7	4.3	13.9	60.5	70.1
	40	8	16	52	56	60	16	51	2	8	1	50	27	43	49	12	48	12	9	16	42	41	37	44	5	60
Davis County HD	49.9	41.6	29.3	18.0	11.1	92.8	1.1	0.6	1.8	0.2	5.0	73.2	6.0	7.8	37.8	54.5	6.5	33.5	22.7	68.4	5.0	12.2	4.5	10.0	72.4	1.9
Bountiful (16)	51.4	35.2	25.2	20.4	19.3	95.7	0.2	0.3	1.3	0.3	2.9	68.1	4.9	5.7	38.0	56.3	5.1	44.8	26.3	59.1	6.5	11.8	6.2	16.4	66.7	0.9
	54	13	15	47	55	49	21	6	28	35	10	29	28	7	18	52	12	54	47	11	38	35	46	53	20	24
Clearfield/Hill AFB (11)	48.6	50.4	27.5	14.0	8.1	87.4	2.6	1.1	2.7	0.3	7.9	73.2	7.6	11.3	47.6	41.1	10.6	18.7	13.4	74.5	3.8	9.5	4.0	8.2	75.2	1.6
	8	54	28	6	11	11	58	46	52	31	43	40	52	26	39	33	35	11	15	59	14	20	35	18	56	26
Farmington/Centerville (14)	49.3	36.0	32.6	21.6	9.8	96.5	0.3	0.4	0.9	0.1	2.6	78.0	4.0	7.9	27.7	64.4	2.6	45.8	30.5	63.2	2.3	19.2	2.1	13.3	69.4	2.2
	13	16	55	51	20	57	25	16	20	14	6	54	8	15	6	56	2	55	48	21	4	61	10	43	31	30
Layton (12)	49.9	42.4	30.8	17.5	9.2	90.5	1.7	0.5	2.3	0.2	6.7	71.5	7.0	10.3	39.4	50.3	7.9	27.1	22.1	71.7	6.5	10.3	4.0	7.6	74.3	0.5
	19	33	47	25	16	21	56	26	46	29	36	35	48	21	21	45	25	29	34	49	36	26	34	14	52	18
Syracuse/Kaysville (13)	50.6	39.3	32.4	18.5	9.9	96.5	0.3	0.3	1.0	0.1	2.9	79.7	4.5	3.2	27.3	69.5	4.2	41.4	24.6	69.8	2.9	13.8	6.7	6.8	71.3	2.8
	38	24	54	33	21	56	26	9	21	10	9	56	15	2	5	60	7	52	42	46	7	51	48	10	43	33
Woods Cross/North SL (15)	49.9	42.5	29.2	19.1	9.3	95.1	0.2	0.6	1.1	0.4	3.9	72.5	5.7	3.1	40.3	56.6	5.0	31.9	22.0	73.1	4.3	11.7	3.6	7.2	76.9	4.4
	22	35	40	42	17	45	17	32	27	40	19	38	34	1	23	53	11	35	33	55	19	32	30	11	58	38

Note: Crude rates. For demographic variable data sources, see Appendix E.

	Female	Aged 18-34	Aged 35-49	Aged 50-64	Aged 65+	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Married	Single Mothers	Household Income <\$20K	Household Inc. \$20K-<\$50K	Household Income ≥\$50K	Children Living in Poverty	College Degree	Females 25+ w/ College Degree	Employed	Unemployed	Homemaker	Student	Retired	16 or Older Working	Rural Area Residents
U.S.	51.5	31.6	30.4	21.5	16.5	77.4	11.4	0.8	3.7	0.1	11.0	58.8	7.2	19.7	42.7	37.6	16.6	29.0	22.8	61.7	9.9	7.9	4.5	16.1	63.9	21.0
State of Utah	50.0	42.9	27.2	17.7	12.3	90.3	0.8	1.2	1.8	0.6	8.1	68.2	5.8	14.4	43.0	42.6	10.1	29.9	22.3	65.3	6.3	11.3	5.8	11.3	69.0	11.8
Salt Lake Valley HD	49.8	40.8	29.1	18.6	11.5	87.7	1.0	0.8	2.7	1.0	10.7	64.6	6.2	12.9	41.0	46.2	9.4	31.6	24.2	68.4	6.9	9.8	4.4	10.5	71.1	1.2
Avenues (18)	50.7	42.8	23.7	18.6	15.0	91.3	0.9	0.6	2.7	0.3	6.9	55.8	3.9	12.1	40.5	47.3	18.4	59.0	47.5	64.8	5.0	9.2	8.1	12.8	71.1	3.3
	39	36	8	35	43	25	43	31	51	32	38	8	5	28	24	39	53	60	60	26	25	18	54	39	41	34
Cottonwood (28)	50.4	31.9	27.3	25.7	15.1	94.6	0.5	0.2	2.4	0.2	2.6	64.6	5.1	7.7	36.1	56.2	5.9	37.6	34.6	66.7	3.3	7.5	4.2	18.2	70.5	1.1
	32	5	25	59	44	44	35	3	47	24	7	21	31	14	15	51	14	48	52	31	10	5	36	58	39	25
Downtown Salt Lake (24)	49.0	49.3	25.1	14.6	11.0	85.9	1.6	1.2	3.5	0.6	10.1	49.5	5.0	21.0	38.6	40.4	13.8	49.4	40.6	68.6	7.1	4.7	8.7	10.9	73.2	0.0
	9	53	13	8	29	10	55	49	56	46	49	3	29	47	20	31	44	57	57	42	41	3	55	30	48	5
Foothill/U of U (19)	51.4	40.5	22.6	18.9	18.0	91.7	0.5	0.4	5.3	0.2	2.4	64.2	4.0	14.5	33.7	51.9	8.2	62.9	53.5	54.6	8.0	12.8	6.2	18.4	66.4	8.1
	55	31	7	40	54	26	33	14	61	19	3	20	7	35	8	46	27	61	61	4	45	42	47	59	19	43
Glendale (21)	45.7	44.1	28.8	15.3	11.8	62.6	3.1	2.2	4.8	5.0	34.9	45.5	8.9	31.4	54.0	14.6	27.3	7.7	7.1	58.6	12.3	10.0	7.8	11.3	64.6	0.4
	1	43	38	13	36	1	60	58	60	61	60	1	61	60	56	1	60	1	1	10	59	24	52	32	13	15
Holladay (27)	52.9	31.0	23.9	22.0	23.1	94.2	0.6	0.3	2.3	0.2	3.1	67.6	4.7	10.8	34.6	54.6	6.3	49.9	36.7	62.5	2.2	12.2	5.0	18.1	65.7	0.0
	61	4	9	53	60	39	39	13	45	21	14	28	25	24	10	49	17	59	56	19	3	36	41	57	16	11
Kearns (29)	49.9	42.8	32.1	17.3	7.7	84.9	0.6	0.9	2.7	1.7	14.9	63.4	7.5	10.6	56.7	32.7	8.3	14.2	11.6	72.1	6.7	8.2	5.4	7.6	73.9	0.2
	18	37	52	24	9	9	41	41	50	57	54	19	51	23	60	18	29	3	10	51	39	9	42	13	51	14
Magna (20)	49.9	44.5	31.5	15.0	9.1	87.7	0.6	0.8	0.7	1.1	13.5	63.3	6.9	17.6	56.4	26.0	9.4	11.1	8.6	74.8	9.9	8.4	3.7	3.2	70.9	0.7
	20	44	50	10	14	12	40	37	18	55	53	18	47	42	59	9	33	2	2	60	51	11	31	1	40	20
Midvale (32)	49.5	46.9	24.3	16.5	12.3	84.6	1.1	1.1	2.1	0.5	18.0	60.9	7.2	12.7	52.7	34.6	18.5	30.2	20.2	70.9	6.5	11.4	1.3	9.9	73.5	0.0
	14	52	10	20	38	8	48	45	39	44	56	14	50	33	52	21	54	34	29	48	37	30	7	23	49	5
Millcreek (26)	52.4	35.2	25.6	18.0	21.1	93.1	0.8	0.5	2.1	0.3	4.3	60.4	5.5	11.5	40.0	48.4	10.0	43.2	34.9	62.3	6.4	11.0	3.5	16.9	65.9	0.4
	60	14	20	28	58	34	42	24	41	38	22	12	32	27	22	42	34	53	53	18	34	29	29	54	17	16
Murray (31)	51.7	39.7	24.5	18.2	17.6	90.7	1.0	0.8	2.5	0.4	7.7	54.6	6.6	21.7	46.8	31.5	14.9	32.1	21.2	61.6	11.2	7.6	6.8	12.8	69.4	0.0
	58	27	12	29	50	23	46	40	49	42	42	7	44	48	37	16	46	36	31	15	55	6	49	41	30	5
Riverton/Draper (39)	46.3	43.1	35.6	15.5	5.8	93.5	1.0	0.6	1.0	0.3	4.7	83.7	3.7	4.2	26.5	69.3	2.8	36.7	23.8	75.6	4.2	14.1	1.2	4.9	68.8	8.1
	2	38	58	16	4	36	47	30	23	37	25	60	4	3	4	59	3	47	38	61	17	53	5	3	28	42
Rose Park (17)	47.7	45.2	27.8	15.2	11.8	68.7	2.8	1.5	4.7	2.7	36.1	50.2	8.6	23.3	55.5	21.2	24.0	20.9	11.1	68.7	13.2	8.1	2.5	7.4	62.6	0.5
	6	47	32	12	35	3	59	53	59	60	61	5	58	52	58	4	57	18	7	43	60	8	14	12	10	17

Note: Crude rates. For demographic variable data sources, see Appendix E.

	Female	Aged 18-34	Aged 35-49	Aged 50-64	Aged 65+	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Married	Single Mothers	Household Income <\$20K	Household Inc. \$20K-<\$50K	Household Income ≥\$50K	Children Living in Poverty	College Degree	Females 25+ w/ College Degree	Employed	Unemployed	Homemaker	Student	Retired	16 or Older Working	Rural Area Residents
U.S.	51.5	31.6	30.4	21.5	16.5	77.4	11.4	0.8	3.7	0.1	11.0	58.8	7.2	19.7	42.7	37.6	16.6	29.0	22.8	61.7	9.9	7.9	4.5	16.1	63.9	21.0
State of Utah	50.0	42.9	27.2	17.7	12.3	90.3	0.8	1.2	1.8	0.6	8.1	68.2	5.8	14.4	43.0	42.6	10.1	29.9	22.3	65.3	6.3	11.3	5.8	11.3	69.0	11.8
SL Valley HD (cont.)	49.8	40.8	29.1	18.6	11.5	87.7	1.0	0.8	2.7	1.0	10.7	64.6	6.2	12.9	41.0	46.2	9.4	31.6	24.2	68.4	6.9	9.8	4.4	10.5	71.1	1.2
Sandy Center (36)	50.9	38.3	30.9	20.2	10.5	92.9	0.5	0.5	2.2	0.4	5.5	65.6	6.5	10.3	35.8	53.8	4.3	29.1	20.7	68.5	11.2	6.3	5.5	8.6	75.2	0.0
	45	21	48	46	26	32	34	23	44	39	32	25	42	22	14	48	8	32	30	41	54	4	43	19	57	5
Sandy, Northeast (37)	49.7	29.2	32.4	29.3	9.1	95.5	0.3	0.2	2.2	0.3	2.5	77.0	4.3	9.9	24.4	65.8	3.1	49.5	34.1	69.8	3.9	13.8	3.3	9.2	71.6	0.0
	16	3	53	61	15	47	24	2	42	33	5	51	13	20	2	57	4	58	51	47	15	50	27	21	46	5
Sandy, Southeast (38)	49.0	27.4	39.1	27.0	6.5	95.8	0.4	0.3	1.9	0.2	2.4	73.7	4.1	4.4	23.8	71.8	4.2	41.0	36.2	68.2	3.2	14.5	6.1	8.0	73.8	2.4
	10	1	61	60	5	51	31	5	37	17	4	43	10	5	1	61	6	51	55	38	9	54	44	16	50	32
South Jordan (35)	50.2	34.6	36.7	20.9	7.8	96.0	0.3	0.1	1.1	0.4	3.0	74.1	3.1	6.0	25.4	68.5	2.5	38.4	24.5	67.6	5.6	13.7	3.7	9.4	72.5	1.7
	29	12	60	50	10	53	22	1	26	43	11	46	2	8	3	58	1	49	41	36	29	49	32	22	47	27
South Salt Lake (25)	48.8	43.9	28.1	15.5	12.6	79.4	2.1	2.5	2.9	1.0	19.9	48.0	8.8	29.9	50.6	19.6	25.5	20.6	15.5	67.5	15.4	2.4	2.2	12.5	67.9	0.0
	7	42	35	15	39	6	57	59	54	54	58	2	60	58	46	3	58	15	19	35	61	1	12	37	22	5
Taylorville (30)	51.1	42.5	27.7	18.6	11.2	88.4	1.2	1.0	2.9	0.8	9.4	61.0	7.7	14.0	44.1	41.9	7.5	26.0	16.4	72.1	5.1	9.0	2.9	10.9	74.4	0.0
	48	34	31	36	31	15	50	44	53	52	46	15	55	34	30	34	23	27	21	50	26	16	19	29	53	5
West Jordan North (33)	49.9	45.7	33.2	16.2	4.8	88.9	0.5	0.5	1.9	1.2	11.0	72.6	7.1	6.7	44.5	48.8	7.0	20.7	16.2	72.3	5.8	11.8	4.9	5.2	78.5	0.0
	23	49	56	18	1	16	37	25	38	56	50	39	49	10	32	43	20	16	20	52	32	34	39	4	60	10
West Jordan/Copperton (34)	50.9	46.1	33.9	14.6	5.5	90.0	0.6	0.6	2.4	0.7	8.1	74.0	6.9	6.1	43.7	50.1	5.9	27.6	17.8	73.7	7.7	10.1	2.6	5.9	78.8	2.1
	46	51	57	9	3	18	38	27	48	49	44	45	46	9	28	44	15	30	27	56	43	25	16	7	61	29
West Valley East (23)	47.2	45.6	26.1	18.3	10.1	77.6	1.6	1.8	4.0	2.1	19.3	58.0	7.7	20.0	53.0	27.0	17.0	14.4	10.5	69.1	8.4	4.7	6.2	11.6	66.4	0.0
	4	48	23	31	22	5	54	56	57	58	57	9	54	46	53	10	51	4	5	44	49	2	45	33	18	5
West Valley West (22)	49.8	43.4	29.9	19.3	7.4	82.2	0.9	0.8	4.3	2.4	15.6	65.1	8.5	14.9	46.0	39.1	8.5	15.2	10.4	73.8	8.1	8.8	3.1	6.2	74.6	0.1
	17	40	42	44	7	7	44	36	58	59	55	22	57	36	35	28	31	6	4	57	46	13	24	8	54	12
Southeastern Utah HD	51.7	32.9	27.9	22.3	16.9	81.8	0.2	13.4	0.3	0.0	6.2	68.9	6.7	23.3	48.4	28.3	22.2	20.8	13.3	61.9	10.3	11.9	1.8	14.1	60.7	59.1
Carbon/Emery Co. (56)	51.6	32.5	27.3	22.4	17.7	93.2	0.2	0.8	0.4	0.1	7.7	70.8	5.8	22.0	47.0	31.1	15.0	17.7	10.2	58.5	12.2	13.4	1.1	14.8	61.3	59.7
	57	6	26	56	53	35	18	39	7	4	41	32	37	49	38	15	49	7	3	9	58	46	3	48	8	58
Grand/San Juan Co. (57)	51.7	33.5	28.6	22.2	15.7	66.5	0.1	30.4	0.2	0.0	4.1	65.3	7.9	25.8	51.0	23.2	29.9	26.9	17.8	68.4	7.0	9.0	3.0	12.6	60.5	57.4
	59	9	37	54	48	2	11	61	1	1	21	23	56	55	48	5	61	28	26	40	40	17	22	38	6	55

Note: Crude rates. For demographic variable data sources, see Appendix E.

	Female	Aged 18-34	Aged 35-49	Aged 50-64	Aged 65+	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Married	Single Mothers	Household Income <\$20K	Household Inc. \$20K-<\$50K	Household Income ≥\$50K	Children Living in Poverty	College Degree	Females 25+ w/ College Degree	Employed	Unemployed	Homemaker	Student	Retired	16 or Older Working	Rural Area Residents
U.S.	51.5	31.6	30.4	21.5	16.5	77.4	11.4	0.8	3.7	0.1	11.0	58.8	7.2	19.7	42.7	37.6	16.6	29.0	22.8	61.7	9.9	7.9	4.5	16.1	63.9	21.0
State of Utah	50.0	42.9	27.2	17.7	12.3	90.3	0.8	1.2	1.8	0.6	8.1	68.2	5.8	14.4	43.0	42.6	10.1	29.9	22.3	65.3	6.3	11.3	5.8	11.3	69.0	11.8
Southwest Utah HD	50.3	37.7	23.1	18.5	20.8	94.5	0.2	1.4	0.6	0.4	4.1	69.6	5.1	18.2	49.6	32.2	15.7	23.5	17.8	59.8	5.6	10.5	4.7	19.5	60.4	31.1
Cedar City (60)	50.7	52.7	21.6	15.1	10.7	93.7	0.3	1.9	1.1	0.3	3.3	67.0	5.8	22.4	51.8	25.8	20.2	22.8	23.3	63.8	4.6	7.8	13.1	10.6	68.8	24.7
Other Southwest District (61)	49.9	29.2	25.5	23.7	21.6	95.1	0.3	1.2	0.4	0.1	3.6	70.8	4.1	22.6	45.5	31.8	12.7	18.0	15.2	58.0	11.7	8.9	1.6	19.8	60.7	87.2
Other Washington County (59)	49.1	32.6	25.6	20.8	20.9	95.8	0.2	1.1	0.4	0.2	3.0	71.4	4.6	15.1	51.4	33.5	15.1	24.3	17.5	64.1	3.7	12.3	2.7	17.2	57.6	37.2
St. George (58)	51.1	36.8	21.1	16.7	25.4	93.9	0.2	1.3	0.6	0.6	5.6	69.7	5.6	16.7	47.8	35.5	15.0	24.9	16.8	55.6	4.9	11.7	3.0	24.8	57.6	6.9
Summit County HD (51)	47.7	34.3	35.8	22.5	7.4	92.2	0.2	0.3	1.1	0.0	7.6	74.3	4.4	7.3	32.5	60.3	6.1	49.0	42.1	74.2	5.3	9.5	1.9	9.1	77.7	51.9
Tooele County HD (40)	50.7	43.4	29.0	17.1	10.4	90.3	1.3	1.8	0.6	0.2	9.2	73.2	6.2	9.4	50.0	40.5	7.8	22.7	12.3	65.9	6.1	13.4	2.6	12.0	68.5	24.5
TriCounty HD (53)	50.5	35.7	28.1	20.9	15.3	89.9	0.1	7.2	0.3	0.1	3.0	73.3	6.6	19.4	49.9	30.7	18.9	14.8	11.8	62.2	10.1	15.4	1.2	11.1	62.1	61.6
Utah County HD	50.6	54.6	22.9	13.4	9.1	93.0	0.2	0.5	1.3	0.5	6.5	70.2	4.6	17.7	43.7	38.7	8.9	32.1	26.6	59.7	5.6	14.3	12.1	8.3	68.0	6.1
American Fork/Alpine (42)	50.2	39.9	31.8	17.9	10.4	96.6	0.1	0.3	0.6	0.2	3.3	78.5	4.3	8.8	35.8	55.5	4.7	39.8	26.3	59.8	8.2	18.5	3.3	10.3	65.6	4.3
East Orem (46)	50.5	40.4	27.3	19.2	13.0	94.2	0.1	0.4	1.5	0.5	5.2	66.1	4.1	12.5	48.0	39.5	3.6	35.7	35.3	48.9	0.8	18.3	20.3	11.7	65.6	0.0
Lehi/Cedar Valley (41)	50.6	54.9	25.5	12.5	7.1	96.5	0.2	0.5	0.5	0.4	2.7	86.0	4.6	5.3	46.3	48.4	6.6	27.7	22.3	67.1	2.2	18.8	3.9	8.0	71.4	23.0
North Orem (44)	51.1	51.6	25.6	13.4	9.4	90.3	0.3	0.8	1.6	0.9	10.0	71.9	6.4	12.2	53.6	34.2	11.1	34.0	25.5	66.9	5.6	13.2	8.1	6.3	69.8	0.1
Pleasant Grove/Lindon (43)	50.1	45.9	30.1	15.4	8.5	95.9	0.1	0.3	0.7	0.3	4.1	73.7	4.5	8.6	38.2	53.2	7.1	35.6	25.4	68.4	2.8	18.8	4.5	5.4	69.6	0.9

Note: Crude rates. For demographic variable data sources, see Appendix E.

	Female	Aged 18-34	Aged 35-49	Aged 50-64	Aged 65+	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Married	Single Mothers	Household Income <\$20K	Household Inc. \$20K-<\$50K	Household Income ≥\$50K	Children Living in Poverty	College Degree	Females 25+ w/ College Degree	Employed	Unemployed	Homemaker	Student	Retired	16 or Older Working	Rural Area Residents
U.S.	51.5	31.6	30.4	21.5	16.5	77.4	11.4	0.8	3.7	0.1	11.0	58.8	7.2	19.7	42.7	37.6	16.6	29.0	22.8	61.7	9.9	7.9	4.5	16.1	63.9	21.0
State of Utah	50.0	42.9	27.2	17.7	12.3	90.3	0.8	1.2	1.8	0.6	8.1	68.2	5.8	14.4	43.0	42.6	10.1	29.9	22.3	65.3	6.3	11.3	5.8	11.3	69.0	11.8
Utah Cnty HD (cont.)	50.6	54.6	22.9	13.4	9.1	93.0	0.2	0.5	1.3	0.5	6.5	70.2	4.6	17.7	43.7	38.7	8.9	32.1	26.6	59.7	5.6	14.3	12.1	8.3	68.0	6.1
Provo/BYU (47)	51.2	66.9	12.4	10.4	10.2	92.5	0.3	0.4	2.2	0.7	4.7	50.2	2.8	27.3	34.4	38.3	13.4	34.8	42.7	44.3	2.3	9.5	33.1	10.8	59.7	0.8
	51	60	1	2	23	30	30	17	43	48	24	4	1	57	9	26	43	41	59	1	5	19	61	28	3	22
Provo South (48)	51.0	73.8	14.1	7.0	5.1	87.8	0.4	0.9	1.7	0.8	12.6	53.4	4.7	42.5	42.3	15.2	17.3	33.9	24.1	51.0	10.6	9.6	25.0	3.7	71.4	0.8
	47	61	2	1	2	14	32	43	34	51	52	6	24	61	26	2	52	39	39	3	53	23	60	2	45	21
Springville/Spanish Fork (49)	50.1	45.1	27.9	16.0	11.0	96.1	0.1	0.4	0.5	0.3	3.7	81.5	4.6	11.3	45.5	43.1	7.1	23.7	21.5	63.7	4.1	16.6	4.9	10.7	70.1	10.8
	27	45	33	17	30	54	6	19	10	34	18	57	18	25	33	35	21	22	32	22	16	56	40	27	36	45
Utah Co. South (50)	49.9	45.1	27.6	16.5	10.8	94.3	0.1	0.4	0.3	0.2	6.7	82.6	4.8	6.9	65.1	28.0	8.1	19.4	15.1	72.3	9.7	12.3	0.0	5.7	69.5	28.5
	21	46	29	19	28	41	2	15	4	20	37	59	26	11	61	11	26	13	17	53	50	37	1	6	32	49
West Orem (45)	50.4	56.1	20.9	14.4	8.7	91.2	0.3	0.7	1.9	0.7	7.5	65.4	5.0	24.1	36.5	39.4	11.1	36.3	31.2	62.6	5.7	9.3	11.7	10.3	70.2	2.0
	31	58	4	7	13	24	29	35	36	50	39	24	30	53	16	29	36	46	49	20	30	22	56	25	37	28
Wasatch County HD (52)	49.3	39.3	30.7	18.5	11.6	96.1	0.1	0.5	0.3	0.1	4.6	74.3	4.6	12.3	44.0	43.7	5.8	32.7	24.1	67.7	5.8	12.5	2.3	11.7	69.1	35.2
	12	25	46	32	32	55	4	20	6	12	23	48	21	30	29	37	13	37	40	37	31	40	13	35	29	50
Weber-Morgan HD	50.2	38.9	27.9	18.8	14.4	89.1	1.4	0.7	1.4	0.2	10.9	66.7	6.5	13.7	44.1	42.2	11.6	25.9	16.6	65.6	6.6	10.2	3.0	14.7	69.0	6.7
Ben Lomond (5)	51.3	38.8	27.6	18.3	15.3	90.5	1.2	0.7	1.0	0.1	9.5	60.8	7.7	15.5	54.6	29.9	12.1	20.8	11.4	65.7	8.3	8.8	3.0	14.2	68.3	7.2
	53	22	30	30	46	22	49	34	22	11	47	13	53	38	57	13	41	17	8	28	48	12	20	47	24	40
Downtown Ogden (7)	46.4	43.4	28.0	16.5	12.1	74.8	3.2	1.6	1.3	0.1	29.4	58.7	8.7	26.0	37.9	36.1	27.1	17.8	10.8	59.4	11.4	14.0	1.2	14.0	64.4	7.6
	3	39	34	21	37	4	61	54	29	16	59	10	59	56	17	24	59	8	6	12	56	52	6	46	12	41
Morgan/East Weber Co. (6)	50.0	33.5	31.1	22.4	13.1	97.3	0.2	0.3	0.6	0.0	2.3	77.8	3.6	6.9	35.8	57.3	4.8	33.8	23.0	66.8	3.4	11.6	2.6	15.6	69.7	50.5
	25	10	49	55	41	61	13	4	14	2	2	53	3	12	13	54	10	38	36	32	11	31	17	51	34	53
Riverdale (10)	51.2	37.3	26.0	19.4	17.4	92.8	1.3	0.6	1.3	0.2	5.4	59.4	6.6	17.4	35.1	47.5	11.5	23.9	17.3	65.2	4.7	10.8	3.1	16.1	68.2	2.3
	52	20	22	45	49	31	52	28	30	23	31	11	43	41	11	40	38	23	23	27	21	28	25	52	23	31
Roy/Hooper (9)	50.8	40.9	29.5	17.9	11.7	92.5	0.9	0.5	1.9	0.1	6.1	74.4	5.9	4.3	50.3	45.4	6.6	23.7	13.2	72.4	4.9	8.9	0.7	13.0	74.9	3.7
	44	32	41	27	34	29	45	22	35	15	34	49	39	4	45	38	19	21	14	54	24	15	2	42	55	36
South Ogden (8)	50.7	39.1	24.5	18.8	17.6	87.7	1.4	0.7	2.1	0.2	11.9	62.2	5.7	19.9	41.7	38.4	11.7	34.9	26.0	60.5	6.5	8.3	7.4	17.4	66.9	0.7
	41	23	11	37	51	13	53	33	40	27	51	16	35	45	25	27	39	42	45	14	35	10	51	56	21	19

Note: Crude rates. For demographic variable data sources, see Appendix E.



