

2019 Utah Adolescent Health Report

Utah Department of Health
Bureau of Health Promotion

Chronic Conditions

Lifestyles

Mental Health

Substance Abuse

Violence and Injury

Acknowledgments

This report was prepared by the following staff at the Utah Department of Health:

Jordan Scarr, BS, Bureau of Health Promotion
Michael Friedrichs, MS, Deputy State Epidemiologist
Caitlyn Jasumback, BS, Healthy Living through Environment, Policy, and Improved Clinical Care Program
Kellie Baxter, MPH, Utah Asthma Program
Deanna Ferrell, MPH, Violence and Injury Prevention Program
Akanksha Acharya, MS, Violence and Injury Prevention Program
Brenda Ralls, PhD, Healthy Living through Environment, Policy, and Improved Clinical Care Program
Brittany Brown, MPH, Healthy Living through Environment, Policy, and Improved Clinical Care Program
Claudia Bohner, MPH, Tobacco Prevention and Control Program
Gary Mower, MPH, Violence and Injury Prevention Program
Holly Uphold, PhD, Utah Asthma Program
Katie McMinn, MSC, Violence and Injury Prevention Program
Nathan Malan, MPH, Violence and Injury Prevention Program
Sarah Mangone, BS, Tobacco Prevention and Control Program
Sarah Roundy, BS, Healthy Living through Environment, Policy, and Improved Clinical Care Program
Wyatt Jensen, MHDSP, BeWise Program

The following agencies planned, administered, and oversaw the Prevention Needs Assessment (PNA) survey:

Survey Administration:

Bach-Harrison, L.L.C.

Planning and Oversight:

Utah Department of Human Services, Division of Substance Abuse and Mental Health (DSAMH)
Utah State Board of Education (USBE)

Suggested Citation:

Utah Department of Health Bureau of Health Promotion. (2020). 2019 Utah Adolescent Health Report. Salt Lake City, UT: Utah Department of Health.

Table of Contents

Introduction.....	4
Executive Summary.....	5-6
Summary of Indicators by Local Health Department.....	7
Chronic Conditions.....	10-21
Asthma.....	10-19
Lifetime Asthma	10
Current Asthma	12
Asthma Attack	14
Asthma Management	16
Missed School Due to Asthma	18
Diabetes.....	20
Lifestyles.....	22-27
Physical Activity.....	22
Obesity.....	24
Family Meals	26
Mental Health.....	28-41
Feeling Sad or Hopeless.....	28
Psychological Distress.....	30
Social Isolation.....	32
Self-Harm.....	34
Suicide.....	36-41
Suicide Ideation.....	36
Suicide Plan.....	38
Suicide Attempt.....	40
Substance Abuse.....	42-63
Binge Drinking.....	42
30-day Alcohol.....	44
Marijuana Use.....	46
Prescription Drug Use	48
Tobacco Use.....	50-63
Cigarette Smoking.....	50
Electronic Cigarette Use.....	52
Use of Chew, Snuff, or Dip.....	54
Anti-tobacco Ad Recall.....	56
Anti-tobacco Lessons in School.....	58
Exposed to Smoking at Home.....	60
Secondhand Smoke Exposure.....	62
Violence and Injury.....	64-77
Motor Vehicle Safety.....	64-69
Driver Talking on Cell Phone.....	64
Driver Texting.....	66
Seat Belt Use.....	68
Bullying.....	66-71
Bullied at School.....	66
Electronic Bullying.....	68
Unsafe at School.....	74
Dating Violence.....	76
Methodology.....	78
References.....	79

Introduction

In Spring 2019, the Utah Department of Health (UDOH), Utah Department of Human Services Division of Substance Abuse and Mental Health (DSAMH), and the Utah State Board of Education (USBE) partnered to conduct the School Health and Risk Prevention (SHARP) survey project in public schools throughout the state. This project included the Prevention Needs Assessment (PNA), the results of which are presented in this report. The PNA surveyed students in grades 6, 8, 10, and 12 on substance abuse, tobacco use, asthma, diabetes, healthy weight, physical activity, nutrition, tanning, violence, and injury. The survey consisted of self-administered paper-pencil questionnaires. The SHARP partnership provided the UDOH an opportunity to create a new report that shows adolescent percentages for important health indicators by local health district, grade, and sex. Additional information on the methodology used to conduct and analyze the survey data can be found on page 70.

Results on selected indicators from five overarching categories are presented here: Chronic Conditions (asthma, diabetes), Lifestyles (physical activity, obesity, family meals, and tanning), Mental Health (feeling sad or hopeless, psychological distress, and suicide), Substance Abuse (binge drinking, marijuana, prescription drug abuse, and tobacco use) and Violence and Injury (motor vehicle safety and bullying). Indicators were selected by staff at the UDOH Bureau of Health Promotion. For each indicator, readers will find:

- information on the significance of the issue;
- a graph depicting the percent of Utah students in grades 8, 10, and 12 who engage in the indicator by grade and sex;
- a graph depicting a comparison of 2013 data, 2015 data, 2017 data, and 2019 data by local health district; and
- a map depicting the percent of Utah students in grades 8, 10, and 12 who engage in the indicator by local health district. These maps highlight counties with a percentage that was statistically higher or lower than the state percentage.

The data presented in this report are expected to help school administrators, teachers, and public health practitioners identify health and safety needs of Utah students and take steps toward protecting and improving student health. Opportunities for change exist all around us, from using permanent signs as an easy way to inform parents and visitors that school property is a tobacco-free zone to ensuring an asthma action plan is completed yearly by parents of children with asthma.

Executive Summary

2019 Prevention Needs Assessment Key Findings

Chronic Conditions

- 11.7% of students reported having asthma currently, and 17.9% of students reported having asthma at some point in their lifetime. Significantly more females reported current asthma than males.
- 6.5% of students reported having an asthma attack in the past year, and among those with asthma 21.0% reported having an asthma action plan. Female students were significantly more likely to have an asthma attack than male students.
- 14.6% of students reported missing at least one day of school due to asthma in the past year.
- 0.8% of students reported having diabetes.

Lifestyles

- 17.9% of students met the U.S. Department of Health and Human Services recommendations for physical activity (60 or more minutes per day). Males were physically active significantly more than females, and physical activity decreased with increasing grade level.
- 9.8% of students were obese. While this percentage is lower than the U.S. percentage, it is still too high, and many adolescents are at risk for developing high blood pressure and cholesterol later in life.
- 57.0% of students regularly ate meals with their family, which can help decrease the risk for obesity and disordered eating. Family meals decreased significantly as students move into higher grades.

Mental Health

- 30.7% of students reported feeling sad or hopeless.
- 21.5% of students reported psychological distress.
- 18.2% of students seriously considered suicide.
- 13.6% of students made a suicide plan.
- 7.2% of students made one or more suicide attempts.
- Percentages for all of these mental health indicators are highest among females.
- Students in higher grades were significantly more likely to have reported feeling sad or hopeless, to have reported psychological distress, and seriously considered suicide.

Executive Summary

Substance Abuse

- 8.2% of students reported recently using marijuana. Use increased with increasing grade level.
- 4.9% of students reported binge drinking. Binge drinking increased with increasing grade level.
- 2.2% of students reported recently using prescription medications without a prescription.
- 1.5% of students reported cigarette smoking, and smoking percentages have steadily decreased in recent years. Smoking percentages increased with increasing grade level.
- Use of electronic cigarettes has greatly increased in recent years. In 2019, 12.4% of students reported recently using vape products. Students in 12th grade reported a vaping percentage of 15.9%.
- Less than one percent (0.7%) of students reported using smokeless tobacco. Percentages are highest among males.
- To counter pro-tobacco messages, the UDOH funds an anti-tobacco mass media campaign. 86.4% of students reported recent exposure to anti-tobacco ads.
- 56.9% of students reported receiving anti-tobacco lessons in school. Students in 12th grade reported significantly less anti-tobacco lessons than students in 8th and 10th grade.
- 9.3% of students reported living in a household with someone who smoked cigarettes, and 17.5% reported recently being in the same room as someone who was smoking a cigarette.

Violence and Injury

- 46.1% of students reported talking on a cell phone while driving, and 33.9% reported texting while driving, both of which are forms of distracted driving. Students in 12th grade reported significantly more distracted driving than students in 8th and 10th grade.
- 67.6% of students reported always wearing a seat belt
- 23.8% of students reported being bullied at school. Females and students in lower grades were significantly more likely to be bullied than males and students in higher grades.
- 22.1% of students reported being bullied over the Internet, by email, or by someone with a cell phone. Females and students in 8th and 10th grade were significantly more likely to be electronically bullied than males or students in the 12th grade.
- 9.9% of students reported experiencing dating violence in the past year.

Summary of Indicators by Local Health Department

Change in state % from 2017 to 2019	<div><div></div><div>Better</div><div></div><div>Worse</div><div></div><div>Same</div></div> <div>Than State Percentage</div>	State Total	Bear River	Central	Davis	Salt Lake	San Juan	Southeast	Southwest	Summit	Tooele	Tri County	Utah County	Wasatch	Weber-Morgan
	Chronic Conditions														
	Lifetime Asthma	17.9	16.4	16.4	19.1	19.7	**	14.1	15.3	19.3	18.8	16.0*	15.7	23.1	18.7
	Rank		5	6	9	11	12	1	2	10	8	4	3	13	7
	Current Asthma	11.7	10.9	10.3	12.7	12.7	**	9.7	10.2	11.1	12.7	12.5*	9.8	14.7	12.9
	Rank		5	4	10	9	13	1	3	6	8	7	2	12	11
	Asthma Attack	6.4	6.0	5.9	6.9	6.8	**	6.5	6.6	7.6	7.0	3.2	5.6	8.9	6.5
	Rank		5	3	10	9	1	6	8	12	11	2	4	13	7
	Asthma Management	21.0	20.8	21.3	22.3	20.4	30.0*	22.8	21.0	29.0	21.8	10.9*	18.7	20.9	26.5
	Rank		10	7	5	11	1	4	8	2	6	13	12	9	3
↓	Missed School due to Asthma	14.6	15.0	15.6	16.4	13.3	**	12.9	16.0	**	13.3	**	16.7	**	12.5
	Rank		7	9	12	6	2	4	11	1	5	10	13	8	3
	Diabetes	0.8	0.8	1.6	1.1*	0.7	**	**	0.9	**	0.7*	**	0.8	**	**
	Rank		10	1	4	12	2	3	6	13	11	9	7	8	5
	Lifestyles														
↓	Physical Activity	17.9	15.8	25.8	16.9	17.8	21.2*	22.4	19.5	20.1	20.5	18.6	17.4	16.1	17.6
	Rank		13	1	11	8	3	2	6	5	4	7	10	12	9
	Obesity	9.8	9.9	10.2	8.5	11.1	9.7	8.1	9.7	4.7	12.2	4.7	8.6	7.6	12.1
	Rank		9	10	5	11	8	4	7	1	13	2	6	3	12
	Family Meals	57.0	61.3	58.7	60.0	51.9	67.7	56.4	56.0	60.5	57.2	64.3	61.5	60.8	54.4
	Rank		4	8	7	13	1	10	11	6	9	2	3	5	12
	Mental Health														
↑	Feeling Sad or Hopeless	30.7	27.4	26.9	29.2	32.8	27.0	32.9	29.8	23.2	31.1	33.5	29.5	27.2	32.4
	Rank		5	2	6	11	3	12	8	1	9	13	7	4	10
↑	Psychological Distress	21.5	19.5	21.0	21.0	23.2	23.9	22.2	20.3	17.7	26.1	25.4	19.7	16.3	22.0
	Rank		3	7	6	10	11	9	5	2	13	12	4	1	8
	Social Isolation	18.7	16.5	16.8	17.9	20.8	13.9	17.6	17.5	15.5	21.5	18.6	17.7	18.3	17.9
	Rank		3	4	8	12	1	6	5	2	13	11	7	10	8
	Self-Harm	16.2	15.1	16.7	16.0	16.8	15.9	15.5	15.3	16.7	20.3	18.0	15.5	13.9	16.5
	Rank		2	10	7	11	6	5	3	9	13	12	4	1	8
	Thinking About Suicide	18.2	16.6	18.1	18.1	19.1	16.8	18.7	17.4	14.4	21.4	19.8	17.4	12.3	18.7
	Rank		3	7	8	11	4	10	5	2	13	12	6	1	9
↓	Making a Suicide Plan	13.6	12.6	14.2	13.1	14.2	13.2	14.8	13.6	11.8	17.6	16.8	12.4	9.9	14.7
	Rank		5	6	13	12	2	8	4	3	10	9	7	1	11
↓	Suicide Attempts	7.2	7.4	7.7	6.6	7.7	4.2	8.1	6.6	5.2	9.9	10.4	6.3	4.7*	7.5
	Rank		7	9	6	10	1	11	5	3	12	13	4	2	8

Summary of Indicators by Local Health Department

Change in state % from 2017 to 2019															
	<div><div></div>Better</div>	<div><div></div>Worse</div>	<div><div></div>Same</div>	Than State Percentage											
	State Total	Bear River	Central	Davis	Salt Lake	San Juan	Southeast	Southwest	Summit	Tooele	TriCounty	Utah County	Wasatch	Weber-Morgan	
	Substance Abuse														
	Binge Drinking	4.9	3.6	5.1	2.8	6.4	4.6	9.9	5.2	11.6	4.9	4.9	2.9	3.8	6.7
	Rank		3	8	1	10	5	12	9	13	7	6	2	4	11
↓	30 Day Alcohol	7.1	4.9	7.1	4.5	9.5	3.3	13.2	6.6	18.2	7.1	5.3	4.1	5.2*	10.0
	Rank		4	9	3	10	1	12	7	13	8	6	2	5	11
	Marijuana Use	8.2	4.3	4.8	5.3	11.9	5.9*	9.6	6.7	11.4	8.6	3.8*	5.1	4.3*	11.3
	Rank		3	4	6	13	7	10	8	12	9	1	5	2	11
↓	Prescription Drug Use	2.2	2.0	1.6	2.1	2.5	**	1.7	2.0	1.7	3.3	1.6	1.8	**	2.4
	Rank		8	3	10	12	1	5	9	6	13	4	7	2	11
↓	Cigarette Smoking	1.5	1.4	2.8	1.0	1.7	**	3.8	1.8	1.5	2.1	**	0.8	1.2*	1.7
	Rank		4	12	2	6	7	13	9	5	10	11	1	3	8
↑	Electronic Cigarette Use	12.4	8.8	12.1	9.6	15.3	2.2	21.0	11.7	16.9	16.2	13.2	7.6	8.5	18.4
	Rank		4	7	5	9	1	13	6	11	10	8	2	3	12
↓	Use of Chew, Snuff, or Dip	0.7	0.8	2.1	0.1*	0.7	**	3.7	1.2	1.2*	1.3	1.5*	0.4	**	0.9
	Rank		6	12	1	5	2	13	9	8	10	11	3	4	7
	Anti-Tobacco Ad Recall	86.4	84.0	85.2	87.0	86.9	73.5	86.2	85.0	83.6	84.6	83.4*	87.6	86.2*	86.1
	Rank		10	7	2	3	13	5	8	11	9	12	1	4	6
	Anti-tobacco Lessons in School	56.9	52.3	63.2	62.6	53.2	50.1	56.4	51.1	62.4	61.7	54.6	62.1	51.3	56.1
	Rank		10	1	2	9	13	6	12	3	5	8	4	11	7
↓	Exposed to Smoking at Home	9.3	7.6	12.0	6.6	11.8	17.4	16.6	10.1	7.3	13.1	13.1*	5.0	4.9	12.3
	Rank		5	8	3	7	13	12	6	4	11	10	2	1	9
	Secondhand Smoke Exposure	17.5	12.2	18.3	14.6	20.7	15.2	25.0*	19.5	14.7	19.5	21.5	14.2	16.4	17.4
	Rank		1	8	3	11	5	13	9	4	10	12	2	6	7

*Use caution in interpreting. The estimate had a coefficient of variation >30% and is therefore deemed unreliable by UDOH standards.

**The estimate had been suppressed because the coefficient of variation is greater than 50%.

Summary of Indicators by Local Health Department

Change in state % from 2017 to 2019	<div><div></div>Better</div> <div><div></div>Worse</div> <div><div></div>Same</div>	State Total	Bear River	Central	Davis	Salt Lake	San Juan	Southeast	Southwest	Summit	Tooele	TriCounty	Utah County	Wasatch	Weber-Morgan
	Than State Percentage														
	Violence and Injury														
	Driver Talking on Cell Phone	46.1	45.8	52.7	48.0	41.9	**	50.1	47.7	54.5	36.8	37.1	50.7	48.4*	49.5
	Rank		5	12	7	4	1	10	6	13	2	3	11	8	9
	Driver Texting	33.9	28.1	41.0	33.9	31.9	**	37.5	35.9	41.1	25.8	29.0*	36.9	**	36.2
	Rank		3	12	6	5	1	11	8	13	2	4	10	7	9
↑	Seat Belt Use	67.6	65.9	50.8	71.7	69.4	50.1	69.8	61.0	67.8	69.4	53.1	68.2	65.7	67.6
	Rank		8	12	1	3	13	2	10	6	4	11	5	9	7
↓	Bullied at School	23.8	23.0	26.5	23.8	22.9	17.7*	27.0	24.9	25.2	27.8	33.5	24.0	19.4	22.7
	Rank		5	10	6	4	1	11	8	9	12	13	7	2	3
↓	Electronic Bullying	22.1	19.4	23.8	22.1	22.9	12.0*	24.0	21.0	21.2	22.9	25.0	21.8	20.2	22.5
	Rank		2	11	7	10	1	12	4	5	9	13	6	3	8
↑	Unsafe at School	10.9	9.2	9.2	8.0	12.3	8.6	11.5	9.4	7.6	10.2	14.9	11.8	7.8	10.4
	Rank		5	6	3	12	4	10	7	1	8	13	11	2	9
↓	Dating Violence	9.9	9.3	10.3	10.0	10.5	**	9.0	8.6	**	13.6	13.8*	8.2	9.9*	11.0
	Rank		5	9	8	10	3	3	2	6	12	13	1	7	11

*Use caution in interpreting. The estimate had a coefficient of variation >30% and is therefore deemed unreliable by UDOH standards.

**The estimate had been suppressed because the coefficient of variation is greater than 50%.

Chronic Conditions:

Lifetime Asthma

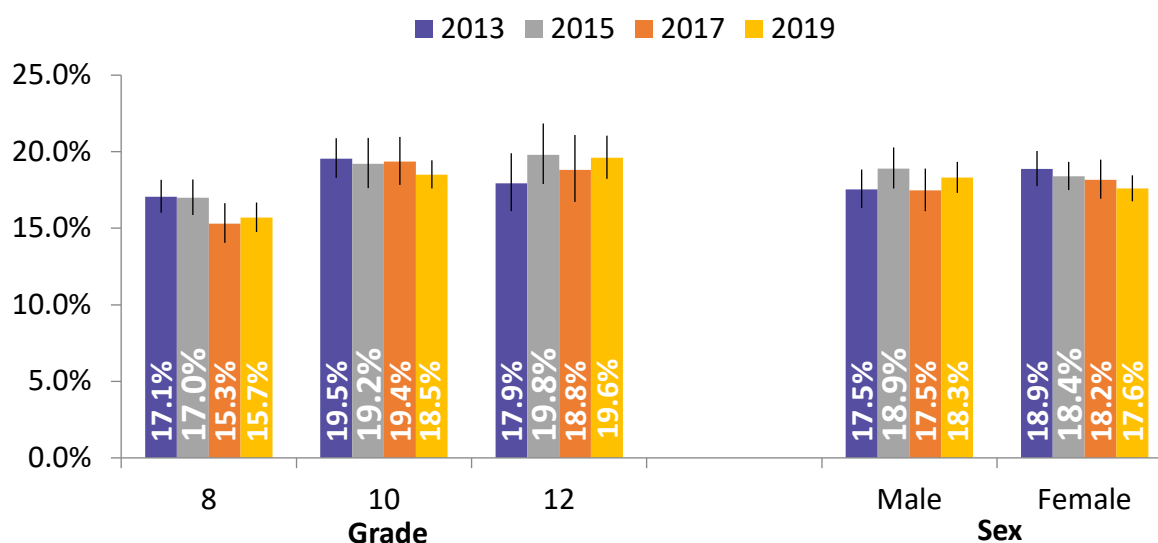
Lifetime asthma is defined as having ever been diagnosed with asthma by a doctor or other health care professional regardless of whether or not that individual still has asthma.

Asthma prevalence is an important indicator for tracking the burden of the disease. In the U.S. in 2015, 22.8% of students had ever been told by a doctor or nurse that they had asthma (lifetime asthma). In 2017, 17.8% of Utah students reported having ever been told by a doctor or nurse that they had asthma. In 2019, 17.9% of Utah students reported having ever been told by a doctor or nurse that they had asthma. This is not a significant change from recent years.

In 2019, there were no significant differences in reported lifetime asthma prevalence for males and females (**Figure 1**). Students in 8th grade reported significantly lower percentages of lifetime asthma than students in 10th and 12th grade.

Among local health districts, students in Wasatch County (23.1%) and Salt Lake County (19.7%) reported a significantly higher percentage of lifetime asthma than the state percentage (17.9%) in 2019. Students in Utah County (15.7%) and Southwest Utah (15.3%) reported a significantly lower percentage of lifetime asthma than the state percentage in 2019 (**Figure 2**).

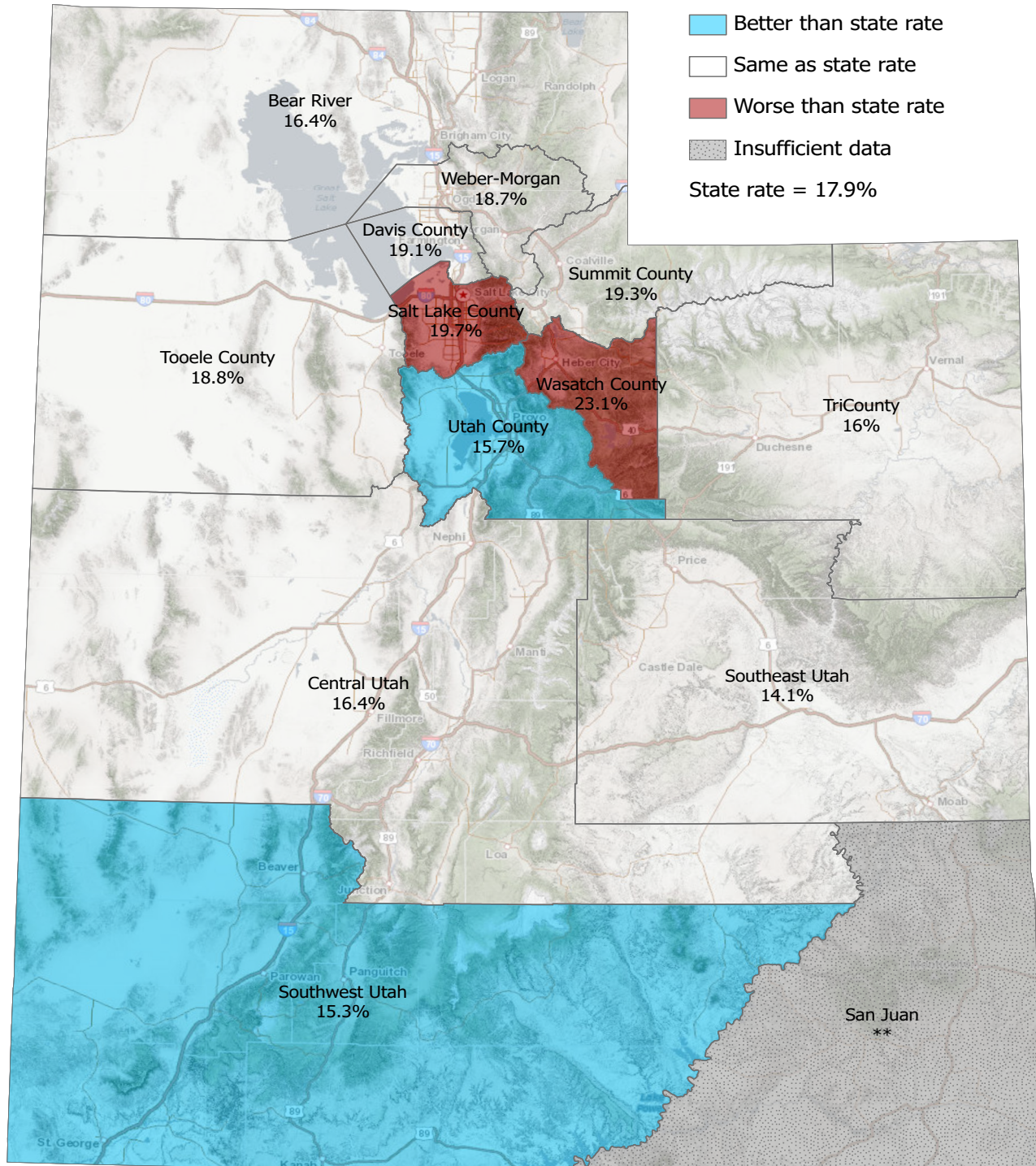
Figure 1: Percent of Utah Students (Grades 8, 10, 12) Who Were Ever Told by a Doctor or Nurse That They Have Asthma by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions:

Lifetime Asthma

Figure 2: Percent of Utah Students (Grades 8, 10, 12) Who Were Told by a Doctor or Nurse That They Have Asthma by Local Health District Map, Utah, 2019



Chronic Conditions:

Current Asthma

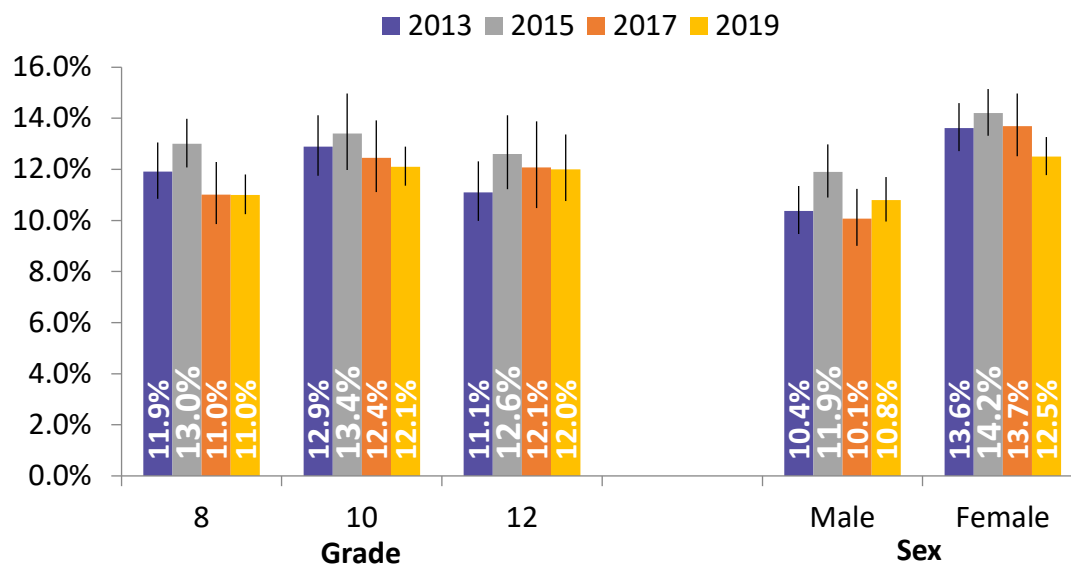
Current asthma is defined as having ever been diagnosed with asthma by a doctor or other health care professional and still have asthma.