APPENDIX E:

DEMOGRAPHIC
CHARACTERISTICS
BY SMALL AREA

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Male Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Male Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	105,664,440	48.5%	47.5%	49.5%
	State of Utah	1,657,454	826,699	49.9%	48.9%	50.9%
	Bear River HD	98,027	48,175	49.1%	48.2%	50.1%
28	Brigham City (1)	14,566	7,214	49.5%	48.5%	50.5%
6	Logan (3)	45,904	22,290	48.6%	47.6%	49.5%
36	Other Box Elder Co. (2)	14,636	7,310	49.9%	49.0%	50.9%
29	Other Cache/Rich Co. (4)	22,921	11,361	49.6%	48.6%	50.5%
	Central Utah HD	47,558	23,824	50.1%	49.1%	51.1%
47	Juab/Millard/Sanpete Co. (54)	31,637	15,970	50.5%	49.5%	51.5%
22	Sevier/Piute/Wayne Co. (55)	15,921	7,854	49.3%	48.4%	50.3%
	Davis County HD	175,027	87,636	50.1%	49.1%	51.0%
8	Bountiful (16)	33,318	16,207	48.6%	47.7%	49.6%
54	Clearfield/Hill AFB (11)	37,329	19,184	51.4%	50.4%	52.4%
49	Farmington/Centerville (14)	19,034	9,642	50.7%	49.7%	51.6%
43	Layton (12)	46,815	23,474	50.1%	49.2%	51.1%
24	Syracuse/Kaysville (13)	24,542	12,119	49.4%	48.4%	50.4%
40	Woods Cross/North SL (15)	13,989	7,009	50.1%	49.1%	51.1%
	Salt Lake Valley HD	658,810	330,648	50.2%	49.2%	51.2%
23	Avenues (18)	18,959	9,353	49.3%	48.4%	50.3%
30	Cottonwood (28)	33,297	16,517	49.6%	48.6%	50.6%
53	Downtown Salt Lake (24)	42,808	21,842	51.0%	50.0%	52.0%
7	Foothill/U of U (19)	17,778	8,635	48.6%	47.6%	49.6%
61	Glendale (21)	18,642	10,123	54.3%	53.3%	55.3%
1	Holladay (27)	35,956	16,939	47.1%	46.1%	48.1%
44	Kearns (29)	42,995	21,559	50.1%	49.2%	51.1%
42	Magna (20)	15,623	7,833	50.1%	49.2%	51.1%
48	Midvale (32)	21,672	10,942	50.5%	49.5%	51.5%
2	Millcreek (26)	44,008	20,944	47.6%	46.6%	48.6%
4	Murray (31)	24,072	11,632	48.3%	47.3%	49.3%
60	Riverton/Draper (39)	41,391	22,237	53.7%	52.7%	54.7%
56	Rose Park (17)	22,639	11,836	52.3%	51.3%	53.3%
17	Sandy Center (36)	36,106	17,729	49.1%	48.1%	50.1%
46	Sandy, Northeast (37)	18,245	9,176	50.3%	49.3%	51.3%
52	Sandy, Southeast (38)	20,781	10,601	51.0%	50.0%	52.0%
33	South Jordan (35)	20,931	10,434	49.8%	48.9%	50.8%
55	South Salt Lake (25)	18,456	9,516	51.6%	50.6%	52.5%
14	Taylorsville (30)	27,372	13,395	48.9%	48.0%	49.9%
39	West Jordan North (33)	30,391	15,224	50.1%	49.1%	51.1%
16	West Jordan/Copperton (34)	26,360	12,937	49.1%	48.1%	50.1%
58	West Valley East (23)	35,527	18,748	52.8%	51.8%	53.7%
45	West Valley West (22)	44,794	22,500	50.2%	49.2%	51.2%
	Southeastern Utah HD	36,828	17,805	48.3%	47.4%	49.3%
5	Carbon/Emery Co. (56)	21,451	10,377	48.4%	47.4%	49.4%
3	Grand/San Juan Co. (57)	15,377	7,428	48.3%	47.3%	49.3%
	Southwest Utah HD	116,150	57,671	49.7%	48.7%	50.6%
19	Cedar City (60)	22,401	11,033	49.3%	48.3%	50.2%
38	Other Southwest District (61)	15,384	7,703	50.1%	49.1%	51.1%
51	Other Washington County (59)	32,503	16,531	50.9%	49.9%	51.8%
12	St. George (58)	45,862	22,404	48.9%	47.9%	49.8%
57	Summit County HD (51)	24,525	12,830	52.3%	51.3%	53.3%
20	Tooele County HD (40)	32,458	15,995	49.3%	48.3%	50.3%
26	TriCounty HD (53)	28,023	13,859	49.5%	48.5%	50.4%
	Utah County HD	278,832	137,808	49.4%	48.4%	50.4%
32	American Fork/Alpine (42)	26,819	13,346	49.8%	48.8%	50.7%
27	East Orem (46)	14,955	7,405	49.5%	48.5%	50.5%
25	Lehi/Cedar Valley (41)	18,752	9,272	49.4%	48.5%	50.4%
13	North Orem (44)	25,965	12,704	48.9%	47.9%	49.9%
34	Pleasant Grove/Lindon (43)	24,636	12,282	49.9%	48.9%	50.8%
11	Provo/BYU (47)	39,401	19,234	48.8%	47.8%	49.8%
15	Provo South (48)	48,138	23,565	49.0%	48.0%	49.9%
35	Springville/Spanish Fork (49)	41,036	20,484	49.9%	48.9%	50.9%
41	Utah Co. South (50)	17,363	8,705	50.1%	49.2%	51.1%
31	West Orem (45)	21,774	10,808	49.6%	48.7%	50.6%
50	Wasatch County HD (52)	12,514	6,348	50.7%	49.7%	51.7%
	Weber-Morgan HD	148,702	74,100	49.8%	48.9%	50.8%
9	Ben Lomond (5)	33,215	16,160	48.7%	47.7%	49.6%
59	Downtown Ogden (7)	21,684	11,621	53.6%	52.6%	54.6%
37	Morgan/East Weber Co. (6)	24,131	12,073	50.0%	49.1%	51.0%
10	Riverdale (10)	15,522	7,574	48.8%	47.8%	49.8%
18	Roy/Hooper (9)	27,898	13,733	49.2%	48.2%	50.2%
21	South Ogden (8)	26,255	12,941	49.3%	48.3%	50.3%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Female Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Female Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	112,138,611	51.5%	50.5%	52.5%
	State of Utah	1,657,454	830,755	50.1%	49.1%	51.1%
	Bear River HD	98,027	49,852	50.9%	49.9%	51.8%
34	Brigham City (1)	14,566	7,352	50.5%	49.5%	51.5%
56	Logan (3)	45,904	23,614	51.4%	50.5%	52.4%
26	Other Box Elder Co. (2)	14,636	7,326	50.1%	49.1%	51.0%
33	Other Cache/Rich Co. (4)	22,921	11,560	50.4%	49.5%	51.4%
	Central Utah HD	47,558	23,734	49.9%	48.9%	50.9%
15	Juab/Millard/Sanpete Co. (54)	31,637	15,667	49.5%	48.5%	50.5%
40	Sevier/Piute/Wayne Co. (55)	15,921	8,067	50.7%	49.7%	51.6%
	Davis County HD	175,027	87,391	49.9%	49.0%	50.9%
54	Bountiful (16)	33,318	17,111	51.4%	50.4%	52.3%
8	Clearfield/Hill AFB (11)	37,329	18,145	48.6%	47.6%	49.6%
13	Farmington/Centerville (14)	19,034	9,392	49.3%	48.4%	50.3%
19	Layton (12)	46,815	23,341	49.9%	48.9%	50.8%
38	Syracuse/Kaysville (13)	24,542	12,423	50.6%	49.6%	51.6%
22	Woods Cross/North SL (15)	13,989	6,980	49.9%	48.9%	50.9%
	Salt Lake Valley HD	658,810	328,162	49.8%	48.8%	50.8%
39	Avenues (18)	18,959	9,606	50.7%	49.7%	51.6%
32	Cottonwood (28)	33,297	16,780	50.4%	49.4%	51.4%
9	Downtown Salt Lake (24)	42,808	20,966	49.0%	48.0%	50.0%
55	Foothill/U of U (19)	17,778	9,143	51.4%	50.4%	52.4%
1	Glendale (21)	18,642	8,519	45.7%	44.7%	46.7%
61	Holladay (27)	35,956	19,017	52.9%	51.9%	53.9%
18	Kearns (29)	42,995	21,436	49.9%	48.9%	50.8%
20	Magna (20)	15,623	7,790	49.9%	48.9%	50.8%
14	Midvale (32)	21,672	10,730	49.5%	48.5%	50.5%
60	Millcreek (26)	44,008	23,064	52.4%	51.4%	53.4%
58	Murray (31)	24,072	12,440	51.7%	50.7%	52.7%
2	Riverton/Draper (39)	41,391	19,154	46.3%	45.3%	47.3%
6	Rose Park (17)	22,639	10,803	47.7%	46.7%	48.7%
45	Sandy Center (36)	36,106	18,377	50.9%	49.9%	51.9%
16	Sandy, Northeast (37)	18,245	9,069	49.7%	48.7%	50.7%
10	Sandy, Southeast (38)	20,781	10,180	49.0%	48.0%	50.0%
29	South Jordan (35)	20,931	10,497	50.2%	49.2%	51.1%
7	South Salt Lake (25)	18,456	8,940	48.4%	47.5%	49.4%
48	Taylorsville (30)	27,372	13,977	51.1%	50.1%	52.0%
23	West Jordan North (33)	30,391	15,167	49.9%	48.9%	50.9%
46	West Jordan/Copperton (34)	26,360	13,423	50.9%	49.9%	51.9%
4	West Valley East (23)	35,527	16,779	47.2%	46.3%	48.2%
17	West Valley West (22)	44,794	22,294	49.8%	48.8%	50.8%
	Southeastern Utah HD	36,828	19,023	51.7%	50.7%	52.6%
57	Carbon/Emery Co. (56)	21,451	11,074	51.6%	50.6%	52.6%
59	Grand/San Juan Co. (57)	15,377	7,949	51.7%	50.7%	52.7%
	Southwest Utah HD	116,150	58,479	50.3%	49.4%	51.3%
43	Cedar City (60)	22,401	11,368	50.7%	49.8%	51.7%
24	Other Southwest District (61)	15,384	7,681	49.9%	48.9%	50.9%
11	Other Washington County (59)	32,503	15,972	49.1%	48.2%	50.1%
50	St. George (58)	45,862	23,458	51.1%	50.2%	52.1%
5	Summit County HD (51)	24,525	11,695	47.7%	46.7%	48.7%
42	Tooele County HD (40)	32,458	16,463	50.7%	49.7%	51.7%
36	TriCounty HD (53)	28,023	14,164	50.5%	49.6%	51.5%
	Utah County HD	278,832	141,024	50.6%	49.6%	51.6%
30	American Fork/Alpine (42)	26,819	13,473	50.2%	49.3%	51.2%
35	East Orem (46)	14,955	7,550	50.5%	49.5%	51.5%
37	Lehi/Cedar Valley (41)	18,752	9,480	50.6%	49.6%	51.5%
49	North Orem (44)	25,965	13,261	51.1%	50.1%	52.1%
28	Pleasant Grove/Lindon (43)	24,636	12,354	50.1%	49.2%	51.1%
51	Provo/BYU (47)	39,401	20,167	51.2%	50.2%	52.2%
47	Provo South (48)	48,138	24,573	51.0%	50.1%	52.0%
27	Springville/Spanish Fork (49)	41,036	20,552	50.1%	49.1%	51.1%
21	Utah Co. South (50)	17,363	8,658	49.9%	48.9%	50.8%
31	West Orem (45)	21,774	10,966	50.4%	49.4%	51.3%
12	Wasatch County HD (52)	12,514	6,166	49.3%	48.3%	50.3%
	Weber-Morgan HD	148,702	74,602	50.2%	49.2%	51.1%
53	Ben Lomond (5)	33,215	17,055	51.3%	50.4%	52.3%
3	Downtown Ogden (7)	21,684	10,063	46.4%	45.4%	47.4%
25	Morgan/East Weber Co. (6)	24,131	12,058	50.0%	49.0%	50.9%
52	Riverdale (10)	15,522	7,948	51.2%	50.2%	52.2%
44	Roy/Hooper (9)	27,898	14,165	50.8%	49.8%	51.8%
41	South Ogden (8)	26,255	13,314	50.7%	49.7%	51.7%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

18-34 Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Aged 18-34	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	68,806,106	31.6%	30.7%	32.5%
	State of Utah	1,657,454	710,240	42.9%	41.9%	43.8%
	Bear River HD	98,027	47,446	48.4%	47.4%	49.4%
19	Brigham City (1)	14,566	5,377	36.9%	36.0%	37.9%
59	Logan (3)	45,904	27,683	60.3%	59.3%	61.3%
17	Other Box Elder Co. (2)	14,636	5,334	36.4%	35.5%	37.4%
26	Other Cache/Rich Co. (4)	22,921	9,052	39.5%	38.5%	40.5%
	Central Utah HD	47,558	18,031	37.9%	37.0%	38.9%
29	Juab/Millard/Sanpete Co. (54)	31,637	12,781	40.4%	39.4%	41.4%
8	Sevier/Piute/Wayne Co. (55)	15,921	5,250	33.0%	32.1%	33.9%
	Davis County HD	175,027	72,837	41.6%	40.6%	42.6%
13	Bountiful (16)	33,318	11,737	35.2%	34.3%	36.2%
54	Clearfield/Hill AFB (11)	37,329	18,799	50.4%	49.4%	51.3%
16	Farmington/Centerville (14)	19,034	6,857	36.0%	35.1%	37.0%
33	Layton (12)	46,815	19,864	42.4%	41.5%	43.4%
24	Syracuse/Kaysville (13)	24,542	9,633	39.3%	38.3%	40.2%
35	Woods Cross/North SL (15)	13,989	5,946	42.5%	41.5%	43.5%
	Salt Lake Valley HD	658,810	268,557	40.8%	39.8%	41.7%
36	Avenues (18)	18,959	8,111	42.8%	41.8%	43.8%
5	Cottonwood (28)	33,297	10,617	31.9%	31.0%	32.8%
53	Downtown Salt Lake (24)	42,808	21,125	49.3%	48.4%	50.3%
31	Foothill/U of U (19)	17,778	7,198	40.5%	39.5%	41.5%
43	Glendale (21)	18,642	8,227	44.1%	43.2%	45.1%
4	Holladay (27)	35,956	11,147	31.0%	30.1%	31.9%
37	Kearns (29)	42,995	18,420	42.8%	41.9%	43.8%
44	Magna (20)	15,623	6,949	44.5%	43.5%	45.5%
52	Midvale (32)	21,672	10,156	46.9%	45.9%	47.8%
14	Millcreek (26)	44,008	15,507	35.2%	34.3%	36.2%
27	Murray (31)	24,072	9,556	39.7%	38.7%	40.7%
38	Riverton/Draper (39)	41,391	17,831	43.1%	42.1%	44.0%
47	Rose Park (17)	22,639	10,223	45.2%	44.2%	46.1%
21	Sandy Center (36)	36,106	13,842	38.3%	37.4%	39.3%
3	Sandy, Northeast (37)	18,245	5,333	29.2%	28.3%	30.1%
1	Sandy, Southeast (38)	20,781	5,686	27.4%	26.5%	28.2%
12	South Jordan (35)	20,931	7,243	34.6%	33.7%	35.5%
42	South Salt Lake (25)	18,456	8,093	43.9%	42.9%	44.8%
34	Taylorsville (30)	27,372	11,630	42.5%	41.5%	43.5%
49	West Jordan North (33)	30,391	13,897	45.7%	44.8%	46.7%
51	West Jordan/Copperton (34)	26,360	12,147	46.1%	45.1%	47.1%
48	West Valley East (23)	35,527	16,192	45.6%	44.6%	46.6%
40	West Valley West (22)	44,794	19,426	43.4%	42.4%	44.3%
	Southeastern Utah HD	36,828	12,128	32.9%	32.0%	33.9%
6	Carbon/Emery Co. (56)	21,451	6,981	32.5%	31.6%	33.5%
9	Grand/San Juan Co. (57)	15,377	5,147	33.5%	32.5%	34.4%
	Southwest Utah HD	116,150	43,777	37.7%	36.7%	38.6%
56	Cedar City (60)	22,401	11,796	52.7%	51.7%	53.6%
2	Other Southwest District (61)	15,384	4,487	29.2%	28.3%	30.1%
7	Other Washington County (59)	32,503	10,607	32.6%	31.7%	33.6%
18	St. George (58)	45,862	16,887	36.8%	35.9%	37.8%
11	Summit County HD (51)	24,525	8,410	34.3%	33.4%	35.2%
41	Tooele County HD (40)	32,458	14,100	43.4%	42.5%	44.4%
15	TriCounty HD (53)	28,023	9,997	35.7%	34.7%	36.6%
	Utah County HD	278,832	152,216	54.6%	53.6%	55.6%
28	American Fork/Alpine (42)	26,819	10,710	39.9%	39.0%	40.9%
30	East Orem (46)	14,955	6,045	40.4%	39.5%	41.4%
57	Lehi/Cedar Valley (41)	18,752	10,298	54.9%	53.9%	55.9%
55	North Orem (44)	25,965	13,407	51.6%	50.7%	52.6%
50	Pleasant Grove/Lindon (43)	24,636	11,314	45.9%	44.9%	46.9%
60	Provo/BYU (47)	39,401	26,378	66.9%	66.0%	67.9%
61	Provo South (48)	48,138	35,505	73.8%	72.9%	74.6%
45	Springville/Spanish Fork (49)	41,036	18,513	45.1%	44.1%	46.1%
46	Utah Co. South (50)	17,363	7,834	45.1%	44.1%	46.1%
58	West Orem (45)	21,774	12,212	56.1%	55.1%	57.1%
25	Wasatch County HD (52)	12,514	4,919	39.3%	38.4%	40.3%
	Weber-Morgan HD	148,702	57,822	38.9%	37.9%	39.8%
22	Ben Lomond (5)	33,215	12,895	38.8%	37.9%	39.8%
39	Downtown Ogden (7)	21,684	9,401	43.4%	42.4%	44.3%
10	Morgan/East Weber Co. (6)	24,131	8,079	33.5%	32.6%	34.4%
20	Riverdale (10)	15,522	5,785	37.3%	36.3%	38.2%
32	Roy/Hooper (9)	27,898	11,403	40.9%	39.9%	41.8%
23	South Ogden (8)	26,255	10,259	39.1%	38.1%	40.0%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

35-49 Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Aged 35-49	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	66,169,614	30.4%	29.5%	31.3%
	State of Utah	1,657,454	451,147	27.2%	26.3%	28.1%
	Bear River HD	98,027	23,675	24.2%	23.3%	25.0%
24	Brigham City (1)	14,566	3,914	26.9%	26.0%	27.7%
3	Logan (3)	45,904	8,481	18.5%	17.7%	19.2%
45	Other Box Elder Co. (2)	14,636	4,417	30.2%	29.3%	31.1%
43	Other Cache/Rich Co. (4)	22,921	6,863	29.9%	29.0%	30.8%
	Central Utah HD	47,558	12,002	25.2%	24.4%	26.1%
14	Juab/Millard/Sanpete Co. (54)	31,637	7,957	25.2%	24.3%	26.0%
16	Sevier/Piute/Wayne Co. (55)	15,921	4,045	25.4%	24.6%	26.3%
	Davis County HD	175,027	51,327	29.3%	28.4%	30.2%
15	Bountiful (16)	33,318	8,380	25.2%	24.3%	26.0%
28	Clearfield/Hill AFB (11)	37,329	10,268	27.5%	26.6%	28.4%
55	Farmington/Centerville (14)	19,034	6,211	32.6%	31.7%	33.6%
47	Layton (12)	46,815	14,440	30.8%	29.9%	31.8%
54	Syracuse/Kaysville (13)	24,542	7,948	32.4%	31.5%	33.3%
40	Woods Cross/North SL (15)	13,989	4,078	29.2%	28.3%	30.0%
	Salt Lake Valley HD	658,810	191,816	29.1%	28.2%	30.0%
8	Avenues (18)	18,959	4,489	23.7%	22.8%	24.5%
25	Cottonwood (28)	33,297	9,102	27.3%	26.5%	28.2%
13	Downtown Salt Lake (24)	42,808	10,758	25.1%	24.3%	26.0%
7	Foothill/U of U (19)	17,778	4,023	22.6%	21.8%	23.4%
38	Glendale (21)	18,642	5,363	28.8%	27.9%	29.7%
9	Holladay (27)	35,956	8,587	23.9%	23.0%	24.7%
52	Kearns (29)	42,995	13,801	32.1%	31.2%	33.0%
50	Magna (20)	15,623	4,914	31.5%	30.5%	32.4%
10	Midvale (32)	21,672	5,269	24.3%	23.5%	25.2%
20	Millcreek (26)	44,008	11,282	25.6%	24.8%	26.5%
12	Murray (31)	24,072	5,900	24.5%	23.7%	25.4%
58	Riverton/Draper (39)	41,391	14,720	35.6%	34.6%	36.5%
32	Rose Park (17)	22,639	6,302	27.8%	27.0%	28.7%
48	Sandy Center (36)	36,106	11,163	30.9%	30.0%	31.8%
53	Sandy, Northeast (37)	18,245	5,908	32.4%	31.5%	33.3%
61	Sandy, Southeast (38)	20,781	8,121	39.1%	38.1%	40.0%
60	South Jordan (35)	20,931	7,683	36.7%	35.8%	37.7%
35	South Salt Lake (25)	18,456	5,182	28.1%	27.2%	29.0%
31	Taylorsville (30)	27,372	7,569	27.7%	26.8%	28.5%
56	West Jordan North (33)	30,391	10,084	33.2%	32.3%	34.1%
57	West Jordan/Copperton (34)	26,360	8,932	33.9%	33.0%	34.8%
23	West Valley East (23)	35,527	9,267	26.1%	25.2%	26.9%
42	West Valley West (22)	44,794	13,390	29.9%	29.0%	30.8%
	Southeastern Utah HD	36,828	10,268	27.9%	27.0%	28.8%
26	Carbon/Emery Co. (56)	21,451	5,865	27.3%	26.5%	28.2%
37	Grand/San Juan Co. (57)	15,377	4,403	28.6%	27.7%	29.5%
	Southwest Utah HD	116,150	26,783	23.1%	22.2%	23.9%
6	Cedar City (60)	22,401	4,831	21.6%	20.8%	22.4%
18	Other Southwest District (61)	15,384	3,921	25.5%	24.6%	26.3%
21	Other Washington County (59)	32,503	8,337	25.6%	24.8%	26.5%
5	St. George (58)	45,862	9,694	21.1%	20.3%	21.9%
59	Summit County HD (51)	24,525	8,771	35.8%	34.8%	36.7%
39	Tooele County HD (40)	32,458	9,426	29.0%	28.2%	29.9%
36	TriCounty HD (53)	28,023	7,887	28.1%	27.3%	29.0%
	Utah County HD	278,832	63,920	22.9%	22.1%	23.7%
51	American Fork/Alpine (42)	26,819	8,526	31.8%	30.9%	32.7%
27	East Orem (46)	14,955	4,090	27.3%	26.5%	28.2%
17	Lehi/Cedar Valley (41)	18,752	4,773	25.5%	24.6%	26.3%
19	North Orem (44)	25,965	6,655	25.6%	24.8%	26.5%
44	Pleasant Grove/Lindon (43)	24,636	7,425	30.1%	29.2%	31.0%
1	Provo/BYU (47)	39,401	4,899	12.4%	11.8%	13.1%
2	Provo South (48)	48,138	6,788	14.1%	13.4%	14.8%
33	Springville/Spanish Fork (49)	41,036	11,437	27.9%	27.0%	28.7%
29	Utah Co. South (50)	17,363	4,787	27.6%	26.7%	28.4%
4	West Orem (45)	21,774	4,540	20.9%	20.1%	21.6%
46	Wasatch County HD (52)	12,514	3,836	30.7%	29.7%	31.6%
	Weber-Morgan HD	148,702	41,436	27.9%	27.0%	28.7%
30	Ben Lomond (5)	33,215	9,166	27.6%	26.7%	28.5%
34	Downtown Ogden (7)	21,684	6,079	28.0%	27.2%	28.9%
49	Morgan/East Weber Co. (6)	24,131	7,502	31.1%	30.2%	32.0%
22	Riverdale (10)	15,522	4,029	26.0%	25.1%	26.8%
41	Roy/Hooper (9)	27,898	8,228	29.5%	28.6%	30.4%
11	South Ogden (8)	26,255	6,431	24.5%	23.7%	25.3%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

50-64 Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Aged 50-64	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	46,874,942	21.5%	20.7%	22.3%
	State of Utah	1,657,454	292,817	17.7%	16.9%	18.4%
	Bear River HD	98,027	15,165	15.5%	14.8%	16.2%
34	Brigham City (1)	14,566	2,700	18.5%	17.8%	19.3%
3	Logan (3)	45,904	5,343	11.6%	11.0%	12.3%
41	Other Box Elder Co. (2)	14,636	2,788	19.0%	18.3%	19.8%
39	Other Cache/Rich Co. (4)	22,921	4,334	18.9%	18.1%	19.7%
	Central Utah HD	47,558	9,428	19.8%	19.0%	20.6%
38	Juab/Millard/Sanpete Co. (54)	31,637	5,947	18.8%	18.0%	19.6%
52	Sevier/Piute/Wayne Co. (55)	15,921	3,481	21.9%	21.1%	22.7%
	Davis County HD	175,027	31,505	18.0%	17.2%	18.8%
47	Bountiful (16)	33,318	6,784	20.4%	19.6%	21.2%
6	Clearfield/Hill AFB (11)	37,329	5,221	14.0%	13.3%	14.7%
51	Farmington/Centerville (14)	19,034	4,109	21.6%	20.8%	22.4%
25	Layton (12)	46,815	8,185	17.5%	16.7%	18.2%
33	Syracuse/Kaysville (13)	24,542	4,540	18.5%	17.7%	19.3%
42	Woods Cross/North SL (15)	13,989	2,666	19.1%	18.3%	19.8%
	Salt Lake Valley HD	658,810	122,506	18.6%	17.8%	19.4%
35	Avenues (18)	18,959	3,520	18.6%	17.8%	19.3%
59	Cottonwood (28)	33,297	8,544	25.7%	24.8%	26.5%
8	Downtown Salt Lake (24)	42,808	6,231	14.6%	13.9%	15.2%
40	Foothill/U of U (19)	17,778	3,365	18.9%	18.2%	19.7%
13	Glendale (21)	18,642	2,849	15.3%	14.6%	16.0%
53	Holladay (27)	35,956	7,924	22.0%	21.2%	22.9%
24	Kearns (29)	42,995	7,442	17.3%	16.6%	18.1%
10	Magna (20)	15,623	2,346	15.0%	14.3%	15.7%
20	Midvale (32)	21,672	3,579	16.5%	15.8%	17.2%
28	Millcreek (26)	44,008	7,915	18.0%	17.2%	18.7%
29	Murray (31)	24,072	4,379	18.2%	17.4%	18.9%
16	Riverton/Draper (39)	41,391	6,433	15.5%	14.8%	16.3%
12	Rose Park (17)	22,639	3,451	15.2%	14.5%	15.9%
46	Sandy Center (36)	36,106	7,298	20.2%	19.4%	21.0%
61	Sandy, Northeast (37)	18,245	5,352	29.3%	28.4%	30.2%
60	Sandy, Southeast (38)	20,781	5,614	27.0%	26.1%	27.9%
50	South Jordan (35)	20,931	4,377	20.9%	20.1%	21.7%
15	South Salt Lake (25)	18,456	2,860	15.5%	14.8%	16.2%
36	Taylorsville (30)	27,372	5,094	18.6%	17.8%	19.4%
18	West Jordan North (33)	30,391	4,937	16.2%	15.5%	17.0%
9	West Jordan/Copperton (34)	26,360	3,838	14.6%	13.9%	15.3%
31	West Valley East (23)	35,527	6,497	18.3%	17.5%	19.0%
44	West Valley West (22)	44,794	8,664	19.3%	18.6%	20.1%
	Southeastern Utah HD	36,828	8,226	22.3%	21.5%	23.2%
56	Carbon/Emery Co. (56)	21,451	4,812	22.4%	21.6%	23.3%
54	Grand/San Juan Co. (57)	15,377	3,414	22.2%	21.4%	23.0%
	Southwest Utah HD	116,150	21,443	18.5%	17.7%	19.2%
11	Cedar City (60)	22,401	3,377	15.1%	14.4%	15.8%
58	Other Southwest District (61)	15,384	3,648	23.7%	22.9%	24.5%
48	Other Washington County (59)	32,503	6,776	20.8%	20.1%	21.6%
22	St. George (58)	45,862	7,642	16.7%	15.9%	17.4%
57	Summit County HD (51)	24,525	5,523	22.5%	21.7%	23.3%
23	Tooele County HD (40)	32,458	5,556	17.1%	16.4%	17.9%
49	TriCounty HD (53)	28,023	5,857	20.9%	20.1%	21.7%
	Utah County HD	278,832	37,308	13.4%	12.7%	14.0%
26	American Fork/Alpine (42)	26,819	4,795	17.9%	17.1%	18.6%
43	East Orem (46)	14,955	2,878	19.2%	18.5%	20.0%
4	Lehi/Cedar Valley (41)	18,752	2,346	12.5%	11.9%	13.2%
5	North Orem (44)	25,965	3,470	13.4%	12.7%	14.0%
14	Pleasant Grove/Lindon (43)	24,636	3,791	15.4%	14.7%	16.1%
2	Provo/BYU (47)	39,401	4,088	10.4%	9.8%	11.0%
1	Provo South (48)	48,138	3,378	7.0%	6.5%	7.5%
17	Springville/Spanish Fork (49)	41,036	6,572	16.0%	15.3%	16.7%
19	Utah Co. South (50)	17,363	2,865	16.5%	15.8%	17.2%
7	West Orem (45)	21,774	3,127	14.4%	13.7%	15.0%
32	Wasatch County HD (52)	12,514	2,313	18.5%	17.7%	19.2%
	Weber-Morgan HD	148,702	27,987	18.8%	18.1%	19.6%
30	Ben Lomond (5)	33,215	6,062	18.3%	17.5%	19.0%
21	Downtown Ogden (7)	21,684	3,585	16.5%	15.8%	17.3%
55	Morgan/East Weber Co. (6)	24,131	5,395	22.4%	21.5%	23.2%
45	Riverdale (10)	15,522	3,008	19.4%	18.6%	20.2%
27	Roy/Hooper (9)	27,898	5,001	17.9%	17.2%	18.7%
37	South Ogden (8)	26,255	4,935	18.8%	18.0%	19.6%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

65 and Over Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Aged 65 Years and Older	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	35,952,389	16.5%	15.8%	17.2%
	State of Utah	1,657,454	203,250	12.3%	11.6%	12.9%
	Bear River HD	98,027	11,741	12.0%	11.3%	12.6%
52	Brigham City (1)	14,566	2,575	17.7%	16.9%	18.4%
19	Logan (3)	45,904	4,397	9.6%	9.0%	10.2%
42	Other Box Elder Co. (2)	14,636	2,097	14.3%	13.6%	15.0%
33	Other Cache/Rich Co. (4)	22,921	2,672	11.7%	11.0%	12.3%
	Central Utah HD	47,558	8,097	17.0%	16.3%	17.8%
47	Juab/Millard/Sanpete Co. (54)	31,637	4,952	15.7%	14.9%	16.4%
56	Sevier/Piute/Wayne Co. (55)	15,921	3,145	19.8%	19.0%	20.5%
	Davis County HD	175,027	19,358	11.1%	10.4%	11.7%
55	Bountiful (16)	33,318	6,417	19.3%	18.5%	20.0%
11	Clearfield/Hill AFB (11)	37,329	3,041	8.1%	7.6%	8.7%
20	Farmington/Centerville (14)	19,034	1,857	9.8%	9.2%	10.3%
16	Layton (12)	46,815	4,326	9.2%	8.7%	9.8%
21	Syracuse/Kaysville (13)	24,542	2,421	9.9%	9.3%	10.4%
17	Woods Cross/North SL (15)	13,989	1,299	9.3%	8.7%	9.9%
	Salt Lake Valley HD	658,810	75,931	11.5%	10.9%	12.2%
43	Avenues (18)	18,959	2,839	15.0%	14.3%	15.7%
44	Cottonwood (28)	33,297	5,034	15.1%	14.4%	15.8%
29	Downtown Salt Lake (24)	42,808	4,694	11.0%	10.4%	11.6%
54	Foothill/U of U (19)	17,778	3,192	18.0%	17.2%	18.7%
36	Glendale (21)	18,642	2,203	11.8%	11.2%	12.5%
60	Holladay (27)	35,956	8,298	23.1%	22.3%	23.9%
9	Kearns (29)	42,995	3,332	7.7%	7.2%	8.3%
14	Magna (20)	15,623	1,414	9.1%	8.5%	9.6%
38	Midvale (32)	21,672	2,668	12.3%	11.7%	13.0%
58	Millcreek (26)	44,008	9,304	21.1%	20.3%	21.9%
50	Murray (31)	24,072	4,237	17.6%	16.9%	18.3%
4	Riverton/Draper (39)	41,391	2,407	5.8%	5.4%	6.3%
35	Rose Park (17)	22,639	2,663	11.8%	11.1%	12.4%
26	Sandy Center (36)	36,106	3,803	10.5%	9.9%	11.1%
15	Sandy, Northeast (37)	18,245	1,652	9.1%	8.5%	9.6%
5	Sandy, Southeast (38)	20,781	1,360	6.5%	6.1%	7.0%
10	South Jordan (35)	20,931	1,628	7.8%	7.3%	8.3%
39	South Salt Lake (25)	18,456	2,321	12.6%	11.9%	13.2%
31	Taylorsville (30)	27,372	3,079	11.2%	10.6%	11.9%
1	West Jordan North (33)	30,391	1,473	4.8%	4.4%	5.3%
3	West Jordan/Copperton (34)	26,360	1,443	5.5%	5.0%	5.9%
22	West Valley East (23)	35,527	3,571	10.1%	9.5%	10.6%
7	West Valley West (22)	44,794	3,314	7.4%	6.9%	7.9%
	Southeastern Utah HD	36,828	6,206	16.9%	16.1%	17.6%
53	Carbon/Emery Co. (56)	21,451	3,793	17.7%	16.9%	18.4%
48	Grand/San Juan Co. (57)	15,377	2,413	15.7%	15.0%	16.4%
	Southwest Utah HD	116,150	24,147	20.8%	20.0%	21.6%
27	Cedar City (60)	22,401	2,397	10.7%	10.1%	11.3%
59	Other Southwest District (61)	15,384	3,328	21.6%	20.8%	22.4%
57	Other Washington County (59)	32,503	6,783	20.9%	20.1%	21.7%
61	St. George (58)	45,862	11,639	25.4%	24.5%	26.2%
8	Summit County HD (51)	24,525	1,821	7.4%	6.9%	7.9%
25	Tooele County HD (40)	32,458	3,376	10.4%	9.8%	11.0%
45	TriCounty HD (53)	28,023	4,282	15.3%	14.6%	16.0%
	Utah County HD	278,832	25,388	9.1%	8.5%	9.7%
24	American Fork/Alpine (42)	26,819	2,788	10.4%	9.8%	11.0%
40	East Orem (46)	14,955	1,942	13.0%	12.3%	13.6%
6	Lehi/Cedar Valley (41)	18,752	1,335	7.1%	6.6%	7.6%
18	North Orem (44)	25,965	2,433	9.4%	8.8%	9.9%
12	Pleasant Grove/Lindon (43)	24,636	2,106	8.5%	8.0%	9.1%
23	Provo/BYU (47)	39,401	4,036	10.2%	9.6%	10.8%
2	Provo South (48)	48,138	2,467	5.1%	4.7%	5.6%
30	Springville/Spanish Fork (49)	41,036	4,514	11.0%	10.4%	11.6%
28	Utah Co. South (50)	17,363	1,877	10.8%	10.2%	11.4%
13	West Orem (45)	21,774	1,895	8.7%	8.2%	9.3%
32	Wasatch County HD (52)	12,514	1,446	11.6%	10.9%	12.2%
	Weber-Morgan HD	148,702	21,457	14.4%	13.7%	15.1%
46	Ben Lomond (5)	33,215	5,092	15.3%	14.6%	16.0%
37	Downtown Ogden (7)	21,684	2,619	12.1%	11.4%	12.7%
41	Morgan/East Weber Co. (6)	24,131	3,155	13.1%	12.4%	13.7%
49	Riverdale (10)	15,522	2,700	17.4%	16.7%	18.1%
34	Roy/Hooper (9)	27,898	3,266	11.7%	11.1%	12.3%
51	South Ogden (8)	26,255	4,630	17.6%	16.9%	18.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: Utah data - Governor's Office of Planning and Budget, 2003; U.S. data - U.S. Census Estimates, 2003

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

White Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of White Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	168,576,637	77.4%	76.6%	78.2%
	State of Utah	1,657,454	1,495,985	90.3%	89.7%	90.8%
	Bear River HD	98,027	91,424	93.3%	92.8%	93.8%
33	Brigham City (1)	14,566	13,536	92.9%	92.4%	93.4%
27	Logan (3)	45,904	42,166	91.9%	91.3%	92.4%
43	Other Box Elder Co. (2)	14,636	13,840	94.6%	94.1%	95.0%
48	Other Cache/Rich Co. (4)	22,921	21,891	95.5%	95.1%	95.9%
	Central Utah HD	47,558	45,242	95.1%	94.7%	95.6%
42	Juab/Millard/Sanpete Co. (54)	31,637	29,863	94.4%	93.9%	94.8%
60	Sevier/Piute/Wayne Co. (55)	15,921	15,408	96.8%	96.4%	97.1%
	Davis County HD	175,027	162,397	92.8%	92.3%	93.3%
49	Bountiful (16)	33,318	31,897	95.7%	95.3%	96.1%
11	Clearfield/Hill AFB (11)	37,329	32,638	87.4%	86.8%	88.1%
57	Farmington/Centerville (14)	19,034	18,372	96.5%	96.2%	96.9%
21	Layton (12)	46,815	42,382	90.5%	90.0%	91.1%
56	Syracuse/Kaysville (13)	24,542	23,688	96.5%	96.2%	96.9%
45	Woods Cross/North SL (15)	13,989	13,300	95.1%	94.7%	95.5%
	Salt Lake Valley HD	658,810	577,600	87.7%	87.0%	88.3%
25	Avenues (18)	18,959	17,307	91.3%	90.7%	91.8%
44	Cottonwood (28)	33,297	31,503	94.6%	94.2%	95.1%
10	Downtown Salt Lake (24)	42,808	36,789	85.9%	85.3%	86.6%
26	Foothill/U of U (19)	17,778	16,308	91.7%	91.2%	92.3%
1	Glendale (21)	18,642	11,674	62.6%	61.7%	63.6%
39	Holladay (27)	35,956	33,885	94.2%	93.8%	94.7%
9	Kearns (29)	42,995	36,491	84.9%	84.2%	85.6%
12	Magna (20)	15,623	13,697	87.7%	87.0%	88.3%
8	Midvale (32)	21,672	18,327	84.6%	83.9%	85.3%
34	Millcreek (26)	44,008	40,969	93.1%	92.6%	93.6%
23	Murray (31)	24,072	21,833	90.7%	90.1%	91.3%
36	Riverton/Draper (39)	41,391	38,698	93.5%	93.0%	94.0%
3	Rose Park (17)	22,639	15,561	68.7%	67.8%	69.6%
32	Sandy Center (36)	36,106	33,526	92.9%	92.4%	93.4%
47	Sandy, Northeast (37)	18,245	17,423	95.5%	95.1%	95.9%
51	Sandy, Southeast (38)	20,781	19,916	95.8%	95.4%	96.2%
53	South Jordan (35)	20,931	20,089	96.0%	95.6%	96.4%
6	South Salt Lake (25)	18,456	14,654	79.4%	78.6%	80.2%
15	Taylorsville (30)	27,372	24,197	88.4%	87.8%	89.0%
16	West Jordan North (33)	30,391	27,015	88.9%	88.3%	89.5%
18	West Jordan/Copperton (34)	26,360	23,733	90.0%	89.4%	90.6%
5	West Valley East (23)	35,527	27,571	77.6%	76.8%	78.4%
7	West Valley West (22)	44,794	36,826	82.2%	81.5%	83.0%
	Southeastern Utah HD	36,828	30,123	81.8%	81.0%	82.5%
35	Carbon/Emery Co. (56)	21,451	19,984	93.2%	92.7%	93.7%
2	Grand/San Juan Co. (57)	15,377	10,229	66.5%	65.6%	67.4%
	Southwest Utah HD	116,150	109,790	94.5%	94.1%	95.0%
37	Cedar City (60)	22,401	20,998	93.7%	93.3%	94.2%
46	Other Southwest District (61)	15,384	14,630	95.1%	94.7%	95.5%
50	Other Washington County (59)	32,503	31,123	95.8%	95.4%	96.1%
38	St. George (58)	45,862	43,054	93.9%	93.4%	94.3%
28	Summit County HD (51)	24,525	22,623	92.2%	91.7%	92.8%
20	Tooele County HD (40)	32,458	29,304	90.3%	89.7%	90.9%
17	TriCounty HD (53)	28,023	25,192	89.9%	89.3%	90.5%
	Utah County HD	278,832	259,257	93.0%	92.5%	93.5%
59	American Fork/Alpine (42)	26,819	25,920	96.6%	96.3%	97.0%
40	East Orem (46)	14,955	14,094	94.2%	93.8%	94.7%
58	Lehi/Cedar Valley (41)	18,752	18,103	96.5%	96.2%	96.9%
19	North Orem (44)	25,965	23,436	90.3%	89.7%	90.8%
52	Pleasant Grove/Lindon (43)	24,636	23,618	95.9%	95.5%	96.3%
30	Provo/BYU (47)	39,401	36,447	92.5%	92.0%	93.0%
14	Provo South (48)	48,138	42,267	87.8%	87.2%	88.4%
54	Springville/Spanish Fork (49)	41,036	39,423	96.1%	95.7%	96.4%
41	Utah Co. South (50)	17,363	16,367	94.3%	93.8%	94.7%
24	West Orem (45)	21,774	19,857	91.2%	90.6%	91.8%
55	Wasatch County HD (52)	12,514	12,026	96.1%	95.7%	96.5%
	Weber-Morgan HD	148,702	132,518	89.1%	88.5%	89.7%
22	Ben Lomond (5)	33,215	30,070	90.5%	90.0%	91.1%
4	Downtown Ogden (7)	21,684	16,211	74.8%	73.9%	75.6%
61	Morgan/East Weber Co. (6)	24,131	23,483	97.3%	97.0%	97.6%
31	Riverdale (10)	15,522	14,403	92.8%	92.3%	93.3%
29	Roy/Hooper (9)	27,898	25,796	92.5%	91.9%	93.0%
13	South Ogden (8)	26,255	23,029	87.7%	87.1%	88.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P5.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Black Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Black/African American Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	24,758,614	11.4%	10.7%	12.0%
	State of Utah	1,657,454	12,493	0.8%	0.6%	0.9%
	Bear River HD	98,027	287	0.3%	0.2%	0.4%
9	Brigham City (1)	14,566	19	0.1%	0.1%	0.2%
36	Logan (3)	45,904	244	0.5%	0.4%	0.7%
1	Other Box Elder Co. (2)	14,636	5	0.0%	0.0%	0.1%
3	Other Cache/Rich Co. (4)	22,921	18	0.1%	0.0%	0.1%
	Central Utah HD	47,558	103	0.2%	0.1%	0.3%
20	Juab/Millard/Sanpete Co. (54)	31,637	70	0.2%	0.1%	0.3%
16	Sevier/Piute/Wayne Co. (55)	15,921	31	0.2%	0.1%	0.3%
	Davis County HD	175,027	1,947	1.1%	0.9%	1.3%
21	Bountiful (16)	33,318	75	0.2%	0.1%	0.3%
58	Clearfield/Hill AFB (11)	37,329	957	2.6%	2.3%	2.9%
25	Farmington/Centerville (14)	19,034	56	0.3%	0.2%	0.4%
56	Layton (12)	46,815	803	1.7%	1.5%	2.0%
26	Syracuse/Kaysville (13)	24,542	73	0.3%	0.2%	0.4%
17	Woods Cross/North SL (15)	13,989	29	0.2%	0.1%	0.3%
	Salt Lake Valley HD	658,810	6,514	1.0%	0.8%	1.2%
43	Avenues (18)	18,959	164	0.9%	0.7%	1.0%
35	Cottonwood (28)	33,297	176	0.5%	0.4%	0.7%
55	Downtown Salt Lake (24)	42,808	679	1.6%	1.3%	1.8%
33	Foothill/U of U (19)	17,778	87	0.5%	0.4%	0.6%
60	Glendale (21)	18,642	570	3.1%	2.7%	3.4%
39	Holladay (27)	35,956	219	0.6%	0.5%	0.8%
41	Kearns (29)	42,995	273	0.6%	0.5%	0.8%
40	Magna (20)	15,623	97	0.6%	0.5%	0.8%
48	Midvale (32)	21,672	231	1.1%	0.9%	1.3%
42	Millcreek (26)	44,008	362	0.8%	0.6%	1.0%
46	Murray (31)	24,072	234	1.0%	0.8%	1.2%
47	Riverton/Draper (39)	41,391	404	1.0%	0.8%	1.2%
59	Rose Park (17)	22,639	636	2.8%	2.5%	3.1%
34	Sandy Center (36)	36,106	184	0.5%	0.4%	0.6%
24	Sandy, Northeast (37)	18,245	51	0.3%	0.2%	0.4%
31	Sandy, Southeast (38)	20,781	77	0.4%	0.3%	0.5%
22	South Jordan (35)	20,931	53	0.3%	0.2%	0.4%
57	South Salt Lake (25)	18,456	390	2.1%	1.8%	2.4%
50	Taylorsville (30)	27,372	317	1.2%	0.9%	1.4%
37	West Jordan North (33)	30,391	164	0.5%	0.4%	0.7%
38	West Jordan/Copperton (34)	26,360	156	0.6%	0.4%	0.7%
54	West Valley East (23)	35,527	555	1.6%	1.3%	1.8%
44	West Valley West (22)	44,794	398	0.9%	0.7%	1.1%
	Southeastern Utah HD	36,828	67	0.2%	0.1%	0.3%
18	Carbon/Emery Co. (56)	21,451	46	0.2%	0.1%	0.3%
11	Grand/San Juan Co. (57)	15,377	21	0.1%	0.1%	0.2%
	Southwest Utah HD	116,150	263	0.2%	0.1%	0.3%
27	Cedar City (60)	22,401	69	0.3%	0.2%	0.4%
23	Other Southwest District (61)	15,384	39	0.3%	0.2%	0.4%
12	Other Washington County (59)	32,503	50	0.2%	0.1%	0.2%
19	St. George (58)	45,862	101	0.2%	0.1%	0.3%
15	Summit County HD (51)	24,525	46	0.2%	0.1%	0.3%
51	Tooele County HD (40)	32,458	413	1.3%	1.1%	1.5%
7	TriCounty HD (53)	28,023	32	0.1%	0.0%	0.2%
	Utah County HD	278,832	684	0.2%	0.1%	0.3%
5	American Fork/Alpine (42)	26,819	27	0.1%	0.0%	0.2%
10	East Orem (46)	14,955	21	0.1%	0.1%	0.2%
14	Lehi/Cedar Valley (41)	18,752	31	0.2%	0.1%	0.2%
28	North Orem (44)	25,965	81	0.3%	0.2%	0.4%
8	Pleasant Grove/Lindon (43)	24,636	31	0.1%	0.1%	0.2%
30	Provo/BYU (47)	39,401	136	0.3%	0.2%	0.5%
32	Provo South (48)	48,138	214	0.4%	0.3%	0.6%
6	Springville/Spanish Fork (49)	41,036	46	0.1%	0.0%	0.2%
2	Utah Co. South (50)	17,363	14	0.1%	0.0%	0.1%
29	West Orem (45)	21,774	69	0.3%	0.2%	0.4%
4	Wasatch County HD (52)	12,514	13	0.1%	0.0%	0.2%
	Weber-Morgan HD	148,702	2,032	1.4%	1.1%	1.6%
49	Ben Lomond (5)	33,215	383	1.2%	0.9%	1.4%
61	Downtown Ogden (7)	21,684	698	3.2%	2.9%	3.6%
13	Morgan/East Weber Co. (6)	24,131	39	0.2%	0.1%	0.2%
52	Riverdale (10)	15,522	206	1.3%	1.1%	1.6%
45	Roy/Hooper (9)	27,898	263	0.9%	0.8%	1.1%
53	South Ogden (8)	26,255	356	1.4%	1.1%	1.6%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P5.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