In the U.S. during 2018, 7.3% of children (ages 0-17) had current asthma.¹ In Utah during 2018, about 5.5% of children (ages 0-17) had current asthma. In 2019, 11.7% of Utah students in grades 8, 10, and 12 reported having current asthma (**Figure 3**). This percentage is not significantly different from previous years.

Reporting of current asthma for female students (12.5%) in 2019 was significantly higher than for male students (10.8%). There were no significant differences among grades in current asthma prevalence.

Among local health districts, students in Salt Lake County (12.7%) reported a significantly higher prevalence than the state percentage (11.7%) in 2019. Utah County (9.8%) reported a significantly lower percentage of current asthma than the state percentage in 2019 (11.7%) (**Figure 4**).

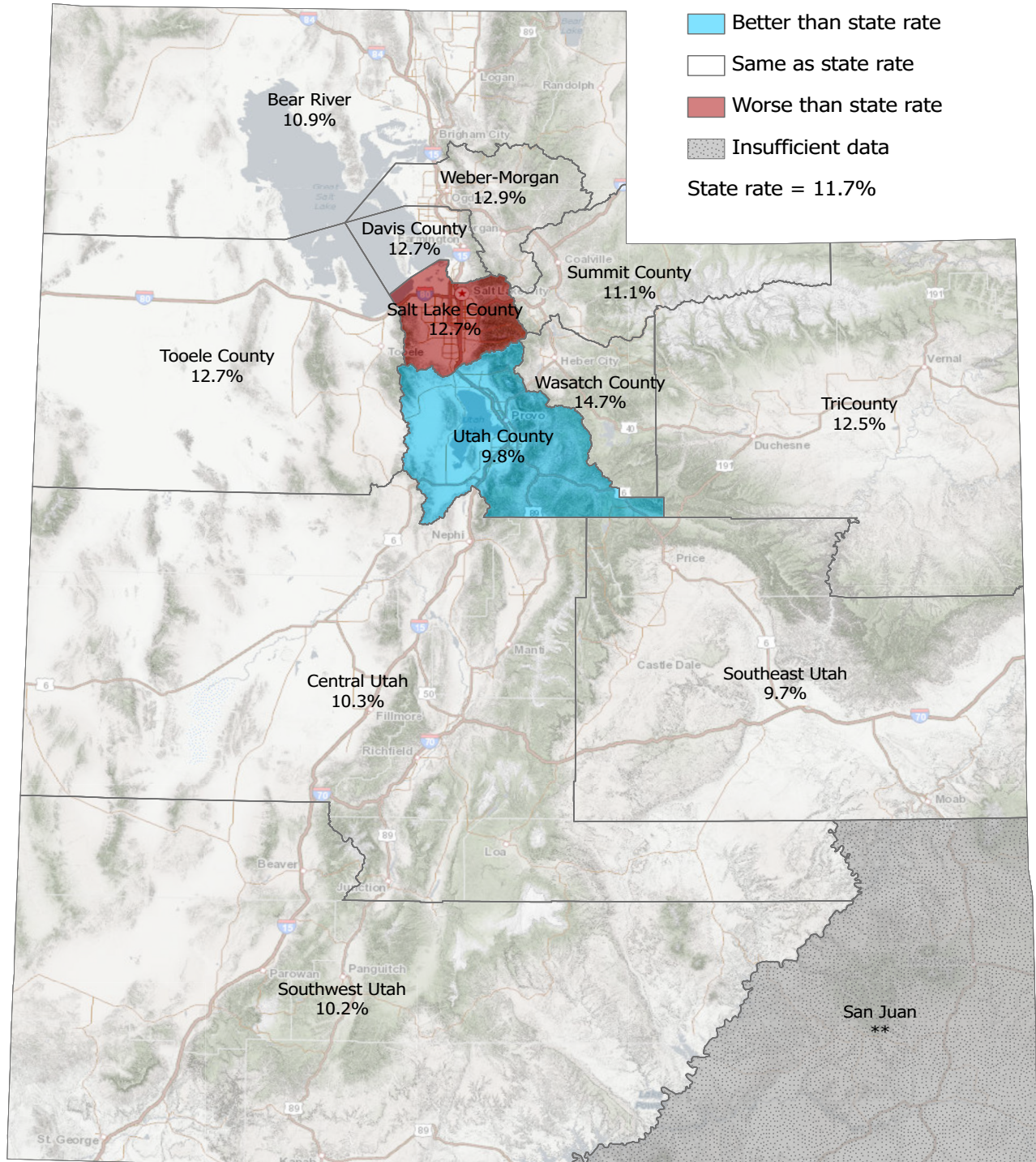
Figure 3: Percent of Utah Students (Grades 8, 10, 12) Who Currently Have Asthma by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions:

Current Asthma

Figure 4: Percent of Utah Students (Grades 8, 10, 12)
Who Currently Have Asthma by Local Health District Map, Utah, 2019



Chronic Conditions:

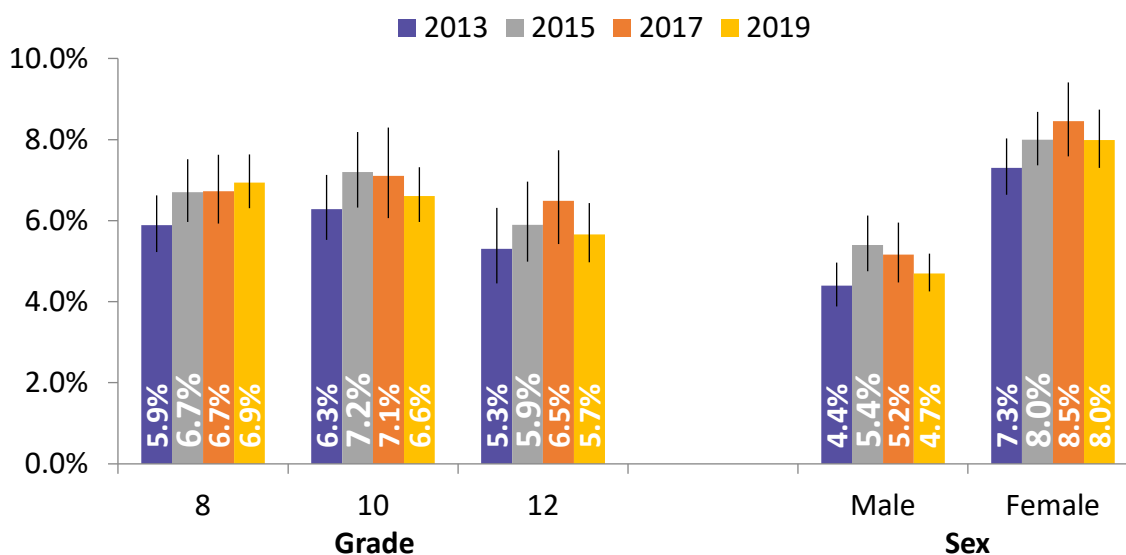
Asthma Attack

Frequency and severity of asthma symptoms are indicators of asthma management. Children with well-controlled asthma should rarely experience symptoms of an asthma attack such as wheezing or coughing, and they should not lose sleep, miss school days, be unable to participate in physical activities, or be hospitalized due to asthma. Through appropriate medication use, medical care, and self-management, the majority of asthma symptoms are preventable.

In 2019, 6.4% of Utah students in grades 8, 10, and 12 reported having had an asthma attack in the past year. This is not a significant change from recent years. Females (8.0%) were significantly more likely to report having an asthma attack in the past year than males (4.7%). There was no significant difference in asthma attack reporting among grade levels in 2019 (**Figure 5**).

Among local health districts, students in Wasatch County (8.9%) reported a significantly higher percentage of asthma attacks than the state percentage (6.5%) in 2019. Tri County (3.2%) reported a significantly lower percentage of asthma attacks than the state percentage in 2019 (**Figure 6**).

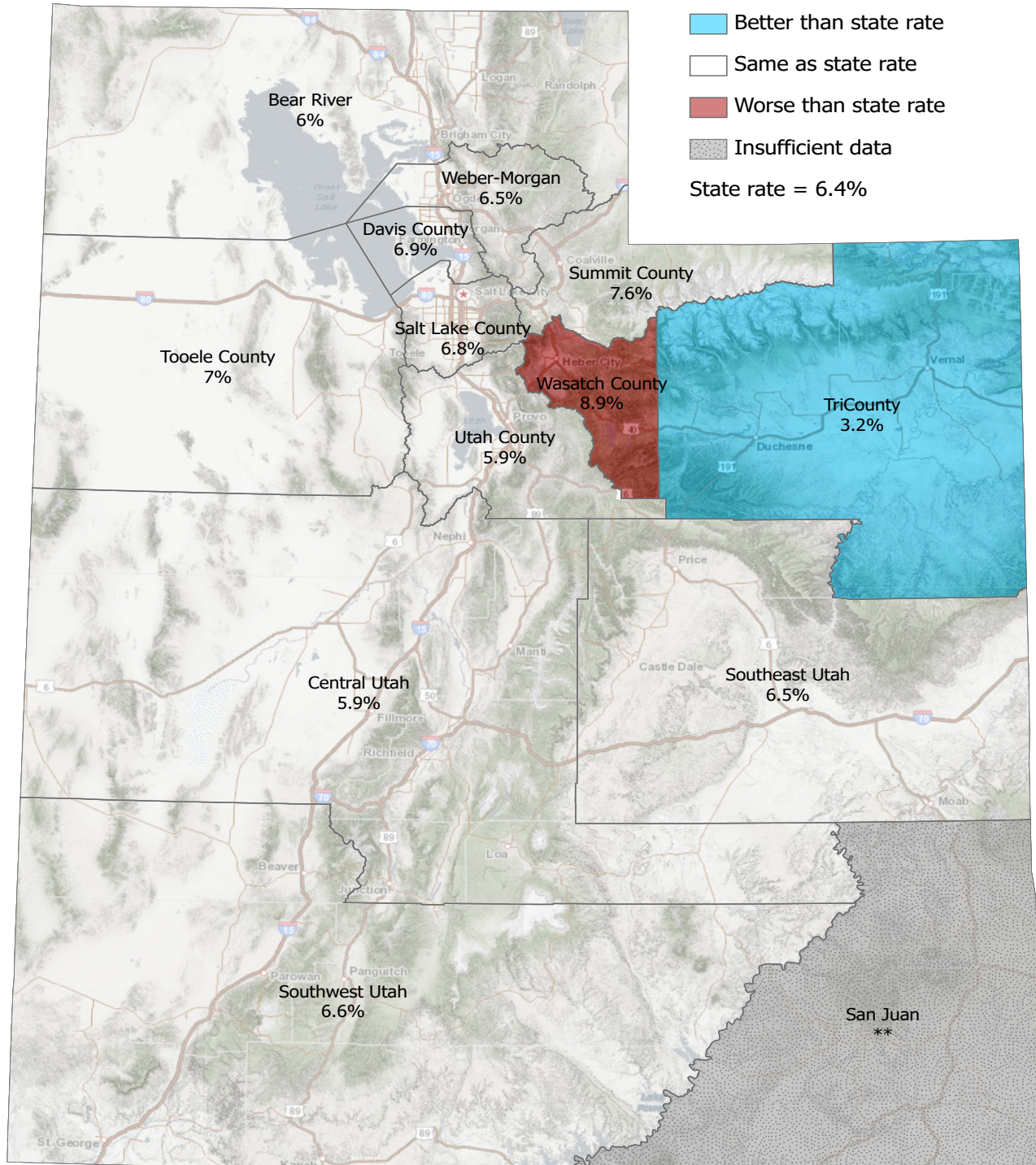
Figure 5: Percent of Utah Students (Grades 8, 10, 12) Who Had an Asthma Attack in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions:

Asthma Attack

Figure 6: Percent of Utah Students (Grades 8, 10, 12) Who Had an Asthma Attack in the Past 12 Months by Local Health District Map, Utah, 2019



Chronic Conditions:

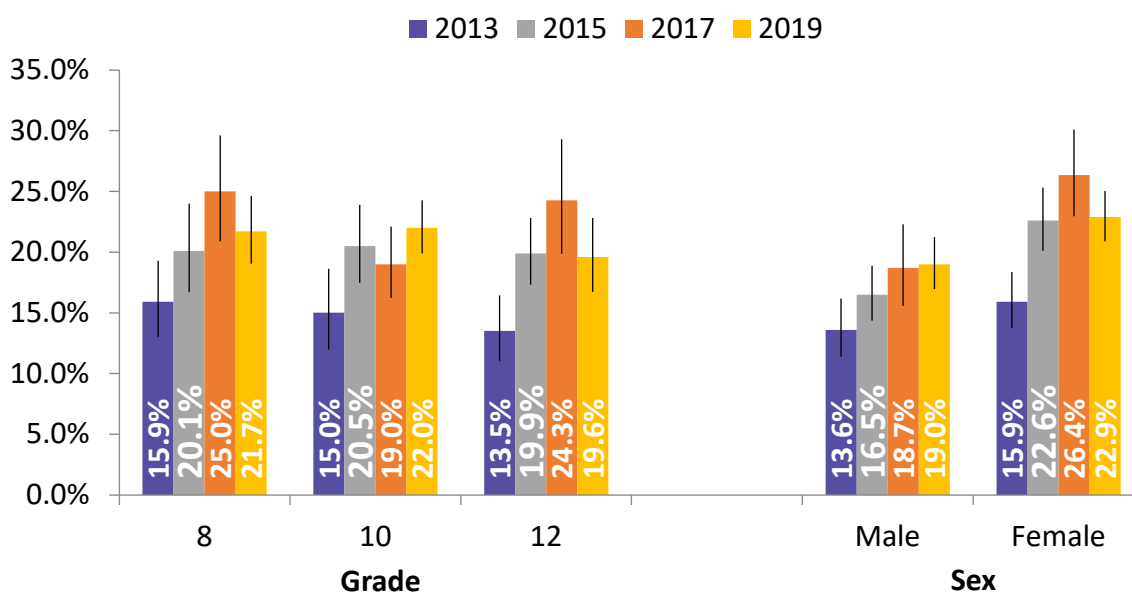
Asthma Management

The goal of asthma management is to control asthma so that children with asthma can live active, full lives while minimizing their risk for asthma episodes that require emergency department and non-routine doctor visits. An asthma action plan, a tool to help control asthma, is one important component of asthma management.²

For Utah students with asthma in grades 8, 10, and 12, the prevalence of having an asthma action plan was 21.0% in 2019 compared to 22.5% in 2017. In 2019, there was not a significant difference in the prevalence of having an asthma action plan between males (19.0%) and females (23.0%) or across grades (**Figure 7**).

Among local health districts, students in Summit County (29.0%) had a significantly higher percentage of asthma action plans than the state percentage (21.0%) in 2019 (Figure 8). No local health districts reported significantly lower percentages of asthma action plans than the state percentage in 2019 (**Figure 8**).

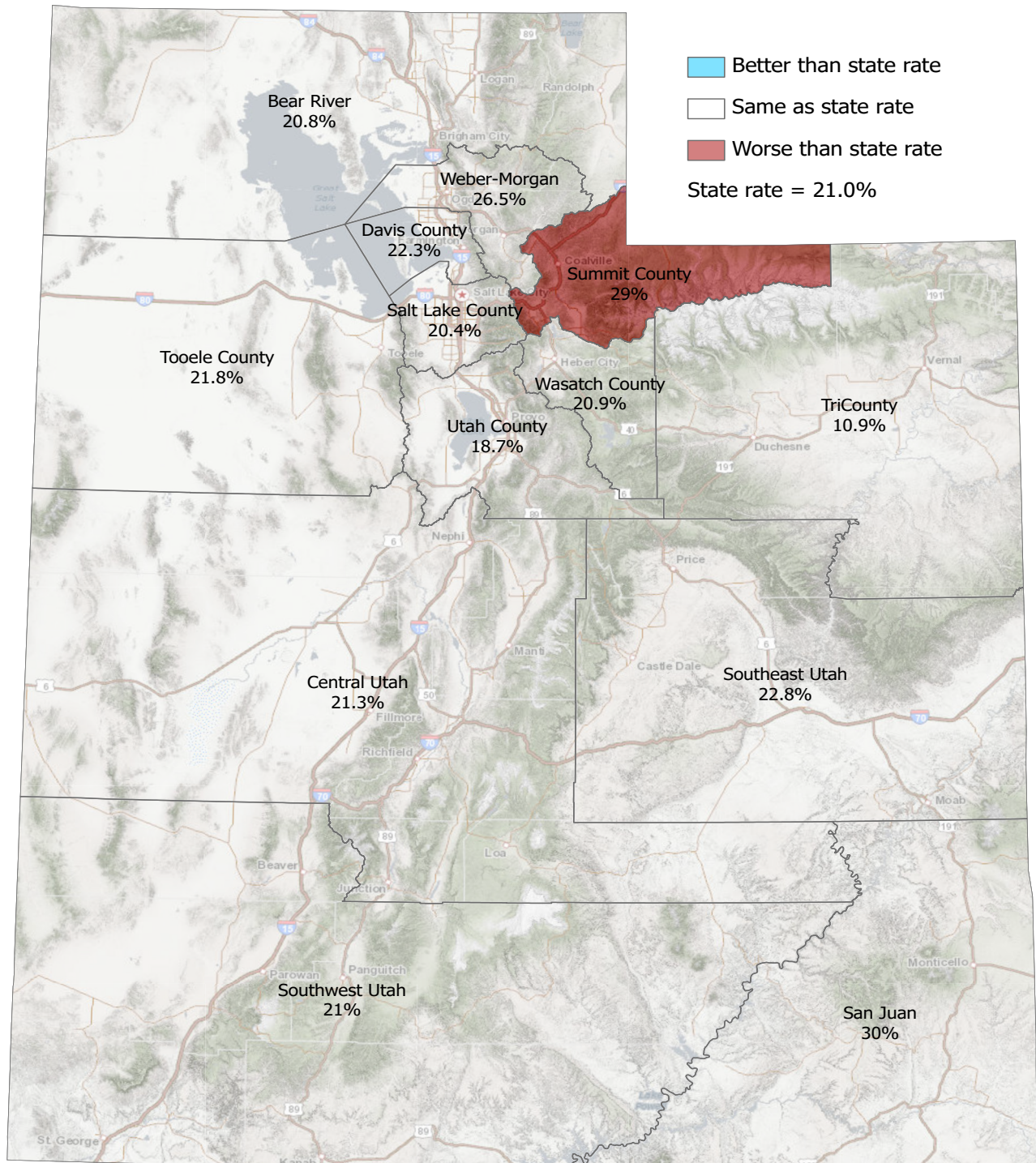
Figure 7: Percent of Utah Students (Grades 8, 10, 12) Who Have Been Diagnosed with Asthma and Have an Asthma Action Plan by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions:

Asthma Management

Figure 8: Percent of Utah Students (Grades 8, 10, 12) Who Have Been Diagnosed with Asthma and Have an Asthma Action Plan by Local Health District Map, Utah, 2019



Chronic Conditions:

Missed School Due to Asthma

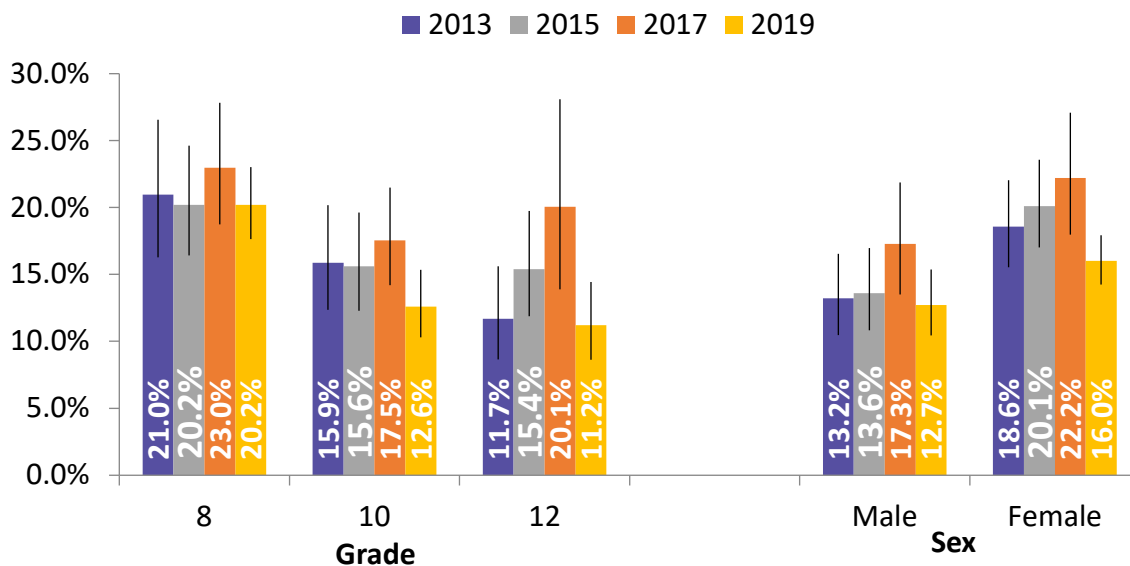
Missed school days show the impact of asthma on a child's social functioning and educational opportunities. Missed school days may also contribute to disparities in learning.

For Utah students with asthma in grades 8, 10, and 12, the prevalence for missing at least one school day in the past year due to asthma was 14.6% in 2019. This is not a significant change from recent years.

There was not a significant difference in the prevalence for missing at least one school day in the past year due to asthma between males and females. Eighth graders (20.2%) had a significantly higher prevalence of missed school days due to asthma when compared to 10th (12.6%) and 12th (11.2%) graders (**Figure 9**).

Among local health districts, none reported rates higher or lower than the state percentage in 2019 (**Figure 10**).