American Indian Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of American Indian Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	1,703,493	0.8%	0.6%	1.0%
	State of Utah	1,657,454	19,772	1.2%	1.0%	1.4%
	Bear River HD	98,027	593	0.6%	0.5%	0.8%
52	Brigham City (1)	14,566	196	1.3%	1.1%	1.6%
29	Logan (3)	45,904	276	0.6%	0.4%	0.8%
12	Other Box Elder Co. (2)	14,636	50	0.3%	0.2%	0.5%
8	Other Cache/Rich Co. (4)	22,921	69	0.3%	0.2%	0.4%
	Central Utah HD	47,558	527	1.1%	0.9%	1.3%
42	Juab/Millard/Sanpete Co. (54)	31,637	283	0.9%	0.7%	1.1%
51	Sevier/Piute/Wayne Co. (55)	15,921	210	1.3%	1.1%	1.5%
	Davis County HD	175,027	1,006	0.6%	0.4%	0.7%
6	Bountiful (16)	33,318	97	0.3%	0.2%	0.4%
46	Clearfield/Hill AFB (11)	37,329	413	1.1%	0.9%	1.3%
16	Farmington/Centerville (14)	19,034	79	0.4%	0.3%	0.5%
26	Layton (12)	46,815	257	0.5%	0.4%	0.7%
9	Syracuse/Kaysville (13)	24,542	75	0.3%	0.2%	0.4%
32	Woods Cross/North SL (15)	13,989	91	0.6%	0.5%	0.8%
	Salt Lake Valley HD	658,810	5,459	0.8%	0.7%	1.0%
31	Avenues (18)	18,959	120	0.6%	0.5%	0.8%
3	Cottonwood (28)	33,297	81	0.2%	0.1%	0.3%
49	Downtown Salt Lake (24)	42,808	522	1.2%	1.0%	1.4%
14	Foothill/U of U (19)	17,778	62	0.4%	0.2%	0.5%
58	Glendale (21)	18,642	401	2.2%	1.9%	2.4%
13	Holladay (27)	35,956	123	0.3%	0.2%	0.5%
41	Kearns (29)	42,995	376	0.9%	0.7%	1.1%
37	Magna (20)	15,623	120	0.8%	0.6%	0.9%
45	Midvale (32)	21,672	231	1.1%	0.9%	1.3%
24	Millcreek (26)	44,008	228	0.5%	0.4%	0.7%
40	Murray (31)	24,072	196	0.8%	0.6%	1.0%
30	Riverton/Draper (39)	41,391	260	0.6%	0.5%	0.8%
53	Rose Park (17)	22,639	350	1.5%	1.3%	1.8%
23	Sandy Center (36)	36,106	185	0.5%	0.4%	0.7%
2	Sandy, Northeast (37)	18,245	42	0.2%	0.1%	0.3%
5	Sandy, Southeast (38)	20,781	53	0.3%	0.2%	0.4%
1	South Jordan (35)	20,931	20	0.1%	0.0%	0.2%
59	South Salt Lake (25)	18,456	468	2.5%	2.2%	2.8%
44	Taylorsville (30)	27,372	277	1.0%	0.8%	1.2%
25	West Jordan North (33)	30,391	163	0.5%	0.4%	0.7%
27	West Jordan/Copperton (34)	26,360	148	0.6%	0.4%	0.7%
56	West Valley East (23)	35,527	649	1.8%	1.6%	2.1%
36	West Valley West (22)	44,794	341	0.8%	0.6%	0.9%
	Southeastern Utah HD	36,828	4,935	13.4%	12.7%	14.1%
39	Carbon/Emery Co. (56)	21,451	169	0.8%	0.6%	1.0%
61	Grand/San Juan Co. (57)	15,377	4,677	30.4%	29.5%	31.3%
	Southwest Utah HD	116,150	1,572	1.4%	1.1%	1.6%
57	Cedar City (60)	22,401	428	1.9%	1.6%	2.2%
48	Other Southwest District (61)	15,384	185	1.2%	1.0%	1.4%
47	Other Washington County (59)	32,503	371	1.1%	0.9%	1.4%
50	St. George (58)	45,862	575	1.3%	1.0%	1.5%
10	Summit County HD (51)	24,525	76	0.3%	0.2%	0.4%
55	Tooele County HD (40)	32,458	569	1.8%	1.5%	2.0%
60	TriCounty HD (53)	28,023	2,005	7.2%	6.6%	7.7%
	Utah County HD	278,832	1,522	0.5%	0.4%	0.7%
7	American Fork/Alpine (42)	26,819	80	0.3%	0.2%	0.4%
18	East Orem (46)	14,955	66	0.4%	0.3%	0.6%
21	Lehi/Cedar Valley (41)	18,752	89	0.5%	0.3%	0.6%
38	North Orem (44)	25,965	202	0.8%	0.6%	0.9%
11	Pleasant Grove/Lindon (43)	24,636	77	0.3%	0.2%	0.4%
17	Provo/BYU (47)	39,401	164	0.4%	0.3%	0.5%
43	Provo South (48)	48,138	434	0.9%	0.7%	1.1%
19	Springville/Spanish Fork (49)	41,036	183	0.4%	0.3%	0.6%
15	Utah Co. South (50)	17,363	62	0.4%	0.2%	0.5%
35	West Orem (45)	21,774	162	0.7%	0.6%	0.9%
20	Wasatch County HD (52)	12,514	59	0.5%	0.3%	0.6%
	Weber-Morgan HD	148,702	1,065	0.7%	0.6%	0.9%
34	Ben Lomond (5)	33,215	236	0.7%	0.5%	0.9%
54	Downtown Ogden (7)	21,684	341	1.6%	1.3%	1.8%
4	Morgan/East Weber Co. (6)	24,131	60	0.3%	0.2%	0.3%
28	Riverdale (10)	15,522	91	0.6%	0.4%	0.7%
22	Roy/Hooper (9)	27,898	142	0.5%	0.4%	0.7%
33	South Ogden (8)	26,255	176	0.7%	0.5%	0.8%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P5.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Asian Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Asian Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	8,100,642	3.7%	3.3%	4.1%
	State of Utah	1,657,454	30,599	1.8%	1.6%	2.1%
	Bear River HD	98,027	1,867	1.9%	1.6%	2.2%
19	Brigham City (1)	14,566	128	0.9%	0.7%	1.1%
55	Logan (3)	45,904	1,460	3.2%	2.8%	3.5%
31	Other Box Elder Co. (2)	14,636	203	1.4%	1.2%	1.6%
5	Other Cache/Rich Co. (4)	22,921	72	0.3%	0.2%	0.4%
	Central Utah HD	47,558	195	0.4%	0.3%	0.5%
12	Juab/Millard/Sanpete Co. (54)	31,637	155	0.5%	0.4%	0.6%
2	Sevier/Piute/Wayne Co. (55)	15,921	38	0.2%	0.1%	0.3%
	Davis County HD	175,027	3,107	1.8%	1.5%	2.0%
28	Bountiful (16)	33,318	417	1.3%	1.0%	1.5%
52	Clearfield/Hill AFB (11)	37,329	1,022	2.7%	2.4%	3.1%
20	Farmington/Centerville (14)	19,034	174	0.9%	0.7%	1.1%
46	Layton (12)	46,815	1,100	2.3%	2.1%	2.6%
21	Syracuse/Kaysville (13)	24,542	251	1.0%	0.8%	1.2%
27	Woods Cross/North SL (15)	13,989	157	1.1%	0.9%	1.3%
	Salt Lake Valley HD	658,810	18,038	2.7%	2.4%	3.1%
51	Avenues (18)	18,959	516	2.7%	2.4%	3.0%
47	Cottonwood (28)	33,297	797	2.4%	2.1%	2.7%
56	Downtown Salt Lake (24)	42,808	1,487	3.5%	3.1%	3.8%
61	Foothill/U of U (19)	17,778	948	5.3%	4.9%	5.8%
60	Glendale (21)	18,642	886	4.8%	4.3%	5.2%
45	Holladay (27)	35,956	825	2.3%	2.0%	2.6%
50	Kearns (29)	42,995	1,169	2.7%	2.4%	3.0%
18	Magna (20)	15,623	109	0.7%	0.5%	0.9%
39	Midvale (32)	21,672	447	2.1%	1.8%	2.3%
41	Millcreek (26)	44,008	945	2.1%	1.9%	2.4%
49	Murray (31)	24,072	607	2.5%	2.2%	2.8%
23	Riverton/Draper (39)	41,391	433	1.0%	0.8%	1.2%
59	Rose Park (17)	22,639	1,073	4.7%	4.3%	5.2%
44	Sandy Center (36)	36,106	793	2.2%	1.9%	2.5%
42	Sandy, Northeast (37)	18,245	393	2.2%	1.9%	2.4%
37	Sandy, Southeast (38)	20,781	390	1.9%	1.6%	2.1%
26	South Jordan (35)	20,931	227	1.1%	0.9%	1.3%
54	South Salt Lake (25)	18,456	537	2.9%	2.6%	3.2%
53	Taylorsville (30)	27,372	789	2.9%	2.6%	3.2%
38	West Jordan North (33)	30,391	588	1.9%	1.7%	2.2%
48	West Jordan/Copperton (34)	26,360	639	2.4%	2.1%	2.7%
57	West Valley East (23)	35,527	1,422	4.0%	3.6%	4.4%
58	West Valley West (22)	44,794	1,909	4.3%	3.9%	4.7%
	Southeastern Utah HD	36,828	114	0.3%	0.2%	0.4%
7	Carbon/Emery Co. (56)	21,451	82	0.4%	0.3%	0.5%
1	Grand/San Juan Co. (57)	15,377	32	0.2%	0.1%	0.3%
	Southwest Utah HD	116,150	693	0.6%	0.4%	0.7%
24	Cedar City (60)	22,401	240	1.1%	0.9%	1.3%
8	Other Southwest District (61)	15,384	60	0.4%	0.3%	0.5%
9	Other Washington County (59)	32,503	130	0.4%	0.3%	0.5%
13	St. George (58)	45,862	254	0.6%	0.4%	0.7%
25	Summit County HD (51)	24,525	264	1.1%	0.9%	1.3%
16	Tooele County HD (40)	32,458	210	0.6%	0.5%	0.8%
3	TriCounty HD (53)	28,023	74	0.3%	0.2%	0.4%
	Utah County HD	278,832	3,488	1.3%	1.0%	1.5%
15	American Fork/Alpine (42)	26,819	157	0.6%	0.4%	0.7%
32	East Orem (46)	14,955	219	1.5%	1.2%	1.7%
11	Lehi/Cedar Valley (41)	18,752	87	0.5%	0.3%	0.6%
33	North Orem (44)	25,965	413	1.6%	1.3%	1.8%
17	Pleasant Grove/Lindon (43)	24,636	167	0.7%	0.5%	0.8%
43	Provo/BYU (47)	39,401	861	2.2%	1.9%	2.5%
34	Provo South (48)	48,138	840	1.7%	1.5%	2.0%
10	Springville/Spanish Fork (49)	41,036	186	0.5%	0.3%	0.6%
4	Utah Co. South (50)	17,363	52	0.3%	0.2%	0.4%
36	West Orem (45)	21,774	409	1.9%	1.6%	2.1%
6	Wasatch County HD (52)	12,514	42	0.3%	0.2%	0.4%
	Weber-Morgan HD	148,702	2,131	1.4%	1.2%	1.7%
22	Ben Lomond (5)	33,215	347	1.0%	0.8%	1.2%
29	Downtown Ogden (7)	21,684	279	1.3%	1.1%	1.5%
14	Morgan/East Weber Co. (6)	24,131	134	0.6%	0.4%	0.7%
30	Riverdale (10)	15,522	206	1.3%	1.1%	1.6%
35	Roy/Hooper (9)	27,898	519	1.9%	1.6%	2.1%
40	South Ogden (8)	26,255	547	2.1%	1.8%	2.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P5.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Pacific Islander Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Pacific Islander Adults	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	282,925	0.1%	0.1%	0.2%
	State of Utah	1,657,454	9,553	0.6%	0.4%	0.7%
	Bear River HD	98,027	158	0.2%	0.1%	0.2%
7	Brigham City (1)	14,566	12	0.1%	0.0%	0.1%
28	Logan (3)	45,904	104	0.2%	0.1%	0.3%
9	Other Box Elder Co. (2)	14,636	14	0.1%	0.0%	0.2%
13	Other Cache/Rich Co. (4)	22,921	28	0.1%	0.1%	0.2%
	Central Utah HD	47,558	82	0.2%	0.1%	0.3%
26	Juab/Millard/Sanpete Co. (54)	31,637	70	0.2%	0.1%	0.3%
8	Sevier/Piute/Wayne Co. (55)	15,921	13	0.1%	0.0%	0.1%
	Davis County HD	175,027	424	0.2%	0.1%	0.3%
35	Bountiful (16)	33,318	112	0.3%	0.2%	0.4%
31	Clearfield/Hill AFB (11)	37,329	100	0.3%	0.2%	0.4%
14	Farmington/Centerville (14)	19,034	27	0.1%	0.1%	0.2%
29	Layton (12)	46,815	112	0.2%	0.1%	0.3%
10	Syracuse/Kaysville (13)	24,542	26	0.1%	0.0%	0.2%
40	Woods Cross/North SL (15)	13,989	52	0.4%	0.2%	0.5%
	Salt Lake Valley HD	658,810	6,503	1.0%	0.8%	1.2%
32	Avenues (18)	18,959	55	0.3%	0.2%	0.4%
24	Cottonwood (28)	33,297	72	0.2%	0.1%	0.3%
46	Downtown Salt Lake (24)	42,808	236	0.6%	0.4%	0.7%
19	Foothill/U of U (19)	17,778	34	0.2%	0.1%	0.3%
61	Glendale (21)	18,642	935	5.0%	4.6%	5.4%
21	Holladay (27)	35,956	69	0.2%	0.1%	0.3%
57	Kearns (29)	42,995	721	1.7%	1.4%	1.9%
55	Magna (20)	15,623	170	1.1%	0.9%	1.3%
44	Midvale (32)	21,672	104	0.5%	0.3%	0.6%
38	Millcreek (26)	44,008	152	0.3%	0.2%	0.5%
42	Murray (31)	24,072	94	0.4%	0.3%	0.5%
37	Riverton/Draper (39)	41,391	143	0.3%	0.2%	0.5%
60	Rose Park (17)	22,639	617	2.7%	2.4%	3.0%
39	Sandy Center (36)	36,106	132	0.4%	0.2%	0.5%
33	Sandy, Northeast (37)	18,245	53	0.3%	0.2%	0.4%
17	Sandy, Southeast (38)	20,781	34	0.2%	0.1%	0.2%
43	South Jordan (35)	20,931	90	0.4%	0.3%	0.6%
54	South Salt Lake (25)	18,456	175	1.0%	0.8%	1.1%
52	Taylorsville (30)	27,372	231	0.8%	0.7%	1.0%
56	West Jordan North (33)	30,391	380	1.2%	1.0%	1.5%
49	West Jordan/Copperton (34)	26,360	192	0.7%	0.6%	0.9%
58	West Valley East (23)	35,527	730	2.1%	1.8%	2.3%
59	West Valley West (22)	44,794	1,077	2.4%	2.1%	2.7%
	Southeastern Utah HD	36,828	15	0.0%	0.0%	0.1%
4	Carbon/Emery Co. (56)	21,451	11	0.1%	0.0%	0.1%
1	Grand/San Juan Co. (57)	15,377	4	0.0%	0.0%	0.1%
	Southwest Utah HD	116,150	413	0.4%	0.2%	0.5%
36	Cedar City (60)	22,401	76	0.3%	0.2%	0.5%
5	Other Southwest District (61)	15,384	11	0.1%	0.0%	0.1%
22	Other Washington County (59)	32,503	65	0.2%	0.1%	0.3%
47	St. George (58)	45,862	269	0.6%	0.4%	0.7%
3	Summit County HD (51)	24,525	11	0.0%	0.0%	0.1%
18	Tooele County HD (40)	32,458	54	0.2%	0.1%	0.2%
6	TriCounty HD (53)	28,023	21	0.1%	0.0%	0.1%
	Utah County HD	278,832	1,511	0.5%	0.4%	0.7%
25	American Fork/Alpine (42)	26,819	59	0.2%	0.1%	0.3%
45	East Orem (46)	14,955	76	0.5%	0.4%	0.6%
41	Lehi/Cedar Valley (41)	18,752	69	0.4%	0.3%	0.5%
53	North Orem (44)	25,965	239	0.9%	0.7%	1.1%
30	Pleasant Grove/Lindon (43)	24,636	62	0.3%	0.2%	0.4%
48	Provo/BYU (47)	39,401	271	0.7%	0.5%	0.8%
51	Provo South (48)	48,138	394	0.8%	0.6%	1.0%
34	Springville/Spanish Fork (49)	41,036	122	0.3%	0.2%	0.4%
20	Utah Co. South (50)	17,363	33	0.2%	0.1%	0.3%
50	West Orem (45)	21,774	162	0.7%	0.6%	0.9%
12	Wasatch County HD (52)	12,514	14	0.1%	0.0%	0.2%
	Weber-Morgan HD	148,702	225	0.2%	0.1%	0.2%
11	Ben Lomond (5)	33,215	36	0.1%	0.0%	0.2%
16	Downtown Ogden (7)	21,684	32	0.1%	0.1%	0.2%
2	Morgan/East Weber Co. (6)	24,131	10	0.0%	0.0%	0.1%
23	Riverdale (10)	15,522	32	0.2%	0.1%	0.3%
15	Roy/Hooper (9)	27,898	39	0.1%	0.1%	0.2%
27	South Ogden (8)	26,255	59	0.2%	0.1%	0.3%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P5.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Hispanic Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Hispanic		95% Confidence Interval	
			Adults	Crude Rate	Lower	Upper
	U.S.	217,803,051	23,916,123	11.0%	10.4%	11.6%
	State of Utah	1,657,454	135,011	8.1%	7.6%	8.7%
	Bear River HD	98,027	5,257	5.4%	4.9%	5.8%
35	Brigham City (1)	14,566	901	6.2%	5.7%	6.7%
30	Logan (3)	45,904	2,441	5.3%	4.9%	5.8%
27	Other Box Elder Co. (2)	14,636	748	5.1%	4.7%	5.5%
26	Other Cache/Rich Co. (4)	22,921	1,165	5.1%	4.7%	5.5%
	Central Utah HD	47,558	2,005	4.2%	3.8%	4.6%
29	Juab/Millard/Sanpete Co. (54)	31,637	1,679	5.3%	4.9%	5.7%
1	Sevier/Piute/Wayne Co. (55)	15,921	333	2.1%	1.8%	2.4%
	Davis County HD	175,027	8,736	5.0%	4.6%	5.4%
10	Bountiful (16)	33,318	977	2.9%	2.6%	3.3%
43	Clearfield/Hill AFB (11)	37,329	2,964	7.9%	7.4%	8.5%
6	Farmington/Centerville (14)	19,034	493	2.6%	2.3%	2.9%
36	Layton (12)	46,815	3,127	6.7%	6.2%	7.2%
9	Syracuse/Kaysville (13)	24,542	714	2.9%	2.6%	3.2%
19	Woods Cross/North SL (15)	13,989	550	3.9%	3.6%	4.3%
	Salt Lake Valley HD	658,810	70,367	10.7%	10.1%	11.3%
38	Avenues (18)	18,959	1,303	6.9%	6.4%	7.4%
7	Cottonwood (28)	33,297	882	2.6%	2.3%	3.0%
49	Downtown Salt Lake (24)	42,808	4,309	10.1%	9.5%	10.7%
3	Foothill/U of U (19)	17,778	425	2.4%	2.1%	2.7%
60	Glendale (21)	18,642	6,506	34.9%	34.0%	35.8%
14	Holladay (27)	35,956	1,126	3.1%	2.8%	3.5%
54	Kearns (29)	42,995	6,404	14.9%	14.2%	15.6%
53	Magna (20)	15,623	2,117	13.5%	12.9%	14.2%
56	Midvale (32)	21,672	3,911	18.0%	17.3%	18.8%
22	Millcreek (26)	44,008	1,910	4.3%	3.9%	4.7%
42	Murray (31)	24,072	1,865	7.7%	7.2%	8.3%
25	Riverton/Draper (39)	41,391	1,958	4.7%	4.3%	5.1%
61	Rose Park (17)	22,639	8,174	36.1%	35.2%	37.0%
32	Sandy Center (36)	36,106	1,999	5.5%	5.1%	6.0%
5	Sandy, Northeast (37)	18,245	459	2.5%	2.2%	2.8%
4	Sandy, Southeast (38)	20,781	505	2.4%	2.1%	2.7%
11	South Jordan (35)	20,931	621	3.0%	2.6%	3.3%
58	South Salt Lake (25)	18,456	3,674	19.9%	19.1%	20.7%
46	Taylorsville (30)	27,372	2,569	9.4%	8.8%	10.0%
50	West Jordan North (33)	30,391	3,336	11.0%	10.4%	11.6%
44	West Jordan/Copperton (34)	26,360	2,140	8.1%	7.6%	8.7%
57	West Valley East (23)	35,527	6,863	19.3%	18.5%	20.1%
55	West Valley West (22)	44,794	6,971	15.6%	14.9%	16.3%
	Southeastern Utah HD	36,828	2,284	6.2%	5.7%	6.7%
41	Carbon/Emery Co. (56)	21,451	1,647	7.7%	7.2%	8.2%
21	Grand/San Juan Co. (57)	15,377	635	4.1%	3.7%	4.5%
	Southwest Utah HD	116,150	4,782	4.1%	3.7%	4.5%
15	Cedar City (60)	22,401	730	3.3%	2.9%	3.6%
17	Other Southwest District (61)	15,384	550	3.6%	3.2%	3.9%
12	Other Washington County (59)	32,503	971	3.0%	2.7%	3.3%
33	St. George (58)	45,862	2,563	5.6%	5.1%	6.0%
40	Summit County HD (51)	24,525	1,869	7.6%	7.1%	8.1%
45	Tooele County HD (40)	32,458	2,992	9.2%	8.7%	9.8%
13	TriCounty HD (53)	28,023	854	3.0%	2.7%	3.4%
	Utah County HD	278,832	18,151	6.5%	6.0%	7.0%
16	American Fork/Alpine (42)	26,819	896	3.3%	3.0%	3.7%
28	East Orem (46)	14,955	780	5.2%	4.8%	5.7%
8	Lehi/Cedar Valley (41)	18,752	511	2.7%	2.4%	3.0%
48	North Orem (44)	25,965	2,603	10.0%	9.4%	10.6%
20	Pleasant Grove/Lindon (43)	24,636	999	4.1%	3.7%	4.4%
24	Provo/BYU (47)	39,401	1,848	4.7%	4.3%	5.1%
52	Provo South (48)	48,138	6,076	12.6%	12.0%	13.3%
18	Springville/Spanish Fork (49)	41,036	1,501	3.7%	3.3%	4.0%
37	Utah Co. South (50)	17,363	1,161	6.7%	6.2%	7.2%
39	West Orem (45)	21,774	1,629	7.5%	7.0%	8.0%
23	Wasatch County HD (52)	12,514	570	4.6%	4.1%	5.0%
	Weber-Morgan HD	148,702	16,186	10.9%	10.3%	11.5%
47	Ben Lomond (5)	33,215	3,149	9.5%	8.9%	10.1%
59	Downtown Ogden (7)	21,684	6,366	29.4%	28.5%	30.3%
2	Morgan/East Weber Co. (6)	24,131	552	2.3%	2.0%	2.6%
31	Riverdale (10)	15,522	844	5.4%	5.0%	5.9%
34	Roy/Hooper (9)	27,898	1,714	6.1%	5.7%	6.6%
51	South Ogden (8)	26,255	3,136	11.9%	11.3%	12.6%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P6.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Married Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults That Were Married	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	127,976,063	58.8%	58.4%	59.1%
	State of Utah	1,657,454	1,129,585	68.2%	67.3%	69.0%
	Bear River HD	98,027	69,933	71.3%	68.2%	74.3%
36	Brigham City (1)	14,566	10,413	71.5%	62.9%	78.8%
17	Logan (3)	45,904	28,820	62.8%	57.5%	67.8%
52	Other Box Elder Co. (2)	14,636	11,391	77.8%	70.4%	83.8%
58	Other Cache/Rich Co. (4)	22,921	18,843	82.2%	77.1%	86.4%
	Central Utah HD	47,558	34,724	73.0%	69.8%	76.0%
33	Juab/Millard/Sanpete Co. (54)	31,637	22,416	70.9%	66.6%	74.8%
50	Sevier/Piute/Wayne Co. (55)	15,921	12,237	76.9%	72.0%	81.1%
	Davis County HD	175,027	128,039	73.2%	70.3%	75.8%
29	Bountiful (16)	33,318	22,684	68.1%	61.1%	74.4%
40	Clearfield/Hill AFB (11)	37,329	27,326	73.2%	66.8%	78.8%
54	Farmington/Centerville (14)	19,034	14,838	78.0%	70.0%	84.3%
35	Layton (12)	46,815	33,450	71.5%	65.4%	76.8%
56	Syracuse/Kaysville (13)	24,542	19,555	79.7%	72.1%	85.6%
38	Woods Cross/North SL (15)	13,989	10,146	72.5%	61.3%	81.5%
	Salt Lake Valley HD	658,810	425,487	64.6%	63.2%	66.0%
8	Avenues (18)	18,959	10,579	55.8%	47.6%	63.7%
21	Cottonwood (28)	33,297	21,504	64.6%	58.0%	70.6%
3	Downtown Salt Lake (24)	42,808	21,191	49.5%	43.4%	55.6%
20	Foothill/U of U (19)	17,778	11,406	64.2%	55.1%	72.3%
1	Glendale (21)	18,642	8,477	45.5%	35.0%	56.4%
28	Holladay (27)	35,956	24,309	67.6%	61.8%	72.9%
19	Kearns (29)	42,995	27,267	63.4%	57.6%	68.9%
18	Magna (20)	15,623	9,883	63.3%	53.8%	71.8%
14	Midvale (32)	21,672	13,188	60.9%	52.8%	68.3%
12	Millcreek (26)	44,008	26,591	60.4%	55.2%	65.5%
7	Murray (31)	24,072	13,135	54.6%	47.1%	61.8%
60	Riverton/Draper (39)	41,391	34,642	83.7%	79.3%	87.3%
5	Rose Park (17)	22,639	11,368	50.2%	41.1%	59.3%
25	Sandy Center (36)	36,106	23,701	65.6%	59.1%	71.6%
51	Sandy, Northeast (37)	18,245	14,043	77.0%	68.8%	83.5%
43	Sandy, Southeast (38)	20,781	15,319	73.7%	66.0%	80.2%
46	South Jordan (35)	20,931	15,506	74.1%	66.3%	80.6%
2	South Salt Lake (25)	18,456	8,859	48.0%	38.5%	57.6%
15	Taylorsville (30)	27,372	16,707	61.0%	54.5%	67.2%
39	West Jordan North (33)	30,391	22,074	72.6%	66.6%	77.9%
45	West Jordan/Copperton (34)	26,360	19,504	74.0%	67.5%	79.6%
9	West Valley East (23)	35,527	20,615	58.0%	50.8%	65.0%
22	West Valley West (22)	44,794	29,171	65.1%	58.8%	70.9%
	Southeastern Utah HD	36,828	25,375	68.9%	66.0%	71.6%
32	Carbon/Emery Co. (56)	21,451	15,197	70.8%	67.3%	74.1%
23	Grand/San Juan Co. (57)	15,377	10,045	65.3%	60.1%	70.2%
	Southwest Utah HD	116,150	80,865	69.6%	66.4%	72.7%
27	Cedar City (60)	22,401	15,016	67.0%	58.7%	74.4%
31	Other Southwest District (61)	15,384	10,885	70.8%	63.4%	77.1%
34	Other Washington County (59)	32,503	23,200	71.4%	65.0%	77.0%
30	St. George (58)	45,862	31,985	69.7%	64.4%	74.6%
47	Summit County HD (51)	24,525	18,232	74.3%	71.1%	77.3%
41	Tooele County HD (40)	32,458	23,765	73.2%	70.2%	76.1%
42	TriCounty HD (53)	28,023	20,544	73.3%	70.3%	76.1%
	Utah County HD	278,832	195,623	70.2%	67.2%	73.0%
55	American Fork/Alpine (42)	26,819	21,042	78.5%	70.7%	84.6%
26	East Orem (46)	14,955	9,882	66.1%	47.2%	80.9%
61	Lehi/Cedar Valley (41)	18,752	16,130	86.0%	78.9%	91.0%
37	North Orem (44)	25,965	18,664	71.9%	63.3%	79.1%
44	Pleasant Grove/Lindon (43)	24,636	18,168	73.7%	66.1%	80.2%
4	Provo/BYU (47)	39,401	19,784	50.2%	40.8%	59.6%
6	Provo South (48)	48,138	25,697	53.4%	45.2%	61.4%
57	Springville/Spanish Fork (49)	41,036	33,447	81.5%	76.2%	85.9%
59	Utah Co. South (50)	17,363	14,337	82.6%	74.1%	88.7%
24	West Orem (45)	21,774	14,233	65.4%	53.0%	76.0%
48	Wasatch County HD (52)	12,514	9,304	74.3%	70.9%	77.5%
	Weber-Morgan HD	148,702	99,176	66.7%	64.0%	69.3%
13	Ben Lomond (5)	33,215	20,187	60.8%	54.8%	66.5%
10	Downtown Ogden (7)	21,684	12,728	58.7%	49.3%	67.5%
53	Morgan/East Weber Co. (6)	24,131	18,783	77.8%	71.6%	83.0%
11	Riverdale (10)	15,522	9,218	59.4%	51.5%	66.8%
49	Roy/Hooper (9)	27,898	20,769	74.4%	68.5%	79.6%
16	South Ogden (8)	26,255	16,360	62.3%	55.2%	68.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Single Mother Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	Number of Households 2003	Number of Female Heads of Household No Husband With Children	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	109,690,575	7,863,723	7.2%	6.7%	7.7%
	State of Utah	779,580	44,832	5.8%	5.3%	6.2%
	Bear River HD	45,922	2,139	4.7%	4.2%	5.1%
32	Brigham City (1)	7,029	418	5.9%	5.5%	6.4%
26	Logan (3)	19,690	908	4.6%	4.2%	5.0%
16	Other Box Elder Co. (2)	7,266	328	4.5%	4.1%	4.9%
4	Other Cache/Rich Co. (4)	11,937	473	4.0%	3.6%	4.3%
	Central Utah HD	21,895	1,056	4.8%	4.4%	5.2%
18	Juab/Millard/Sanpete Co. (54)	14,167	660	4.7%	4.2%	5.1%
27	Sevier/Piute/Wayne Co. (55)	7,728	379	4.9%	4.5%	5.3%
	Davis County HD	80,175	4,772	6.0%	5.5%	6.4%
31	Bountiful (16)	15,807	779	4.9%	4.5%	5.4%
43	Clearfield/Hill AFB (11)	16,712	1,274	7.6%	7.1%	8.1%
9	Farmington/Centerville (14)	8,129	328	4.0%	3.7%	4.4%
39	Layton (12)	22,687	1,596	7.0%	6.5%	7.5%
10	Syracuse/Kaysville (13)	10,570	474	4.5%	4.1%	4.9%
24	Woods Cross/North SL (15)	6,269	359	5.7%	5.3%	6.2%
	Salt Lake Valley HD	315,982	19,618	6.2%	5.7%	6.7%
52	Avenues (18)	11,443	443	3.9%	3.5%	4.3%
41	Cottonwood (28)	16,393	830	5.1%	4.6%	5.5%
60	Downtown Salt Lake (24)	26,057	1,303	5.0%	4.6%	5.4%
25	Foothill/U of U (19)	8,752	350	4.0%	3.6%	4.4%
58	Glendale (21)	8,555	763	8.9%	8.4%	9.5%
46	Holladay (27)	18,543	880	4.7%	4.3%	5.2%
37	Kearns (29)	18,665	1,396	7.5%	7.0%	8.0%
35	Magna (20)	6,927	480	6.9%	6.4%	7.4%
56	Midvale (32)	11,667	843	7.2%	6.7%	7.7%
49	Millcreek (26)	23,707	1,310	5.5%	5.1%	6.0%
57	Murray (31)	13,615	893	6.6%	6.1%	7.0%
2	Riverton/Draper (39)	15,661	585	3.7%	3.4%	4.1%
53	Rose Park (17)	10,346	886	8.6%	8.0%	9.1%
38	Sandy Center (36)	16,838	1,101	6.5%	6.1%	7.0%
13	Sandy, Northeast (37)	7,520	324	4.3%	3.9%	4.7%
3	Sandy, Southeast (38)	8,822	361	4.1%	3.7%	4.5%
1	South Jordan (35)	7,981	249	3.1%	2.8%	3.5%
61	South Salt Lake (25)	10,701	945	8.8%	8.3%	9.4%
54	Taylorsville (30)	14,254	1,103	7.7%	7.2%	8.3%
28	West Jordan North (33)	12,629	894	7.1%	6.6%	7.6%
23	West Jordan/Copperton (34)	11,519	796	6.9%	6.4%	7.4%
55	West Valley East (23)	16,559	1,277	7.7%	7.2%	8.2%
40	West Valley West (22)	18,827	1,602	8.5%	8.0%	9.1%
	Southeastern Utah HD	18,538	1,243	6.7%	6.2%	7.2%
42	Carbon/Emery Co. (56)	10,874	632	5.8%	5.4%	6.3%
51	Grand/San Juan Co. (57)	7,664	605	7.9%	7.4%	8.4%
	Southwest Utah HD	56,217	2,869	5.1%	4.7%	5.5%
36	Cedar City (60)	9,768	563	5.8%	5.3%	6.2%
20	Other Southwest District (61)	11,867	484	4.1%	3.7%	4.5%
22	Other Washington County (59)	14,077	643	4.6%	4.2%	5.0%
45	St. George (58)	20,505	1,151	5.6%	5.2%	6.1%
19	Summit County HD (51)	11,945	522	4.4%	4.0%	4.8%
33	Tooele County HD (40)	15,486	965	6.2%	5.8%	6.7%
44	TriCounty HD (53)	13,749	909	6.6%	6.1%	7.1%
	Utah County HD	121,521	5,539	4.6%	4.1%	5.0%
6	American Fork/Alpine (42)	11,540	494	4.3%	3.9%	4.7%
11	East Orem (46)	6,389	263	4.1%	3.7%	4.5%
8	Lehi/Cedar Valley (41)	7,952	364	4.6%	4.2%	5.0%
30	North Orem (44)	12,093	775	6.4%	5.9%	6.9%
7	Pleasant Grove/Lindon (43)	10,760	485	4.5%	4.1%	4.9%
15	Provo/BYU (47)	15,075	424	2.8%	2.5%	3.1%
34	Provo South (48)	20,607	964	4.7%	4.3%	5.1%
12	Springville/Spanish Fork (49)	18,818	858	4.6%	4.2%	5.0%
14	Utah Co. South (50)	8,506	412	4.8%	4.4%	5.3%
21	West Orem (45)	9,781	493	5.0%	4.6%	5.5%
17	Wasatch County HD (52)	5,790	266	4.6%	4.2%	5.0%
	Weber-Morgan HD	72,360	4,682	6.5%	6.0%	7.0%
50	Ben Lomond (5)	16,755	1,287	7.7%	7.2%	8.2%
59	Downtown Ogden (7)	10,706	934	8.7%	8.2%	9.3%
5	Morgan/East Weber Co. (6)	10,847	391	3.6%	3.2%	4.0%
48	Riverdale (10)	7,486	491	6.6%	6.1%	7.0%
29	Roy/Hooper (9)	13,433	798	5.9%	5.5%	6.4%
47	South Ogden (8)	13,133	754	5.7%	5.3%	6.2%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P34.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Low Income Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With		95% Confidence Interval	
			Annual Household Incomes <\$20,000	Crude Rate	Lower	Upper
	U.S.	217,803,051	42,815,506	19.7%	19.3%	20.0%
	State of Utah	1,657,454	239,152	14.4%	13.8%	15.1%
	Bear River HD	98,027	19,718	20.1%	17.4%	23.2%
32	Brigham City (1)	14,566	1,828	12.5%	7.0%	21.4%
59	Logan (3)	45,904	13,986	30.5%	25.4%	36.0%
39	Other Box Elder Co. (2)	14,636	2,283	15.6%	10.4%	22.7%
19	Other Cache/Rich Co. (4)	22,921	2,184	9.5%	6.6%	13.6%
	Central Utah HD	47,558	10,610	22.3%	19.5%	25.3%
54	Juab/Millard/Sanpete Co. (54)	31,637	7,639	24.1%	20.6%	28.1%
43	Sevier/Piute/Wayne Co. (55)	15,921	3,041	19.1%	15.1%	23.9%
	Davis County HD	175,027	13,593	7.8%	6.3%	9.5%
7	Bountiful (16)	33,318	1,899	5.7%	3.2%	9.9%
26	Clearfield/Hill AFB (11)	37,329	4,236	11.3%	7.7%	16.4%
15	Farmington/Centerville (14)	19,034	1,509	7.9%	4.1%	14.7%
21	Layton (12)	46,815	4,833	10.3%	7.4%	14.3%
2	Syracuse/Kaysville (13)	24,542	775	3.2%	1.4%	6.9%
1	Woods Cross/North SL (15)	13,989	438	3.1%	1.1%	8.8%
	Salt Lake Valley HD	658,810	84,696	12.9%	11.8%	14.0%
28	Avenues (18)	18,959	2,300	12.1%	8.0%	18.0%
14	Cottonwood (28)	33,297	2,574	7.7%	4.8%	12.3%
47	Downtown Salt Lake (24)	42,808	8,996	21.0%	16.0%	27.1%
35	Foothill/U of U (19)	17,778	2,573	14.5%	8.7%	23.1%
60	Glendale (21)	18,642	5,859	31.4%	22.5%	42.1%
24	Holladay (27)	35,956	3,884	10.8%	7.4%	15.5%
23	Kearns (29)	42,995	4,566	10.6%	7.0%	15.8%
42	Magna (20)	15,623	2,749	17.6%	11.5%	25.9%
33	Midvale (32)	21,672	2,753	12.7%	7.7%	20.2%
27	Millcreek (26)	44,008	5,079	11.5%	8.5%	15.6%
48	Murray (31)	24,072	5,225	21.7%	15.4%	29.7%
3	Riverton/Drapers (39)	41,391	1,721	4.2%	2.6%	6.6%
52	Rose Park (17)	22,639	5,282	23.3%	15.9%	32.8%
22	Sandy Center (36)	36,106	3,729	10.3%	7.2%	14.6%
20	Sandy, Northeast (37)	18,245	1,803	9.9%	5.3%	17.8%
5	Sandy, Southeast (38)	20,781	914	4.4%	1.9%	9.9%
8	South Jordan (35)	20,931	1,263	6.0%	2.9%	12.3%
58	South Salt Lake (25)	18,456	5,509	29.9%	21.4%	39.9%
34	Taylorsville (30)	27,372	3,825	14.0%	10.0%	19.3%
10	West Jordan North (33)	30,391	2,040	6.7%	4.4%	10.2%
9	West Jordan/Copperton (34)	26,360	1,613	6.1%	3.4%	10.9%
46	West Valley East (23)	35,527	7,088	20.0%	14.6%	26.6%
36	West Valley West (22)	44,794	6,689	14.9%	10.4%	21.1%
	Southeastern Utah HD	36,828	8,563	23.3%	20.7%	26.0%
49	Carbon/Emery Co. (56)	21,451	4,711	22.0%	19.0%	25.2%
55	Grand/San Juan Co. (57)	15,377	3,970	25.8%	21.2%	31.0%
	Southwest Utah HD	116,150	21,151	18.2%	15.8%	20.9%
50	Cedar City (60)	22,401	5,026	22.4%	16.7%	29.5%
51	Other Southwest District (61)	15,384	3,484	22.6%	16.5%	30.2%
37	Other Washington County (59)	32,503	4,895	15.1%	11.3%	19.9%
40	St. George (58)	45,862	7,649	16.7%	12.8%	21.4%
13	Summit County HD (51)	24,525	1,779	7.3%	5.4%	9.7%
18	Tooele County HD (40)	32,458	3,066	9.4%	7.8%	11.4%
44	TriCounty HD (53)	28,023	5,429	19.4%	16.9%	22.1%
	Utah County HD	278,832	49,224	17.7%	15.4%	20.2%
17	American Fork/Alpine (42)	26,819	2,348	8.8%	4.7%	15.8%
31	East Orem (46)	14,955	1,876	12.5%	6.1%	24.1%
6	Lehi/Cedar Valley (41)	18,752	996	5.3%	2.9%	9.5%
29	North Orem (44)	25,965	3,162	12.2%	8.0%	18.1%
16	Pleasant Grove/Lindon (43)	24,636	2,119	8.6%	4.8%	15.1%
57	Provo/BYU (47)	39,401	10,759	27.3%	18.8%	37.9%
61	Provo South (48)	48,138	20,470	42.5%	34.4%	51.1%
25	Springville/Spanish Fork (49)	41,036	4,656	11.3%	7.8%	16.2%
11	Utah Co. South (50)	17,363	1,196	6.9%	3.8%	12.1%
53	West Orem (45)	21,774	5,254	24.1%	15.4%	35.8%
30	Wasatch County HD (52)	12,514	1,541	12.3%	10.0%	15.0%
	Weber-Morgan HD	148,702	20,320	13.7%	11.7%	15.9%
38	Ben Lomond (5)	33,215	5,147	15.5%	11.5%	20.5%
56	Downtown Ogden (7)	21,684	5,636	26.0%	18.0%	35.9%
12	Morgan/East Weber Co. (6)	24,131	1,677	6.9%	4.0%	11.7%
41	Riverdale (10)	15,522	2,704	17.4%	12.0%	24.6%
4	Roy/Hooper (9)	27,898	1,193	4.3%	2.5%	7.3%
45	South Ogden (8)	26,255	5,221	19.9%	14.5%	26.7%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Middle Income Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With \$20,000-\$49,999 Annual Household Incomes	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	93,097,954	42.7%	42.4%	43.1%
	State of Utah	1,657,454	712,385	43.0%	42.1%	43.9%
	Bear River HD	98,027	45,973	46.9%	43.6%	50.2%
31	Brigham City (1)	14,566	6,445	44.2%	36.3%	52.5%
27	Logan (3)	45,904	20,044	43.7%	38.5%	49.0%
42	Other Box Elder Co. (2)	14,636	7,209	49.3%	41.6%	57.0%
54	Other Cache/Rich Co. (4)	22,921	12,258	53.5%	47.3%	59.6%
	Central Utah HD	47,558	24,163	50.8%	47.5%	54.2%
47	Juab/Millard/Sanpete Co. (54)	31,637	16,002	50.6%	46.4%	54.8%
49	Sevier/Piute/Wayne Co. (55)	15,921	8,145	51.2%	45.6%	56.7%
	Davis County HD	175,027	66,110	37.8%	34.9%	40.7%
18	Bountiful (16)	33,318	12,646	38.0%	31.2%	45.2%
39	Clearfield/Hill AFB (11)	37,329	17,751	47.6%	41.1%	54.1%
6	Farmington/Centerville (14)	19,034	5,266	27.7%	20.7%	35.9%
21	Layton (12)	46,815	18,436	39.4%	33.6%	45.5%
5	Syracuse/Kaysville (13)	24,542	6,711	27.3%	21.1%	34.7%
23	Woods Cross/North SL (15)	13,989	5,633	40.3%	30.6%	50.8%
	Salt Lake Valley HD	658,810	270,072	41.0%	39.5%	42.5%
24	Avenues (18)	18,959	7,686	40.5%	32.4%	49.2%
15	Cottonwood (28)	33,297	12,026	36.1%	29.9%	42.8%
20	Downtown Salt Lake (24)	42,808	16,518	38.6%	32.6%	44.9%
8	Foothill/U of U (19)	17,778	5,987	33.7%	25.2%	43.3%
56	Glendale (21)	18,642	10,063	54.0%	43.1%	64.5%
10	Holladay (27)	35,956	12,428	34.6%	29.0%	40.6%
60	Kearns (29)	42,995	24,387	56.7%	50.6%	62.6%
59	Magna (20)	15,623	8,816	56.4%	46.9%	65.5%
52	Midvale (32)	21,672	11,422	52.7%	44.5%	60.8%
22	Millcreek (26)	44,008	17,622	40.0%	34.9%	45.5%
37	Murray (31)	24,072	11,259	46.8%	39.4%	54.3%
4	Riverton/Draper (39)	41,391	10,975	26.5%	22.0%	31.6%
58	Rose Park (17)	22,639	12,560	55.5%	45.8%	64.7%
14	Sandy Center (36)	36,106	12,943	35.8%	30.1%	42.1%
2	Sandy, Northeast (37)	18,245	4,443	24.4%	17.8%	32.4%
1	Sandy, Southeast (38)	20,781	4,941	23.8%	17.3%	31.7%
3	South Jordan (35)	20,931	5,320	25.4%	19.2%	32.8%
46	South Salt Lake (25)	18,456	9,331	50.6%	40.6%	60.5%
30	Taylorsville (30)	27,372	12,081	44.1%	37.5%	51.0%
32	West Jordan North (33)	30,391	13,513	44.5%	38.3%	50.8%
28	West Jordan/Copperton (34)	26,360	11,531	43.7%	37.0%	50.7%
53	West Valley East (23)	35,527	18,839	53.0%	45.4%	60.5%
35	West Valley West (22)	44,794	20,600	46.0%	39.8%	52.3%
	Southeastern Utah HD	36,828	17,825	48.4%	45.2%	51.6%
38	Carbon/Emery Co. (56)	21,451	10,074	47.0%	43.0%	50.9%
48	Grand/San Juan Co. (57)	15,377	7,839	51.0%	45.5%	56.5%
	Southwest Utah HD	116,150	57,590	49.6%	46.2%	52.9%
51	Cedar City (60)	22,401	11,605	51.8%	44.4%	59.1%
34	Other Southwest District (61)	15,384	7,007	45.5%	37.9%	53.4%
50	Other Washington County (59)	32,503	16,719	51.4%	44.9%	58.0%
40	St. George (58)	45,862	21,943	47.8%	42.3%	53.5%
7	Summit County HD (51)	24,525	7,965	32.5%	29.3%	35.8%
44	Tooele County HD (40)	32,458	16,238	50.0%	46.8%	53.3%
43	TriCounty HD (53)	28,023	13,993	49.9%	46.6%	53.3%
	Utah County HD	278,832	121,812	43.7%	40.9%	46.6%
12	American Fork/Alpine (42)	26,819	9,593	35.8%	28.6%	43.6%
41	East Orem (46)	14,955	7,173	48.0%	31.7%	64.7%
36	Lehi/Cedar Valley (41)	18,752	8,684	46.3%	38.1%	54.7%
55	North Orem (44)	25,965	13,920	53.6%	45.0%	62.0%
19	Pleasant Grove/Lindon (43)	24,636	9,416	38.2%	30.8%	46.3%
9	Provo/BYU (47)	39,401	13,546	34.4%	25.5%	44.5%
26	Provo South (48)	48,138	20,354	42.3%	34.4%	50.5%
33	Springville/Spanish Fork (49)	41,036	18,689	45.5%	39.7%	51.5%
61	Utah Co. South (50)	17,363	11,300	65.1%	56.5%	72.8%
16	West Orem (45)	21,774	7,946	36.5%	27.4%	46.7%
29	Wasatch County HD (52)	12,514	5,500	44.0%	40.2%	47.8%
	Weber-Morgan HD	148,702	65,638	44.1%	41.2%	47.1%
57	Ben Lomond (5)	33,215	18,146	54.6%	48.3%	60.8%
17	Downtown Ogden (7)	21,684	8,210	37.9%	28.7%	47.9%
13	Morgan/East Weber Co. (6)	24,131	8,636	35.8%	29.6%	42.4%
11	Riverdale (10)	15,522	5,447	35.1%	27.9%	43.0%
45	Roy/Hooper (9)	27,898	14,042	50.3%	43.8%	56.8%
25	South Ogden (8)	26,255	10,953	41.7%	34.6%	49.2%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

High Income Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With \$50,000+ Annual Household Incomes	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	81,889,373	37.6%	37.2%	38.0%
	State of Utah	1,657,454	705,918	42.6%	41.7%	43.5%
	Bear River HD	98,027	32,337	33.0%	30.1%	36.1%
36	Brigham City (1)	14,566	6,294	43.2%	35.2%	51.6%
8	Logan (3)	45,904	11,874	25.9%	21.7%	30.5%
22	Other Box Elder Co. (2)	14,636	5,144	35.1%	28.3%	42.6%
25	Other Cache/Rich Co. (4)	22,921	8,479	37.0%	31.2%	43.2%
	Central Utah HD	47,558	12,786	26.9%	24.0%	29.9%
6	Juab/Millard/Sanpete Co. (54)	31,637	7,996	25.3%	21.9%	29.0%
12	Sevier/Piute/Wayne Co. (55)	15,921	4,734	29.7%	24.8%	35.2%
	Davis County HD	175,027	95,324	54.5%	51.4%	57.5%
52	Bountiful (16)	33,318	18,773	56.3%	49.0%	63.4%
33	Clearfield/Hill AFB (11)	37,329	15,342	41.1%	34.8%	47.7%
56	Farmington/Centerville (14)	19,034	12,259	64.4%	55.7%	72.3%
45	Layton (12)	46,815	23,545	50.3%	44.2%	56.4%
60	Syracuse/Kaysville (13)	24,542	17,055	69.5%	62.0%	76.1%
53	Woods Cross/North SL (15)	13,989	7,919	56.6%	46.1%	66.6%
	Salt Lake Valley HD	658,810	304,041	46.2%	44.7%	47.7%
39	Avenues (18)	18,959	8,973	47.3%	39.0%	55.8%
51	Cottonwood (28)	33,297	18,697	56.2%	49.4%	62.7%
31	Downtown Salt Lake (24)	42,808	17,295	40.4%	34.3%	46.8%
46	Foothill/U of U (19)	17,778	9,218	51.9%	42.4%	61.2%
1	Glendale (21)	18,642	2,719	14.6%	8.7%	23.5%
49	Holladay (27)	35,956	19,643	54.6%	48.4%	60.7%
18	Kearns (29)	42,995	14,042	32.7%	27.3%	38.5%
9	Magna (20)	15,623	4,058	26.0%	18.4%	35.4%
21	Midvale (32)	21,672	7,497	34.6%	27.3%	42.7%
42	Millcreek (26)	44,008	21,307	48.4%	43.0%	53.9%
16	Murray (31)	24,072	7,588	31.5%	25.1%	38.7%
59	Riverton/Draper (39)	41,391	28,695	69.3%	64.1%	74.1%
4	Rose Park (17)	22,639	4,797	21.2%	14.8%	29.3%
48	Sandy Center (36)	36,106	19,433	53.8%	47.4%	60.1%
57	Sandy, Northeast (37)	18,245	11,999	65.8%	56.9%	73.6%
61	Sandy, Southeast (38)	20,781	14,926	71.8%	63.7%	78.8%
58	South Jordan (35)	20,931	14,347	68.5%	60.7%	75.5%
3	South Salt Lake (25)	18,456	3,615	19.6%	13.2%	28.1%
34	Taylorsville (30)	27,372	11,467	41.9%	35.3%	48.8%
43	West Jordan North (33)	30,391	14,838	48.8%	42.5%	55.1%
44	West Jordan/Copperton (34)	26,360	13,216	50.1%	43.3%	57.0%
10	West Valley East (23)	35,527	9,600	27.0%	20.4%	34.8%
28	West Valley West (22)	44,794	17,505	39.1%	33.2%	45.3%
	Southeastern Utah HD	36,828	10,440	28.3%	25.6%	31.3%
15	Carbon/Emery Co. (56)	21,451	6,666	31.1%	27.5%	34.8%
5	Grand/San Juan Co. (57)	15,377	3,568	23.2%	19.0%	27.9%
	Southwest Utah HD	116,150	37,409	32.2%	29.2%	35.4%
7	Cedar City (60)	22,401	5,769	25.8%	20.0%	32.4%
17	Other Southwest District (61)	15,384	4,893	31.8%	25.0%	39.5%
19	Other Washington County (59)	32,503	10,889	33.5%	27.4%	40.2%
23	St. George (58)	45,862	16,270	35.5%	30.3%	41.0%
55	Summit County HD (51)	24,525	14,781	60.3%	56.8%	63.7%
32	Tooele County HD (40)	32,458	13,153	40.5%	37.4%	43.7%
14	TriCounty HD (53)	28,023	8,601	30.7%	27.7%	33.8%
	Utah County HD	278,832	107,797	38.7%	36.0%	41.4%
50	American Fork/Alpine (42)	26,819	14,878	55.5%	47.4%	63.2%
30	East Orem (46)	14,955	5,906	39.5%	26.3%	54.4%
41	Lehi/Cedar Valley (41)	18,752	9,073	48.4%	40.2%	56.6%
20	North Orem (44)	25,965	8,883	34.2%	26.5%	42.8%
47	Pleasant Grove/Lindon (43)	24,636	13,100	53.2%	45.1%	61.1%
26	Provo/BYU (47)	39,401	15,096	38.3%	29.7%	47.7%
2	Provo South (48)	48,138	7,314	15.2%	10.9%	20.8%
35	Springville/Spanish Fork (49)	41,036	17,690	43.1%	37.3%	49.1%
11	Utah Co. South (50)	17,363	4,867	28.0%	21.0%	36.3%
29	West Orem (45)	21,774	8,575	39.4%	29.9%	49.7%
37	Wasatch County HD (52)	12,514	5,473	43.7%	40.0%	47.5%
	Weber-Morgan HD	148,702	62,744	42.2%	39.3%	45.1%
13	Ben Lomond (5)	33,215	9,922	29.9%	24.5%	35.9%
24	Downtown Ogden (7)	21,684	7,838	36.1%	27.4%	45.9%
54	Morgan/East Weber Co. (6)	24,131	13,818	57.3%	50.4%	63.8%
40	Riverdale (10)	15,522	7,371	47.5%	39.4%	55.7%
38	Roy/Hooper (9)	27,898	12,663	45.4%	39.0%	52.0%
27	South Ogden (8)	26,255	10,081	38.4%	31.4%	45.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Children in Poverty by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population <18	Number of Children <18		95% Confidence Interval	
			Living at or Below Poverty	Crude Rate	Lower	Upper
	U.S.	73,046,954	12,098,259	16.6%	15.8%	17.3%
	State of Utah	756,174	76,616	10.1%	9.5%	10.7%
	Bear River HD	46,250	4,450	9.6%	9.0%	10.2%
32	Brigham City (1)	6,902	601	8.7%	8.2%	9.3%
40	Logan (3)	17,609	2,074	11.8%	11.1%	12.4%
30	Other Box Elder Co. (2)	7,918	672	8.5%	7.9%	9.0%
28	Other Cache/Rich Co. (4)	13,821	1,140	8.2%	7.7%	8.8%
	Central Utah HD	22,173	3,275	14.8%	14.1%	15.5%
45	Juab/Millard/Sanpete Co. (54)	14,931	2,179	14.6%	13.9%	15.3%
48	Sevier/Piute/Wayne Co. (55)	7,242	1,085	15.0%	14.3%	15.7%
	Davis County HD	87,011	5,664	6.5%	6.0%	7.0%
12	Bountiful (16)	13,211	669	5.1%	4.6%	5.5%
35	Clearfield/Hill AFB (11)	19,209	2,033	10.6%	10.0%	11.2%
2	Farmington/Centerville (14)	9,923	261	2.6%	2.3%	2.9%
25	Layton (12)	23,276	1,841	7.9%	7.4%	8.4%
7	Syracuse/Kaysville (13)	14,689	620	4.2%	3.8%	4.6%
11	Woods Cross/North SL (15)	6,704	332	5.0%	4.5%	5.4%
	Salt Lake Valley HD	281,655	26,577	9.4%	8.9%	10.0%
53	Avenues (18)	3,890	715	18.4%	17.6%	19.1%
14	Cottonwood (28)	11,035	646	5.9%	5.4%	6.3%
44	Downtown Salt Lake (24)	9,015	1,244	13.8%	13.1%	14.5%
27	Foothill/U of U (19)	5,502	452	8.2%	7.7%	8.7%
60	Glendale (21)	8,599	2,348	27.3%	26.4%	28.2%
17	Holladay (27)	10,505	666	6.3%	5.9%	6.8%
29	Kearns (29)	22,937	1,903	8.3%	7.8%	8.8%
33	Magna (20)	8,617	806	9.4%	8.8%	9.9%
54	Midvale (32)	7,662	1,421	18.5%	17.8%	19.3%
34	Millcreek (26)	14,056	1,400	10.0%	9.4%	10.5%
46	Murray (31)	7,524	1,118	14.9%	14.2%	15.6%
3	Riverton/Draper (39)	24,319	670	2.8%	2.4%	3.1%
57	Rose Park (17)	10,662	2,561	24.0%	23.2%	24.9%
8	Sandy Center (36)	16,889	727	4.3%	3.9%	4.7%
4	Sandy, Northeast (37)	7,881	244	3.1%	2.8%	3.4%
6	Sandy, Southeast (38)	10,722	452	4.2%	3.8%	4.6%
1	South Jordan (35)	12,690	311	2.5%	2.2%	2.8%
58	South Salt Lake (25)	6,403	1,634	25.5%	24.7%	26.4%
23	Taylorsville (30)	10,559	797	7.5%	7.0%	8.1%
20	West Jordan North (33)	17,448	1,225	7.0%	6.5%	7.5%
15	West Jordan/Copperton (34)	16,586	976	5.9%	5.4%	6.3%
51	West Valley East (23)	14,254	2,429	17.0%	16.3%	17.8%
31	West Valley West (22)	23,898	2,029	8.5%	7.9%	9.0%
	Southeastern Utah HD	15,911	3,539	22.2%	21.4%	23.1%
49	Carbon/Emery Co. (56)	8,584	1,288	15.0%	14.3%	15.7%
61	Grand/San Juan Co. (57)	7,327	2,194	29.9%	29.0%	30.8%
	Southwest Utah HD	47,930	7,524	15.7%	15.0%	16.4%
56	Cedar City (60)	9,880	1,992	20.2%	19.4%	20.9%
42	Other Southwest District (61)	6,648	842	12.7%	12.0%	13.3%
50	Other Washington County (59)	14,932	2,251	15.1%	14.4%	15.8%
47	St. George (58)	16,470	2,464	15.0%	14.3%	15.7%
16	Summit County HD (51)	9,548	582	6.1%	5.6%	6.6%
24	Tooele County HD (40)	16,498	1,289	7.8%	7.3%	8.3%
55	TriCounty HD (53)	13,615	2,567	18.9%	18.1%	19.6%
	Utah County HD	144,454	12,818	8.9%	8.3%	9.4%
9	American Fork/Alpine (42)	17,899	844	4.7%	4.3%	5.1%
5	East Orem (46)	8,482	303	3.6%	3.2%	3.9%
18	Lehi/Cedar Valley (41)	12,760	839	6.6%	6.1%	7.1%
37	North Orem (44)	14,526	1,617	11.1%	10.5%	11.7%
22	Pleasant Grove/Lindon (43)	17,105	1,209	7.1%	6.6%	7.6%
43	Provo/BYU (47)	10,641	1,430	13.4%	12.8%	14.1%
52	Provo South (48)	16,310	2,817	17.3%	16.5%	18.0%
21	Springville/Spanish Fork (49)	25,283	1,783	7.1%	6.6%	7.6%
26	Utah Co. South (50)	11,237	907	8.1%	7.5%	8.6%
36	West Orem (45)	10,217	1,131	11.1%	10.5%	11.7%
13	Wasatch County HD (52)	6,001	351	5.8%	5.4%	6.3%
	Weber-Morgan HD	65,118	7,543	11.6%	11.0%	12.2%
41	Ben Lomond (5)	14,432	1,742	12.1%	11.4%	12.7%
59	Downtown Ogden (7)	9,450	2,560	27.1%	26.2%	28.0%
10	Morgan/East Weber Co. (6)	11,491	546	4.8%	4.3%	5.2%
38	Riverdale (10)	6,373	731	11.5%	10.8%	12.1%
19	Roy/Hooper (9)	13,522	898	6.6%	6.2%	7.1%
39	South Ogden (8)	9,855	1,157	11.7%	11.1%	12.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 3 (SF-3) Sample data P87.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

No High School Degree by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With No High School Degree**	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	28,596,887	13.1%	12.8%	13.4%
	State of Utah	1,657,454	114,393	6.9%	6.4%	7.4%
	Bear River HD	98,027	4,902	5.0%	3.8%	6.6%
42	Brigham City (1)	14,566	1,204	8.3%	4.1%	15.8%
13	Logan (3)	45,904	1,461	3.2%	2.0%	5.1%
37	Other Box Elder Co. (2)	14,636	1,052	7.2%	3.8%	13.1%
21	Other Cache/Rich Co. (4)	22,921	1,060	4.6%	2.8%	7.6%
	Central Utah HD	47,558	4,026	8.5%	6.7%	10.6%
44	Juab/Millard/Sanpete Co. (54)	31,637	2,648	8.4%	6.2%	11.1%
46	Sevier/Piute/Wayne Co. (55)	15,921	1,374	8.6%	6.0%	12.3%
	Davis County HD	175,027	7,647	4.4%	3.2%	6.0%
10	Bountiful (16)	33,318	903	2.7%	1.1%	6.6%
38	Clearfield/Hill AFB (11)	37,329	2,732	7.3%	4.4%	12.0%
2	Farmington/Centerville (14)	19,034	-	0.0%	0.0%	0.0%
29	Layton (12)	46,815	2,854	6.1%	3.3%	10.9%
9	Syracuse/Kaysville (13)	24,542	514	2.1%	0.8%	5.6%
16	Woods Cross/North SL (15)	13,989	526	3.8%	1.2%	10.9%
	Salt Lake Valley HD	658,810	51,465	7.8%	7.0%	8.7%
33	Avenues (18)	18,959	1,213	6.4%	2.5%	15.2%
11	Cottonwood (28)	33,297	946	2.8%	1.4%	5.6%
32	Downtown Salt Lake (24)	42,808	2,729	6.4%	3.7%	10.8%
4	Foothill/U of U (19)	17,778	191	1.1%	0.3%	4.2%
61	Glendale (21)	18,642	4,853	26.0%	17.6%	36.8%
5	Holladay (27)	35,956	408	1.1%	0.5%	2.5%
51	Kearns (29)	42,995	4,907	11.4%	8.1%	15.9%
48	Magna (20)	15,623	1,466	9.4%	5.4%	15.7%
47	Midvale (32)	21,672	1,913	8.8%	4.7%	15.9%
27	Millcreek (26)	44,008	2,601	5.9%	3.8%	9.0%
30	Murray (31)	24,072	1,513	6.3%	3.6%	10.8%
20	Riverton/Draper (39)	41,391	1,884	4.6%	2.6%	7.7%
60	Rose Park (17)	22,639	5,056	22.3%	14.9%	32.0%
24	Sandy Center (36)	36,106	2,032	5.6%	2.8%	11.0%
2	Sandy, Northeast (37)	18,245	-	0.0%	0.0%	0.0%
6	Sandy, Southeast (38)	20,781	276	1.3%	0.4%	4.2%
23	South Jordan (35)	20,931	1,124	5.4%	2.3%	12.1%
59	South Salt Lake (25)	18,456	4,081	22.1%	14.1%	32.9%
35	Taylorsville (30)	27,372	1,869	6.8%	4.2%	10.8%
34	West Jordan North (33)	30,391	1,980	6.5%	3.5%	11.9%
17	West Jordan/Copperton (34)	26,360	1,046	4.0%	1.9%	8.2%
54	West Valley East (23)	35,527	4,368	12.3%	8.3%	17.8%
56	West Valley West (22)	44,794	6,298	14.1%	9.9%	19.6%
	Southeastern Utah HD	36,828	4,195	11.4%	9.5%	13.6%
52	Carbon/Emery Co. (56)	21,451	2,489	11.6%	9.4%	14.2%
50	Grand/San Juan Co. (57)	15,377	1,728	11.2%	7.8%	15.9%
	Southwest Utah HD	116,150	8,481	7.3%	5.8%	9.2%
14	Cedar City (60)	22,401	777	3.5%	1.8%	6.7%
53	Other Southwest District (61)	15,384	1,890	12.3%	7.8%	18.8%
45	Other Washington County (59)	32,503	2,732	8.4%	5.4%	13.0%
31	St. George (58)	45,862	2,892	6.3%	4.2%	9.4%
26	Summit County HD (51)	24,525	1,395	5.7%	3.9%	8.3%
43	Tooele County HD (40)	32,458	2,684	8.3%	6.7%	10.2%
55	TriCounty HD (53)	28,023	3,649	13.0%	11.0%	15.3%
	Utah County HD	278,832	14,749	5.3%	3.8%	7.3%
49	American Fork/Alpine (42)	26,819	2,557	9.5%	5.5%	16.0%
57	East Orem (46)	14,955	2,162	14.5%	3.3%	45.9%
7	Lehi/Cedar Valley (41)	18,752	375	2.0%	0.6%	6.9%
40	North Orem (44)	25,965	2,047	7.9%	4.5%	13.6%
19	Pleasant Grove/Lindon (43)	24,636	1,004	4.1%	1.9%	8.7%
8	Provo/BYU (47)	39,401	808	2.1%	0.4%	10.1%
12	Provo South (48)	48,138	1,476	3.1%	1.4%	6.4%
15	Springville/Spanish Fork (49)	41,036	1,444	3.5%	2.0%	6.2%
28	Utah Co. South (50)	17,363	1,039	6.0%	2.7%	12.6%
18	West Orem (45)	21,774	873	4.0%	1.7%	9.4%
41	Wasatch County HD (52)	12,514	1,028	8.2%	6.4%	10.5%
	Weber-Morgan HD	148,702	9,787	6.6%	5.3%	8.1%
39	Ben Lomond (5)	33,215	2,486	7.5%	4.9%	11.2%
58	Downtown Ogden (7)	21,684	3,884	17.9%	11.8%	26.3%
3	Morgan/East Weber Co. (6)	24,131	188	0.8%	0.2%	3.4%
22	Riverdale (10)	15,522	821	5.3%	2.7%	10.2%
25	Roy/Hooper (9)	27,898	1,571	5.6%	3.4%	9.2%
36	South Ogden (8)	26,255	1,834	7.0%	4.0%	11.8%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

**Highest level of educational attainment.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

High School Graduates by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With HS Degree**	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	67,130,603	30.8%	30.5%	31.2%
	State of Utah	1,657,454	475,795	28.7%	27.9%	29.5%
	Bear River HD	98,027	28,255	28.8%	26.0%	31.8%
58	Brigham City (1)	14,566	5,730	39.3%	31.8%	47.5%
13	Logan (3)	45,904	9,230	20.1%	16.1%	24.8%
56	Other Box Elder Co. (2)	14,636	5,681	38.8%	31.8%	46.3%
31	Other Cache/Rich Co. (4)	22,921	7,122	31.1%	25.8%	36.8%
	Central Utah HD	47,558	17,466	36.7%	33.7%	39.9%
49	Juab/Millard/Sanpete Co. (54)	31,637	11,187	35.4%	31.5%	39.4%
57	Sevier/Piute/Wayne Co. (55)	15,921	6,241	39.2%	34.2%	44.4%
	Davis County HD	175,027	46,898	26.8%	24.2%	29.6%
3	Bountiful (16)	33,318	5,105	15.3%	10.9%	21.0%
50	Clearfield/Hill AFB (11)	37,329	13,475	36.1%	30.2%	42.4%
12	Farmington/Centerville (14)	19,034	3,602	18.9%	13.3%	26.3%
36	Layton (12)	46,815	14,706	31.4%	25.9%	37.5%
20	Syracuse/Kaysville (13)	24,542	5,802	23.6%	17.6%	31.0%
38	Woods Cross/North SL (15)	13,989	4,539	32.4%	23.1%	43.5%
	Salt Lake Valley HD	658,810	185,526	28.2%	26.9%	29.5%
1	Avenues (18)	18,959	1,854	9.8%	6.0%	15.5%
17	Cottonwood (28)	33,297	7,449	22.4%	17.4%	28.3%
9	Downtown Salt Lake (24)	42,808	7,796	18.2%	13.8%	23.6%
2	Foothill/U of U (19)	17,778	2,526	14.2%	8.7%	22.4%
45	Glendale (21)	18,642	6,484	34.8%	24.9%	46.1%
6	Holladay (27)	35,956	6,150	17.1%	12.9%	22.3%
60	Kearns (29)	42,995	18,790	43.7%	38.1%	49.5%
61	Magna (20)	15,623	8,061	51.6%	42.5%	60.6%
24	Midvale (32)	21,672	5,787	26.7%	20.1%	34.5%
14	Millcreek (26)	44,008	8,922	20.3%	16.3%	24.9%
37	Murray (31)	24,072	7,619	31.7%	25.3%	38.8%
21	Riverton/Draper (39)	41,391	9,958	24.1%	19.9%	28.8%
47	Rose Park (17)	22,639	7,990	35.3%	27.4%	44.1%
25	Sandy Center (36)	36,106	9,967	27.6%	22.4%	33.5%
19	Sandy, Northeast (37)	18,245	4,236	23.2%	16.8%	31.2%
15	Sandy, Southeast (38)	20,781	4,485	21.6%	15.7%	29.0%
23	South Jordan (35)	20,931	5,354	25.6%	19.5%	32.8%
35	South Salt Lake (25)	18,456	5,793	31.4%	23.3%	40.8%
34	Taylorsville (30)	27,372	8,563	31.3%	25.3%	38.0%
28	West Jordan North (33)	30,391	9,354	30.8%	25.4%	36.7%
27	West Jordan/Copperton (34)	26,360	7,846	29.8%	24.1%	36.1%
52	West Valley East (23)	35,527	13,007	36.6%	29.9%	43.8%
53	West Valley West (22)	44,794	16,488	36.8%	31.2%	42.8%
	Southeastern Utah HD	36,828	12,339	33.5%	30.6%	36.5%
43	Carbon/Emery Co. (56)	21,451	7,425	34.6%	31.2%	38.2%
32	Grand/San Juan Co. (57)	15,377	4,800	31.2%	26.4%	36.5%
	Southwest Utah HD	116,150	38,892	33.5%	30.5%	36.6%
33	Cedar City (60)	22,401	6,995	31.2%	24.5%	38.8%
54	Other Southwest District (61)	15,384	5,702	37.1%	30.1%	44.6%
42	Other Washington County (59)	32,503	11,124	34.2%	28.4%	40.6%
40	St. George (58)	45,862	15,184	33.1%	28.2%	38.4%
16	Summit County HD (51)	24,525	5,318	21.7%	19.0%	24.6%
46	Tooele County HD (40)	32,458	11,447	35.3%	32.2%	38.5%
59	TriCounty HD (53)	28,023	11,830	42.2%	39.1%	45.4%
	Utah County HD	278,832	63,385	22.7%	20.6%	25.1%
8	American Fork/Alpine (42)	26,819	4,803	17.9%	12.8%	24.4%
4	East Orem (46)	14,955	2,369	15.8%	9.2%	26.0%
29	Lehi/Cedar Valley (41)	18,752	5,776	30.8%	23.6%	39.1%
18	North Orem (44)	25,965	5,861	22.6%	15.8%	31.1%
11	Pleasant Grove/Lindon (43)	24,636	4,662	18.9%	13.5%	25.9%
7	Provo/BYU (47)	39,401	6,859	17.4%	10.8%	26.8%
5	Provo South (48)	48,138	7,754	16.1%	11.2%	22.6%
41	Springville/Spanish Fork (49)	41,036	13,776	33.6%	28.3%	39.3%
48	Utah Co. South (50)	17,363	6,134	35.3%	27.4%	44.1%
10	West Orem (45)	21,774	4,065	18.7%	11.7%	28.5%
26	Wasatch County HD (52)	12,514	3,723	29.7%	26.4%	33.3%
	Weber-Morgan HD	148,702	49,936	33.6%	31.0%	36.3%
51	Ben Lomond (5)	33,215	12,122	36.5%	30.9%	42.5%
39	Downtown Ogden (7)	21,684	7,148	33.0%	25.2%	41.8%
30	Morgan/East Weber Co. (6)	24,131	7,477	31.0%	25.2%	37.5%
44	Riverdale (10)	15,522	5,397	34.8%	27.7%	42.6%
55	Roy/Hooper (9)	27,898	10,610	38.0%	32.2%	44.3%
22	South Ogden (8)	26,255	6,697	25.5%	19.6%	32.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

**Highest level of educational attainment.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Some College Education by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With Some College**	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	59,021,360	27.1%	26.8%	27.4%
	State of Utah	1,657,454	571,409	34.5%	33.6%	35.3%
	Bear River HD	98,027	35,835	36.6%	33.5%	39.7%
9	Brigham City (1)	14,566	4,145	28.5%	22.2%	35.7%
55	Logan (3)	45,904	18,672	40.7%	35.6%	45.9%
38	Other Box Elder Co. (2)	14,636	5,202	35.5%	28.8%	42.9%
34	Other Cache/Rich Co. (4)	22,921	8,049	35.1%	29.7%	40.9%
	Central Utah HD	47,558	16,842	35.4%	32.4%	38.6%
46	Juab/Millard/Sanpete Co. (54)	31,637	11,637	36.8%	32.9%	40.8%
26	Sevier/Piute/Wayne Co. (55)	15,921	5,248	33.0%	28.2%	38.1%
	Davis County HD	175,027	61,921	35.4%	32.7%	38.2%
47	Bountiful (16)	33,318	12,383	37.2%	30.8%	44.0%
50	Clearfield/Hill AFB (11)	37,329	14,152	37.9%	32.1%	44.1%
36	Farmington/Centerville (14)	19,034	6,710	35.3%	27.7%	43.6%
37	Layton (12)	46,815	16,556	35.4%	30.1%	41.0%
25	Syracuse/Kaysville (13)	24,542	8,068	32.9%	26.3%	40.2%
20	Woods Cross/North SL (15)	13,989	4,465	31.9%	23.4%	41.9%
	Salt Lake Valley HD	658,810	213,321	32.4%	31.1%	33.7%
4	Avenues (18)	18,959	4,701	24.8%	18.5%	32.4%
48	Cottonwood (28)	33,297	12,388	37.2%	31.1%	43.7%
6	Downtown Salt Lake (24)	42,808	11,140	26.0%	21.0%	31.8%
2	Foothill/U of U (19)	17,778	3,874	21.8%	15.0%	30.6%
18	Glendale (21)	18,642	5,866	31.5%	22.2%	42.4%
19	Holladay (27)	35,956	11,473	31.9%	26.5%	37.8%
16	Kearns (29)	42,995	13,197	30.7%	25.9%	36.0%
8	Magna (20)	15,623	4,362	27.9%	20.5%	36.8%
31	Midvale (32)	21,672	7,425	34.3%	27.2%	42.1%
13	Millcreek (26)	44,008	13,458	30.6%	26.0%	35.6%
12	Murray (31)	24,072	7,222	30.0%	24.0%	36.8%
33	Riverton/Draper (39)	41,391	14,352	34.7%	29.8%	39.9%
1	Rose Park (17)	22,639	4,869	21.5%	14.8%	30.2%
49	Sandy Center (36)	36,106	13,593	37.6%	31.8%	43.9%
7	Sandy, Northeast (37)	18,245	4,982	27.3%	20.6%	35.2%
43	Sandy, Southeast (38)	20,781	7,498	36.1%	28.9%	43.9%
15	South Jordan (35)	20,931	6,412	30.6%	24.2%	37.9%
5	South Salt Lake (25)	18,456	4,777	25.9%	18.8%	34.6%
41	Taylorsville (30)	27,372	9,835	35.9%	30.1%	42.2%
58	West Jordan North (33)	30,391	12,766	42.0%	36.1%	48.2%
51	West Jordan/Copperton (34)	26,360	10,200	38.7%	32.4%	45.4%
45	West Valley East (23)	35,527	13,046	36.7%	30.0%	44.0%
29	West Valley West (22)	44,794	15,215	34.0%	28.9%	39.4%
	Southeastern Utah HD	36,828	12,622	34.3%	31.3%	37.3%
44	Carbon/Emery Co. (56)	21,451	7,743	36.1%	32.5%	39.8%
14	Grand/San Juan Co. (57)	15,377	4,707	30.6%	25.6%	36.2%
	Southwest Utah HD	116,150	41,463	35.7%	32.7%	38.8%
59	Cedar City (60)	22,401	9,520	42.5%	35.0%	50.4%
22	Other Southwest District (61)	15,384	5,016	32.6%	26.2%	39.7%
27	Other Washington County (59)	32,503	10,736	33.0%	27.6%	39.0%
40	St. George (58)	45,862	16,372	35.7%	30.8%	40.9%
3	Summit County HD (51)	24,525	5,787	23.6%	21.0%	26.4%
28	Tooele County HD (40)	32,458	10,965	33.8%	30.8%	36.9%
11	TriCounty HD (53)	28,023	8,388	29.9%	27.1%	32.9%
	Utah County HD	278,832	111,269	39.9%	37.3%	42.5%
24	American Fork/Alpine (42)	26,819	8,776	32.7%	25.8%	40.5%
30	East Orem (46)	14,955	5,081	34.0%	22.9%	47.1%
54	Lehi/Cedar Valley (41)	18,752	7,413	39.5%	32.1%	47.5%
39	North Orem (44)	25,965	9,229	35.5%	28.1%	43.8%
57	Pleasant Grove/Lindon (43)	24,636	10,210	41.4%	34.0%	49.3%
60	Provo/BYU (47)	39,401	18,027	45.8%	36.4%	55.4%
61	Provo South (48)	48,138	22,594	46.9%	39.0%	55.1%
52	Springville/Spanish Fork (49)	41,036	16,077	39.2%	33.7%	44.9%
53	Utah Co. South (50)	17,363	6,824	39.3%	31.3%	47.9%
56	West Orem (45)	21,774	8,942	41.1%	30.7%	52.3%
10	Wasatch County HD (52)	12,514	3,670	29.3%	26.3%	32.5%
	Weber-Morgan HD	148,702	50,521	34.0%	31.4%	36.7%
35	Ben Lomond (5)	33,215	11,685	35.2%	29.8%	41.0%
17	Downtown Ogden (7)	21,684	6,782	31.3%	23.2%	40.6%
32	Morgan/East Weber Co. (6)	24,131	8,301	34.4%	28.5%	40.9%
42	Riverdale (10)	15,522	5,591	36.0%	28.9%	43.9%
23	Roy/Hooper (9)	27,898	9,111	32.7%	27.0%	38.8%
21	South Ogden (8)	26,255	8,551	32.6%	26.4%	39.4%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