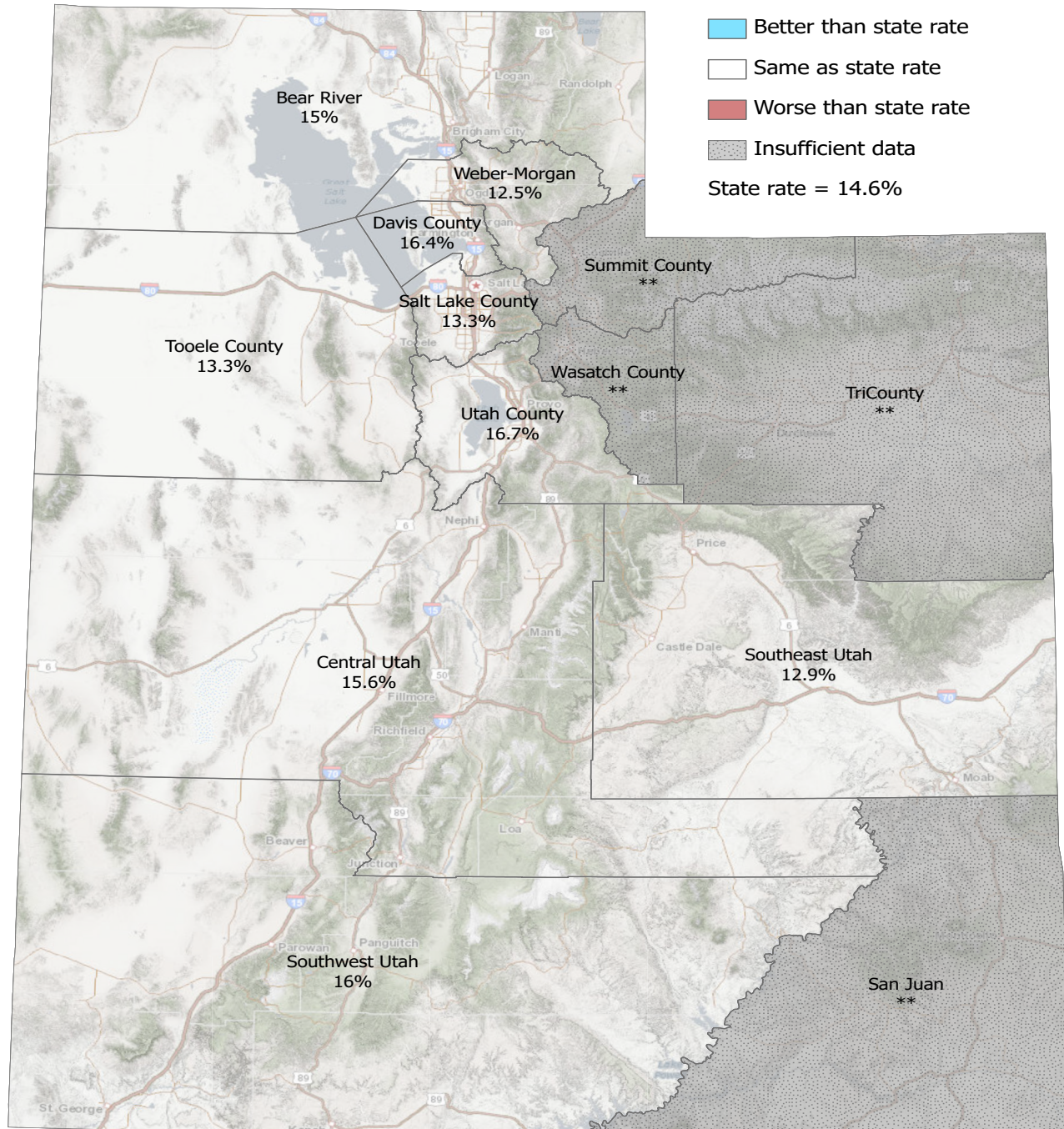
Figure 9: Percent of Utah Students (Grades 8, 10, 12) Who Missed One or More Days of School During the Past Year Because of Their Asthma by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions:

Missed School Due to Asthma

Figure 10: Percent of Utah Students (Grades 8, 10, 12) Who Missed One or More Days of School During the Past Year Because of Their Asthma by Local Health District Map, Utah, 2019



Chronic Conditions:

Diabetes

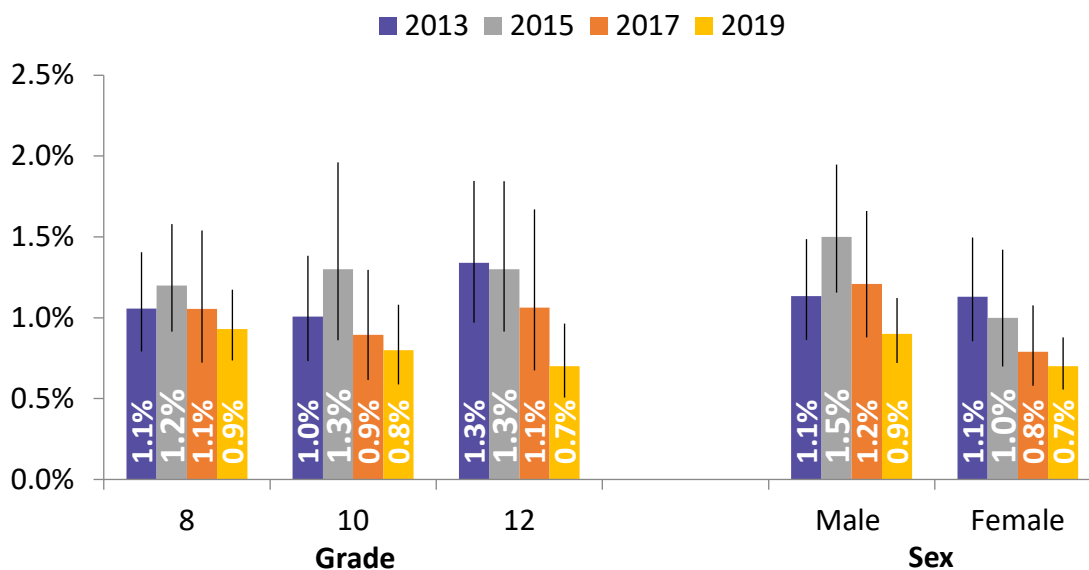
Diabetes is a serious chronic condition that may require extreme diligence to manage.³ Diabetes is one of the most common chronic diseases among school-aged children. Among Utah students in grades 8, 10, and 12, almost one out of every 100 students (0.8%) reported having diabetes in 2019. This is not a significant difference from recent years.

Diabetes is uncommon in very young children but the risk gradually increases with age, with incidence peaking during puberty.⁴ Diabetes often requires 24-hour-a-day management. This means students may need to monitor their blood sugar levels during school and administer insulin during the school day. They may experience high or low blood sugars that require immediate medical attention. It is important for students with diabetes to have a care management plan (often referred to as a “504 Plan”) with the school so that the student, parents or guardians, and school staff understand the specific care needs for each student.⁵

There was no statistically significant difference in the prevalence of diabetes by sex in 2019. Diabetes prevalence was also similar across grade levels (**Figure 11**).

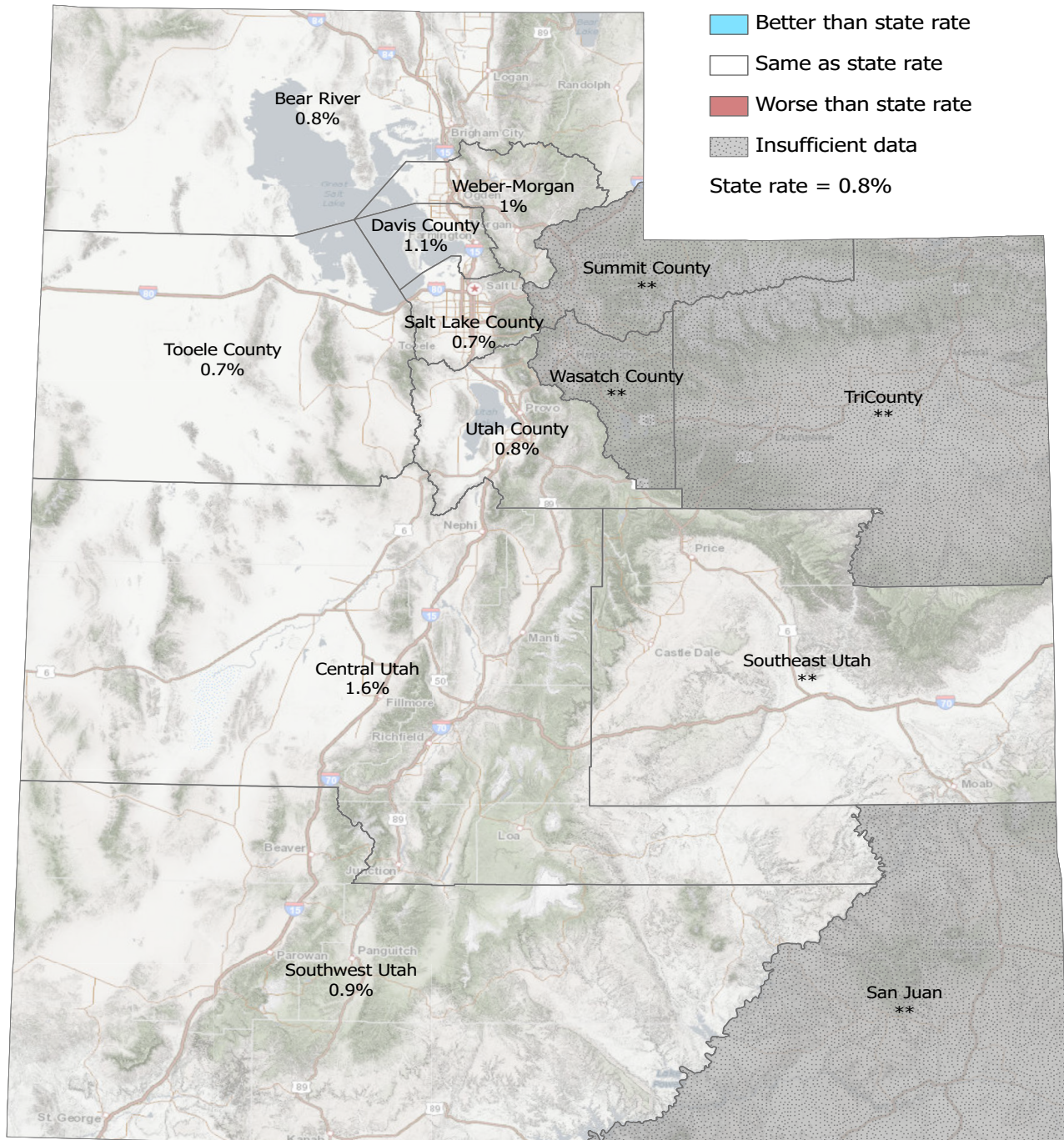
Among local health districts, students in Summit County (0.17%) reported significantly lower rates of diabetes than the state percentage in 2019. No health districts reported significantly lower rates (**Figure 12**).

Figure 11: Percent of Utah Students (Grades 8, 10, 12) Who Have Diabetes by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Chronic Conditions: Diabetes

Figure 12: Percent of Utah Students (Grades 8, 10, 12) Who Have Diabetes by Local Health District Map, Utah, 2019



Lifestyles:

Physical Activity

The U.S. Department of Health and Human Services (HHS) recommends that adolescents ages 6-17 engage in physical activity for 60 or more minutes every day.⁶ Any type of moderate physical activity, such as walking, running, biking, or playing at a playground, may be counted. Activities should be age-appropriate and suitable for the child's physical development.

In 2019, 17.9% of Utah students in grades 8, 10, and 12 met the HHS recommendation for physical activity. This was not a significant change in physical activity from previous years. Male students (23.0%) consistently had significantly higher percentages of physical activity than female students (13.3%). Physical activity percentages for both males and females did not change significantly between 2017 and 2019. The percentage of adolescents who met HHS physical activity guidelines decreased as grade level increased. A significantly higher proportion of students in grade 8 (22.3%) met the guidelines than students in grade 10 (17.9%) and grade 12 (13.5%) (**Figure 13**).

Among local health districts, students in Central Utah (25.8%) and Southeast Utah (22.4%) reported significantly higher percentages of physical activity than the state percentage (18%) in 2019. No health districts reported significantly lower rates than the state percentage (**Figure 14**).

Figure 13: Percent of Utah Students (Grades 8, 10, 12) Who Meet Current Physical Activity Guidelines by Grade and Sex, Utah 2013, 2015, 2017, 2019

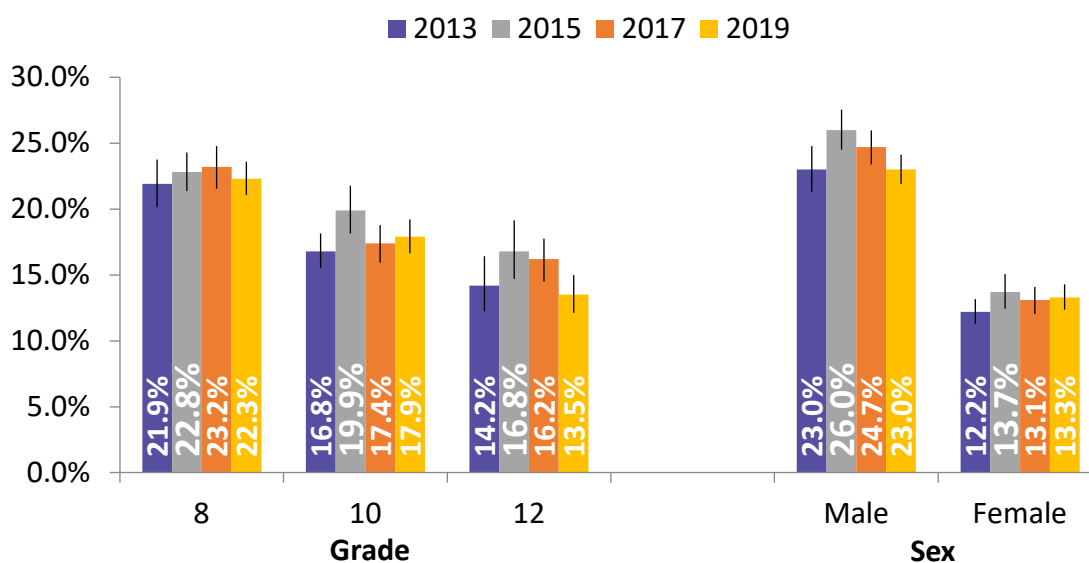
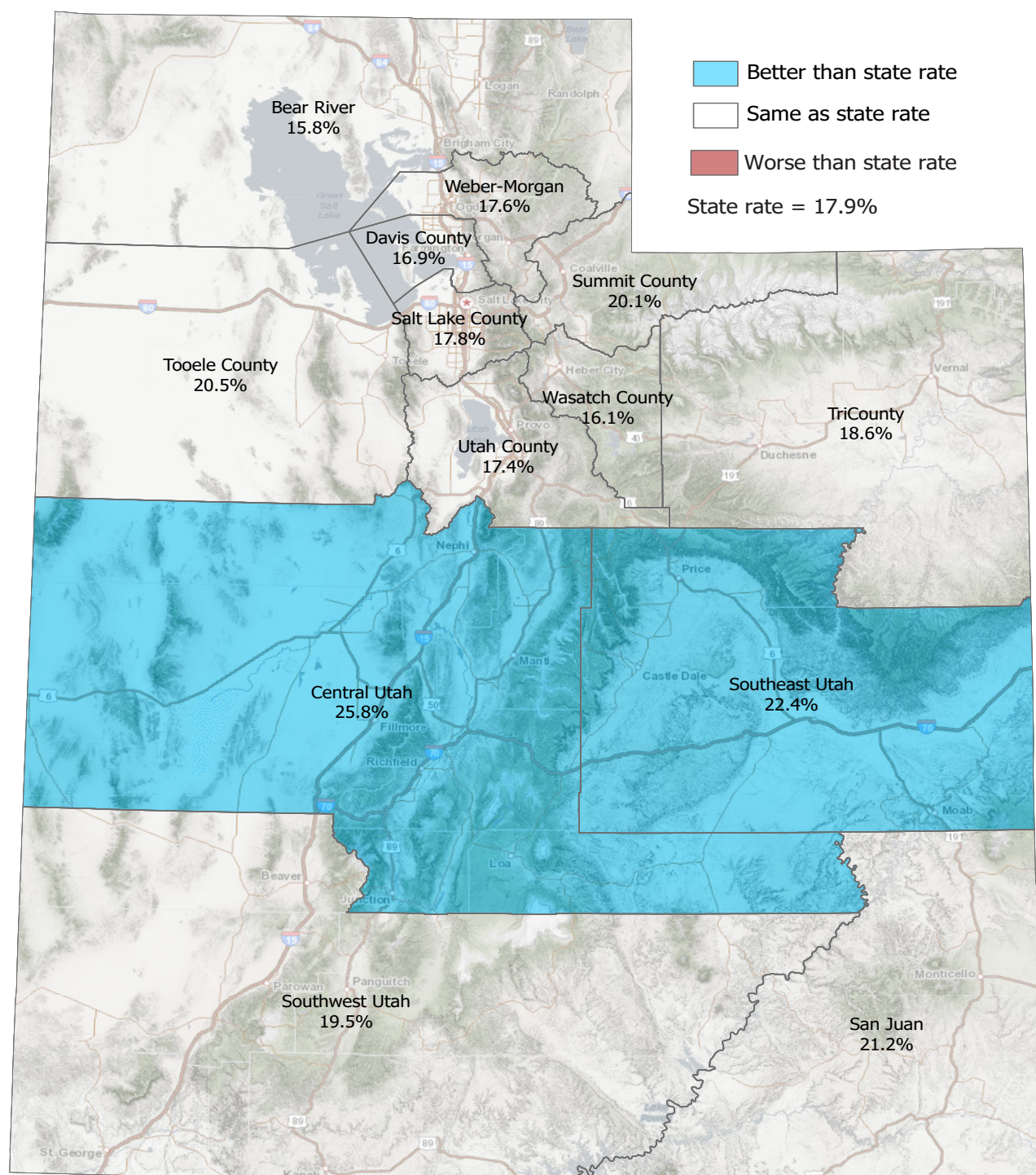


Figure 14: Percent of Utah Students (Grade 8, 10, 12) Who Meet Current Physical Activity Guidelines by Local Health District Map, Utah 2019



Lifestyles:

Obesity

Obesity is a persistent public health problem, and unfortunately, too many adolescents are affected by this condition. Adolescents who are obese have an increased risk of elevated cholesterol and blood pressure levels later in life.⁷ They are also more likely to be obese as adults. Obesity for adolescents is defined as having a body mass index that is greater than the 95th percentile for age and sex, based on the Centers for Disease Control and Prevention (CDC) growth charts.⁸

Nationally, about one out of every six adolescents (17%) ages 12-19 are obese. In Utah in 2019, 9.8% of students in grades 8, 10, and 12 were obese. This percentage is not significantly different from previous years. The percentage for males continues to be significantly higher than the percentage for females. In 2019, 12.5% of males were obese, compared to 7.3% of females. Obesity percentages among grade levels were not significantly different (**Figure 15**).

Among local health districts, students in Utah County (8.6%), Tri County (4.7%), and Summit County (4.7%) reported a significantly lower adolescent obesity percentage than the state percentage (9.8%) in 2019. Students in Tooele County (12.2%) and Weber-Morgan (12.1%) reported a significantly higher percentage than the state percentage in 2019 (**Figure 16**).

Figure 15: Percent of Utah Students (Grades 8, 10, 12) Who Are Obese by Grade and Sex, Utah, 2013, 2015, 2017, 2019

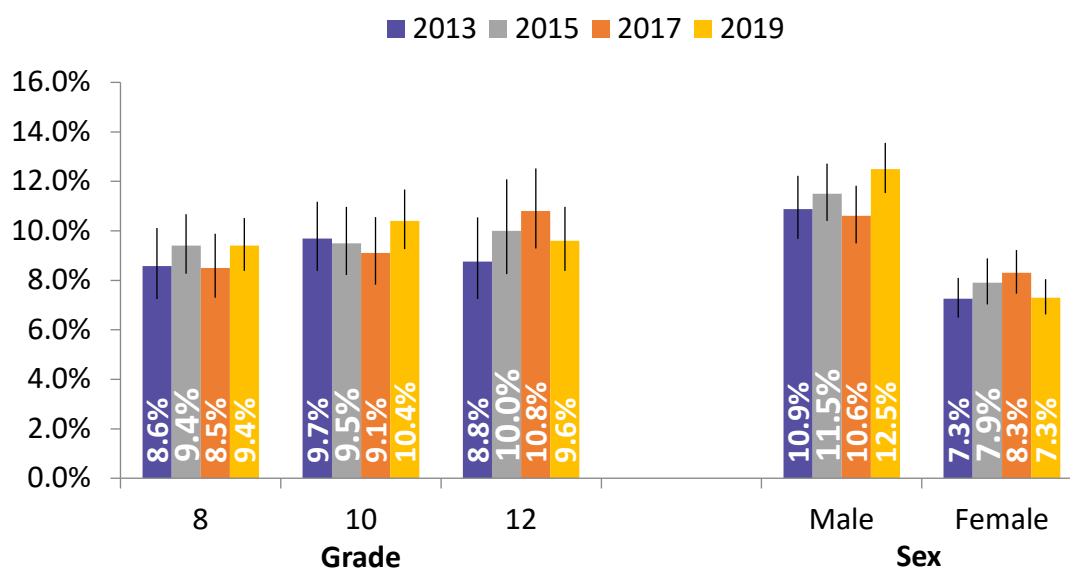
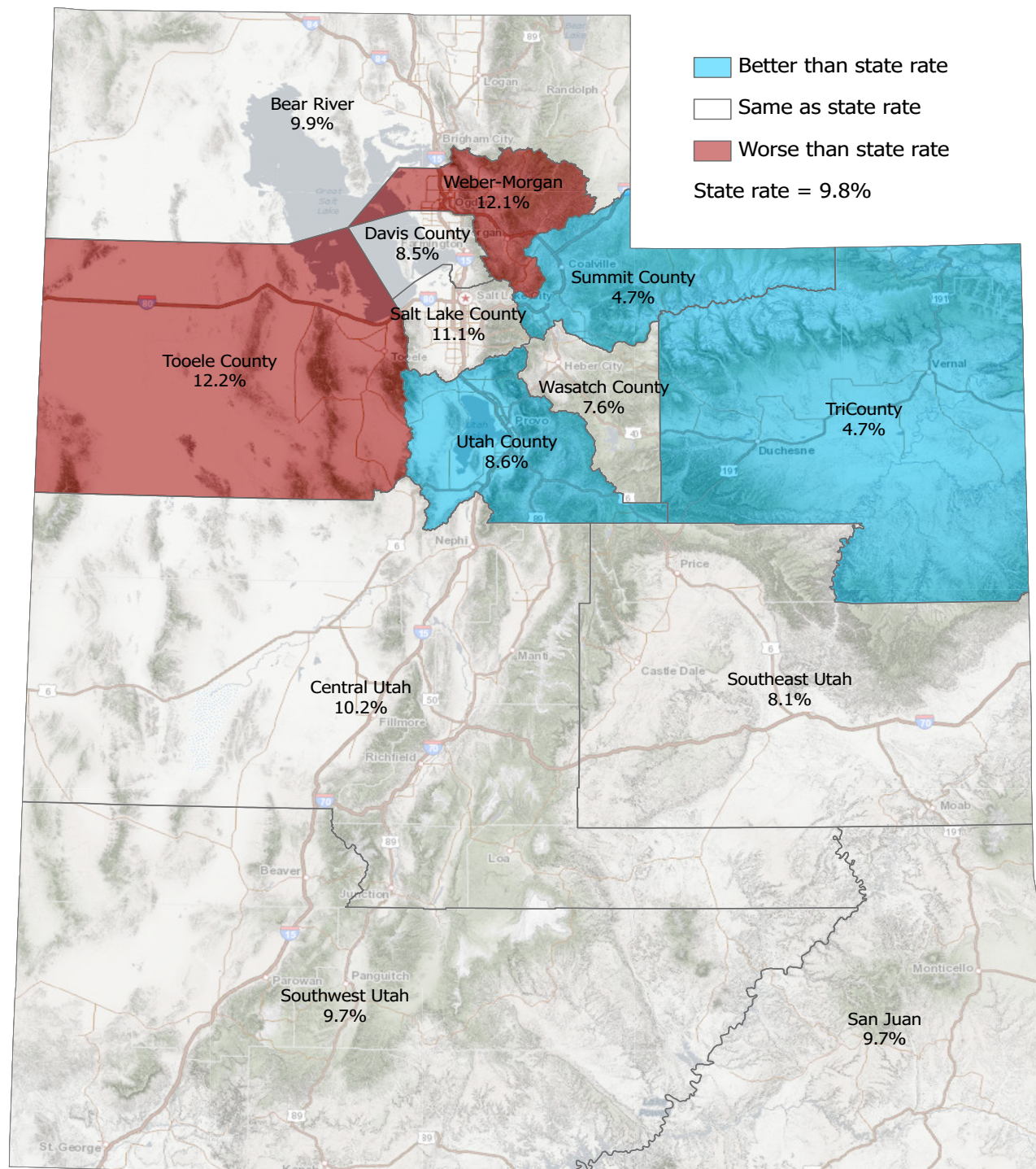


Figure 16: Percent of Utah Students (Grades 8, 10, 12) Who Are Obese by Local Health District Map, Utah, 2019



Lifestyles:

Family Meals

Adolescents who regularly eat meals with their families are less likely to be overweight and less likely to have eating disorders. Some studies have found a correlation between eating regular family meals and improved adolescents academic performance.⁹ This document defines regular family meals as eating all or most meals with the family at least five days a week.

In Utah, the percentage of students who had regular family meals decreased significantly between 2013 (61.1%) and 2019 (57.0%). The proportion of students who had regular family meals decreased significantly as students moved into higher grades. In 2019, among 8th grade students, 66.9% had regular family meals. By 12th grade, the percentage dropped to 46.6%. For 2019, the percentage of males who had regular family meals was significantly higher than that for females, 60.1% vs. 54.2%, respectively (Figure 17).

Among local health districts, students in Bear River (61.3%), Tri County (64.3%), and Utah County (61.5%) reported significantly higher percentages of having regular family meals than the state percentage (57.0%) in 2019. Students in Salt Lake County reported a significantly lower percentage (51.9%) of regular family meals than the state percentage in 2019 (Figure 18).

Figure 17: Percent of Utah Students (Grades 8, 10, 12) Who Ate At Least One Meal with Their Family on Five or More Days a Week by Grade and Sex, Utah, 2013, 2015, 2017, 2019

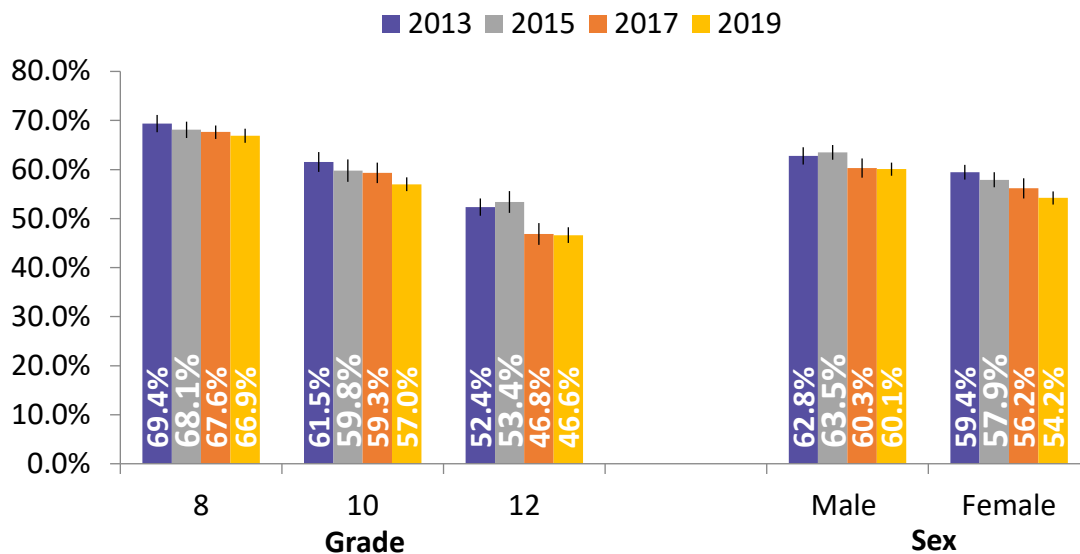
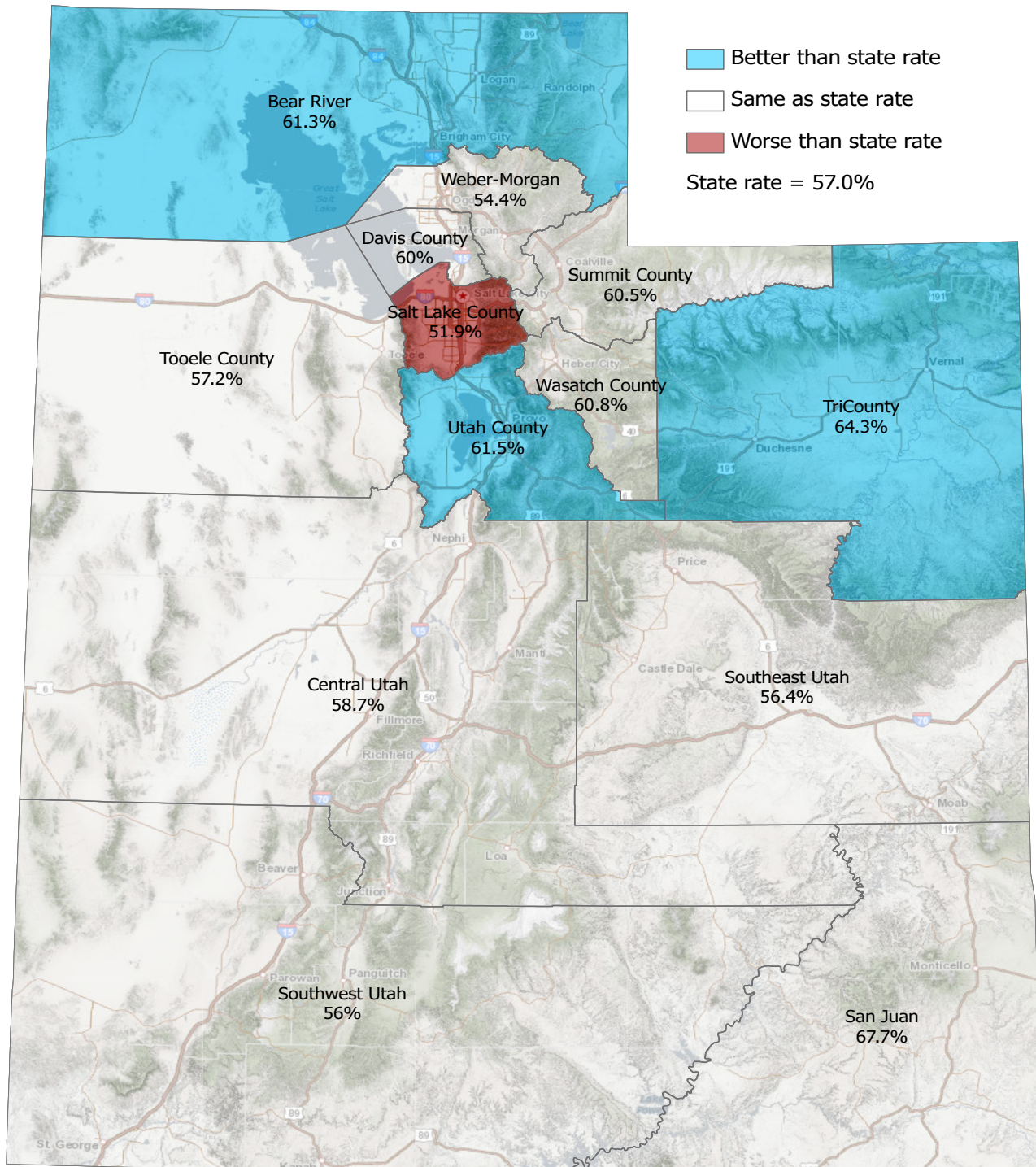


Figure 18: Percent of Utah Students (Grades 8, 10, 12) Who Ate At Least One Meal with Their Family on Five or More Days a Week by Local Health District Map, Utah, 2019



Mental Health:

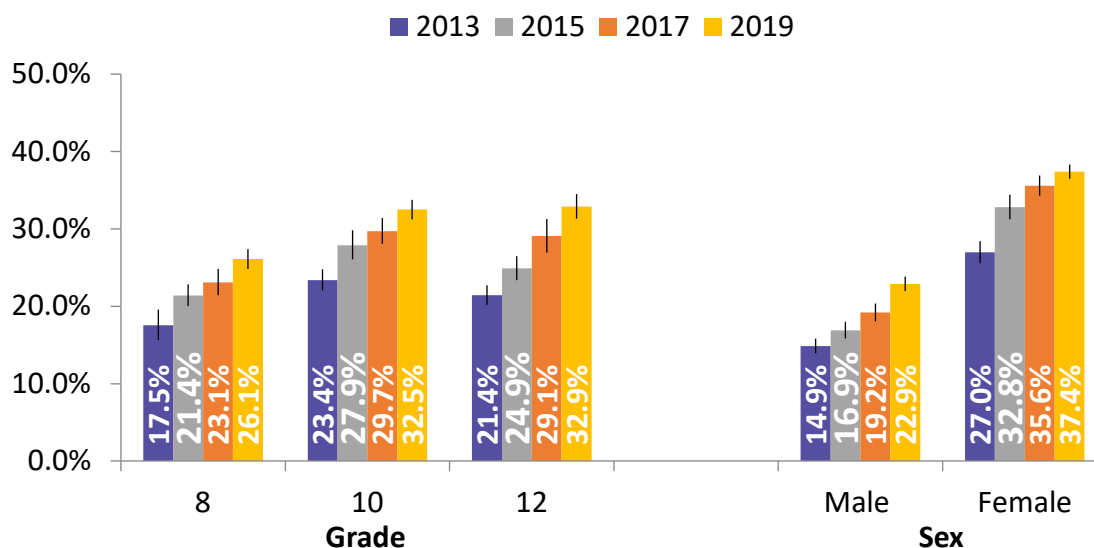
Feeling Sad or Hopeless

Feeling sad or hopeless for at least two consecutive weeks to the point where it becomes difficult to enjoy activities or do daily tasks can be a sign of depression.¹⁰ Adolescents who have depression are at an elevated risk of a host of other negative health outcomes, including substance abuse and suicide. Persistent feelings of sadness or hopelessness may indicate a need for mental health services.

Since 2013, percentages of students reporting feeling sad or hopeless have been steadily increasing. There have been significant increases year to year, rising from 20.8% in 2013 to 24.7% in 2015, to 27.3% in 2017, and to 30.7% in 2019. Females (37.4%) reported a significantly higher prevalence of such feelings when compared to males (22.9%) in 2019. Students in 10th (32.5%) and 12th (32.9%) grade were significantly more likely to report being sad or hopeless than students in 8th grade during 2019 (**Figure 19**).

Among local health districts, students in Bear River (27.4%), Central Utah (26.9%), San Juan County (27%), Summit County (23.2%), and Wasatch County (27.2%) reported significantly lower percentages of feeling sad or hopeless than the state average (30.7%) in 2019. Students in Salt Lake County (32.8%) reported a significantly higher percentage of feeling more sad or hopeless youth in 2019 than the state percentage in 2019 (**Figure 20**).

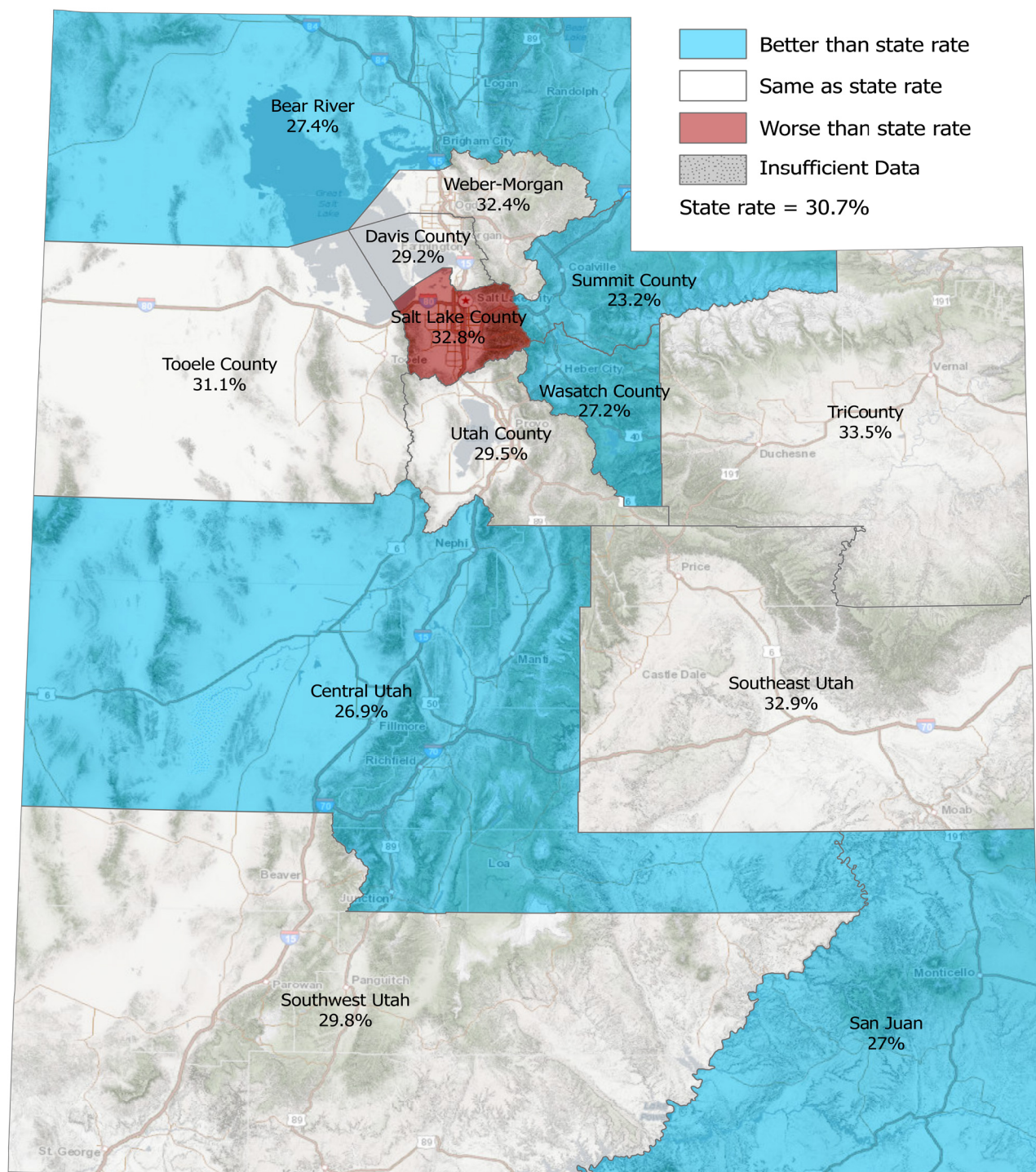
Figure 19: Percent of Utah Students (Grades 8, 10, 12) Who Felt Sad or Hopeless Almost Every Day for Two Weeks or More in a Row in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Mental Health:

Feeling Sad or Hopeless

Figure 20: Percent of Utah Students (Grades 8, 10, 12) Who Felt Sad or Hopeless Almost Every Day for Two Weeks or More in a Row in the Past 12 Months by Local Health District Map, Utah, 2019



Mental Health:

Psychological Distress

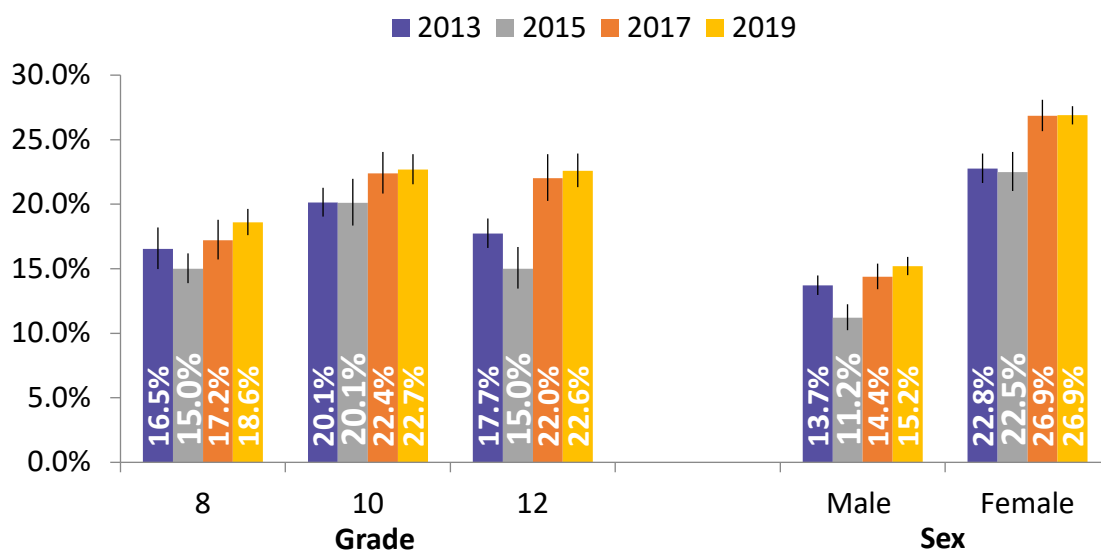
The Kessler Psychological Distress Scale (K6) is a simple measure of psychological distress which asks six questions about a person's emotional state. Each question is scored from 0 (none of the time) to 4 (all of the time). Scores of the six questions are then summed, yielding a minimum score of 0 and a maximum score of 24.¹¹ A score of 12 or higher indicates that someone is experiencing psychological distress and may benefit from mental health services.

In 2019, 21.5% of Utah students in grades 8, 10, and 12 had K6 scores of 12 or more. This was not a significant increase from 2017 (20.5%). However, 2017 and 2019 are both significant increases from the 2013 percentage of 18.1% and 2015 percentage of 16.8%.

Females (26.9%) were at a significantly greater risk of psychological distress compared to males (15.2%). In 2019, 10th (22.7%) and 12th (22.6%) grade students were significantly more likely to score 12 or higher on the K6 scale than 8th grade students (18.6%) (**Figure 21**).

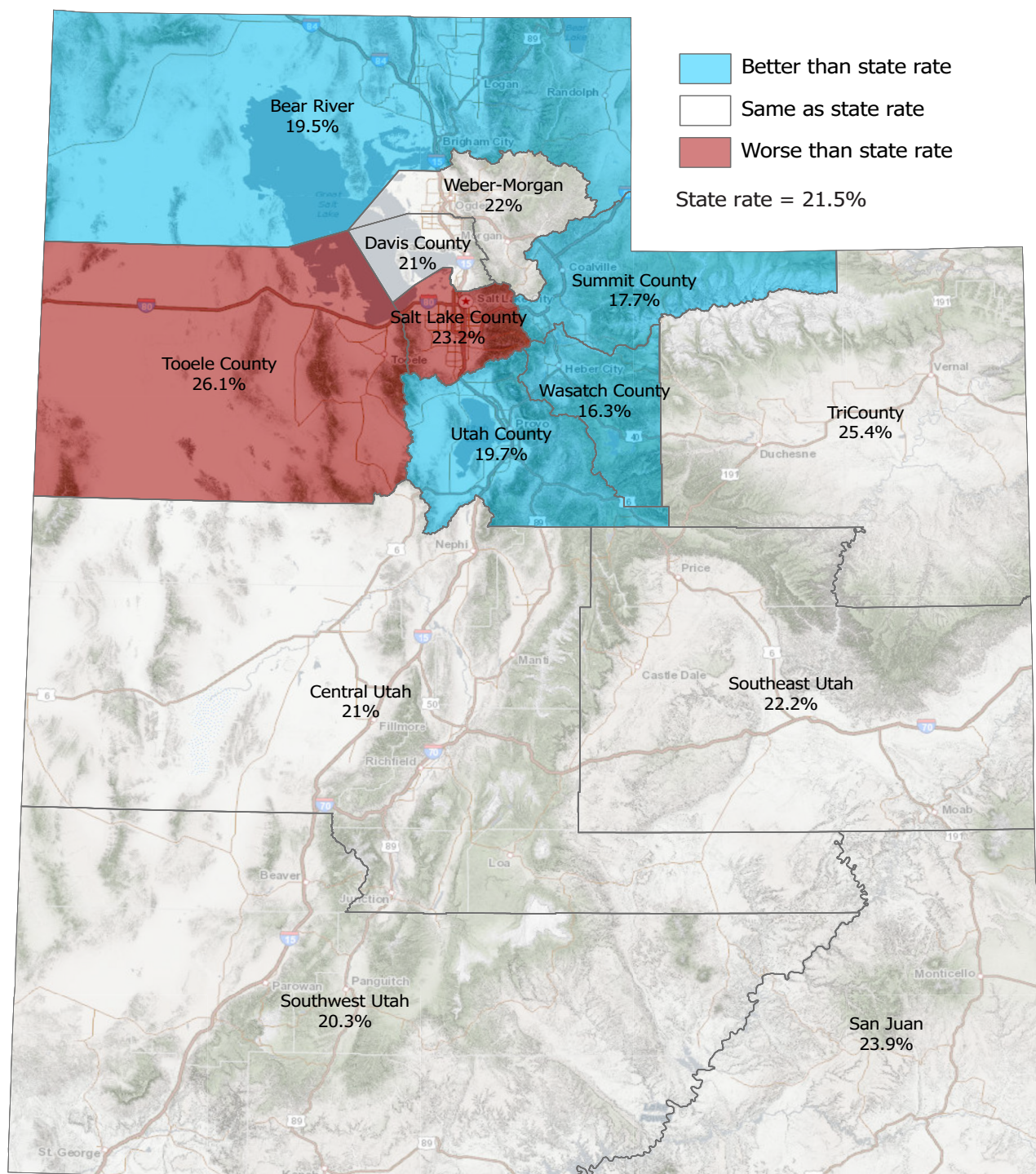
Among local health districts, students in Summit County (17.7%), Utah County (19.7%), Bear River (19.5%), and Wasatch County (16.3%) reported significantly lower percentages of psychological distress than the state percentage (21.5%) in 2019. Salt Lake County (24.2%) and Tooele County (26.1%) reported significantly higher percentages of psychological stress than the state percentage in 2019 (**Figure 22**).

Figure 21: Percent of Utah Students (Grades 8, 10, 12) Who Had K6 Scores of 12 or Higher by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Mental Health: Psychological Distress

Figure 22: Percent of Utah Students (Grades 8, 10, 12) Who Had K6 Scores of 12 or Higher, by Local Health District Map, Utah, 2019



Mental Health:

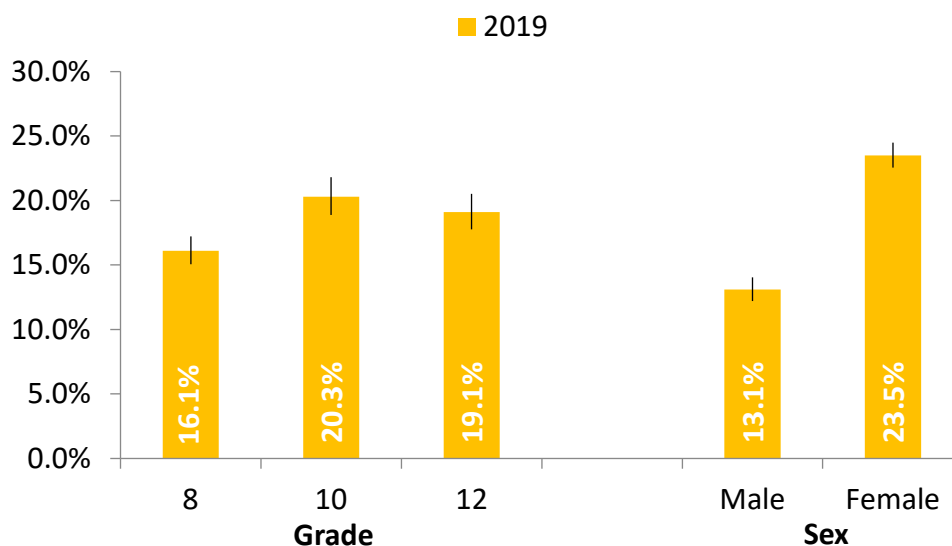
Social Isolation

Social isolation is a lack of social connections and can lead to loneliness. Social isolation and loneliness often correlates with mental health problems including depression. Children who are socially isolated tend to have lower subsequent educational attainment, be part of a less advantaged social class in adulthood, and are more likely to be psychologically distressed in adulthood. Social isolation can have serious public health risks.¹²

In 2019, 18.7% of adolescents felt moderately isolated. Females (23.5%) were significantly more likely to report being socially isolated than males (13.1%). Social isolation was highest among 10th grade (20.3%) and 12th grade (19.1%) students. Eighth grade students had significantly lower percentages (16.1%) than all ages (**Figure 23**).

Salt Lake County (20.8%) had significantly higher percentages than the state, while Utah County (17.7%) had a significantly lower percentages than the state (**Figure 24**).

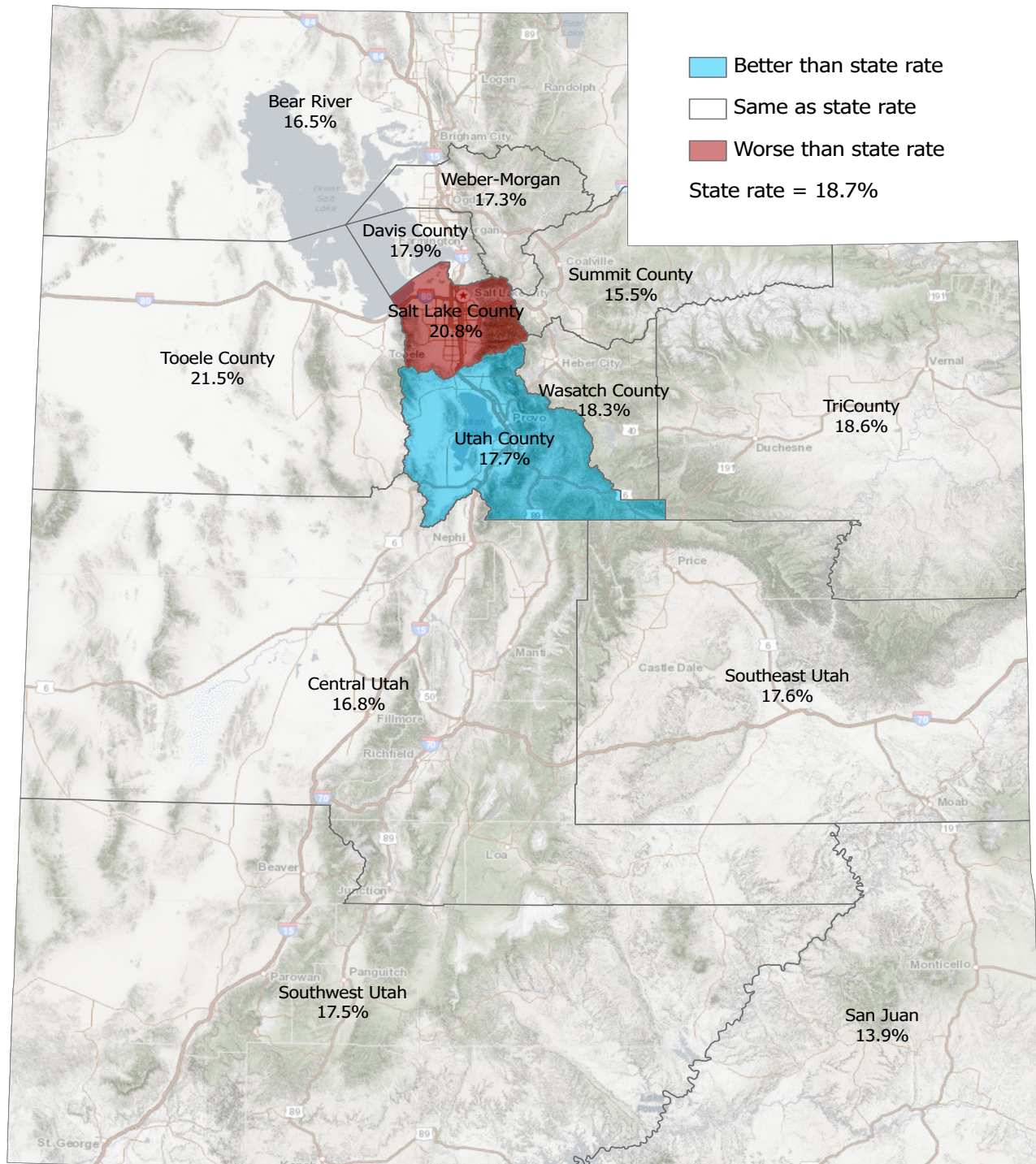
Figure 23: Percent of Utah Students (Grades 8, 10, 12) Who Felt Socially Isolated by Grade and Sex, Utah, 2019



Mental Health:

Social Isolation

Figure 24: Percent of Utah Students (Grades 8, 10, 12) Who Felt Socially Isolated by Local Health-District Map, Utah, 2019



Mental Health:

Self-Harm

Self-harm is generally used to cope with negative emotions (like anger, contempt, depression, disgust, guilt, fear, and nervousness) and poor self-concept.¹³ This question asked about purposeful self harm without suicidal intent one or more times during the previous 12 months. Self-harm most commonly includes cutting or burning oneself.