**Highest level of educational attainment.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

College Graduates by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults With College Degree**	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	63,054,201	29.0%	28.6%	29.3%
	State of Utah	1,657,454	495,856	29.9%	29.1%	30.7%
	Bear River HD	98,027	29,034	29.6%	27.0%	32.4%
24	Brigham City (1)	14,566	3,487	23.9%	18.2%	30.9%
45	Logan (3)	45,904	16,542	36.0%	31.6%	40.8%
10	Other Box Elder Co. (2)	14,636	2,701	18.5%	13.3%	25.0%
33	Other Cache/Rich Co. (4)	22,921	6,690	29.2%	24.3%	34.6%
	Central Utah HD	47,558	9,224	19.4%	17.0%	22.0%
14	Juab/Millard/Sanpete Co. (54)	31,637	6,166	19.5%	16.6%	22.8%
12	Sevier/Piute/Wayne Co. (55)	15,921	3,058	19.2%	15.5%	23.6%
	Davis County HD	175,027	58,562	33.5%	30.8%	36.2%
54	Bountiful (16)	33,318	14,926	44.8%	38.1%	51.7%
11	Clearfield/Hill AFB (11)	37,329	6,970	18.7%	14.3%	24.0%
55	Farmington/Centerville (14)	19,034	8,722	45.8%	37.7%	54.2%
29	Layton (12)	46,815	12,700	27.1%	22.3%	32.5%
52	Syracuse/Kaysville (13)	24,542	10,158	41.4%	34.3%	48.9%
35	Woods Cross/North SL (15)	13,989	4,460	31.9%	23.5%	41.7%
	Salt Lake Valley HD	658,810	208,498	31.6%	30.4%	33.0%
60	Avenues (18)	18,959	11,191	59.0%	50.7%	66.9%
48	Cottonwood (28)	33,297	12,514	37.6%	31.9%	43.7%
57	Downtown Salt Lake (24)	42,808	21,143	49.4%	43.3%	55.5%
61	Foothill/U of U (19)	17,778	11,187	62.9%	53.7%	71.3%
1	Glendale (21)	18,642	1,439	7.7%	4.4%	13.3%
59	Holladay (27)	35,956	17,925	49.9%	43.9%	55.8%
3	Kearns (29)	42,995	6,101	14.2%	10.9%	18.3%
2	Magna (20)	15,623	1,734	11.1%	7.1%	16.9%
34	Midvale (32)	21,672	6,547	30.2%	23.7%	37.7%
53	Millcreek (26)	44,008	19,027	43.2%	38.0%	48.6%
36	Murray (31)	24,072	7,719	32.1%	25.4%	39.6%
47	Riverton/Draper (39)	41,391	15,198	36.7%	31.9%	41.8%
18	Rose Park (17)	22,639	4,725	20.9%	14.6%	28.9%
32	Sandy Center (36)	36,106	10,514	29.1%	24.1%	34.7%
58	Sandy, Northeast (37)	18,245	9,026	49.5%	41.3%	57.7%
51	Sandy, Southeast (38)	20,781	8,523	41.0%	33.8%	48.6%
49	South Jordan (35)	20,931	8,041	38.4%	31.4%	45.9%
15	South Salt Lake (25)	18,456	3,805	20.6%	14.5%	28.5%
27	Taylorsville (30)	27,372	7,105	26.0%	20.7%	32.0%
16	West Jordan North (33)	30,391	6,292	20.7%	16.3%	25.9%
30	West Jordan/Copperton (34)	26,360	7,269	27.6%	22.1%	33.8%
4	West Valley East (23)	35,527	5,105	14.4%	10.5%	19.4%
6	West Valley West (22)	44,794	6,792	15.2%	11.1%	20.3%
	Southeastern Utah HD	36,828	7,671	20.8%	18.3%	23.6%
7	Carbon/Emery Co. (56)	21,451	3,794	17.7%	15.0%	20.8%
28	Grand/San Juan Co. (57)	15,377	4,141	26.9%	22.0%	32.5%
	Southwest Utah HD	116,150	27,314	23.5%	21.0%	26.2%
20	Cedar City (60)	22,401	5,110	22.8%	17.7%	28.9%
9	Other Southwest District (61)	15,384	2,776	18.0%	13.2%	24.2%
25	Other Washington County (59)	32,503	7,911	24.3%	19.6%	29.8%
26	St. George (58)	45,862	11,414	24.9%	20.6%	29.7%
56	Summit County HD (51)	24,525	12,026	49.0%	45.7%	52.4%
19	Tooele County HD (40)	32,458	7,362	22.7%	20.2%	25.3%
5	TriCounty HD (53)	28,023	4,157	14.8%	12.8%	17.1%
	Utah County HD	278,832	89,429	32.1%	29.8%	34.5%
50	American Fork/Alpine (42)	26,819	10,683	39.8%	32.7%	47.5%
44	East Orem (46)	14,955	5,344	35.7%	24.8%	48.4%
31	Lehi/Cedar Valley (41)	18,752	5,188	27.7%	21.6%	34.7%
40	North Orem (44)	25,965	8,828	34.0%	26.8%	42.0%
43	Pleasant Grove/Lindon (43)	24,636	8,760	35.6%	28.6%	43.1%
41	Provo/BYU (47)	39,401	13,707	34.8%	26.9%	43.7%
39	Provo South (48)	48,138	16,314	33.9%	26.9%	41.6%
22	Springville/Spanish Fork (49)	41,036	9,739	23.7%	19.5%	28.6%
13	Utah Co. South (50)	17,363	3,366	19.4%	13.9%	26.4%
46	West Orem (45)	21,774	7,893	36.3%	27.2%	46.5%
37	Wasatch County HD (52)	12,514	4,093	32.7%	29.2%	36.4%
	Weber-Morgan HD	148,702	38,458	25.9%	23.6%	28.3%
17	Ben Lomond (5)	33,215	6,921	20.8%	16.4%	26.2%
8	Downtown Ogden (7)	21,684	3,869	17.8%	12.3%	25.2%
38	Morgan/East Weber Co. (6)	24,131	8,164	33.8%	28.0%	40.2%
23	Riverdale (10)	15,522	3,713	23.9%	18.1%	30.9%
21	Roy/Hooper (9)	27,898	6,606	23.7%	18.8%	29.4%
42	South Ogden (8)	26,255	9,173	34.9%	28.9%	41.5%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

**Highest level of educational attainment.

Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Female College Graduates by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Female Population 18+	Number Females 25+ With College Degree**	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	98,089,377	22,412,775	22.8%	22.0%	23.7%
	State of Utah	670,729	149,884	22.3%	21.5%	23.2%
	Bear River HD	37,918	8,671	22.9%	22.0%	23.7%
24	Brigham City (1)	6,015	1,052	17.5%	16.8%	18.2%
50	Logan (3)	16,053	5,215	32.5%	31.6%	33.4%
12	Other Box Elder Co. (2)	5,938	727	12.2%	11.6%	12.9%
28	Other Cache/Rich Co. (4)	9,912	1,881	19.0%	18.2%	19.7%
	Central Utah HD	18,626	2,435	13.1%	12.4%	13.7%
16	Juab/Millard/Sanpete Co. (54)	11,959	1,669	14.0%	13.3%	14.6%
9	Sevier/Piute/Wayne Co. (55)	6,667	763	11.4%	10.8%	12.1%
	Davis County HD	70,909	16,123	22.7%	21.9%	23.6%
47	Bountiful (16)	14,282	3,762	26.3%	25.5%	27.2%
15	Clearfield/Hill AFB (11)	14,177	1,896	13.4%	12.7%	14.0%
48	Farmington/Centerville (14)	7,781	2,376	30.5%	29.6%	31.4%
34	Layton (12)	18,811	4,153	22.1%	21.3%	22.9%
42	Syracuse/Kaysville (13)	10,204	2,506	24.6%	23.7%	25.4%
33	Woods Cross/North SL (15)	5,654	1,245	22.0%	21.2%	22.8%
	Salt Lake Valley HD	274,159	66,235	24.2%	23.3%	25.0%
60	Avenues (18)	7,924	3,764	47.5%	46.5%	48.5%
52	Cottonwood (28)	14,583	5,047	34.6%	33.7%	35.5%
57	Downtown Salt Lake (24)	16,624	6,746	40.6%	39.6%	41.5%
61	Foothill/U of U (19)	7,324	3,916	53.5%	52.5%	54.4%
1	Glendale (21)	6,976	495	7.1%	6.6%	7.6%
56	Holladay (27)	16,615	6,096	36.7%	35.7%	37.6%
10	Kearns (29)	17,759	2,060	11.6%	11.0%	12.2%
2	Magna (20)	6,435	554	8.6%	8.1%	9.2%
29	Midvale (32)	8,683	1,751	20.2%	19.4%	21.0%
53	Millcreek (26)	20,054	6,999	34.9%	34.0%	35.8%
31	Murray (31)	10,388	2,204	21.2%	20.4%	22.0%
38	Riverton/Draper (39)	16,290	3,875	23.8%	23.0%	24.6%
7	Rose Park (17)	8,915	988	11.1%	10.5%	11.7%
30	Sandy Center (36)	15,658	3,238	20.7%	19.9%	21.5%
51	Sandy, Northeast (37)	7,731	2,636	34.1%	33.2%	35.0%
55	Sandy, Southeast (38)	8,753	3,171	36.2%	35.3%	37.2%
41	South Jordan (35)	8,866	2,170	24.5%	23.6%	25.3%
19	South Salt Lake (25)	7,430	1,154	15.5%	14.8%	16.2%
21	Taylorsville (30)	11,310	1,857	16.4%	15.7%	17.1%
20	West Jordan North (33)	12,429	2,014	16.2%	15.5%	16.9%
27	West Jordan/Copperton (34)	11,112	1,977	17.8%	17.0%	18.5%
5	West Valley East (23)	13,795	1,451	10.5%	9.9%	11.1%
4	West Valley West (22)	18,499	1,918	10.4%	9.8%	11.0%
	Southeastern Utah HD	15,672	2,077	13.3%	12.6%	13.9%
3	Carbon/Emery Co. (56)	9,004	919	10.2%	9.6%	10.8%
26	Grand/San Juan Co. (57)	6,668	1,184	17.8%	17.0%	18.5%
	Southwest Utah HD	47,459	8,446	17.8%	17.0%	18.5%
37	Cedar City (60)	8,137	1,899	23.3%	22.5%	24.2%
18	Other Southwest District (61)	6,623	1,009	15.2%	14.5%	15.9%
25	Other Washington County (59)	13,718	2,402	17.5%	16.8%	18.3%
22	St. George (58)	18,981	3,184	16.8%	16.0%	17.5%
58	Summit County HD (51)	10,066	4,236	42.1%	41.1%	43.1%
13	Tooele County HD (40)	13,020	1,597	12.3%	11.6%	12.9%
11	TriCounty HD (53)	11,563	1,363	11.8%	11.2%	12.4%
	Utah County HD	104,434	27,777	26.6%	25.7%	27.5%
46	American Fork/Alpine (42)	11,604	3,050	26.3%	25.4%	27.2%
54	East Orem (46)	6,223	2,196	35.3%	34.4%	36.2%
35	Lehi/Cedar Valley (41)	7,929	1,768	22.3%	21.5%	23.1%
44	North Orem (44)	10,567	2,690	25.5%	24.6%	26.3%
43	Pleasant Grove/Lindon (43)	10,548	2,676	25.4%	24.5%	26.2%
59	Provo/BYU (47)	10,803	4,608	42.7%	41.7%	43.6%
39	Provo South (48)	13,820	3,325	24.1%	23.2%	24.9%
32	Springville/Spanish Fork (49)	17,475	3,752	21.5%	20.7%	22.3%
17	Utah Co. South (50)	7,356	1,111	15.1%	14.4%	15.8%
49	West Orem (45)	8,116	2,529	31.2%	30.3%	32.1%
40	Wasatch County HD (52)	5,089	1,226	24.1%	23.2%	24.9%
	Weber-Morgan HD	61,810	10,283	16.6%	15.9%	17.4%
8	Ben Lomond (5)	14,291	1,623	11.4%	10.7%	12.0%
6	Downtown Ogden (7)	8,133	878	10.8%	10.2%	11.4%
36	Morgan/East Weber Co. (6)	10,027	2,307	23.0%	22.2%	23.8%
23	Riverdale (10)	6,666	1,154	17.3%	16.6%	18.1%
14	Roy/Hooper (9)	11,868	1,561	13.2%	12.5%	13.8%
45	South Ogden (8)	10,828	2,816	26.0%	25.2%	26.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