In 2019, 16.2% of Utah students in grades 8, 10, and 12 reported self-harming. This was not a significant increase from 2017 (15.9%).

Self-harm was highest among 10th grade (17.4%) and 8th grade (16.8%) students. Twelfth grade students had significantly lower percentages (13.8%) than all ages. Females (20.6%) had significantly higher percentages than males (11.0%) (**Figure 25**).

Tooele County (20.3%) had significantly higher percentages than the state. No health district had significantly lower percentages than the state (**Figure 26**).

Figure 25: Percent of Utah Students (Grades 8, 10, 12) Who Reported Self-Harm in the Past 12 Months by Grade and Sex, Utah, 2017, 2019

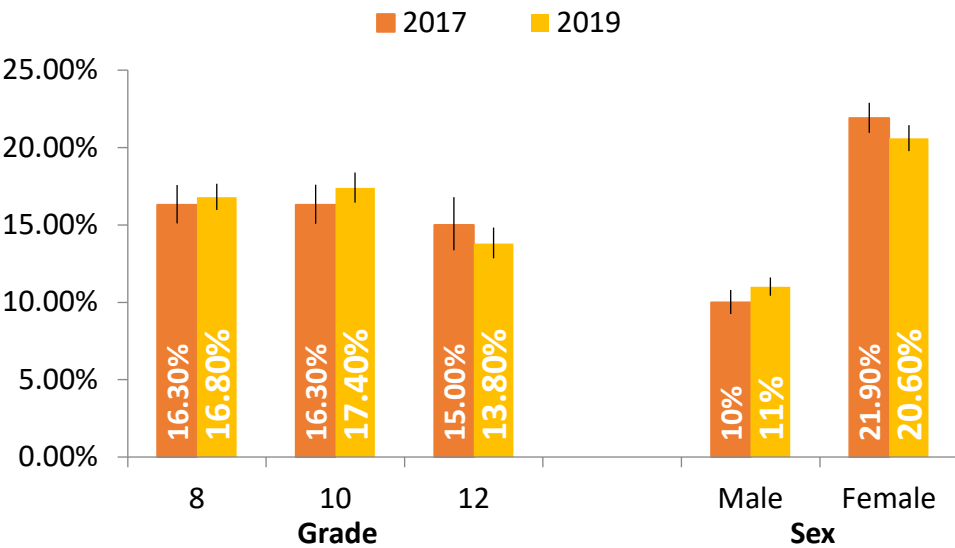
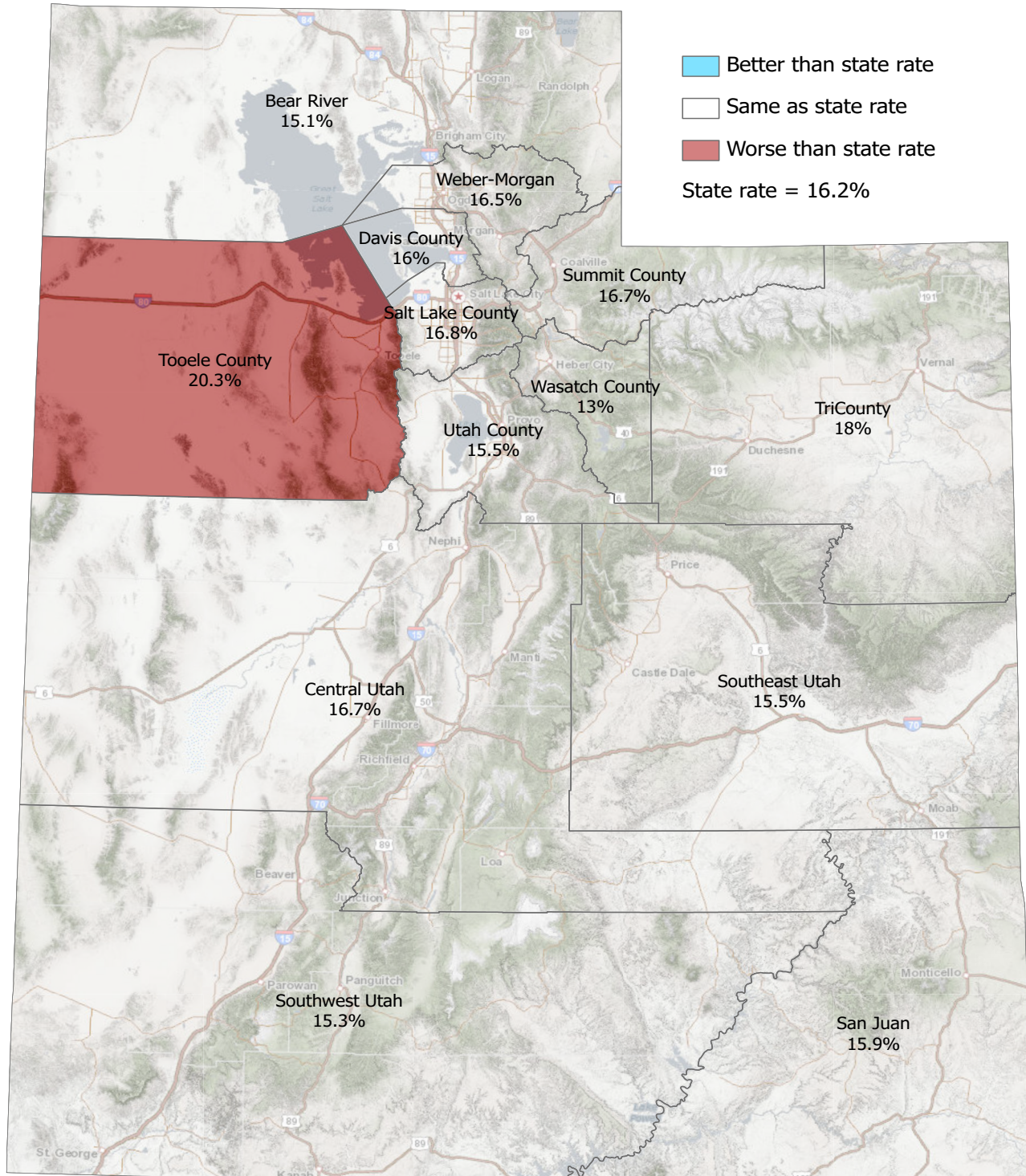


Figure 26: Percent of Utah Students (Grades 8, 10, 12) Who Reported Self-Harm in the Past 12 Months by Local Health District Map, Utah, 2019



Mental Health:

Suicide Ideation

Suicide is the leading cause of death among adolescents ages 10-17 in Utah.¹⁴ More adolescents are hospitalized or treated in an emergency department for suicide attempts than are fatally injured. Suicide ideation is thinking about suicide, having suicidal thoughts, or considering attempting suicide. Suicide ideation is a risk factor for suicide.

In 2019, 18.2% of Utah students in grades 8, 10, and 12 reported that they had seriously considered attempting suicide at some point during the past 12 months. This was not a significant increase from 2017 (18.1%); however it is a significant increase since the 2013 percentage of 14.1%. Female (21.5%) students reported significantly higher percentages of suicide ideation compared to male (14.1%) students. Students in 8th grade (16.3%) were significantly less likely to report suicidal ideation than students in 10th (19.4%) and 12th (18.2%) grade during 2019 (**Figure 27**).

Among the local health districts, students in Tooele County (21.4%) reported a significantly higher percentage of suicidal ideation than the state percentage (18.2%) in 2019. Students in Summit County (14.4%) and Wasatch County (12.3%) reported significantly lower percentages of suicidal ideation than the state percentage in 2019 (**Figure 28**).

Figure 27: Percent of Utah Students (Grades 8, 10, 12) Who Seriously Considered Attempting Suicide in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019

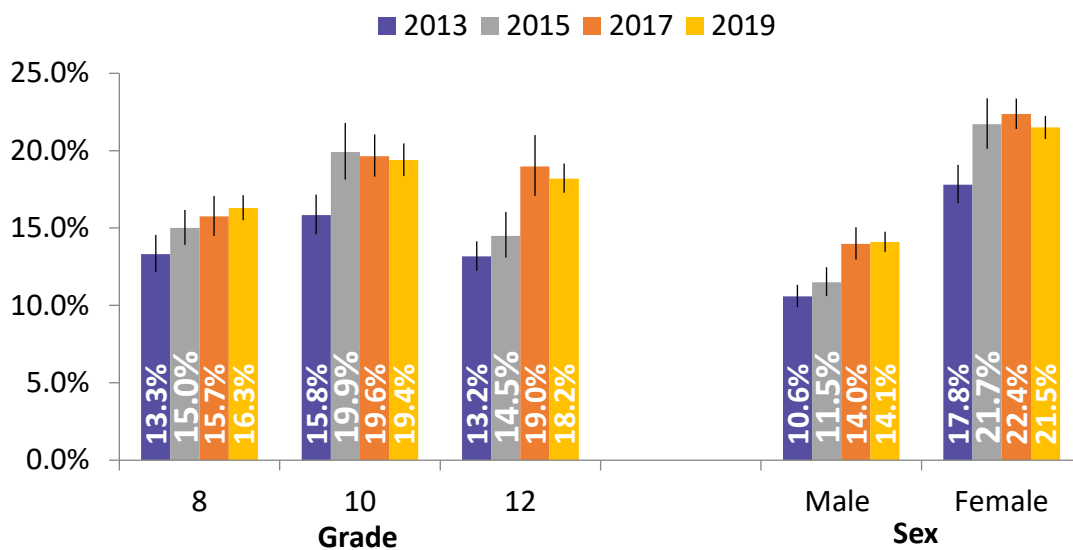
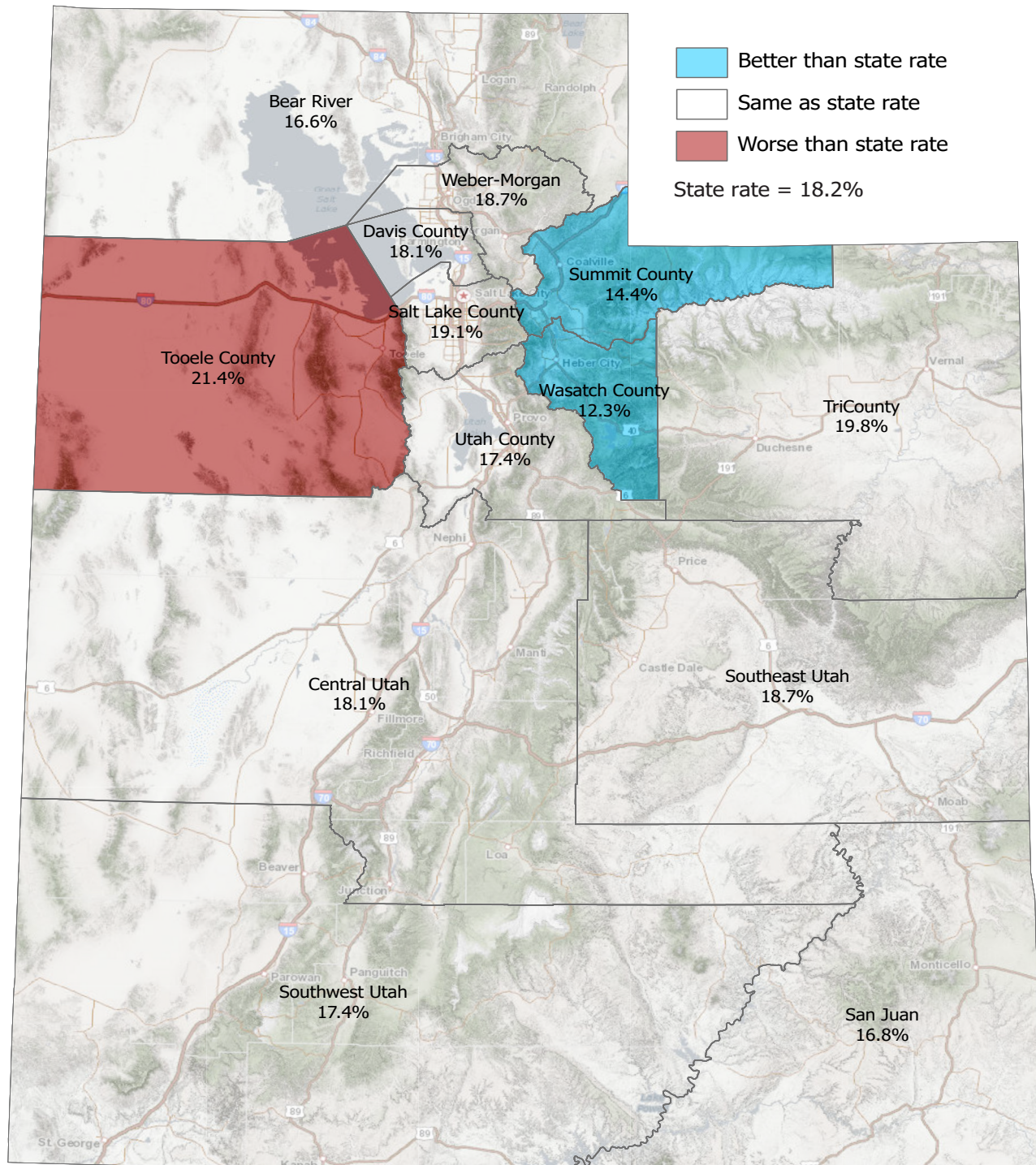


Figure 28: Percent of Utah Students (Grades 8, 10, 12) Who Seriously Considered Attempting Suicide in the Past 12 Months by Local Health District Map, Utah, 2019



Mental Health:

Suicide Plan

Suicide is the leading cause of death among adolescents ages 10-17 in Utah. More adolescents are hospitalized or treated in an emergency department for suicide attempts than are fatally injured.

In 2019, 13.6% of Utah students in grades 8, 10, and 12 reported making a suicide plan within the past 12 months. This was lower than the 2017 percentage of 14.3%; however it was a significant increase from the 2013 percentage of 10.8%. There was no statistically significant difference seen between grade levels in 2019. Females (15.5%) were significantly more likely than males (11.2%) to have made a suicide plan (**Figure 29**).

Among local health districts, students in Tooele County reported a significantly higher percentage (17.6%) of making suicide plans than the state percentage (13.6%) in 2019. Students in Utah County reported a significantly lower percentage (12.4%) of making suicide plans than the state percentage in 2019 (**Figure 30**).

Figure 29: Percent of Utah Students (Grades 8, 10, 12) Who Made a Suicide Plan in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019

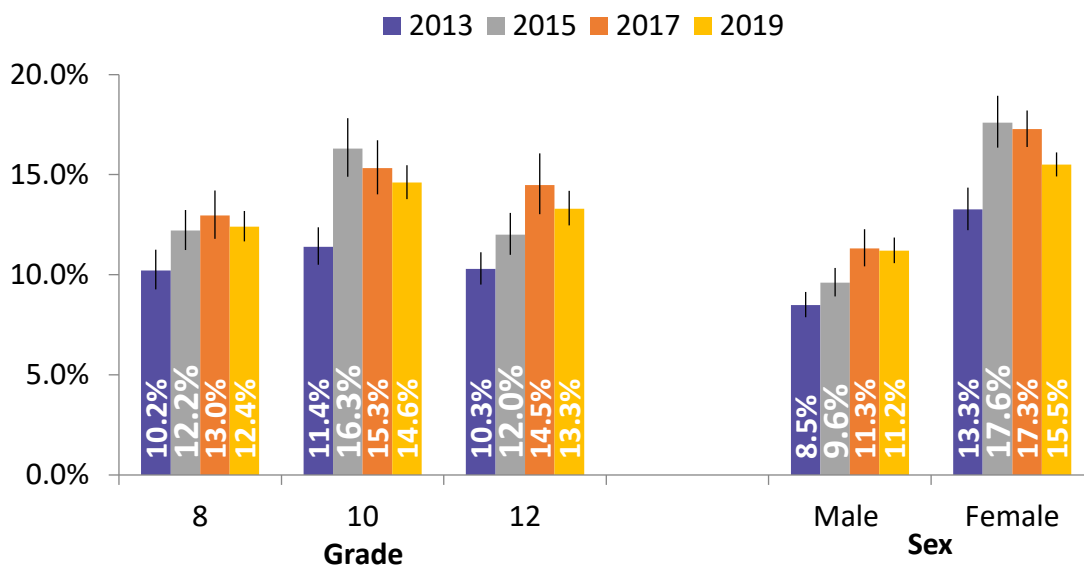
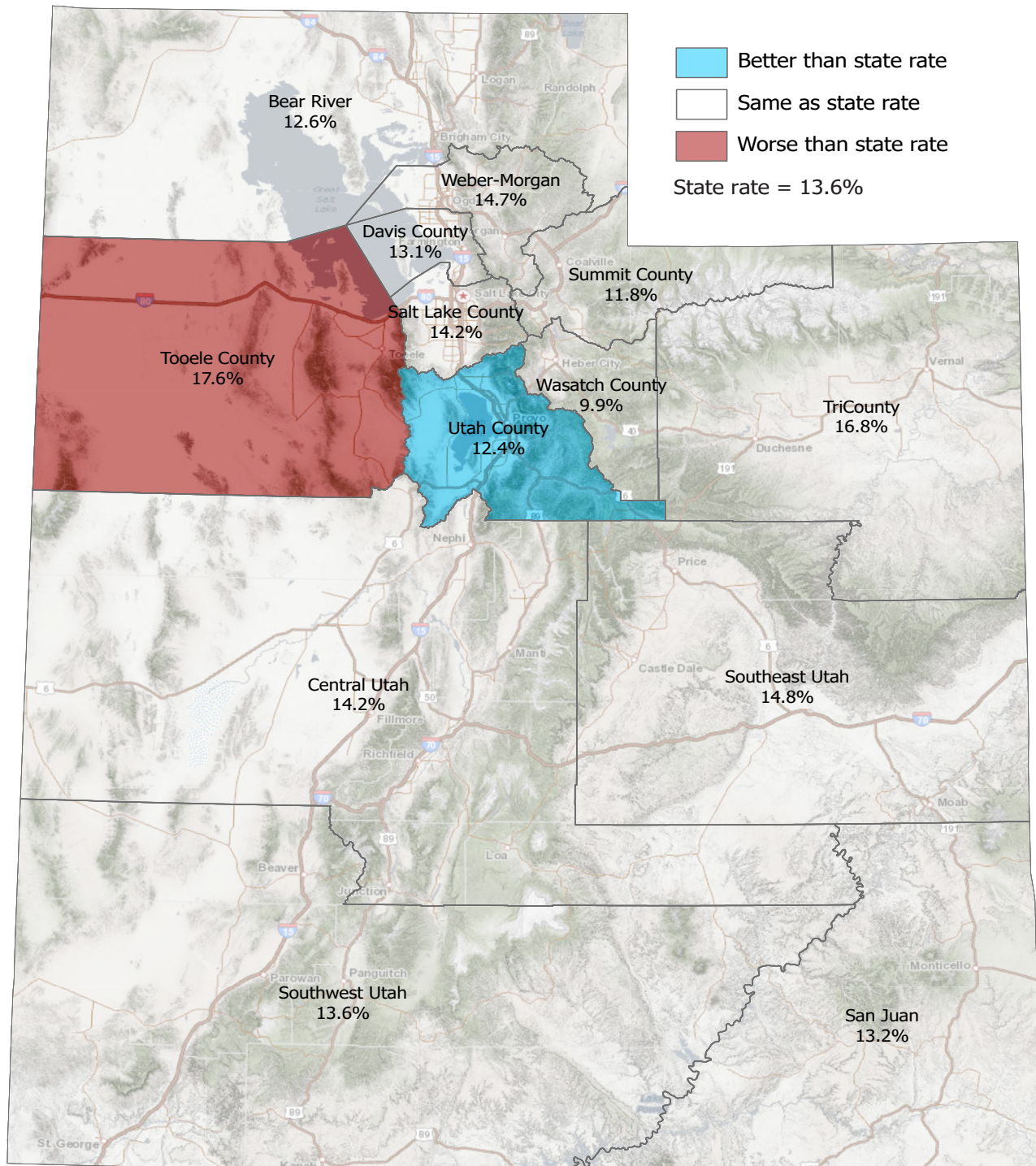


Figure 30: Percent of Utah Students (Grades 8, 10, 12) Who Made a Suicide Plan in the Past 12 Months by Local Health District Map, Utah, 2019



Mental Health:

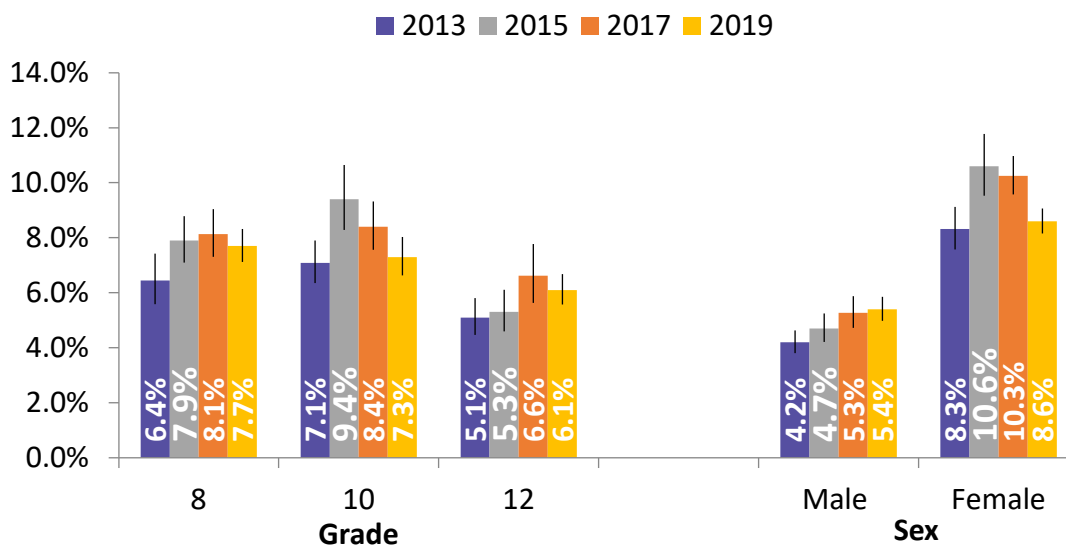
Suicide Attempt

Suicide is the leading cause of death among adolescents ages 10-17 in Utah. More adolescents are hospitalized or treated in an emergency department for suicide attempts than are fatally injured. Suicide attempts are a significant risk factor for suicide death later on. All suicide attempts should be taken seriously. Those who survive suicide attempts are often seriously injured and many have depression and other mental health problems.

In 2019, 7.2% of Utah students in grades 8, 10, and 12 reported that they had made one or more suicide attempts in the past 12 months. This was not significantly different from previous years. Reporting of suicide attempts in 2019 did not significantly differ among grade levels. Suicide attempts were significantly higher for females (8.6%) as compared to males (5.4%) (**Figure 31**).

Among local health districts, students in Tooele County reported a suicide attempt percentage (9.9%) that was significantly higher than the state percentage (7.2%) in 2019. Students in Summit County (5.2%), and Utah County (6.3%) reported significantly lower percentages than the state percentage in 2019 (**Figure 32**).