**Highest level of educational attainment.

Source: U.S. Census 2000 Summary file 3 (SF-3) Sample data P37.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Employed Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults		95% Confidence Interval	
			Employed	Crude Rate	Lower	Upper
	U.S.	217,803,051	134,298,232	61.7%	61.5%	61.8%
	State of Utah	1,657,454	1,082,869	65.3%	64.5%	66.2%
	Bear River HD	98,027	61,276	62.5%	59.4%	65.5%
24	Brigham City (1)	14,566	9,303	63.9%	56.1%	70.9%
6	Logan (3)	45,904	26,125	56.9%	51.8%	61.8%
30	Other Box Elder Co. (2)	14,636	9,648	65.9%	58.7%	72.4%
45	Other Cache/Rich Co. (4)	22,921	15,875	69.3%	63.9%	74.2%
	Central Utah HD	47,558	28,189	59.3%	56.1%	62.4%
7	Juab/Millard/Sanpete Co. (54)	31,637	18,261	57.7%	53.6%	61.8%
16	Sevier/Piute/Wayne Co. (55)	15,921	9,866	62.0%	56.9%	66.8%
	Davis County HD	175,027	119,658	68.4%	65.6%	71.0%
11	Bountiful (16)	33,318	19,676	59.1%	52.2%	65.5%
59	Clearfield/Hill AFB (11)	37,329	27,816	74.5%	68.8%	79.5%
21	Farmington/Centerville (14)	19,034	12,035	63.2%	55.0%	70.8%
49	Layton (12)	46,815	33,546	71.7%	66.1%	76.6%
46	Syracuse/Kaysville (13)	24,542	17,121	69.8%	62.6%	76.0%
55	Woods Cross/North SL (15)	13,989	10,227	73.1%	63.2%	81.1%
	Salt Lake Valley HD	658,810	450,590	68.4%	67.1%	69.7%
26	Avenues (18)	18,959	12,291	64.8%	56.7%	72.2%
31	Cottonwood (28)	33,297	22,223	66.7%	60.7%	72.3%
42	Downtown Salt Lake (24)	42,808	29,366	68.6%	62.7%	74.0%
4	Foothill/U of U (19)	17,778	9,712	54.6%	45.8%	63.2%
10	Glendale (21)	18,642	10,917	58.6%	47.6%	68.7%
19	Holladay (27)	35,956	22,460	62.5%	56.6%	68.0%
51	Kearns (29)	42,995	31,000	72.1%	67.0%	76.7%
60	Magna (20)	15,623	11,691	74.8%	66.5%	81.6%
48	Midvale (32)	21,672	15,364	70.9%	63.6%	77.3%
18	Millcreek (26)	44,008	27,423	62.3%	57.0%	67.4%
15	Murray (31)	24,072	14,832	61.6%	54.0%	68.7%
61	Riverton/Draper (39)	41,391	31,309	75.6%	70.8%	79.9%
43	Rose Park (17)	22,639	15,562	68.7%	59.4%	76.8%
41	Sandy Center (36)	36,106	24,732	68.5%	62.1%	74.3%
47	Sandy, Northeast (37)	18,245	12,735	69.8%	62.0%	76.6%
38	Sandy, Southeast (38)	20,781	14,174	68.2%	60.9%	74.7%
36	South Jordan (35)	20,931	14,148	67.6%	60.1%	74.3%
35	South Salt Lake (25)	18,456	12,452	67.5%	57.6%	76.0%
50	Taylorsville (30)	27,372	19,734	72.1%	65.9%	77.5%
52	West Jordan North (33)	30,391	21,971	72.3%	66.3%	77.6%
56	West Jordan/Copperton (34)	26,360	19,435	73.7%	67.6%	79.1%
44	West Valley East (23)	35,527	24,556	69.1%	62.2%	75.3%
57	West Valley West (22)	44,794	33,044	73.8%	68.5%	78.5%
	Southeastern Utah HD	36,828	22,814	61.9%	58.9%	64.9%
9	Carbon/Emery Co. (56)	21,451	12,550	58.5%	54.8%	62.1%
40	Grand/San Juan Co. (57)	15,377	10,523	68.4%	63.3%	73.2%
	Southwest Utah HD	116,150	69,418	59.8%	56.7%	62.8%
23	Cedar City (60)	22,401	14,288	63.8%	55.9%	71.0%
8	Other Southwest District (61)	15,384	8,921	58.0%	50.6%	65.1%
25	Other Washington County (59)	32,503	20,843	64.1%	58.2%	69.6%
5	St. George (58)	45,862	25,504	55.6%	50.4%	60.7%
58	Summit County HD (51)	24,525	18,201	74.2%	71.3%	76.9%
29	Tooele County HD (40)	32,458	21,378	65.9%	62.8%	68.8%
17	TriCounty HD (53)	28,023	17,444	62.2%	59.2%	65.2%
	Utah County HD	278,832	166,414	59.7%	56.9%	62.5%
13	American Fork/Alpine (42)	26,819	16,025	59.8%	52.0%	67.0%
2	East Orem (46)	14,955	7,306	48.9%	34.8%	63.1%
34	Lehi/Cedar Valley (41)	18,752	12,590	67.1%	59.2%	74.2%
33	North Orem (44)	25,965	17,363	66.9%	58.4%	74.4%
39	Pleasant Grove/Lindon (43)	24,636	16,855	68.4%	60.9%	75.1%
1	Provo/BYU (47)	39,401	17,454	44.3%	35.2%	53.8%
3	Provo South (48)	48,138	24,563	51.0%	43.0%	59.0%
22	Springville/Spanish Fork (49)	41,036	26,156	63.7%	58.1%	69.1%
53	Utah Co. South (50)	17,363	12,555	72.3%	64.3%	79.1%
20	West Orem (45)	21,774	13,637	62.6%	52.4%	71.8%
37	Wasatch County HD (52)	12,514	8,471	67.7%	64.1%	71.0%
	Weber-Morgan HD	148,702	97,478	65.6%	62.9%	68.1%
28	Ben Lomond (5)	33,215	21,833	65.7%	59.9%	71.1%
12	Downtown Ogden (7)	21,684	12,877	59.4%	50.3%	67.9%
32	Morgan/East Weber Co. (6)	24,131	16,115	66.8%	60.5%	72.5%
27	Riverdale (10)	15,522	10,128	65.2%	57.8%	72.1%
54	Roy/Hooper (9)	27,898	20,209	72.4%	66.8%	77.5%
14	South Ogden (8)	26,255	15,872	60.5%	53.6%	66.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Unemployed Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Unemployed	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	21,499,121	9.9%	9.8%	10.0%
	State of Utah	1,657,454	104,580	6.3%	5.9%	6.8%
	Bear River HD	98,027	3,855	3.9%	2.9%	5.2%
22	Brigham City (1)	14,566	695	4.8%	2.5%	9.0%
18	Logan (3)	45,904	1,983	4.3%	2.7%	6.8%
8	Other Box Elder Co. (2)	14,636	455	3.1%	1.5%	6.4%
12	Other Cache/Rich Co. (4)	22,921	800	3.5%	2.1%	5.7%
	Central Utah HD	47,558	3,593	7.6%	6.1%	9.4%
44	Juab/Millard/Sanpete Co. (54)	31,637	2,465	7.8%	5.8%	10.3%
42	Sevier/Piute/Wayne Co. (55)	15,921	1,135	7.1%	5.1%	9.8%
	Davis County HD	175,027	8,670	5.0%	3.7%	6.6%
38	Bountiful (16)	33,318	2,166	6.5%	3.4%	12.0%
14	Clearfield/Hill AFB (11)	37,329	1,421	3.8%	2.0%	7.0%
4	Farmington/Centerville (14)	19,034	431	2.3%	0.7%	6.7%
36	Layton (12)	46,815	3,024	6.5%	3.7%	10.9%
7	Syracuse/Kaysville (13)	24,542	714	2.9%	1.4%	5.9%
19	Woods Cross/North SL (15)	13,989	608	4.3%	1.2%	15.0%
	Salt Lake Valley HD	658,810	45,635	6.9%	6.2%	7.7%
25	Avenues (18)	18,959	953	5.0%	2.7%	9.2%
10	Cottonwood (28)	33,297	1,112	3.3%	1.7%	6.4%
41	Downtown Salt Lake (24)	42,808	3,038	7.1%	4.7%	10.6%
45	Foothill/U of U (19)	17,778	1,421	8.0%	4.0%	15.5%
59	Glendale (21)	18,642	2,294	12.3%	7.1%	20.5%
3	Holladay (27)	35,956	796	2.2%	1.1%	4.4%
39	Kearns (29)	42,995	2,901	6.7%	4.5%	10.1%
51	Magna (20)	15,623	1,549	9.9%	5.7%	16.7%
37	Midvale (32)	21,672	1,408	6.5%	3.6%	11.3%
34	Millcreek (26)	44,008	2,798	6.4%	4.1%	9.7%
55	Murray (31)	24,072	2,694	11.2%	7.1%	17.3%
17	Riverton/Draper (39)	41,391	1,722	4.2%	2.5%	6.9%
60	Rose Park (17)	22,639	2,995	13.2%	7.3%	22.8%
54	Sandy Center (36)	36,106	4,032	11.2%	7.0%	17.4%
15	Sandy, Northeast (37)	18,245	710	3.9%	1.9%	8.0%
9	Sandy, Southeast (38)	20,781	669	3.2%	1.4%	7.3%
29	South Jordan (35)	20,931	1,180	5.6%	2.5%	12.1%
61	South Salt Lake (25)	18,456	2,838	15.4%	9.1%	24.7%
26	Taylorsville (30)	27,372	1,400	5.1%	2.6%	9.7%
32	West Jordan North (33)	30,391	1,765	5.8%	3.5%	9.4%
43	West Jordan/Copperton (34)	26,360	2,029	7.7%	4.6%	12.6%
49	West Valley East (23)	35,527	2,989	8.4%	5.1%	13.5%
46	West Valley West (22)	44,794	3,616	8.1%	5.7%	11.4%
	Southeastern Utah HD	36,828	3,792	10.3%	8.6%	12.3%
58	Carbon/Emery Co. (56)	21,451	2,611	12.2%	9.9%	14.9%
40	Grand/San Juan Co. (57)	15,377	1,069	7.0%	4.6%	10.3%
	Southwest Utah HD	116,150	6,456	5.6%	4.3%	7.1%
20	Cedar City (60)	22,401	1,037	4.6%	2.5%	8.3%
57	Other Southwest District (61)	15,384	1,802	11.7%	7.4%	18.1%
13	Other Washington County (59)	32,503	1,213	3.7%	2.2%	6.3%
23	St. George (58)	45,862	2,240	4.9%	3.2%	7.4%
27	Summit County HD (51)	24,525	1,309	5.3%	3.8%	7.4%
33	Tooele County HD (40)	32,458	1,994	6.1%	4.8%	7.9%
52	TriCounty HD (53)	28,023	2,824	10.1%	8.3%	12.3%
	Utah County HD	278,832	15,645	5.6%	4.5%	7.0%
47	American Fork/Alpine (42)	26,819	2,193	8.2%	4.6%	14.1%
1	East Orem (46)	14,955	119	0.8%	0.2%	3.6%
2	Lehi/Cedar Valley (41)	18,752	410	2.2%	0.9%	5.3%
28	North Orem (44)	25,965	1,453	5.6%	2.6%	11.5%
6	Pleasant Grove/Lindon (43)	24,636	698	2.8%	1.2%	6.4%
5	Provo/BYU (47)	39,401	922	2.3%	1.0%	5.2%
53	Provo South (48)	48,138	5,117	10.6%	6.4%	17.2%
16	Springville/Spanish Fork (49)	41,036	1,668	4.1%	2.4%	6.7%
50	Utah Co. South (50)	17,363	1,679	9.7%	5.5%	16.5%
30	West Orem (45)	21,774	1,246	5.7%	2.9%	11.0%
31	Wasatch County HD (52)	12,514	720	5.8%	4.5%	7.4%
	Weber-Morgan HD	148,702	9,742	6.6%	5.2%	8.2%
48	Ben Lomond (5)	33,215	2,760	8.3%	5.4%	12.5%
56	Downtown Ogden (7)	21,684	2,468	11.4%	6.6%	19.0%
11	Morgan/East Weber Co. (6)	24,131	819	3.4%	1.6%	6.9%
21	Riverdale (10)	15,522	735	4.7%	2.5%	8.8%
24	Roy/Hooper (9)	27,898	1,374	4.9%	2.7%	8.7%
35	South Ogden (8)	26,255	1,696	6.5%	3.7%	10.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Homemaker Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Who Were Homemakers	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	17,165,712	7.9%	7.8%	8.0%
	State of Utah	1,657,454	186,810	11.3%	10.8%	11.8%
	Bear River HD	98,027	11,560	11.8%	10.0%	13.8%
43	Brigham City (1)	14,566	1,885	12.9%	8.9%	18.5%
27	Logan (3)	45,904	4,760	10.4%	7.9%	13.4%
44	Other Box Elder Co. (2)	14,636	1,909	13.0%	8.8%	18.9%
39	Other Cache/Rich Co. (4)	22,921	2,829	12.3%	9.0%	16.7%
	Central Utah HD	47,558	6,267	13.2%	11.3%	15.3%
48	Juab/Millard/Sanpete Co. (54)	31,637	4,251	13.4%	11.1%	16.2%
41	Sevier/Piute/Wayne Co. (55)	15,921	2,023	12.7%	9.8%	16.3%
	Davis County HD	175,027	21,297	12.2%	10.5%	14.0%
35	Bountiful (16)	33,318	3,943	11.8%	8.2%	16.8%
20	Clearfield/Hill AFB (11)	37,329	3,532	9.5%	6.6%	13.3%
61	Farmington/Centerville (14)	19,034	3,646	19.2%	13.5%	26.5%
26	Layton (12)	46,815	4,834	10.3%	7.5%	14.0%
51	Syracuse/Kaysville (13)	24,542	3,383	13.8%	9.9%	18.8%
32	Woods Cross/North SL (15)	13,989	1,631	11.7%	7.1%	18.6%
	Salt Lake Valley HD	658,810	64,285	9.8%	9.0%	10.6%
18	Avenues (18)	18,959	1,753	9.2%	5.4%	15.4%
5	Cottonwood (28)	33,297	2,503	7.5%	5.1%	11.0%
3	Downtown Salt Lake (24)	42,808	2,029	4.7%	2.5%	8.9%
42	Foothill/U of U (19)	17,778	2,277	12.8%	8.6%	18.7%
24	Glendale (21)	18,642	1,860	10.0%	5.6%	17.2%
36	Holladay (27)	35,956	4,388	12.2%	8.8%	16.7%
9	Kearns (29)	42,995	3,534	8.2%	5.9%	11.3%
11	Magna (20)	15,623	1,312	8.4%	5.0%	13.7%
30	Midvale (32)	21,672	2,463	11.4%	7.2%	17.4%
29	Millcreek (26)	44,008	4,820	11.0%	8.2%	14.4%
6	Murray (31)	24,072	1,819	7.6%	4.8%	11.7%
53	Riverton/Draper (39)	41,391	5,823	14.1%	10.7%	18.2%
8	Rose Park (17)	22,639	1,841	8.1%	4.5%	14.3%
4	Sandy Center (36)	36,106	2,261	6.3%	4.1%	9.4%
50	Sandy, Northeast (37)	18,245	2,514	13.8%	9.3%	19.9%
54	Sandy, Southeast (38)	20,781	3,020	14.5%	10.1%	20.4%
49	South Jordan (35)	20,931	2,865	13.7%	9.7%	18.9%
1	South Salt Lake (25)	18,456	448	2.4%	0.7%	7.7%
16	Taylorsville (30)	27,372	2,461	9.0%	5.9%	13.4%
34	West Jordan North (33)	30,391	3,585	11.8%	8.2%	16.7%
25	West Jordan/Copperton (34)	26,360	2,661	10.1%	7.1%	14.1%
2	West Valley East (23)	35,527	1,680	4.7%	2.5%	8.7%
13	West Valley West (22)	44,794	3,964	8.8%	5.8%	13.2%
	Southeastern Utah HD	36,828	4,387	11.9%	10.0%	14.1%
46	Carbon/Emery Co. (56)	21,451	2,871	13.4%	11.0%	16.2%
17	Grand/San Juan Co. (57)	15,377	1,389	9.0%	6.2%	12.9%
	Southwest Utah HD	116,150	12,164	10.5%	8.8%	12.4%
7	Cedar City (60)	22,401	1,752	7.8%	4.7%	12.8%
14	Other Southwest District (61)	15,384	1,368	8.9%	5.7%	13.7%
38	Other Washington County (59)	32,503	3,990	12.3%	9.0%	16.5%
33	St. George (58)	45,862	5,383	11.7%	8.9%	15.4%
21	Summit County HD (51)	24,525	2,328	9.5%	7.9%	11.4%
47	Tooele County HD (40)	32,458	4,351	13.4%	11.3%	15.8%
55	TriCounty HD (53)	28,023	4,314	15.4%	13.4%	17.6%
	Utah County HD	278,832	39,967	14.3%	12.8%	16.1%
58	American Fork/Alpine (42)	26,819	4,963	18.5%	13.3%	25.2%
57	East Orem (46)	14,955	2,744	18.3%	11.4%	28.3%
59	Lehi/Cedar Valley (41)	18,752	3,518	18.8%	13.4%	25.6%
45	North Orem (44)	25,965	3,426	13.2%	8.7%	19.5%
60	Pleasant Grove/Lindon (43)	24,636	4,633	18.8%	13.4%	25.7%
19	Provo/BYU (47)	39,401	3,727	9.5%	6.0%	14.6%
23	Provo South (48)	48,138	4,641	9.6%	6.5%	14.1%
56	Springville/Spanish Fork (49)	41,036	6,825	16.6%	12.9%	21.2%
37	Utah Co. South (50)	17,363	2,130	12.3%	7.9%	18.5%
22	West Orem (45)	21,774	2,096	9.6%	5.9%	15.4%
40	Wasatch County HD (52)	12,514	1,569	12.5%	10.1%	15.4%
	Weber-Morgan HD	148,702	15,148	10.2%	8.7%	12.0%
12	Ben Lomond (5)	33,215	2,937	8.8%	6.0%	12.8%
52	Downtown Ogden (7)	21,684	3,026	14.0%	8.8%	21.5%
31	Morgan/East Weber Co. (6)	24,131	2,794	11.6%	8.0%	16.5%
28	Riverdale (10)	15,522	1,679	10.8%	6.8%	16.8%
15	Roy/Hooper (9)	27,898	2,487	8.9%	6.1%	12.8%
10	South Ogden (8)	26,255	2,170	8.3%	5.6%	12.1%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Student Population by Health District, Small Area, Utah, and U.S., 2003						
State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Who Were Students	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	9,806,800	4.5%	4.4%	4.6%
	State of Utah	1,657,454	95,305	5.8%	5.2%	6.4%
	Bear River HD	98,027	10,244	10.5%	8.3%	13.1%
28	Brigham City (1)	14,566	505	3.5%	1.1%	10.6%
59	Logan (3)	45,904	9,502	20.7%	16.3%	25.9%
23	Other Box Elder Co. (2)	14,636	448	3.1%	1.2%	7.7%
11	Other Cache/Rich Co. (4)	22,921	475	2.1%	0.9%	4.9%
	Central Utah HD	47,558	2,919	6.1%	4.2%	8.8%
50	Juab/Millard/Sanpete Co. (54)	31,637	2,266	7.2%	4.6%	11.0%
37	Sevier/Piute/Wayne Co. (55)	15,921	687	4.3%	2.3%	7.9%
	Davis County HD	175,027	7,825	4.5%	3.3%	6.1%
46	Bountiful (16)	33,318	2,064	6.2%	3.2%	11.6%
35	Clearfield/Hill AFB (11)	37,329	1,488	4.0%	2.0%	7.7%
10	Farmington/Centerville (14)	19,034	391	2.1%	0.5%	7.9%
34	Layton (12)	46,815	1,852	4.0%	2.1%	7.4%
48	Syracuse/Kaysville (13)	24,542	1,647	6.7%	3.2%	13.3%
30	Woods Cross/North SL (15)	13,989	510	3.6%	1.2%	10.7%
	Salt Lake Valley HD	658,810	29,235	4.4%	3.8%	5.2%
54	Avenues (18)	18,959	1,540	8.1%	4.1%	15.3%
36	Cottonwood (28)	33,297	1,393	4.2%	2.2%	7.9%
55	Downtown Salt Lake (24)	42,808	3,710	8.7%	5.6%	13.1%
47	Foothill/U of U (19)	17,778	1,102	6.2%	2.9%	12.8%
52	Glendale (21)	18,642	1,463	7.8%	2.7%	20.7%
41	Holladay (27)	35,956	1,793	5.0%	2.7%	9.2%
42	Kearns (29)	42,995	2,311	5.4%	3.2%	9.0%
31	Magna (20)	15,623	574	3.7%	1.2%	10.7%
7	Midvale (32)	21,672	287	1.3%	0.3%	5.2%
29	Millcreek (26)	44,008	1,533	3.5%	1.9%	6.2%
49	Murray (31)	24,072	1,636	6.8%	2.8%	15.5%
5	Riverton/Draper (39)	41,391	500	1.2%	0.5%	2.9%
14	Rose Park (17)	22,639	569	2.5%	0.7%	8.2%
43	Sandy Center (36)	36,106	1,982	5.5%	3.0%	10.0%
27	Sandy, Northeast (37)	18,245	604	3.3%	1.1%	9.6%
44	Sandy, Southeast (38)	20,781	1,262	6.1%	3.1%	11.5%
32	South Jordan (35)	20,931	772	3.7%	1.6%	8.2%
12	South Salt Lake (25)	18,456	411	2.2%	0.8%	6.4%
19	Taylorsville (30)	27,372	802	2.9%	1.4%	6.2%
39	West Jordan North (33)	30,391	1,483	4.9%	2.5%	9.3%
16	West Jordan/Copperton (34)	26,360	681	2.6%	1.1%	5.8%
45	West Valley East (23)	35,527	2,185	6.2%	3.0%	12.2%
24	West Valley West (22)	44,794	1,380	3.1%	1.6%	6.0%
	Southeastern Utah HD	36,828	655	1.8%	1.1%	2.9%
3	Carbon/Emery Co. (56)	21,451	244	1.1%	0.6%	2.3%
22	Grand/San Juan Co. (57)	15,377	462	3.0%	1.5%	5.8%
	Southwest Utah HD	116,150	5,469	4.7%	3.1%	7.0%
57	Cedar City (60)	22,401	2,941	13.1%	7.5%	21.9%
8	Other Southwest District (61)	15,384	244	1.6%	0.5%	4.6%
18	Other Washington County (59)	32,503	865	2.7%	0.9%	7.6%
21	St. George (58)	45,862	1,373	3.0%	1.5%	5.9%
9	Summit County HD (51)	24,525	456	1.9%	1.1%	3.3%
15	Tooele County HD (40)	32,458	838	2.6%	1.7%	4.0%
4	TriCounty HD (53)	28,023	330	1.2%	0.6%	2.2%
	Utah County HD	278,832	33,727	12.1%	9.8%	14.9%
26	American Fork/Alpine (42)	26,819	883	3.3%	1.3%	8.1%
58	East Orem (46)	14,955	3,040	20.3%	7.1%	46.0%
33	Lehi/Cedar Valley (41)	18,752	734	3.9%	1.2%	12.1%
53	North Orem (44)	25,965	2,091	8.1%	3.9%	15.9%
38	Pleasant Grove/Lindon (43)	24,636	1,109	4.5%	1.9%	10.1%
61	Provo/BYU (47)	39,401	13,049	33.1%	24.0%	43.7%
60	Provo South (48)	48,138	12,033	25.0%	17.7%	34.1%
40	Springville/Spanish Fork (49)	41,036	2,015	4.9%	2.6%	9.2%
1	Utah Co. South (50)	17,363	-	0.0%	0.0%	0.0%
56	West Orem (45)	21,774	2,550	11.7%	6.0%	21.6%
13	Wasatch County HD (52)	12,514	285	2.3%	1.4%	3.8%
	Weber-Morgan HD	148,702	4,461	3.0%	2.1%	4.3%
20	Ben Lomond (5)	33,215	981	3.0%	1.5%	5.8%
6	Downtown Ogden (7)	21,684	269	1.2%	0.3%	5.6%
17	Morgan/East Weber Co. (6)	24,131	639	2.6%	1.0%	6.6%
25	Riverdale (10)	15,522	482	3.1%	1.1%	8.6%
2	Roy/Hooper (9)	27,898	193	0.7%	0.1%	4.7%
51	South Ogden (8)	26,255	1,953	7.4%	4.1%	13.1%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Retired Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Who Were Retired	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	35,033,185	16.1%	16.0%	16.2%
	State of Utah	1,657,454	187,887	11.3%	10.9%	11.8%
	Bear River HD	98,027	11,090	11.3%	9.8%	13.1%
50	Brigham City (1)	14,566	2,177	14.9%	10.5%	20.8%
15	Logan (3)	45,904	3,534	7.7%	5.9%	10.0%
49	Other Box Elder Co. (2)	14,636	2,176	14.9%	10.7%	20.2%
40	Other Cache/Rich Co. (4)	22,921	2,942	12.8%	9.8%	16.7%
	Central Utah HD	47,558	6,591	13.9%	12.1%	15.9%
45	Juab/Millard/Sanpete Co. (54)	31,637	4,395	13.9%	11.7%	16.5%
44	Sevier/Piute/Wayne Co. (55)	15,921	2,210	13.9%	11.0%	17.4%
	Davis County HD	175,027	17,577	10.0%	8.6%	11.7%
53	Bountiful (16)	33,318	5,469	16.4%	12.5%	21.2%
18	Clearfield/Hill AFB (11)	37,329	3,073	8.2%	5.4%	12.3%
43	Farmington/Centerville (14)	19,034	2,531	13.3%	8.9%	19.3%
14	Layton (12)	46,815	3,559	7.6%	5.5%	10.5%
10	Syracuse/Kaysville (13)	24,542	1,677	6.8%	4.2%	11.1%
11	Woods Cross/North SL (15)	13,989	1,013	7.2%	3.7%	13.8%
	Salt Lake Valley HD	658,810	69,064	10.5%	9.7%	11.3%
39	Avenues (18)	18,959	2,422	12.8%	8.6%	18.5%
58	Cottonwood (28)	33,297	6,066	18.2%	14.0%	23.3%
30	Downtown Salt Lake (24)	42,808	4,664	10.9%	7.9%	14.8%
59	Foothill/U of U (19)	17,778	3,265	18.4%	12.7%	25.8%
32	Glendale (21)	18,642	2,108	11.3%	7.0%	17.7%
57	Holladay (27)	35,956	6,519	18.1%	14.3%	22.7%
13	Kearns (29)	42,995	3,249	7.6%	5.3%	10.6%
1	Magna (20)	15,623	497	3.2%	1.5%	6.7%
23	Midvale (32)	21,672	2,151	9.9%	6.7%	14.6%
54	Millcreek (26)	44,008	7,434	16.9%	13.1%	21.6%
41	Murray (31)	24,072	3,091	12.8%	9.2%	17.7%
3	Riverton/Draper (39)	41,391	2,037	4.9%	3.2%	7.6%
12	Rose Park (17)	22,639	1,672	7.4%	4.4%	12.0%
19	Sandy Center (36)	36,106	3,099	8.6%	6.0%	12.1%
21	Sandy, Northeast (37)	18,245	1,682	9.2%	5.7%	14.5%
16	Sandy, Southeast (38)	20,781	1,656	8.0%	5.1%	12.2%
22	South Jordan (35)	20,931	1,966	9.4%	5.9%	14.7%
37	South Salt Lake (25)	18,456	2,306	12.5%	7.4%	20.3%
29	Taylorsville (30)	27,372	2,975	10.9%	7.7%	15.1%
4	West Jordan North (33)	30,391	1,586	5.2%	3.5%	7.8%
7	West Jordan/Copperton (34)	26,360	1,553	5.9%	3.4%	9.9%
33	West Valley East (23)	35,527	4,117	11.6%	8.3%	15.9%
8	West Valley West (22)	44,794	2,789	6.2%	4.3%	8.9%
	Southeastern Utah HD	36,828	5,180	14.1%	12.3%	16.1%
48	Carbon/Emery Co. (56)	21,451	3,176	14.8%	12.6%	17.4%
38	Grand/San Juan Co. (57)	15,377	1,935	12.6%	9.8%	16.0%
	Southwest Utah HD	116,150	22,643	19.5%	17.4%	21.8%
26	Cedar City (60)	22,401	2,383	10.6%	7.5%	14.9%
60	Other Southwest District (61)	15,384	3,049	19.8%	14.9%	25.9%
55	Other Washington County (59)	32,503	5,592	17.2%	13.5%	21.7%
61	St. George (58)	45,862	11,362	24.8%	21.0%	29.0%
20	Summit County HD (51)	24,525	2,231	9.1%	7.6%	10.8%
36	Tooele County HD (40)	32,458	3,897	12.0%	10.3%	14.0%
31	TriCounty HD (53)	28,023	3,112	11.1%	9.5%	13.0%
	Utah County HD	278,832	23,079	8.3%	7.2%	9.5%
24	American Fork/Alpine (42)	26,819	2,754	10.3%	6.8%	15.3%
34	East Orem (46)	14,955	1,746	11.7%	6.4%	20.4%
17	Lehi/Cedar Valley (41)	18,752	1,500	8.0%	5.1%	12.3%
9	North Orem (44)	25,965	1,632	6.3%	3.5%	11.0%
5	Pleasant Grove/Lindon (43)	24,636	1,340	5.4%	3.4%	8.6%
28	Provo/BYU (47)	39,401	4,249	10.8%	7.4%	15.4%
2	Provo South (48)	48,138	1,783	3.7%	2.2%	6.1%
27	Springville/Spanish Fork (49)	41,036	4,372	10.7%	7.7%	14.6%
6	Utah Co. South (50)	17,363	998	5.7%	3.2%	10.0%
25	West Orem (45)	21,774	2,245	10.3%	6.4%	16.2%
35	Wasatch County HD (52)	12,514	1,470	11.7%	9.6%	14.2%
	Weber-Morgan HD	148,702	21,872	14.7%	13.0%	16.5%
47	Ben Lomond (5)	33,215	4,704	14.2%	10.7%	18.5%
46	Downtown Ogden (7)	21,684	3,044	14.0%	9.3%	20.6%
51	Morgan/East Weber Co. (6)	24,131	3,764	15.6%	11.9%	20.2%
52	Riverdale (10)	15,522	2,498	16.1%	11.8%	21.6%
42	Roy/Hooper (9)	27,898	3,635	13.0%	9.8%	17.2%
56	South Ogden (8)	26,255	4,564	17.4%	13.2%	22.6%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: Utah Behavioral Risk Factor Surveillance System, 2001-2005.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Population in Work Force by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 16+	Number of Persons 16+ in the Work Force	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	225,983,495	144,456,038	63.9%	63.0%	64.9%
	State of Utah	1,736,062	1,198,142	69.0%	68.1%	69.9%
	Bear River HD	102,876	71,273	69.3%	68.4%	70.2%
11	Brigham City (1)	15,419	9,839	63.8%	62.9%	64.8%
38	Logan (3)	47,471	33,382	70.3%	69.4%	71.2%
25	Other Box Elder Co. (2)	15,582	10,672	68.5%	67.6%	69.4%
42	Other Cache/Rich Co. (4)	24,404	17,390	71.3%	70.4%	72.1%
	Central Utah HD	50,256	30,179	60.1%	59.1%	61.0%
4	Juab/Millard/Sanpete Co. (54)	33,472	20,042	59.9%	58.9%	60.8%
5	Sevier/Piute/Wayne Co. (55)	16,784	10,147	60.5%	59.5%	61.4%
	Davis County HD	184,504	133,523	72.4%	71.5%	73.2%
20	Bountiful (16)	34,813	23,218	66.7%	65.8%	67.6%
56	Clearfield/Hill AFB (11)	39,279	29,521	75.2%	74.3%	76.0%
31	Farmington/Centerville (14)	20,329	14,108	69.4%	68.5%	70.3%
52	Layton (12)	49,244	36,585	74.3%	73.4%	75.2%
43	Syracuse/Kaysville (13)	26,168	18,651	71.3%	70.4%	72.2%
58	Woods Cross/North SL (15)	14,672	11,287	76.9%	76.1%	77.8%
	Salt Lake Valley HD	687,841	488,735	71.1%	70.2%	71.9%
41	Avenues (18)	19,349	13,761	71.1%	70.2%	72.0%
39	Cottonwood (28)	34,755	24,512	70.5%	69.6%	71.4%
48	Downtown Salt Lake (24)	43,717	32,015	73.2%	72.4%	74.1%
19	Foothill/U of U (19)	18,327	12,170	66.4%	65.5%	67.3%
13	Glendale (21)	19,409	12,537	64.6%	63.7%	65.5%
16	Holladay (27)	37,204	24,427	65.7%	64.7%	66.6%
51	Kearns (29)	45,402	33,537	73.9%	73.0%	74.7%
40	Magna (20)	16,460	11,674	70.9%	70.0%	71.8%
49	Midvale (32)	22,390	16,466	73.5%	72.7%	74.4%
17	Millcreek (26)	45,465	29,978	65.9%	65.0%	66.9%
30	Murray (31)	24,777	17,184	69.4%	68.4%	70.3%
28	Riverton/Draper (39)	43,531	29,941	68.8%	67.9%	69.7%
10	Rose Park (17)	23,572	14,760	62.6%	61.7%	63.6%
57	Sandy Center (36)	37,890	28,498	75.2%	74.4%	76.1%
46	Sandy, Northeast (37)	19,405	13,901	71.6%	70.8%	72.5%
50	Sandy, Southeast (38)	22,116	16,329	73.8%	73.0%	74.7%
47	South Jordan (35)	22,507	16,323	72.5%	71.6%	73.4%
22	South Salt Lake (25)	18,984	12,896	67.9%	67.0%	68.8%
53	Taylorsville (30)	28,540	21,234	74.4%	73.5%	75.3%
60	West Jordan North (33)	32,105	25,199	78.5%	77.7%	79.3%
61	West Jordan/Copperton (34)	27,911	21,987	78.8%	78.0%	79.6%
18	West Valley East (23)	36,937	24,516	66.4%	65.4%	67.3%
54	West Valley West (22)	47,083	35,105	74.6%	73.7%	75.4%
	Southeastern Utah HD	38,895	23,597	60.7%	59.7%	61.6%
8	Carbon/Emery Co. (56)	22,602	13,852	61.3%	60.3%	62.2%
6	Grand/San Juan Co. (57)	16,293	9,853	60.5%	59.5%	61.4%
	Southwest Utah HD	121,466	73,373	60.4%	59.4%	61.4%
27	Cedar City (60)	23,378	16,076	68.8%	67.9%	69.7%
7	Other Southwest District (61)	16,205	9,832	60.7%	59.7%	61.6%
2	Other Washington County (59)	34,234	19,734	57.6%	56.7%	58.6%
1	St. George (58)	47,649	27,442	57.6%	56.6%	58.6%
59	Summit County HD (51)	25,703	19,966	77.7%	76.9%	78.5%
26	Tooele County HD (40)	34,021	23,311	68.5%	67.6%	69.4%
9	TriCounty HD (53)	29,769	18,474	62.1%	61.1%	63.0%
	Utah County HD	291,983	198,501	68.0%	67.1%	68.9%
15	American Fork/Alpine (42)	28,549	18,740	65.6%	64.7%	66.6%
14	East Orem (46)	16,007	10,507	65.6%	64.7%	66.6%
44	Lehi/Cedar Valley (41)	19,574	13,967	71.4%	70.5%	72.2%
35	North Orem (44)	27,229	19,007	69.8%	68.9%	70.7%
33	Pleasant Grove/Lindon (43)	26,109	18,164	69.6%	68.7%	70.5%
3	Provo/BYU (47)	40,827	24,364	59.7%	58.7%	60.6%
45	Provo South (48)	49,338	35,209	71.4%	70.5%	72.2%
36	Springville/Spanish Fork (49)	43,181	30,289	70.1%	69.2%	71.0%
32	Utah Co. South (50)	18,336	12,739	69.5%	68.6%	70.4%
37	West Orem (45)	22,843	16,027	70.2%	69.3%	71.1%
29	Wasatch County HD (52)	13,185	9,110	69.1%	68.2%	70.0%
	Weber-Morgan HD	155,555	107,291	69.0%	68.1%	69.9%
24	Ben Lomond (5)	34,662	23,662	68.3%	67.4%	69.2%
12	Downtown Ogden (7)	22,562	14,520	64.4%	63.4%	65.3%
34	Morgan/East Weber Co. (6)	25,628	17,851	69.7%	68.8%	70.6%
23	Riverdale (10)	16,276	11,101	68.2%	67.3%	69.1%
55	Roy/Hooper (9)	29,198	21,877	74.9%	74.1%	75.8%
21	South Ogden (8)	27,231	18,221	66.9%	66.0%	67.8%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

Source: U.S. Census 2000 Summary file 3 (SF-3) Sample data P43.

APPENDIX E: DEMOGRAPHIC CHARACTERISTICS BY SMALL AREA

Rural Area Population by Health District, Small Area, Utah, and U.S., 2003

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Living in Rural Areas	Crude Rate	95% Confidence Interval	
					Lower	Upper
	U.S.	217,803,051	45,709,824	21.0%	20.2%	21.8%
	State of Utah	1,657,454	195,068	11.8%	11.1%	12.4%
	Bear River HD	98,027	22,913	23.4%	22.5%	24.2%
44	Brigham City (1)	14,566	1,238	8.5%	8.0%	9.0%
35	Logan (3)	45,904	1,618	3.5%	3.2%	3.9%
57	Other Box Elder Co. (2)	14,636	8,649	59.1%	58.1%	60.1%
52	Other Cache/Rich Co. (4)	22,921	10,031	43.8%	42.8%	44.7%
	Central Utah HD	47,558	29,794	62.6%	61.7%	63.6%
56	Juab/Millard/Sanpete Co. (54)	31,637	18,468	58.4%	57.4%	59.3%
60	Sevier/Piute/Wayne Co. (55)	15,921	11,158	70.1%	69.2%	71.0%
	Davis County HD	175,027	3,298	1.9%	1.6%	2.2%
24	Bountiful (16)	33,318	312	0.9%	0.7%	1.1%
26	Clearfield/Hill AFB (11)	37,329	591	1.6%	1.3%	1.8%
30	Farmington/Centerville (14)	19,034	415	2.2%	1.9%	2.5%
18	Layton (12)	46,815	242	0.5%	0.4%	0.7%
33	Syracuse/Kaysville (13)	24,542	686	2.8%	2.5%	3.1%
38	Woods Cross/North SL (15)	13,989	622	4.4%	4.0%	4.8%
	Salt Lake Valley HD	658,810	7,874	1.2%	1.0%	1.4%
34	Avenues (18)	18,959	620	3.3%	2.9%	3.6%
25	Cottonwood (28)	33,297	354	1.1%	0.9%	1.3%
	5 Downtown Salt Lake (24)	42,808	-	0.0%	0.0%	0.0%
43	Foothill/U of U (19)	17,778	1,443	8.1%	7.6%	8.7%
15	Glendale (21)	18,642	78	0.4%	0.3%	0.5%
11	Holladay (27)	35,956	2	0.0%	0.0%	0.0%
14	Kearns (29)	42,995	90	0.2%	0.1%	0.3%
20	Magna (20)	15,623	112	0.7%	0.6%	0.9%
	5 Midvale (32)	21,672	-	0.0%	0.0%	0.0%
16	Millcreek (26)	44,008	195	0.4%	0.3%	0.6%
	5 Murray (31)	24,072	-	0.0%	0.0%	0.0%
42	Riverton/Draper (39)	41,391	3,338	8.1%	7.5%	8.6%
17	Rose Park (17)	22,639	103	0.5%	0.3%	0.6%
	5 Sandy Center (36)	36,106	-	0.0%	0.0%	0.0%
	5 Sandy, Northeast (37)	18,245	-	0.0%	0.0%	0.0%
32	Sandy, Southeast (38)	20,781	506	2.4%	2.1%	2.7%
27	South Jordan (35)	20,931	359	1.7%	1.5%	2.0%
	5 South Salt Lake (25)	18,456	-	0.0%	0.0%	0.0%
	5 Taylorsville (30)	27,372	-	0.0%	0.0%	0.0%
10	West Jordan North (33)	30,391	1	0.0%	0.0%	0.0%
29	West Jordan/Copperton (34)	26,360	565	2.1%	1.9%	2.4%
	5 West Valley East (23)	35,527	-	0.0%	0.0%	0.0%
12	West Valley West (22)	44,794	33	0.1%	0.0%	0.1%
	Southeastern Utah HD	36,828	21,781	59.1%	58.2%	60.1%
58	Carbon/Emery Co. (56)	21,451	12,801	59.7%	58.7%	60.6%
55	Grand/San Juan Co. (57)	15,377	8,822	57.4%	56.4%	58.3%
	Southwest Utah HD	116,150	36,123	31.1%	30.2%	32.0%
48	Cedar City (60)	22,401	5,543	24.7%	23.9%	25.6%
61	Other Southwest District (61)	15,384	13,418	87.2%	86.6%	87.9%
51	Other Washington County (59)	32,503	12,077	37.2%	36.2%	38.1%
39	St. George (58)	45,862	3,158	6.9%	6.4%	7.4%
54	Summit County HD (51)	24,525	12,737	51.9%	51.0%	52.9%
47	Tooele County HD (40)	32,458	7,936	24.5%	23.6%	25.3%
59	TriCounty HD (53)	28,023	17,261	61.6%	60.6%	62.5%
	Utah County HD	278,832	16,889	6.1%	5.6%	6.5%
37	American Fork/Alpine (42)	26,819	1,142	4.3%	3.9%	4.7%
	5 East Orem (46)	14,955	-	0.0%	0.0%	0.0%
46	Lehi/Cedar Valley (41)	18,752	4,311	23.0%	22.2%	23.8%
13	North Orem (44)	25,965	23	0.1%	0.0%	0.1%
23	Pleasant Grove/Lindon (43)	24,636	229	0.9%	0.7%	1.1%
22	Provo/BYU (47)	39,401	314	0.8%	0.6%	1.0%
21	Provo South (48)	48,138	373	0.8%	0.6%	0.9%
45	Springville/Spanish Fork (49)	41,036	4,421	10.8%	10.2%	11.4%
49	Utah Co. South (50)	17,363	4,957	28.5%	27.7%	29.4%
28	West Orem (45)	21,774	441	2.0%	1.7%	2.3%
50	Wasatch County HD (52)	12,514	4,402	35.2%	34.2%	36.1%
	Weber-Morgan HD	148,702	9,996	6.7%	6.2%	7.2%
40	Ben Lomond (5)	33,215	2,389	7.2%	6.7%	7.7%
41	Downtown Ogden (7)	21,684	1,642	7.6%	7.1%	8.1%
53	Morgan/East Weber Co. (6)	24,131	12,185	50.5%	49.5%	51.5%
31	Riverdale (10)	15,522	357	2.3%	2.0%	2.6%
36	Roy/Hooper (9)	27,898	1,042	3.7%	3.4%	4.1%
19	South Ogden (8)	26,255	182	0.7%	0.5%	0.9%

*State rank is by 61 small areas for crude rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.
Source: U.S. Census 2000 Summary file 1 (SF-1) 100 Percent data P2.



APPENDIX F:

METHODOLOGY

APPENDIX F: METHODOLOGY

Questionnaire

The BRFSS questionnaire is modified each year by the Centers for Disease Control and Prevention (CDC) in collaboration with participating states and territories. The questionnaire has three sections. One is a core set of questions that is asked by all states and territories. The second consists of a series of topical modules developed by the CDC. States have the option of adding modules as they wish. The final section of the questionnaire consists of questions designed and administered by individual states to address issues of local concern (state-added questions).

Sampling design

In the years 2001–2005, the Utah BRFSS telephone sample was disproportionately stratified by Utah's 12 health districts. Rural health districts with a comparatively lower population were sampled at a higher rate than urban health districts with larger populations. This over-sampling of lower population districts allowed for the collection of enough observations to produce reliable estimates within each district.

Within each health district a disproportionate stratified sampling (DSS) design was used. In years 2001 and 2002 in the DSS design, all the telephone numbers in each health district were stratified by telephone blocks. A block consists of 100 phone numbers that differ by only their last 2 digits (e.g. (801)-538-1100 to (801)-538-1199). One-plus blocks (high-density strata) include 100 consecutive telephone numbers containing at least one published household telephone number. Zero-blocks (low-density strata) consist of 100 consecutive telephone numbers containing no published household telephone numbers. Theoretically, there should be no published residential numbers in zero blocks, but unpublished numbers may exist. Zero blocks were sampled so that no individuals would be systemically excluded from the BRFSS. Both one-plus and zero-block numbers were randomly sampled from each health district, but at a disproportionate rate of 4:1, respectively. Beginning with the 2003 data year, zero-block numbers were not included in the sample frame.⁴⁹ In the DSS design since 2003, telephone numbers were drawn from two strata (lists) that are based on the presumed density of known telephone household numbers. In this most recent DSS design, telephone numbers are classified into two strata that are either high density (listed one-plus block telephone numbers) or medium density (not listed one-plus block numbers). High density versus medium density numbers are sampled at a rate of 1.5 to 1, respectively.