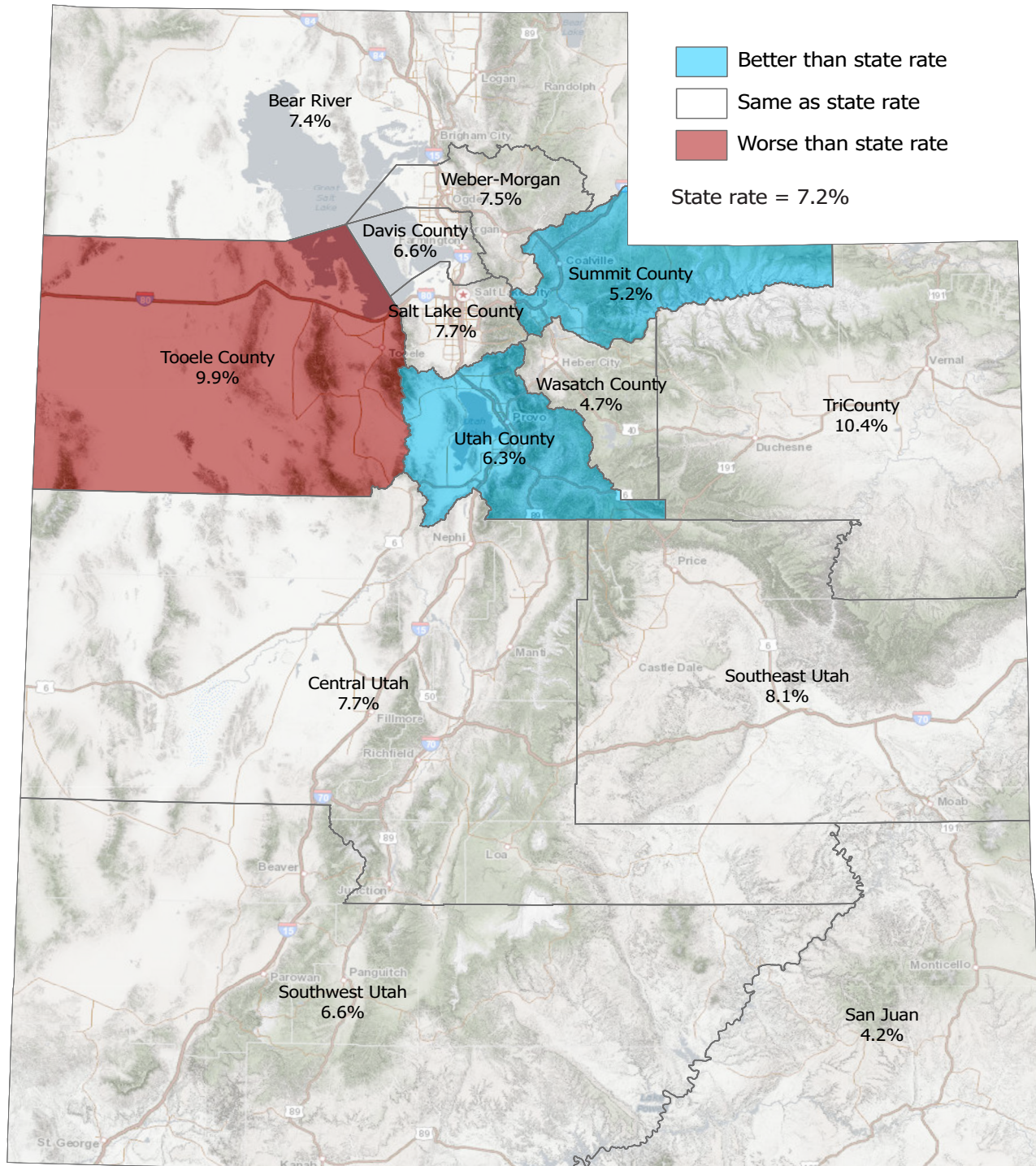
Figure 31: Percent of Utah Students (Grades 8, 10, 12) Who Made a Suicide Attempt in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Mental Health:

Suicide Attempt

Figure 32: Percent of Utah Students (Grades 8, 10, 12) Who Made a Suicide Attempt in the Past 12 Months by Local Health District Map, Utah, 2019



Substance Abuse:

Binge Drinking

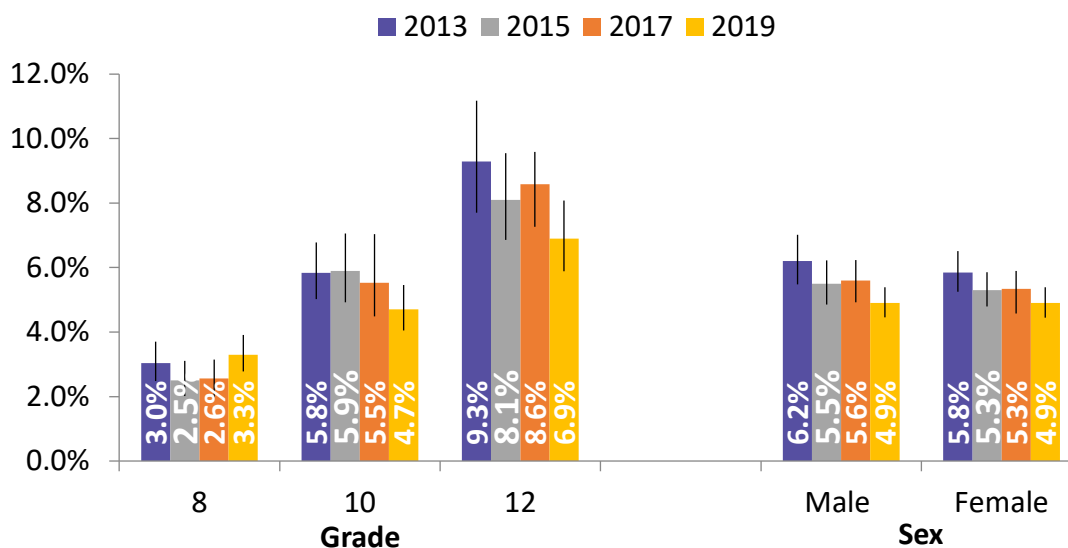
According to the Centers for Disease Control and Prevention, binge drinking (five or more drinks on an occasion for males or four or more drinks on an occasion for females), is the most common, costly, and deadly pattern of excessive alcohol use in the U.S. Binge drinking is associated with an increase in risk for many health and social harms, including liver cirrhosis, certain cancers, unintentional injuries, violence, and fetal alcohol spectrum disorders.¹⁵

In 2019, 4.9% of Utah students in grades 8, 10 and 12 reported being involved in binge drinking in the last 30 days. This is not significantly different from the 2017 reported percentage (5.5%).

Binge drinking increased significantly with each increasing grade level in 2019, rising from 3.3% for 8th graders to 4.7% for 10th graders and 6.9% for 12th graders. There was not a significant difference in reported percentages of binge drinking between males and females (**Figure 33**).

Among local health districts, students in Southeast (9.9%), Salt Lake County (6.4%), Summit County (11.6%), and Weber-Morgan (6.7%) reported significantly higher percentages than the state percentage (4.9%) in 2019. Utah County (2.9%), Bear River (3.6%), and Davis County (2.8%) had significantly lower percentages than the state percentage in 2019 (**Figure 34**).

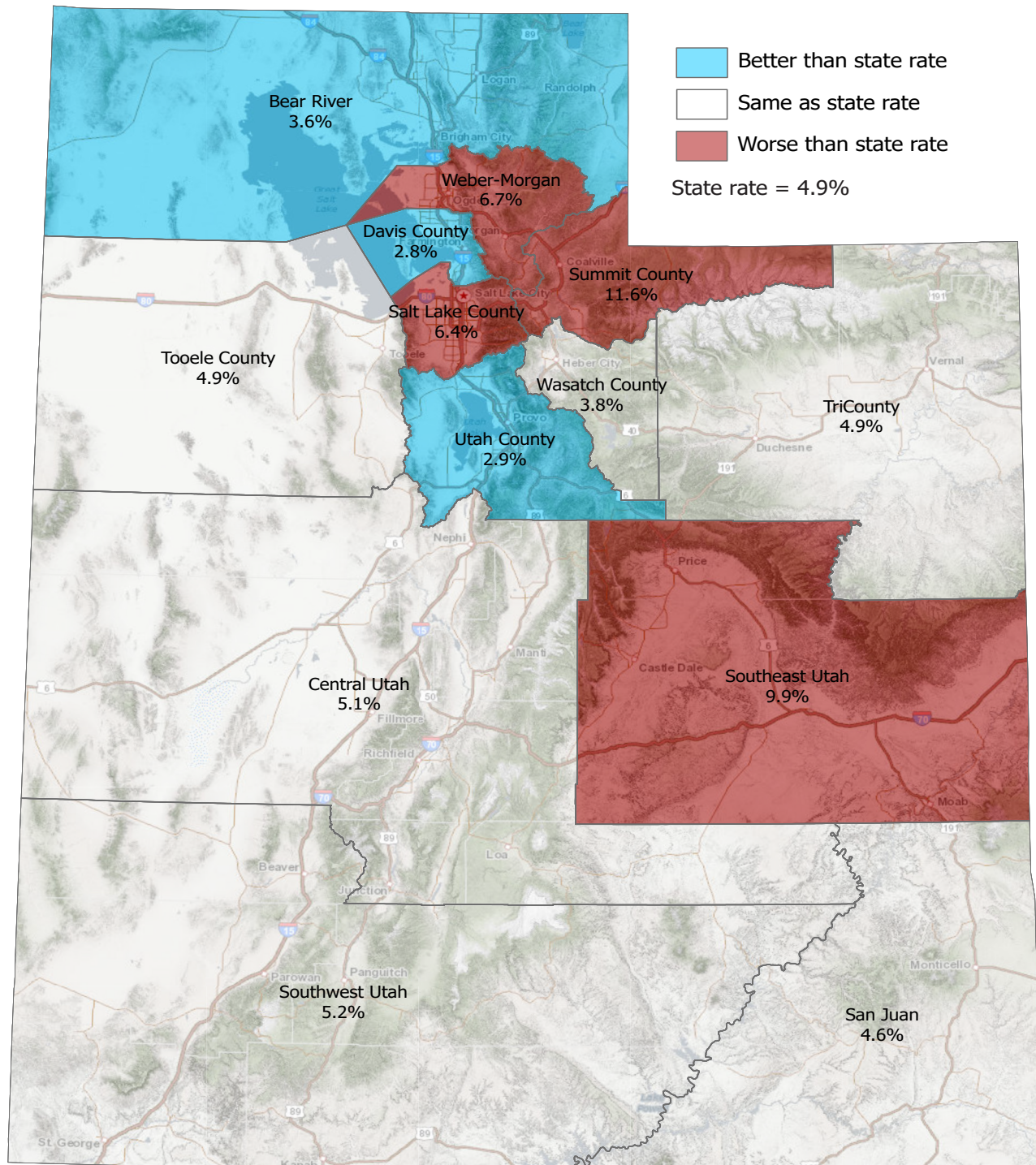
Figure 33: Percent of Utah Students (Grades 8, 10, 12) Who Reported Binge Drinking in the Last 30 Days by Grade and Sex, Utah, 2019



Substance Abuse:

Binge Drinking

Figure 34: Percent of Utah Students (Grades 8, 10, 12) Who Reported Binge Drinking in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

30-Day Alcohol

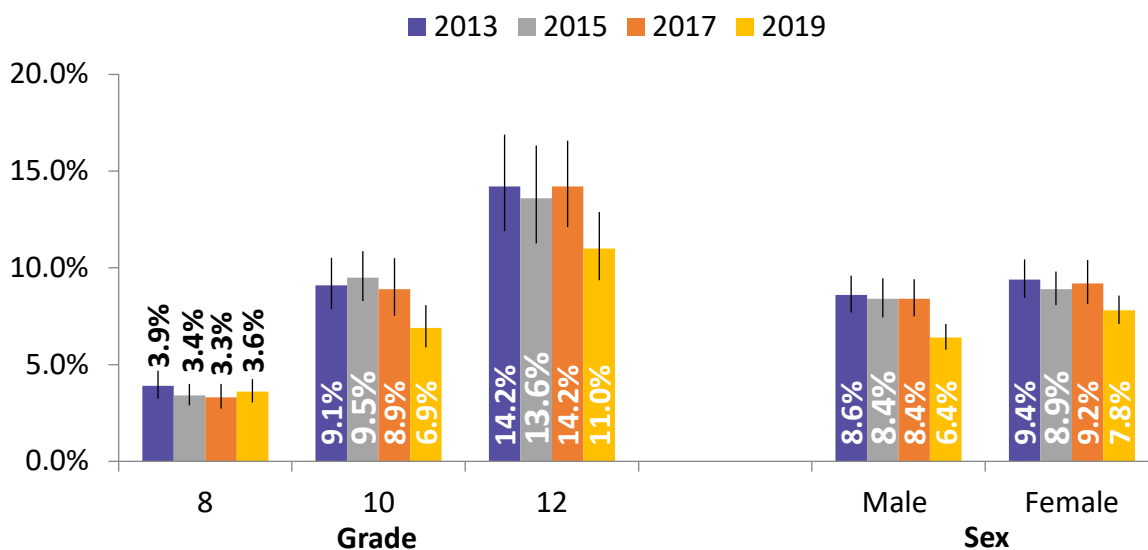
Youth who drink alcohol are more likely to experience school problems, social problems, legal problems, and physical problems. Youth alcohol use can lead to changes in brain development that may have life-long effects.¹⁶

Significantly fewer students reported using alcohol in the past 30 days in 2019 (7.1%) compared to 2017 (8.8%). This decrease was seen among males, females, 12th graders, and 10th graders.

Students in higher grades reported greater alcohol use in the past 30 days than students in lower grades. In 2019, 3.6% of 8th grade students, 6.9% of 10th grade students, and 11.1% of 12th grade students reported using alcohol in the past 30 days. The use of alcohol in the past 30 days was significantly higher for 12th grade students. Female alcohol use (7.8%) was significantly higher than male alcohol use (6.4%) (**Figure 35**).

Among local health districts, Summit County (18.2%), Southeast (13.2%), Weber-Morgan (10.0%), and Salt Lake County (9.5%) all had significantly higher than the state percentage (7.1%). Utah County (4.1%), Davis County (4.5%), and Bear River (4.9%) all had percentages significantly lower than the state percentage(**Figure 36**).

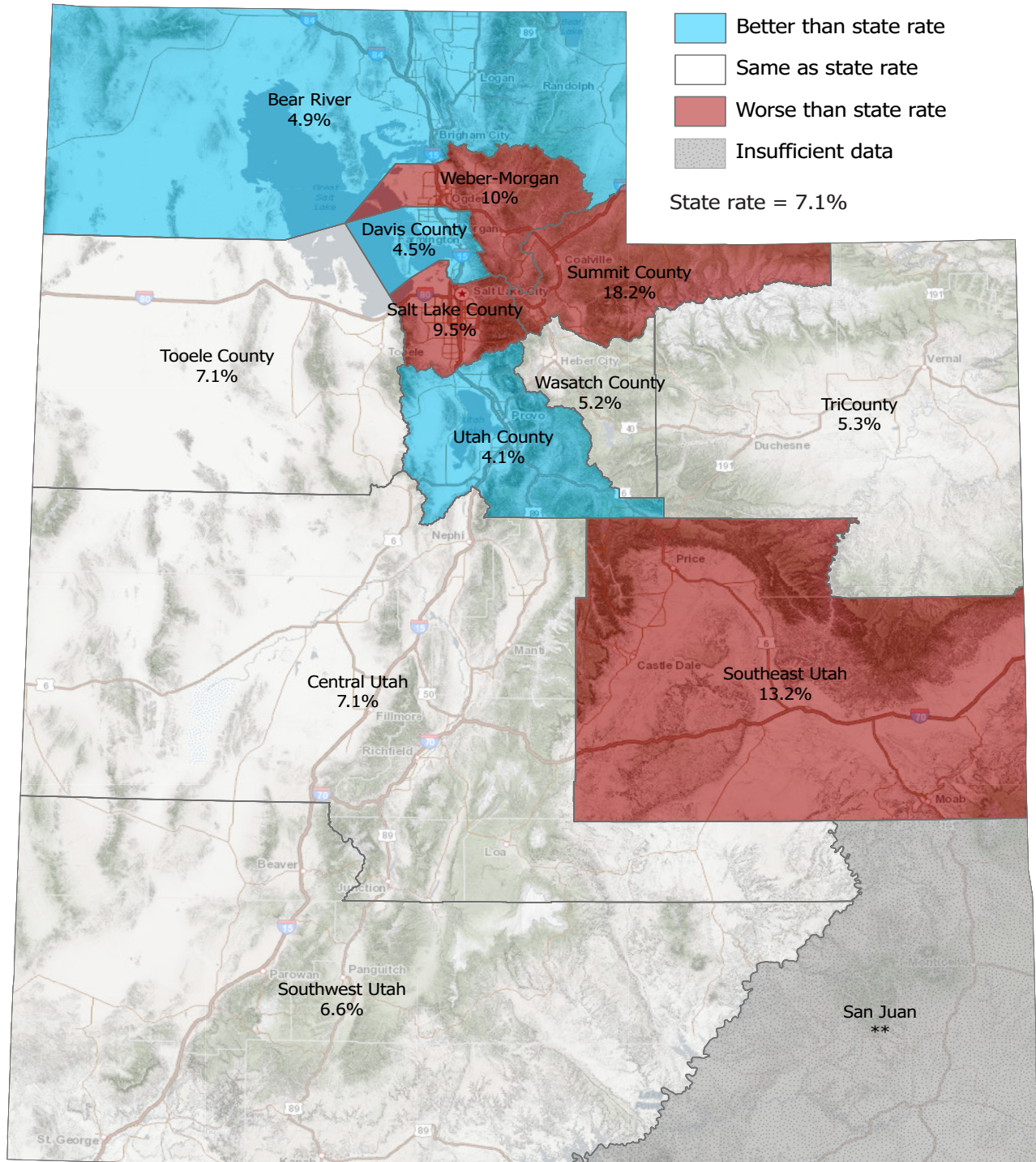
Figure 35: Percent of Utah Students (Grades 8, 10, 12) Who Drank Alcohol in the Past 30 Days by Grade and Sex, Utah, 2019



Substance Abuse:

30-Day Alcohol

Figure 36: Percent of Utah Students (Grades 8, 10, 12) Who Drank Alcohol in the Last 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

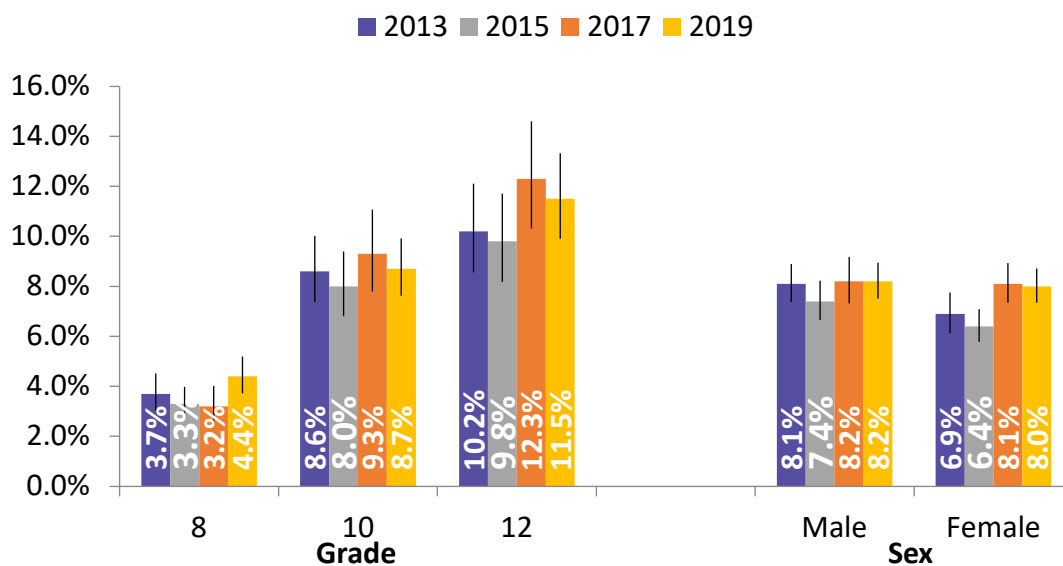
Marijuana Use

Marijuana is now legal for recreational or medical use in many states. The legalization of marijuana has raised the percentages of unintended marijuana exposure among young children and adolescents. The drug has harmful effects on developing adolescents and can affect brain development, cognition, and social functioning.¹⁷ Adolescents who use marijuana are also at greater risk for cardio-respiratory disease and testicular cancer.¹⁸ Effects of marijuana use increase for adolescents who begin smoking younger, who smoke heavier, and who continue smoking into adulthood.¹⁹

In 2019, 8.2% of Utah students in grades 8, 10 and 12 reported using marijuana in the last 30 days. This is not a significant increase from 2017 (8.1%). Marijuana use increased with increasing grade level. Eighth grade students (4.4%) were significantly less likely to use marijuana than 10th (8.7%) and 12th (11.5%) grade students. The percentage of marijuana use was not significantly different between males and females (Figure 37).

Among local health districts, students in Salt Lake County (11.9%) and Weber-Morgan (11.3%) reported a significantly higher youth marijuana use percentage than the state percentage (8.2%) in 2019. Students in Bear River (4.4%), Central Utah (4.8%), Davis County (5.3%), Utah County (5.1%), Southwest (6.7%), and Tri County (3.8%) reported significantly lower marijuana use percentages than the state percentage in 2019 (Figure 38).

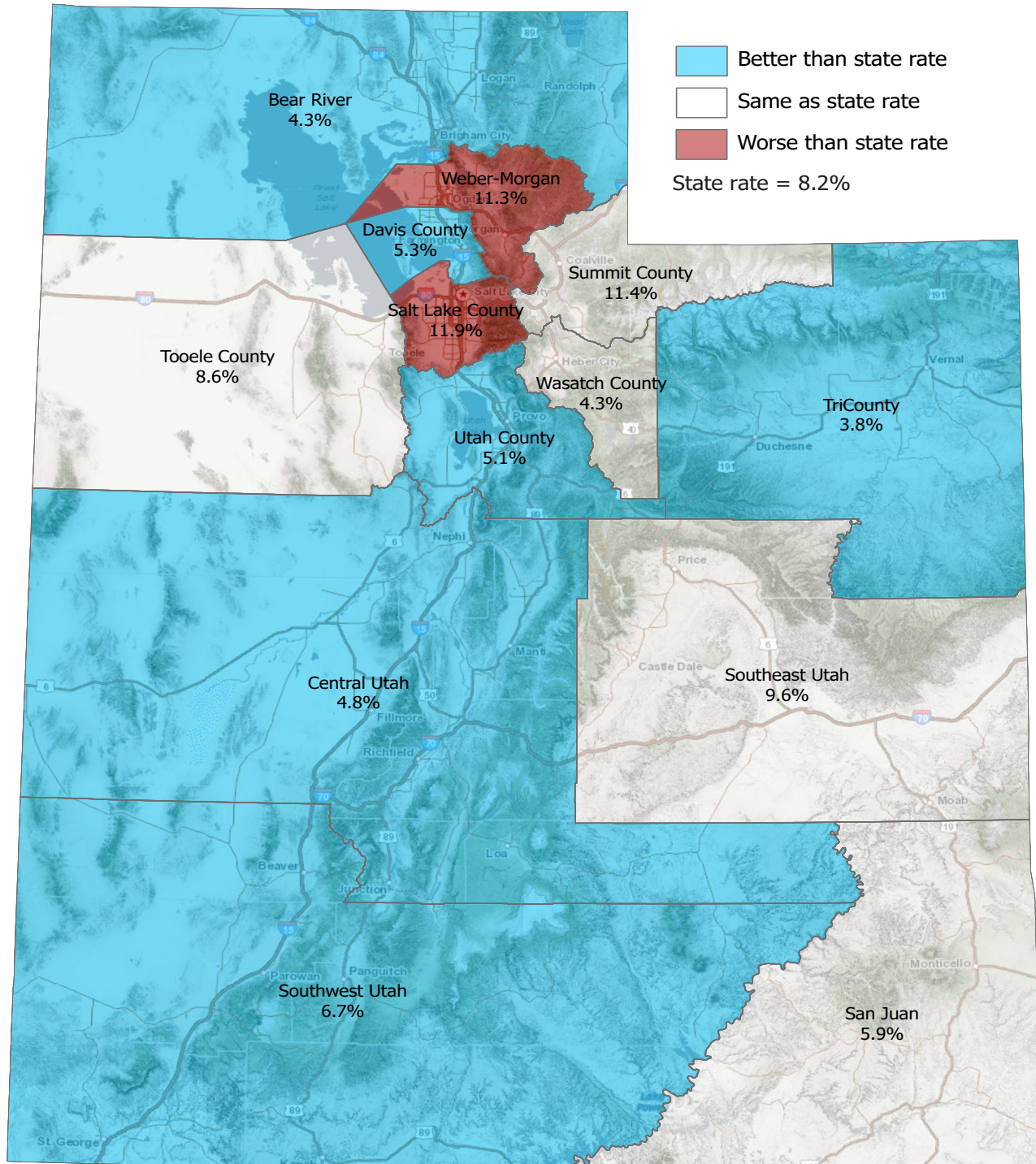
Figure 37: Percent of Utah Students (Grades 8, 10, 12) Who Used Marijuana in the Past 30 Days by Grade and Sex, Utah, 2019



Substance Abuse:

Use Marijuana

Figure 38: Percent of Utah Students (Grades 8, 10, 12) Who Used Marijuana in the Last 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

Prescription Drug Use

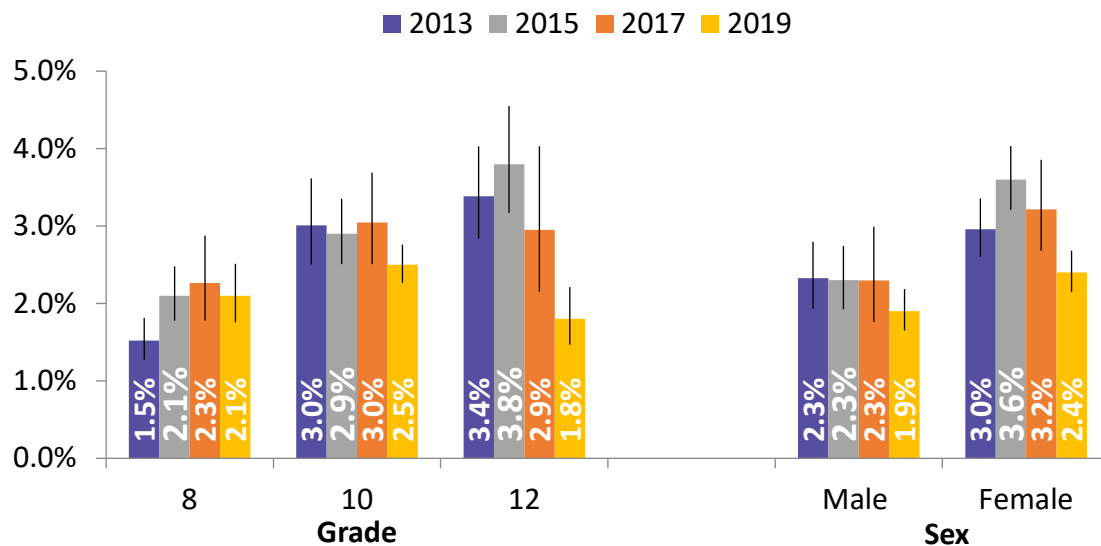
Prescription drugs can be very helpful when prescribed by a doctor and used as directed. The misuse and abuse of prescription medications is a significant health concern in Utah and has led to many deaths due to drug overdose.²⁰

In 2019, 2.2% of students in grades 8, 10, and 12 reported that they had used prescription drugs that were not prescribed to them in the past 30 days, which is not significantly different from recent years.