The monthly number of telephone numbers sampled from each health district is routinely tallied to ensure a target number of completed interviews each month in each district. Rural health districts were over-sampled to obtain at least 500 interviews in three years per health district. To facilitate analysis of the Utah BRFSS data by small area, a state-added question was included to collect the respondent's ZIP code. Combined 2001–2002 data were analyzed to check the number of completed interviews in the small areas. Completes ranged from 36 to 505 surveys in each small area during the two-year period. The highest number of completes were in small areas that are single county rural health districts, as those had been over-sampled. The smallest number of completes were in some of the small areas in the four urban, Wasatch Front health districts (Weber-Morgan, Davis County, Salt Lake Valley and Utah County). To compensate, sample size was increased in the four health districts along the Wasatch Front. There was no change in how the sample was stratified within those districts, however, the sampling proportion was increased in an effort to obtain at least 100 completed interviews in each small area with three years of data.

Once a residence was successfully contacted, individual respondents were randomly selected from all adults aged 18 and older living in the household. The selected adult, if willing, was then interviewed in accordance with the BRFSS protocol.

Data collection

Interviews were conducted monthly from the Utah Department of Health (UDOH) Survey Center by professional interviewers employed by the UDOH. The Survey Center uses a computer-assisted telephone interview-

APPENDIX F: METHODOLOGY

ing (CATI) system to record respondent answers to the survey directly to a computerized database. The system is programmed to help ensure accurate data entry. The interviews were conducted during daytime and evening hours on weekdays and during daytime hours on Saturday to ensure that selected respondents had ample opportunity to complete the survey. Fifteen attempts were made to reach a phone number at different times of the day and on the weekend. Selected respondents were given the opportunity to schedule a time to be called in order to complete the interview. Interviews are routinely monitored to ensure adherence to strict BRFSS protocol. Monitoring is done electronically so that both the interviewer and respondent can be heard, and the computer screen can be observed to make sure responses are entered correctly without the interviewer being aware that he or she is being monitored. The overall response rate during the period was about 67%.

Data analysis

Sampling error: The BRFSS data were gathered from a sample of the Utah adult population. Sampling error refers to random variation that occurs because only a subset of the entire population is sampled and used to estimate the finding for the entire population. It is often called “margin of error” in popular use. In this report, sampling error has been expressed as **confidence interval bounds**. The 95% confidence interval indicates the range of values within which the statistic would fall 95% of the time if the researcher were to calculate the statistic from an infinite number of samples of the same size drawn from the same base population. The bar graphs of the age-adjusted prevalence estimates in this report include a line showing the estimated confidence intervals around the percentage estimates.

Non-sampling error: Sources of non-sampling error include idiosyncratic interpretation of survey questions by respondents, variations in interviewer technique, household and item non-response to questions and coding errors. Respondents may have the tendency to under report behaviors that are undesirable, unhealthy, or illegal (e.g., drinking and driving). They may over report desirable behaviors. The accuracy of self-reported information is also affected by the ability of respondents to fully recall past behaviors or health screening results. Unit non-response is when the person chosen for the sample refuses to complete the survey. Non-response rates in the BRFSS have increased in recent years. Conversely, a commonly used measure of the response rate known as the CASRO (Council of American Survey Research Organizations) rate has decreased over time. The Utah BRFSS CASRO response rate ranged from 70.6% to 63.2% between 2001–2005 with a generally decreasing trend in those years.

Weighting: Data were weighted to account for differences in the probability of selection (e.g., the number of adults in a household). Post-stratification weighting based upon population estimates of adults by age categories and sex in Utah for the years 2001–2005 was used to ensure that the results more closely reflected the adult population of Utah.

Prevalence estimates: Respondents who answered “Don’t know/Not sure” or refused to answer were excluded from the calculation of these estimates. The SAS® statistical package with SAS-Callable SUDAAN® computer software was used to compute prevalence estimates (both crude and age-adjusted) and associated 95% confidence intervals using sample weights provided by the CDC. SUDAAN software takes into account the complex BRFSS sample design in calculating unbiased standard errors for the confidence interval calculations.

Age-adjusted data: Many of the BRFSS measures vary by age. Therefore, the data were age adjusted to the 2000 U.S. standard population to control for differences due only to differences in the age composition of the small areas, health districts and the state as a whole. This adjustment allowed comparison between small areas, local health districts, and the state rate. Percentages for the small areas and local health districts were considered different from the state percentage if their 95% confidence intervals did not include the state percentage. In the report, these differences are represented on the maps of Utah’s small areas for each measure. (These age-adjusted rates are useful for comparison purposes only, not to measure absolute magnitude. The actual numer-

APPENDIX F: METHODOLOGY

ical value of an age-adjusted rate is dependent on the standard population used and, therefore, has no intrinsic meaning. To compare absolute magnitude, actual numbers and crude rates must be used.)

Population count estimates: Crude percentage estimates were applied to 2003 population counts to derive an estimate for the total number of persons in the U.S., Utah and in each of Utah's 61 small areas to whom the measure probably applied. The total 2003 population estimates for the U.S. were taken from the U.S. Census <http://www.census.gov/popest/national/asrh/NC-EST2005-sa.html>. The total population estimates for Utah and Utah's 12 local health districts were taken from the Governor's Office of Planning and Budget (GOPB) for year 2003. Population estimates for Utah's 61 small areas were derived by ZIP code estimates purchased from ESRI and then combined where necessary and adjusted to annual GOPB rates by county age and sex. Any demographic subgroup estimates for race, income, and education in Utah were derived from the BRFSS surveys using combined 2001–2005 data and using total population estimates from the GOPB.

Demographic profile information: Estimates of the population distribution for income, education, employment status, and marital status were derived from the BRFSS surveys from 2001–2005. The 2000 U.S. Census data were used for population distribution by race, Hispanic ethnicity, rural residence, children living in poverty, female head of household with no husband and children aged <18 years, females aged 25+ with a college degree, and adults aged 16+ in the work force. The population distributions by sex and age were obtained from the Governor's Office of Planning and Budget.

Small area analysis: In general, small areas yield rates with poor precision, that is, wide confidence intervals. The confidence interval provides information on the precision of an estimate and can be useful in identifying true differences between small areas and the state rate from sampling error. To minimize the sampling error, five years of the Utah BRFSS data were combined, and only measures that were asked at least three of the five years were included in order to have a large enough sample size for the measure in each small area.

For a detailed description of BRFSS methodology, see the BRFSS Surveillance Guide, an online version of the BRFSS Users Guide at <http://www.cdc.gov/brfss/training.htm>.



APPENDIX G:

BRESS QUESTIONS USED IN THIS REPORT

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

The data for this report came from different questions asked on the annual Utah BRFSS questionnaires from 2001–2005. The following text includes questions from those years that were used to create the measures analyzed for this report. For each measure in bold text, the years enclosed in bolded parentheses directly following the measure indicate when a question or set of questions was asked. If a particular question changed in the years reported, all versions of the question are included following the measure, and the years are indicated in parentheses after the specific question text.

1. FAIR OR POOR HEALTH (2001–2005):

1.1 Would you say that in general your health is:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 7 Don't know/Not sure
- 9 Refused

2. POOR PHYSICAL HEALTH (2001–2005):

2.1 Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- __ __ Number of days
- 8 8 None
- 7 7 Don't know/Not sure
- 9 9 Refused

3. POOR MENTAL HEALTH (2001–2005):

3.1 Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- __ __ Number of days
- 8 8 None
- 7 7 Don't know/Not sure
- 9 9 Refused

4. DOCTOR-DIAGNOSED DIABETES (2001–2005):

4.1 Have you ever been told by a doctor that you have diabetes?
(If “Yes” and respondent is female, ask: “Was this only when you were pregnant?”) (2001–2003)

- 1 Yes
- 2 Yes, but female told only during pregnancy
- 3 No
- 7 Don't know/Not sure
- 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

4.1 Have you ever been told by a doctor that you have diabetes? (2004, 2005)
(If “Yes” and respondent is female, ask: “Was this only when you were pregnant?”)
(If Respondent says pre-diabetes or borderline diabetes, use response code 4.)

- 1 Yes
- 2 Yes, but female told only during pregnancy
- 3 No
- 4 No, pre-diabetes or borderline diabetes
- 7 Don’t know/Not sure
- 9 Refused

5. CURRENT DOCTOR-DIAGNOSED ASTHMA (2001–2005):

5.1 Have you ever been told by a doctor, nurse, or other health professional that you had asthma?

- 1 Yes
- 2 No ⇒ (Go to next section)
- 7 Don’t know/Not sure ⇒ (Go to next section)
- 9 Refused ⇒ (Go to next section)

5.2 Do you still have asthma?

- 1 Yes
- 2 No
- 7 Don’t know/Not sure
- 9 Refused

6. DOCTOR-DIAGNOSED ARTHRITIS (2001-2003, 2005):

6.1 Have you ever been told by a doctor that you have arthritis? (2001)

- 1 Yes
- 2 No
- 7 Don’t know/Not sure
- 9 Refused

6.1 Have you **EVER** been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia? (2002, 2003, 2005)

- 1 Yes
- 2 No
- 7 Don’t know/Not sure
- 9 Refused

7. DOCTOR-DIAGNOSED HIGH BLOOD PRESSURE (2001, 2003, 2005):

7.1 Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? (2001)

- 1 Yes
- 2 No
- 7 Don’t know/Not sure
- 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

7.1 Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? (2003)

- 1 Yes
- 2 Yes, but female told only during pregnancy
- 3 No
- 7 Don't know/Not sure
- 9 Refused

7.1 Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? (2005)

- 1 Yes
- 2 Yes, but female told only during pregnancy
- 3 No
- 4 Told borderline high or pre-hypertensive
- 7 Don't know/Not sure
- 9 Refused

8. DOCTOR-DIAGNOSED HIGH CHOLESTEROL (2001, 2003, 2005):

8.1 Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

9. ACTIVITY LIMITATION (2001–2005):

9.1 Are you limited in any way in any activities because of physical, mental, or emotional problems?

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

10. HEALTH CARE COVERAGE (2001–2005):

10.1 Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

11. PRIMARY CARE PROVIDER (2001–2005):

11.1 Do you have one person you think of as your personal doctor or health care provider?
(If “No,” ask: “Is there more than one or is there no person who you think of?”)

- 1 Yes, only one
- 2 More than one
- 3 No
- 7 Don’t know/Not sure
- 9 Refused

12. HIV TESTING (asked only of adults ages 18-64) (2001–2005):

12.1 Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation.
(2001–2004)

- Include**
- 1 Yes
 - saliva tests** 2 No
 - 7 Don’t know/Not sure
 - 9 Refused

12.1 Have you EVER been tested for HIV? Do not count tests you may have had as part of a blood donation.
Include test using fluid from your mouth. (2005)

- 1 Yes
- 2 No
- 7 Don’t know/Not sure
- 9 Refused

13. SIGMOIDOSCOPY OR COLONOSCOPY (asked only of adults ages 50 and older) (2001–2005):

13.1 Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

- 1 Yes
- 2 No ⇒(Go to next section)
- 7 Don’t know/Not sure ⇒(Go to next section)
- 9 Refused ⇒(Go to next section)

13.2 How long has it been since you had your last sigmoidoscopy or colonoscopy?

Read Only if Necessary

- 1 Within the past year (Anytime less than 12 months ago)
- 2 Within the past 2 years (1 year but less than 2 years ago)
- 3 Within the past 5 years (2 years but less than 5 years ago)
- 4 Within the past 10 years (5 years but less than 10 years ago)
- 5 10 or more years ago
- 7 Don’t know/Not sure
- 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

14. CURRENT CIGARETTE SMOKING (2001–2005):

14.1 Have you smoked at least 100 cigarettes in your entire life?

- 5 packs
= 100
cigarettes**
- 1 Yes
 - 2 No ⇒(Go to next section)
 - 7 Don't know/Not sure ⇒(Go to next section)
 - 9 Refused ⇒(Go to next section)

14.2 Do you now smoke cigarettes every day, some days, or not at all?

- 1 Every day
- 2 Some days
- 3 Not at all
- 9 Refused

15. BINGE DRINKING (2001–2005):

15.1 Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?

- ___ ___ Number of times
- 8 8 None
- 7 7 Don't know/Not sure
- 9 9 Refused

16. CHRONIC DRINKING (2001–2005):

16.1 A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how often have you had at least one drink of any alcoholic beverage? (2001)

- 1 ___ ___ Days per week
- 2 ___ ___ Days in past 30
- 8 8 8 No drinks in past 30 days ⇒(Go to next section)
- 7 7 7 Don't know/Not sure ⇒(Go to next section)
- 9 9 9 Refused ⇒(Go to next section)

16.1 A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how many days per week or per month did you have at least 1 drink of any alcoholic beverage? (2002–2004)

- 1 ___ ___ Days per week
- 2 ___ ___ Days in past 30
- 8 8 8 No drinks in past 30 days ⇒(Go to next section)
- 7 7 7 Don't know/Not sure ⇒(Go to next section)
- 9 9 9 Refused ⇒(Go to next section)

16.2 On the days when you drank, about how many drinks did you drink on the average? (2001–2004)

- ___ ___ Number of drinks
- 7 7 Don't know/Not sure
- 9 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

16.1 During the past 30 days, have you had at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor? (2005)

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

16.2 During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage? (2005)

- 1 ___ Days per week
- 2 ___ Days in past 30
- 8 8 8 No drinks in past 30 days ⇒ (Go to next section)
- 7 7 7 Don't know/Not sure ⇒ (Go to next section)
- 9 9 9 Refused ⇒ (Go to next section)

16.3 One drink is equivalent to a 12 ounce beer, a 4 ounce glass of wine, or a drink with one shot of liquor. On the days when you drank, during the past 30 days, about how many did you drink on average? (2005)

- ___ ___ Number of drinks
- 7 7 Don't know/Not sure
- 9 9 Refused

17. PHYSICAL INACTIVITY (2001–2005):

17.1 During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

18. RECOMMENDED PHYSICAL ACTIVITY (2001, 2003, 2005):

18.1 When you are at work, which of the following best describes what you do? Would you say? (Ask only of respondents who are employed for wages or self-employed.)

Note: If respondent has multiple jobs, include all jobs.

Please read

- 1 Mostly sitting or standing
- 2 Mostly walking
- 3 Mostly heavy labor or physically demanding work

DO NOT READ

- 7 Don't know/Not sure
- 9 Refused

Please read

We are interested in two types of physical activity - vigorous and moderate. Vigorous activities cause large increases in breathing or heart rate while moderate activities cause small increases in breathing or heart rate.

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

18.2 Now, thinking about the moderate activities you do [fill in “when you are not working” if “employed” or self-employed] in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate?

- 1 Yes
- 2 No ⇒(Go to Q18.5)
- 7 Don't know/Not sure ⇒(Go to Q18.5)
- 9 Refused ⇒(Go to Q18.5)

18.3 How many days per week do you do these moderate activities for at least 10 minutes at a time?

- ___ ___ Days per week
- 8 8 Do not do any moderate physical activity for at least 10 minutes at a time ⇒(Go to Q18.5)
- 7 7 Don't know/Not sure ⇒(Go to Q18.5)
- 9 9 Refused ⇒(Go to Q18.5)

18.4 On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

- __:__ Hours and minutes per day
- 7 7 7 Don't know/Not sure
- 9 9 9 Refused

18.5 Now, thinking about the vigorous activities you do [fill in “when you are not working” if “employed” or “self-employed”] in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

- 1 Yes
- 2 No ⇒(Go to next section)
- 7 Don't know/Not sure ⇒(Go to next section)
- 9 Refused ⇒(Go to next section)

18.6 How many days per week do you do these vigorous activities for at least 10 minutes at a time?

- ___ ___ Days per week
- 8 8 Do not do any vigorous physical activity for at least 10 minutes at a time ⇒(Go to next section)
- 7 7 Don't know/Not sure ⇒(Go to next section)
- 9 9 Refused ⇒(Go to next section)

18.7 On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

- __:__ Hours and minutes per day
- 7 7 7 Don't know/Not sure
- 9 9 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

19. OVERWEIGHT OR OBESE (2001–2005):

19.1 About how much do you weigh without shoes?

Round	__ __ __	Weight
fractions up	pounds	
	7 7 7	Don't know/Not sure
	9 9 9	Refused

19.2 About how tall are you without shoes?

Round	__ / __ __	Height
fractions	ft/inches	
down	7 7 7	Don't know/Not sure
	9 9 9	Refused

Reported height and weight are used to calculate BMI. Overweight or Obese is defined as BMI ≥ 25 .

20. OBESE (2001–2005):

20.1 About how much do you weigh without shoes?

Round	__ __ __	Weight
fractions up	pounds	
	7 7 7	Don't know/Not sure
	9 9 9	Refused

20.2 About how tall are you without shoes?

Round	__ / __ __	Height
fractions	ft/inches	
down	7 7 7	Don't know/Not sure
	9 9 9	Refused

Reported height and weight are used to calculate BMI. Obese is defined as BMI ≥ 30 .

21. TWO OR MORE FRUITS PER DAY (2002, 2003, 2005):

21.1 How often do you drink fruit juices such as orange, grapefruit, or tomato?

Per day	1 __ __
Per week	2 __ __
Per month	3 __ __
Per year	4 __ __
555	Never
777	Don't know/Not sure
999	Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

21.2 Not counting juice, how often do you eat fruit?

Per day 1 ___
Per week 2 ___
Per month 3 ___
Per year 4 ___
555 Never
777 Don't know/Not sure
999 Refused

22. THREE OR MORE VEGETABLES PER DAY (2002, 2003, 2005):

22.1 How often do you eat green salad?

Per day 1 ___
Per week 2 ___
Per month 3 ___
Per year 4 ___
555 Never
777 Don't know/Not sure
999 Refused

22.2 How often do you eat potatoes not including french fries, fried potatoes, or potato chips?

Per day 1 ___
Per week 2 ___
Per month 3 ___
Per year 4 ___
555 Never
777 Don't know/Not sure
999 Refused

22.3 How often do you eat carrots?

Per day 1 ___
Per week 2 ___
Per month 3 ___
Per year 4 ___
555 Never
777 Don't know/Not sure
999 Refused

22.4 Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat? (Example: a serving of vegetables at both lunch and dinner would be two servings)

Per day 1 ___
Per week 2 ___
Per month 3 ___
Per year 4 ___
555 Never
777 Don't know/Not sure
999 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

DEMOGRAPHICS (2001–2005):

D.1 What is your age?

- | | |
|-------|---------------------|
| __ __ | Code age in years |
| 0 7 | Don't know/Not sure |
| 0 9 | Refused |

D.2 Are you Hispanic or Latino?

- 1 Yes
- 2 No
- 7 Don't know/Not sure
- 9 Refused

D.3 Which one or more of the following would you say is your race?

(Check all that apply)

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or Other Pacific Islander
- 5 American Indian or Alaska Native
- 6 Other [specify]_____
- 8 No additional choices
- 7 Don't know/Not sure
- 9 Refused

Note: If more than one response to question 3, continue. Otherwise⇒(Go to D.5)

D.4 Which one of these groups would you say best represents your race?

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or Other Pacific Islander
- 5 American Indian or Alaska Native
- 6 Other [specify]_____
- 8 No additional choices
- 7 Don't know/Not sure
- 9 Refused

D.5 Are you...?

- 1 Married
- 2 Divorced
- 3 Widowed
- 4 Separated
- 5 Never married
- 6 A member of an unmarried couple
- 9 Refused

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

D.6 How many children less than 18 years of age live in your household?

- | | |
|-----|--------------------|
| — — | Number of children |
| 8 8 | None |
| 9 9 | Refused |

D.7 What is the highest grade or year of school you completed?

- 1 Never attended school or only attended kindergarten
- 2 Grades 1 through 8 (Elementary)
- 3 Grades 9 through 11 (Some high school)
- 4 Grade 12 or GED (High school graduate)
- 5 College 1 year to 3 years (Some college or technical school)
- 6 College 4 years or more (College graduate)
- 9 Refused

D.8 Are you currently...?

- 1 Employed for wages
- 2 Self-employed
- 3 Out of work for more than 1 year
- 4 Out of work for less than 1 year
- 5 A Homemaker
- 6 A Student
- 7 Retired
- 8 Unable to work
- 9 Refused

D.9 Is your annual household income from all sources—

If respondent refuses at ANY income level, code '99' (Refused)

- 01 Less than \$10,000
- 02 \$10,000 to less than \$15,000
- 03 \$15,000 to less than \$20,000
- 04 \$20,000 to less than \$25,000
- 05 \$25,000 to less than \$35,000
- 06 \$35,000 to less than \$50,000
- 07 \$50,000 to less than \$75,000
- 08 \$75,000 or more
- 77 Don't know/Not sure
- 09 Refused

D.10 About how much do you weigh without shoes?

- | | | |
|-------------------------------|--------|---------------------|
| Round
fractions up | — — — | Weight |
| | pounds | |
| | 7 7 7 | Don't know/Not sure |
| | 9 9 9 | Refused |

APPENDIX G: BRFSS QUESTIONS USED IN THIS REPORT

D.11 About how tall are you without shoes?

Round	__/__ __	Height
fractions	ft/inches	
down	7 7 7	Don't know/Not sure
	9 9 9	Refused

D.12 What county do you live in?

__ __ __	FIPS county code
7 7 7	Don't know/Not sure
9 9 9	Refused

D.13 What is your ZIP Code where you live?

__ __ __ __	FIPS county code
7 7 7 7 7	Don't know/Not sure
9 9 9 9 9	Refused

REFERENCES

1. U.S. Department of Health and Human Services, *Healthy people 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
2. Andresen, E. M., Catlin, T. K., Wyrwich, K. W., & Jackson-Thompson, J. (2003). Retest reliability of surveillance questions on health related quality of life. *J Epidemiol Community Health*, 57, 339-343.
3. Centers for Disease Control and Prevention. Health-related quality of life surveillance — United States, 1993–2002. In: Surveillance Summaries, October 28, 2005. *MMWR* 2005;54(No. SS-4).
4. U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
5. Murray, C. J., & Lopez, A. D., (Eds.). (1996, August). *The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Cambridge, MA: Harvard University Press.
6. Mrazek, P. J., & Haggerty, R. J. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press.
7. Centers for Disease Control and Prevention. *Measuring Healthy Days*. Atlanta, Georgia: CDC, November 2000.
8. American Diabetes Association. (2003). Economic costs of diabetes in the U.S. in 2002. *Diabetes Care*, 26, 917-932.
9. U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
10. Cowie, C. C., Rust, K. F., Byrd-Holt, D. D., Eberhardt, M. S., Flegal, K. M., Engelgau, M. M., et al. (2006). Prevalence of diabetes and impaired fasting glucose in adults in the U.S. population: National Health and Nutrition Examination Survey 1999–2002. *Diabetes Care*, 29, 1263-1268.
11. American Lung Association. (2006, August). *American Lung Association: Asthma in adults fact sheet*. Retrieved January 29, 2007, from <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=22596>
12. Centers for Disease Control and Prevention. Racial/Ethnic Differences in the Prevalence and Impact of Doctor-diagnosed Arthritis—United States, 2002. *MMWR* 2005;54:119-123.
13. Centers for Disease Control and Prevention. Update: Direct and Indirect Costs of Arthritis and Other Rheumatic Conditions—United States, 1997. *MMWR* 2004;53:388-389.
14. Sheridan, S., Pignone, M., Donahue, K. (2003) Screening for high blood pressure: A review of the evidence for the U.S. Preventive Services Task Force. *Am J Prev Med*, 25, 151–158.
15. Zamorski, M. A., & Green, L. A. (2001) NHBPEP report on high blood pressure in pregnancy: A summary for family physicians. *Am Fam Physician*, 64, 263-270.
16. Pignone, M. P., Phillips, C. J., Atkins, D., Teutsch, S. M., Mulrow, C. D., & Lohr, K. N. (2001). Screening and treating adults for lipid disorders. *Am J Prev Med*. 20(Suppl. 3), 77-89.
17. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans, 2005*. 6th Edition, Washington, DC: U.S. Government Printing Office, January 2005.
18. U.S. Department of Health and Human Services. (2001). *The Surgeon General's call to action to prevent and decrease overweight and obesity: Overweight and obesity: Health consequences* [Fact sheet]. Rockville, MD: U.S.

REFERENCES

- Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Retrieved January 25, 2007, from http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_consequences.htm
19. U.S. Department of Health and Human Services. *The Health Benefits of Smoking Cessation*. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control. Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. DHHS Publication No. (CDC) 90-8416. 1990.
 20. Campbell, V.A., Crews, J. A., Moriarty, D. G., Zack, M. M., Blackman, D. K. Surveillance for sensory impairment, activity limitation, and health-related quality of life among older adults – United States, 1993-1997. In: CDC Surveillance Summaries, December 17, 1999. *MMWR* 1999;48(No. SS-8);131-156.
 21. LaPlante, M. and Carlson, D. (1996). *Disability in the United States: Prevalence and Causes, 1992*. Disability Statistics Report (7). Washington, DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.
 22. Waidman, T., Bound. J., & Schoenbaum, M. (1995). The illusion of failure: Trends in the self-reported health of the U.S. elderly. *Milbank Q*, 73(2), 253-387.
 23. Centers for Disease Control and Prevention. Self-assessed health status and selected behavioral risk factors among persons with and without health-care coverage—United States, 1994-1995. *MMWR* 1998;47:176-180.
 24. Weissman, J. S., Stern, R., Fielding, S. L., and Epstein, A. M. (1991). Delayed access to health care: Risk factors, reasons, and consequences. *Ann Intern Med*, 114, 325-331.
 25. Seifert, R. W. (2000, November). *Using “risk factors” to assess health care access in a community*. Boston, MA: The Access Project. Retrieved January 29, 2007, from http://www.accessproject.org/adobe/using_risk_factors.pdf
 26. U.S. Department of Health and Human Services, Health Resources and Services Administration. Health services utilization. In *Women’s health USA 2005* (pp. 62-74). Rockville, MD: U.S. Department of Health and Human Services, 2005. Retrieved January 29, 2007, from http://www.mchb.hrsa.gov/whusa_05/pages/0500healthsvcsutil.htm
 27. American Cancer Society. *Cancer Facts and Figures 2006*. Atlanta: American Cancer Society; 2006. Retrieved June 5, 2006, from <http://www.cancer.org/downloads/STT/CAFF2006PWSecured.pdf>
 28. Centers for Disease Control and Prevention. (2007, January 12). Colorectal (colon) cancer. In *Cancer prevention and control*. Retrieved January 29, 2007, from <http://www.cdc.gov/cancer/colorectal/>
 29. National Center for Chronic Disease Prevention and Health Promotion. (2006). *Targeting Tobacco Use: The Nation’s Leading Cause of Death*. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved on January 29, 2006 from <http://www.cdc.gov/nccdphp/publications/aag/osh.htm>
 30. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health, 2004.
 31. National Cancer Institute. (1999, August). *Health effects of exposure to environmental tobacco smoke* (Monograph No. 10). Bethesda, MD: Smoking and Tobacco Control Program (STCP), National Cancer Institute. Retrieved January 30, 2007, from National Cancer Institute, Cancer Control and Population Sciences website: <http://cancercontrol.cancer.gov/tcrb/monographs/10/index.html>
 32. U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

REFERENCES

33. Naimi, T. S., Brewer, R. D., Mokdad, A., Denny, C., Serdula, M. K., & Marks, J. S. (2003). Binge drinking among U.S. adults. *JAMA*, 289, 70-75.
34. Blair, S. N., Kohl, H. W., 3rd, Paffenbarger, R. S., Jr., Clark, D. G., Hooper, K. H., & Gibbons, L. W. (1989). Physical fitness and all-cause mortality. A prospective study of healthy men and women. *JAMA*, 262, 2395-2401.
35. Wang, G., Pratt, M., Macera, C. A., Zheng, Z-J., & Heath, G. (2004). Physical activity, cardiovascular disease, and medical expenditures in U.S. adults. *Ann Behav Med*, 28(2), 88-94.
36. Erikssen, G., Liestol, K., Bjornholt, J., Thaulow, E., Sandvik, L., & Erikssen, J. (1998). Changes in physical fitness and changes in mortality. *Lancet*, 352, 759-62.
37. W.C. Wilkinson, N. Eddy, G. MacFadden and B. Burgess. *Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners*. Washington: National Center for Bicycling & Walking, May 2002.
38. Bureau of Health Promotion. *Tipping the Scales Toward a Healthier Population in Utah*. Salt Lake City, UT: Utah Department of Health 2005.
39. Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., & Raudenbush, S. (2003) Relationship between urban sprawl and physical activity, obesity, and morbidity. *Am J Health Promot*, 18, 47-57.
40. Knowler, W. C., Barrett-Connor, E., Fowler, S. E., Hamman, R. F., Lachin, J. M., Walker, E. A., et al. (2002). Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med*, 346, 393-403.
41. Abell, J. E., Hootman, J. M., Zack, M. M., Moriarty, D., & Helmick, C. G. (2005). Physical activity and health related quality of life among people with arthritis. *J Epidemiol Community Health*, 59, 380-385.
42. Kesaniemi, Y. K., Danforth, E., Jr., Jensen, M.D., Kopelman, P. G., Lefebvre, P., & Reeder, B. A. (2001). Dose-response issues concerning physical activity and health: An evidence-based symposium. *Med Sci Sports Exerc*, 33(Suppl. 6), S351-358.
43. World Health Organization. (1998). *Obesity: Preventing and managing the global epidemic: Report of a WHO Consultation on Obesity, Geneva, 3-5 June 1997*. Geneva, Switzerland: Author.
44. National Institutes of Health. (1998). Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults – The evidence report. *Obes Res*, 6(Suppl. 2), 51S-209S.
45. Whitaker, R. C., Wright, J. A., Pepe, M. S., Seidel, K. D., & Dietz, W. H. (1997). Predicting obesity in young adulthood from childhood and parental obesity. *N Engl J Med*, 337, 869-873.
46. U.S. Department of Health and Human Services Public Health Service. *The Surgeon General's Report on Nutrition and Health*. Washington, DC: U.S. Government Printing Office, 1988.
47. Produce for Better Health Foundation. (2003). *State of the plate: Study on America's consumption of fruits and vegetables*. Wilmington, DE: NPD National Eating Trends.
48. Haggard, L., Shah, G., and Rolfs, R. T. (1998.) Assessing Community Health Status: Establishing Geographic Areas for Small Area Analysis in Utah. *Utah's Health: An Annual Review, Vol V, 1997-1998*. Salt Lake City, UT: University of Utah, The Governor Scott M. Matheson Center for Health Care Studies. Retrieved January 30, 2007, from Utah Department of Health, IBIS-PH website: <http://health.utah.gov/opha/IBIShelp/sarea/SmallAreaAnalysis.htm>
49. National Center for Chronic Disease Prevention and Health Promotion. (2003). Sampling and sampling information protocols [BRFSS Policy Memos]. (2003.1). Retrieved January 29, 2007, from http://www.cdc.gov/brfss/technical_infodata/memos/20031.htm