No significant differences were noted among male and female students. Students in the 8th grade (2.1%) reported significantly higher rates of prescription drug use than in the 12th grade (1.8%) (**Figure 39**).

Among local health districts, Tooele County (3.3%) reported a significantly higher percentage of prescription drug use than the state percentage (2.2%) in 2019. No districts reported a significantly lower percentage (**Figure 40**).

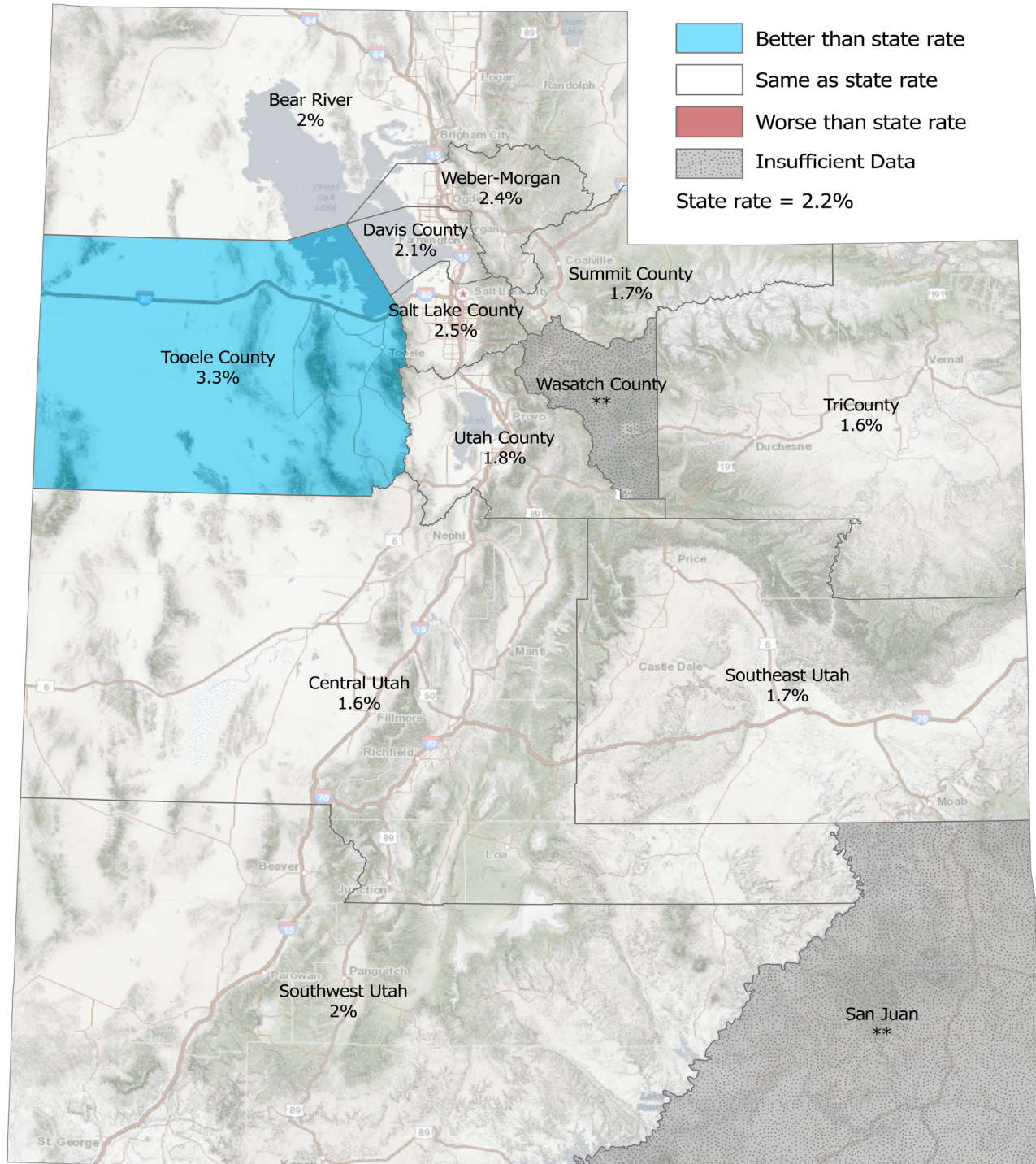
Figure 39: Percent of Utah Students (Grades 8, 10, 12) Who Reported Using Prescription Drugs That Were Not Prescribed to Them in the Past 30 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Prescription Drug Use

Figure 40: Percent of Utah Students (Grades 8, 10, 12) Who Reported Using Prescription Drugs That Were Not Prescribed to Them in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

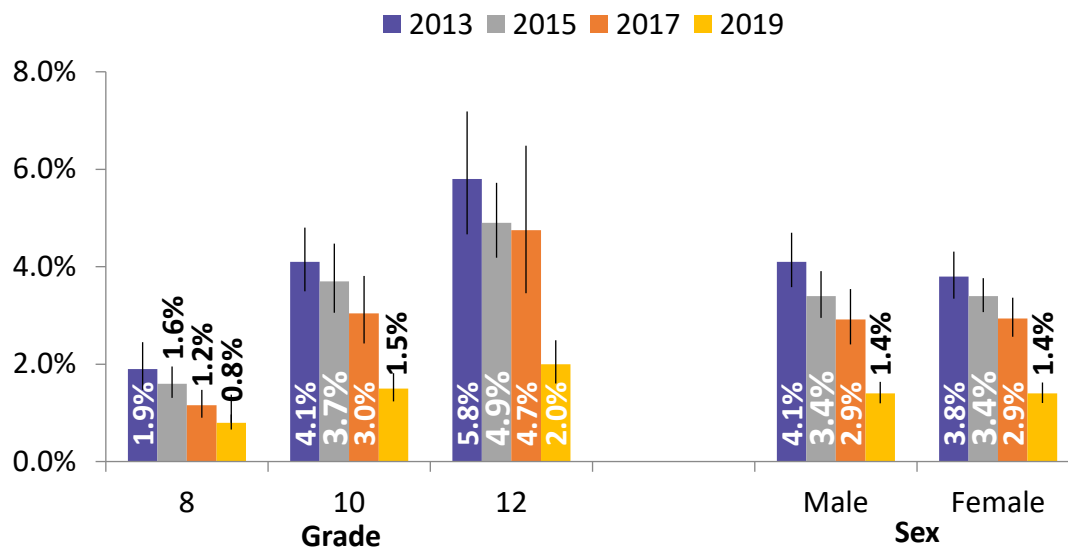
Cigarette Smoking

Current cigarette smoking among Utah students has declined significantly since the Utah Department of Health expanded its comprehensive Tobacco Prevention and Control Program in 2000²¹, following adoption of the Master Settlement Agreement with major tobacco companies.²² In 2019, 1.5% of Utah students in grades 8, 10, and 12 reported that they had smoked cigarettes in the past 30 days. Cigarette smoking among Utah students has shown a continuous decline since 2013 when 3.8% of Utah students smoked cigarettes in the past 30 days.

Students in higher grades were more likely to smoke cigarettes than students in lower grades. In 2019, smoking among 8th grade students (0.8%) was significantly lower than smoking among students in 10th (1.5%) and 12th (2.0%) grade. Smoking rates for male and female students in grades 8, 10, and 12 combined were comparable. From 2013 to 2019, cigarette smoking decreased significantly for all grades and for males and females (**Figure 41**).

Among local health districts, students in Southeast (3.8%), Central Utah (2.8%), and Tooele County (2.1%) reported significantly higher rates of cigarette smoking than the 2019 state average (1.5%). Students in Utah County (0.8%) and Davis County (1.0%) reported significantly lower percentages than the 2019 state average (**Figure 42**).

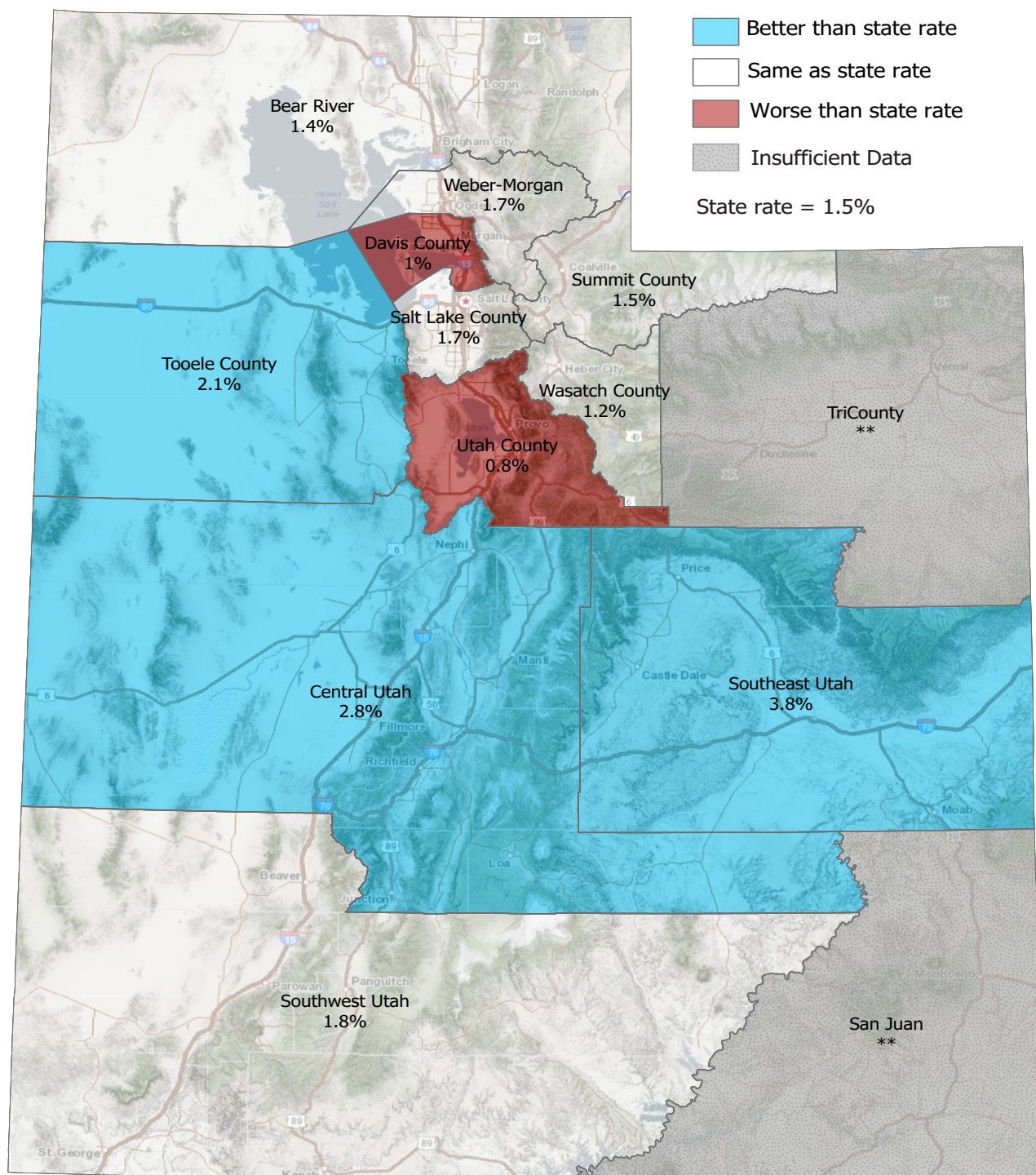
Figure 41: Percent of Utah Students (Grades 8, 10, 12) Who Smoked Cigarettes in the Past 30 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Cigarette Smoking

Figure 42: Percent of Utah Students (Grades 8, 10, 12) Who Smoked Cigarettes in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

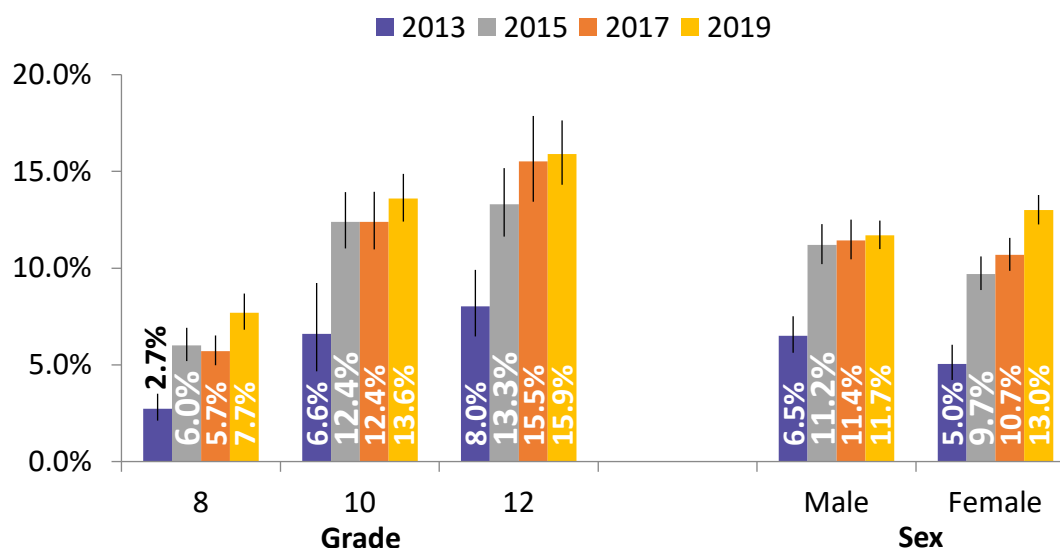
Electronic Cigarette Use

Electronic cigarettes (also known as e-cigarettes, vape products, or mods) are battery-powered devices that turn liquids (usually containing nicotine) into an aerosol inhaled by the user. They are frequently marketed as safer alternatives to conventional cigarettes. Use of vape products among Utah students more than doubled from 2013 to 2019. In 2019, 12.4% of students in grades 8, 10, and 12 reported that they used vape products in the past 30 days compared to 5.8% in 2013.

From 2013 to 2019, use of vape products increased significantly among male and female students as well as 8th, 10th and 12th grade students. In 2019, female students (13%) used vaping products significantly more than male students (11.7%). Students in higher grades were more likely to vape than students in lower grades; in 2019, 10th and 12th grade students were significantly more likely to report vaping than 8th grade students. Vaping rates nearly doubled from 8th grade (7.7%) to 10th grade (13.6%). The rate of current vaping among 12th grade students was 15.9% (**Figure 43**).

Among local health districts, students in Salt Lake County (15.3%), Southeast Utah (21%), Summit County (16.9%), Tooele County (16.2%), and Weber-Morgan (18.4) reported higher percentages than the 2019 state percentage (12.4%). Students in Bear River (8.9%), Utah County (7.6%), Davis County (9.6%), and San Juan County (2.2%) reported lower percentages than the 2019 state percentage (**Figure 44**).

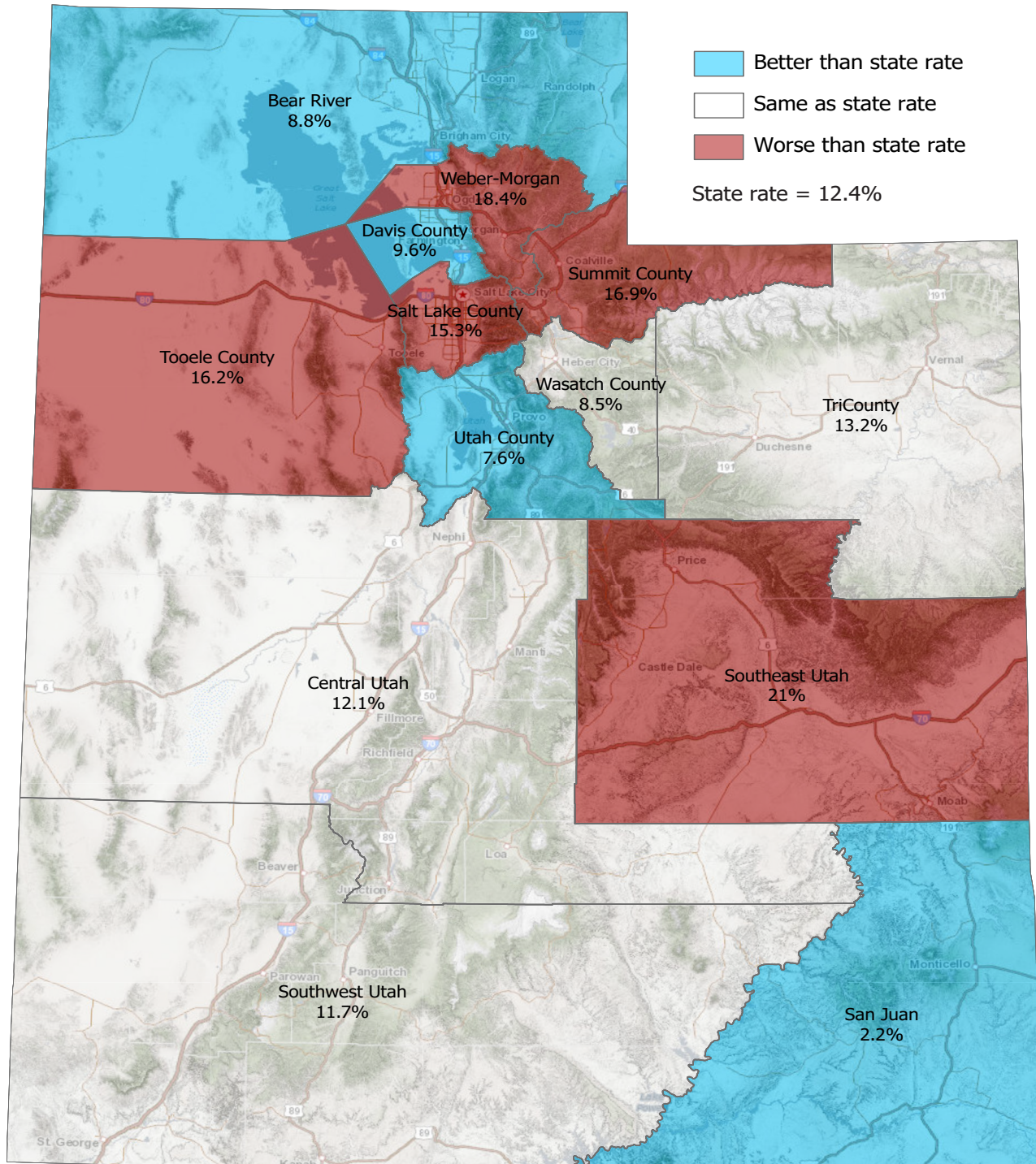
Figure 43: Percent of Utah Students (Grades 8, 10, 12) Who Used E-Cigarettes in the Past 30 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Electronic Cigarette Use

Figure 44: Percent of Utah Students (Grades 8, 10, 12) Who Used E-Cigarettes in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

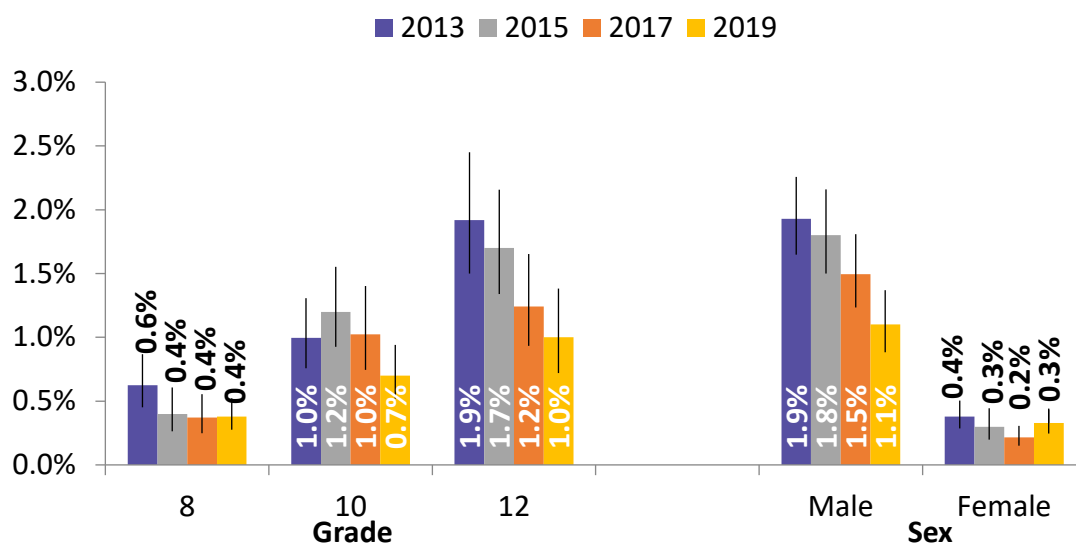
Use of Chew, Snuff, or Dip

Use of smokeless tobacco is not a safe alternative to cigarette smoking. The health risks associated with smokeless use include heart disease and cancer of the mouth, esophagus, pharynx, larynx, stomach, and pancreas.²³

In 2019, 0.7% of Utah students in grades 8, 10, and 12 reported that they had used smokeless tobacco (chew, snuff, or dip) in the past 30 days. Use of smokeless tobacco did not change significantly compared to previous years. In addition, no significant differences in smokeless tobacco use were observed by grade. Males (1.1%) were significantly more likely to report using smokeless tobacco in 2019 than females (0.3%) (**Figure 45**).

Among local health districts, students in Southeast (3.7%), Central (2.1%), Southwest (1.2%), and Tooele County (1.3%) reported significantly higher rates of smokeless tobacco use than the 2019 state percentage (0.7%). Students in Davis County (0.1%) and Utah County (0.4%) reported significantly lower rates of smokeless tobacco use than the 2019 state percentage (**Figure 46**).

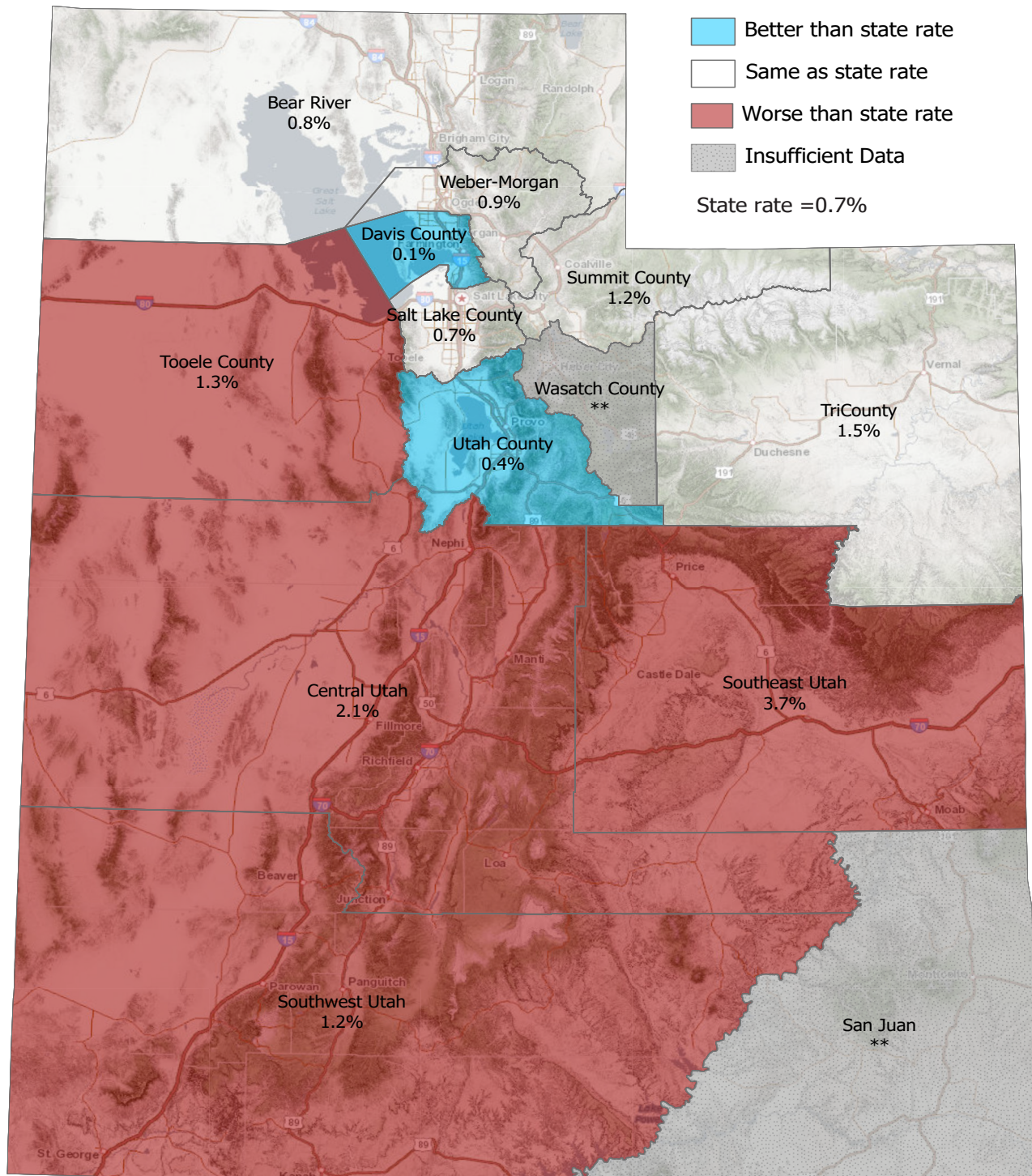
Figure 45: Percent of Utah Students (Grades 8, 10, 12) Who Used Chewing Tobacco, Snuff, or Dip in the Past 30 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Use of Chew, Snuff, or Dip

Figure 46: Percent of Utah Students (Grades 8, 10, 12) Who Used Chewing Tobacco, Snuff, or Dip in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

Anti-tobacco Ad Recall

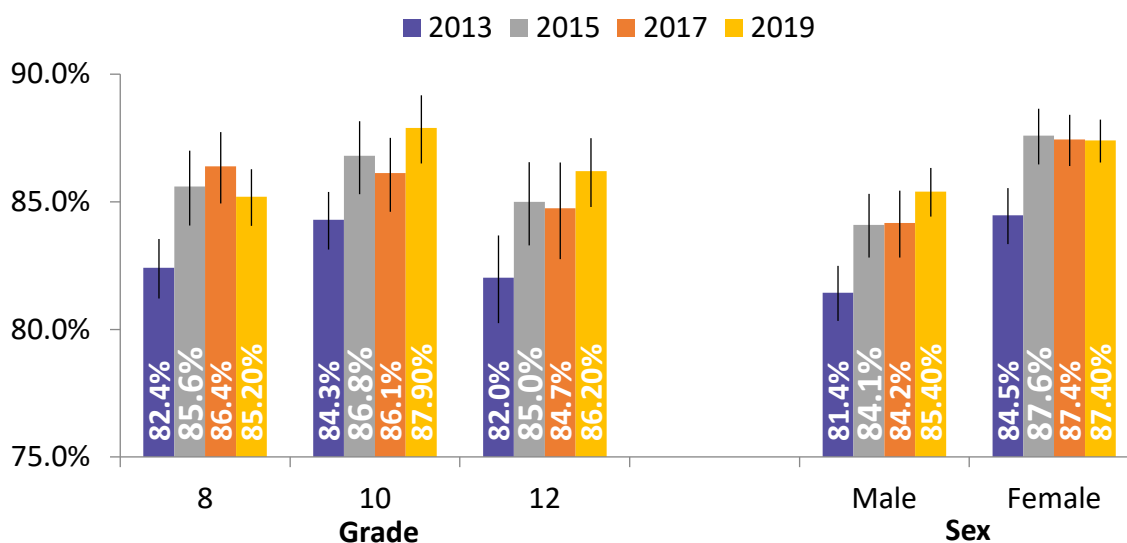
Although tobacco advertising targeted to adolescents is prohibited in the U.S., young people continue to be exposed to pro-tobacco messages in a variety of settings. To counter pro-tobacco messages and inform the public of the health and social consequences of tobacco use, the Utah Department of Health Tobacco Prevention and Control Program funds a comprehensive anti-tobacco marketing campaign.

In 2019, 86.4% of Utah students reported that they had seen advertising or campaigns against smoking in the past 30 days. This was a significant increase from the reported 81.1% in 2013, and no change from the reported percentage in 2015 (85.8%) and 2017 (85.8%).

In 2019, female students (87.4%) were significantly more likely to report that they saw anti-smoking ads in the past 30 days than male students (85.4%), following the trends found in 2013, 2015, and 2017. In 2019, 10th graders were significantly more likely to report seeing anti-tobacco ads than 8th graders (**Figure 47**).

Among local health districts, students in San Juan County (73.5%) and Summit County (83.6%) reported a significantly lower rate of exposure to anti-tobacco ads than the 2019 state percentage (86.4%). No local health districts reported significantly higher percentages of anti-tobacco ad exposure than the 2019 state percentage (**Figure 48**).

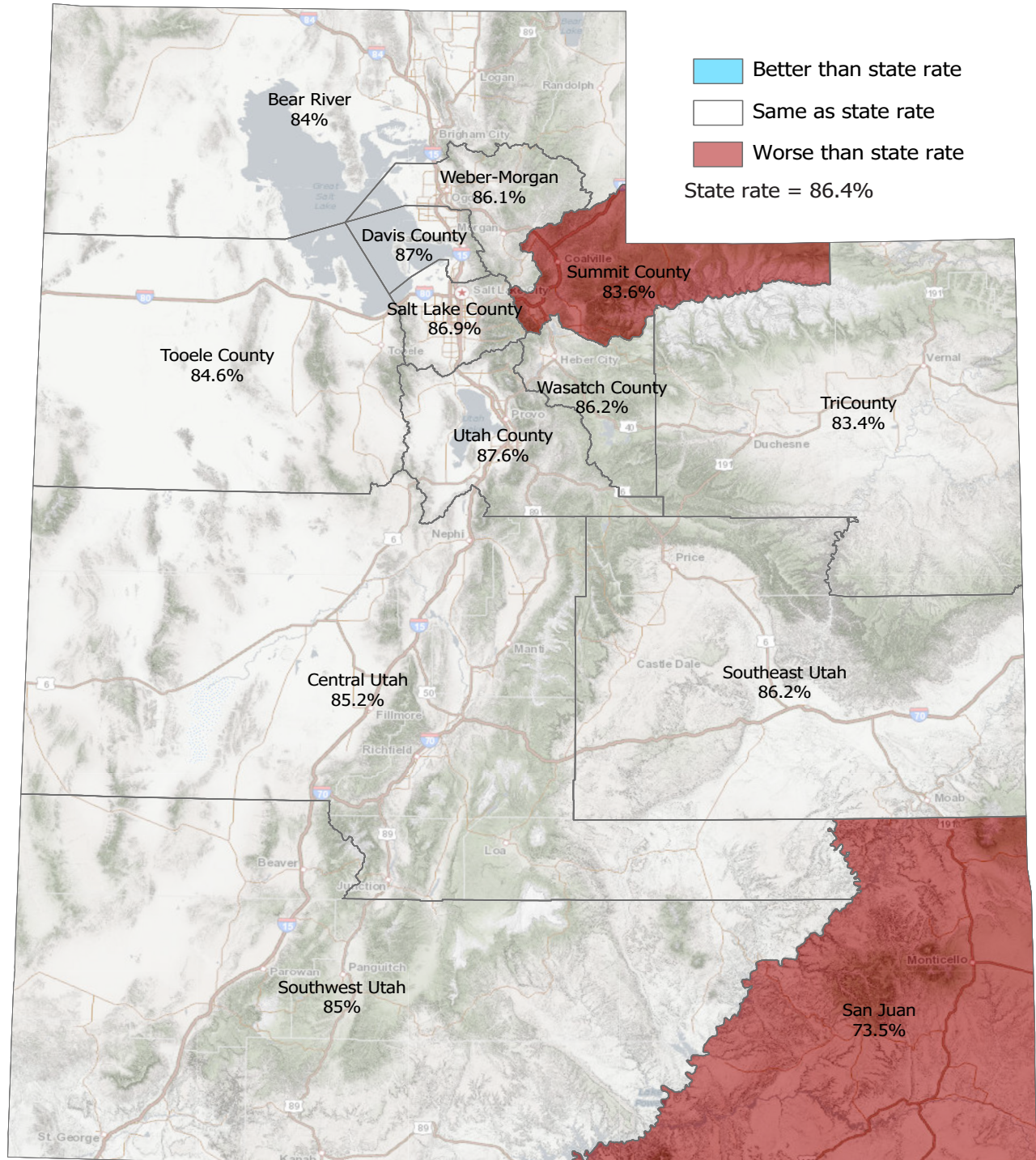
Figure 47: Percent of Utah Students (Grades 8, 10, 12) Who Saw or Heard Anti-tobacco Advertising in the Past 30 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Anti-tobacco Ad Recall

Figure 48: Percent of Utah Students (Grades 8, 10, 12) Who Saw or Heard Anti-tobacco Advertising in the Past 30 Days by Local Health District Map, Utah, 2019



Substance Abuse:

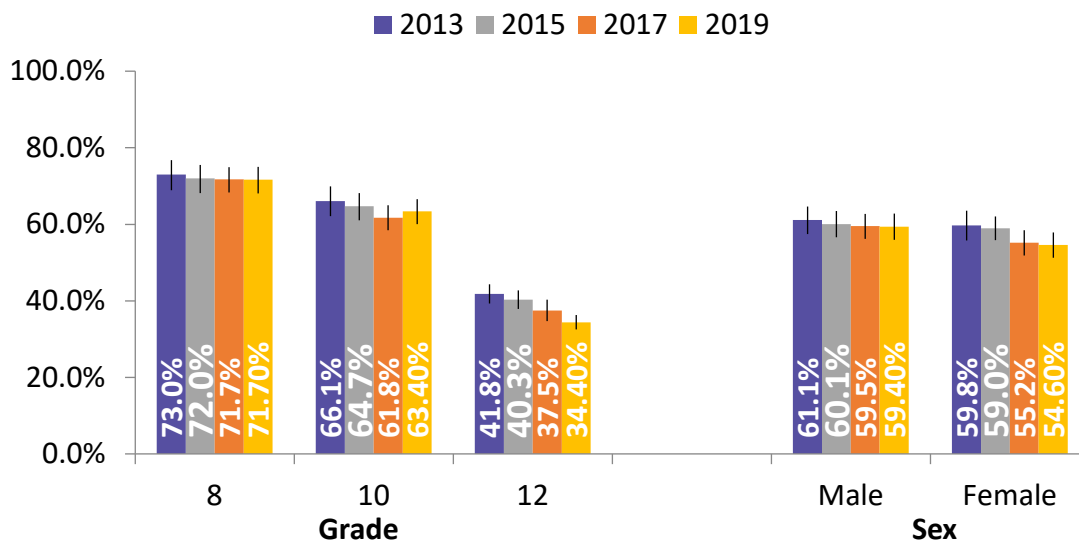
Anti-tobacco Lessons in School

The CDC Guidelines for School Health Programs to Prevent Tobacco Use and Addiction state that school-based anti-tobacco programs are most effective when they include developmentally appropriate instruction in grades K-12 about the short- and long-term physiological and social consequences of tobacco use, as well as refusal skills.²⁴

In 2019, 56.9% of Utah students in grades 8, 10, and 12 reported that they received anti-tobacco education during the past school year. The 2019 percentage is not significantly different from previous years. Exposure to anti-tobacco education decreased significantly with increasing grade level. At 34.4%, 12th grade students reported a significantly lower rate of anti-tobacco education than 10th grade students (63.4%) and 8th grade students (71.7%). Male and female students reported comparable rates for receiving anti-tobacco education in the past school year (**Figure 49**).

No local health districts reported higher or lower percentages of receiving anti-tobacco lessons than the 2019 state percentage (56.9%) (**Figure 50**).

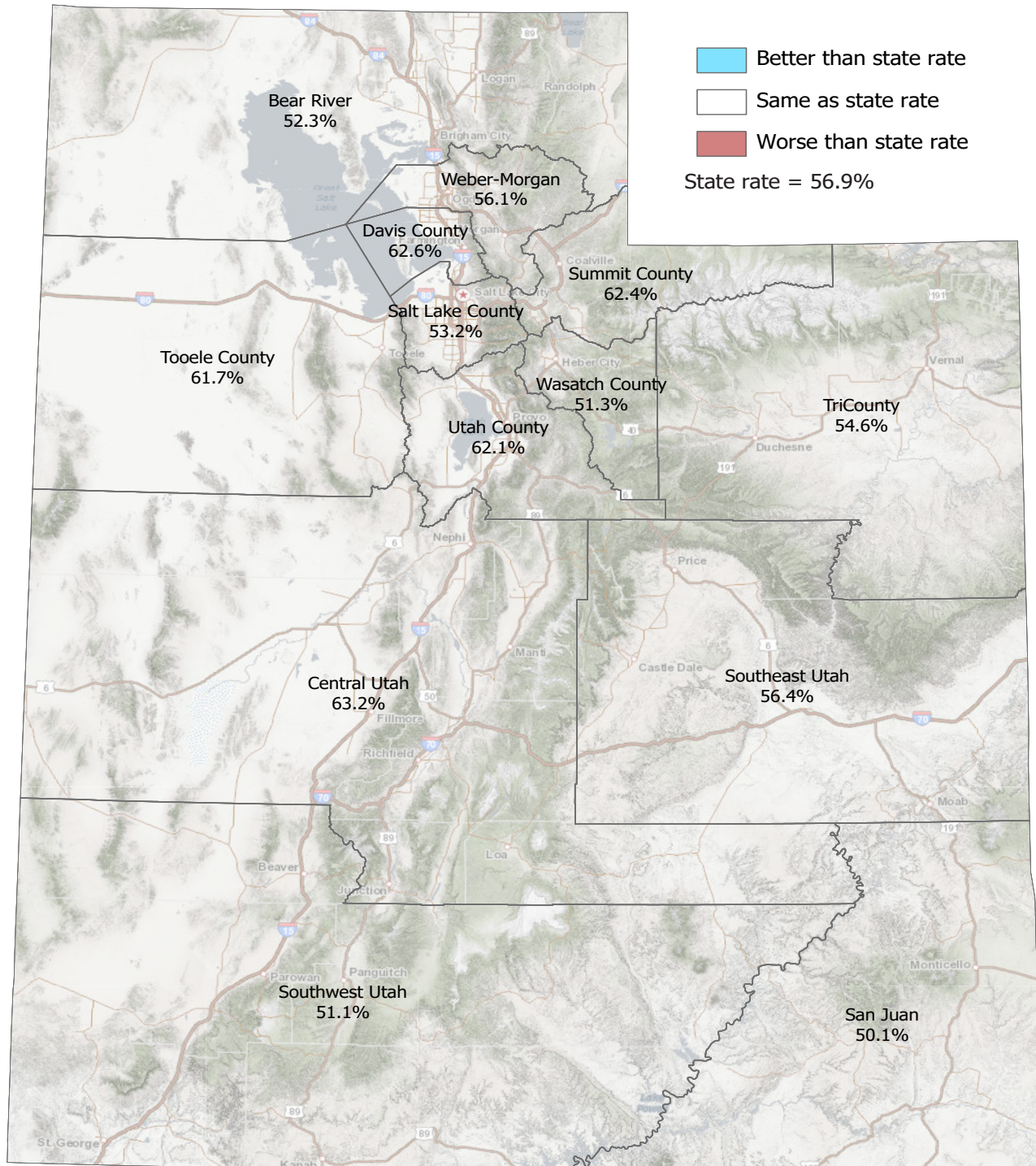
Figure 49: Percent of Utah Students (Grades 8, 10, 12) Who Were Taught About the Dangers of Tobacco During the Current School Year by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Anti-tobacco Lessons in School

Figure 50: Percent of Utah Students (Grades 8, 10, 12) Who Were Taught About the Dangers of Tobacco During the Current School Year by Local Health District Map, Utah, 2019



Substance Abuse:

Exposed to Smoking at Home

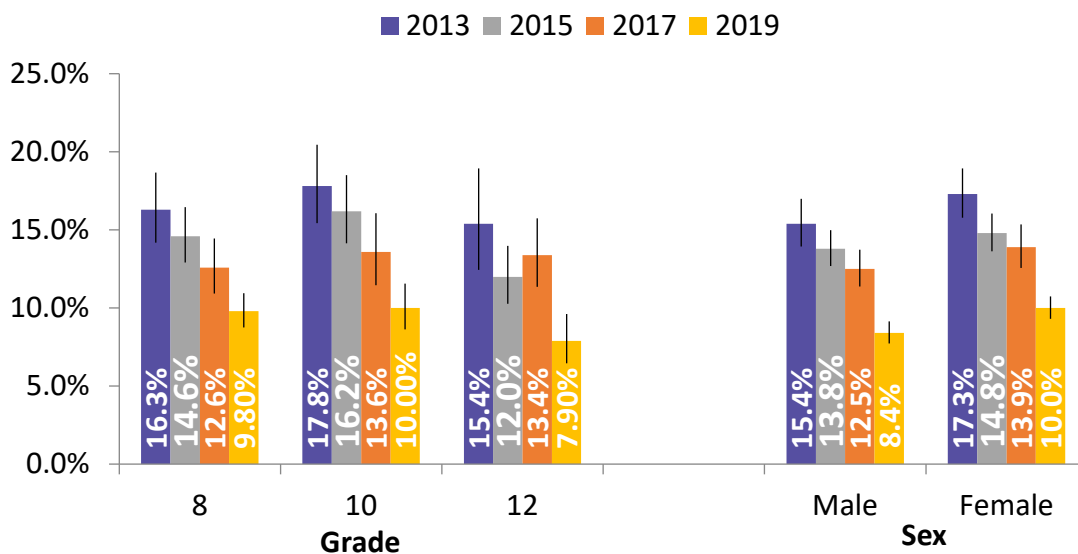
Children who live in households where one or more of the other household members smoke cigarettes are more likely to have tried smoking than children who live in households without smokers.²⁵

In 2019, 9.3% of students in grades 8, 10, and 12 reported that they lived in a household where someone smoked cigarettes. These rates have decreased significantly since 2013 when 16.5% of students reported that someone who smoked lived in their household and 2017 when the rate was 13.2%.

There were no significant differences in exposure to smoking at home by grade. In 2019, female students (10%) were significantly more likely to report living in a household where someone smoked cigarettes than male students (8.4%) (**Figure 51**).

Among local health districts, students in Southeast (28.4%), TriCounty (20.4%), Salt Lake County (16.8%), Tooele County (16.7%), and Central (15.5%) reported significantly higher rates of living in a household with one or more smokers than the 2019 state percentage (9.3%) (Figure 48). Students in Utah County (8.3%), Wasatch County (9.5%), and Bear River (10.3%) reported significantly lower percentages of exposure to smoking at home than the 2019 state percentage (**Figure 52**).

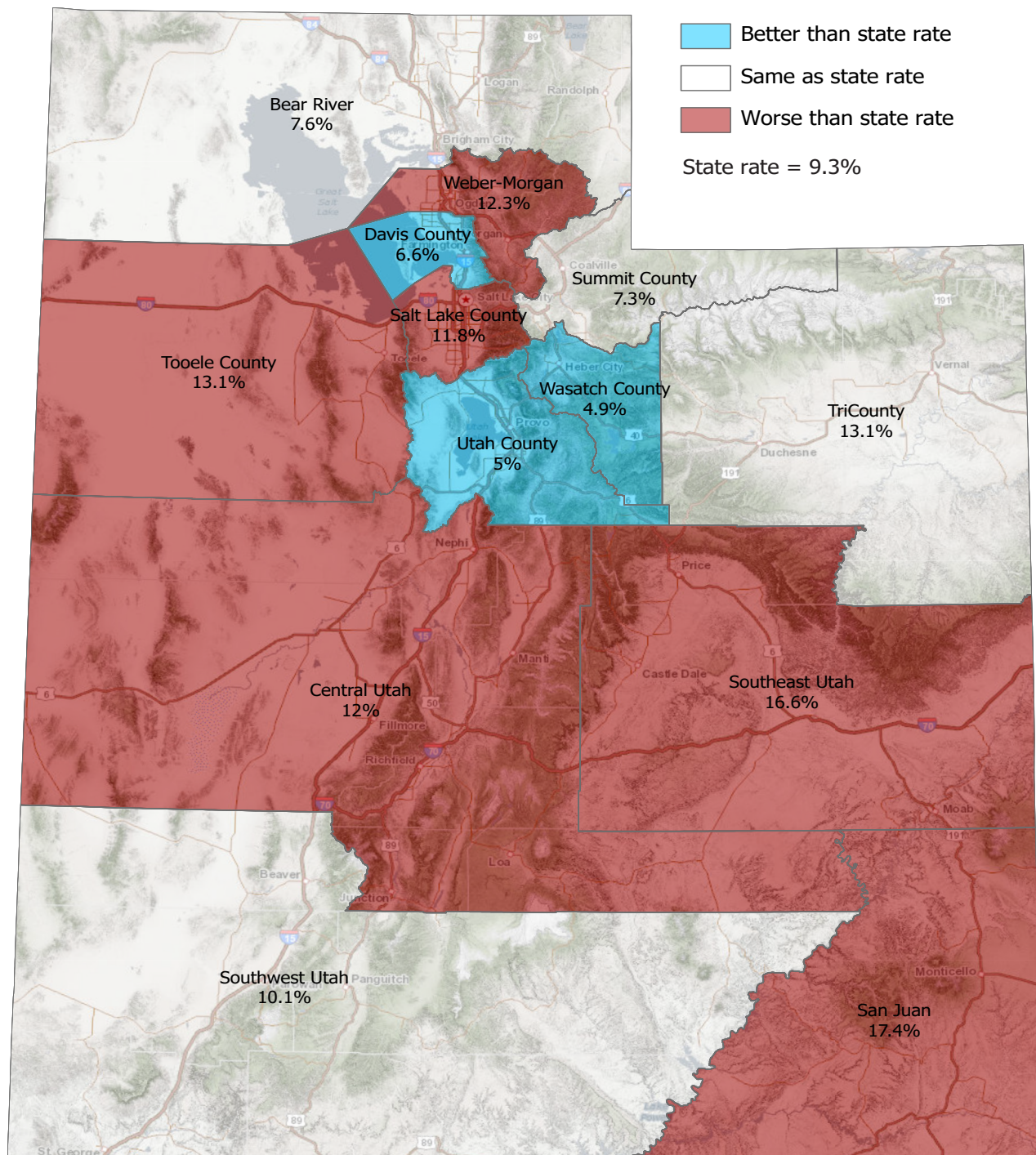
Figure 51: Percent of Utah Students (Grades 8, 10, 12) Who Currently Live With Someone Who Smokes Cigarettes by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Exposed to Smoking at Home

Figure 52: Percent of Utah Students (Grades 8, 10, 12) Who Currently Live With Someone Who Smokes Cigarettes by Local Health District Map, Utah, 2019



Substance Abuse:

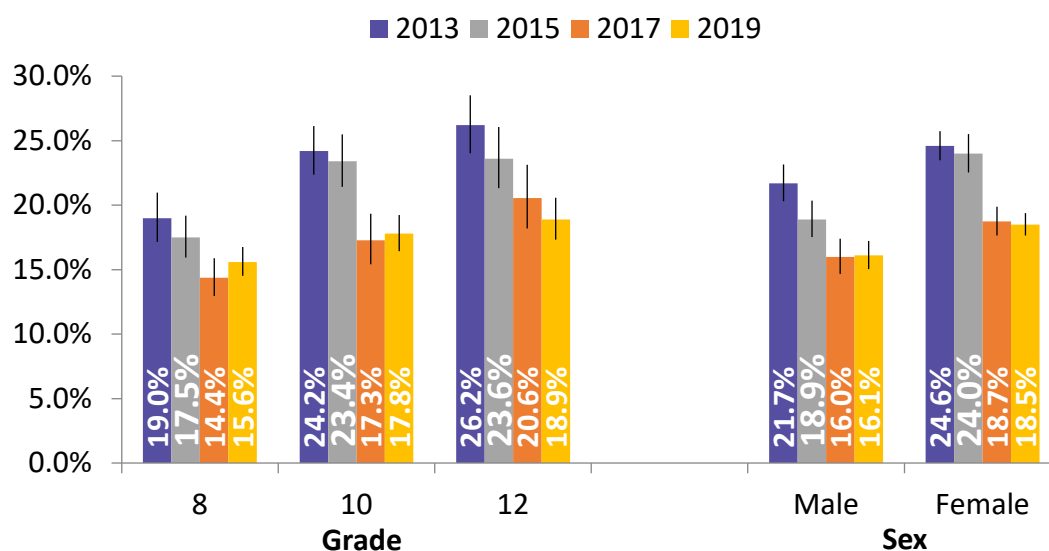
Secondhand Smoke Exposure

Children who are exposed to secondhand smoke (SHS) are at increased risk for bronchitis, pneumonia, and ear infections.²⁶ In addition, SHS can trigger asthma attacks. Children with asthma who are exposed to SHS have more severe and frequent asthma attacks. To measure indoor exposure to SHS, Utah students were asked if they had been in a room with someone who was smoking a cigarette during the past seven days.

In 2019, 17.5% of 8th, 10th, and 12th grade students in Utah reported such exposure in the past seven days. This is not a significant change from 2017 (17.4%), though it is a significant decrease from 2015 (21.5%) and 2013 (23.1%). In 2019, exposure to SHS increased significantly from 15.6% in 8th grade to 18.9% in 12th grade (**Figure 53**).

Among local health districts, students in Southeast (25%), Salt Lake County (20.7%), Southwest (19.5%), and Tooele County (19.6%) reported significantly higher percentages of indoor SHS exposure than the state percentage (17.4%) in 2019. Students in Davis County (14.6%), Bear River (12.2%), and Utah County (14.2%) reported significantly lower percentages than the state percentage in 2019 (**Figure 54**).

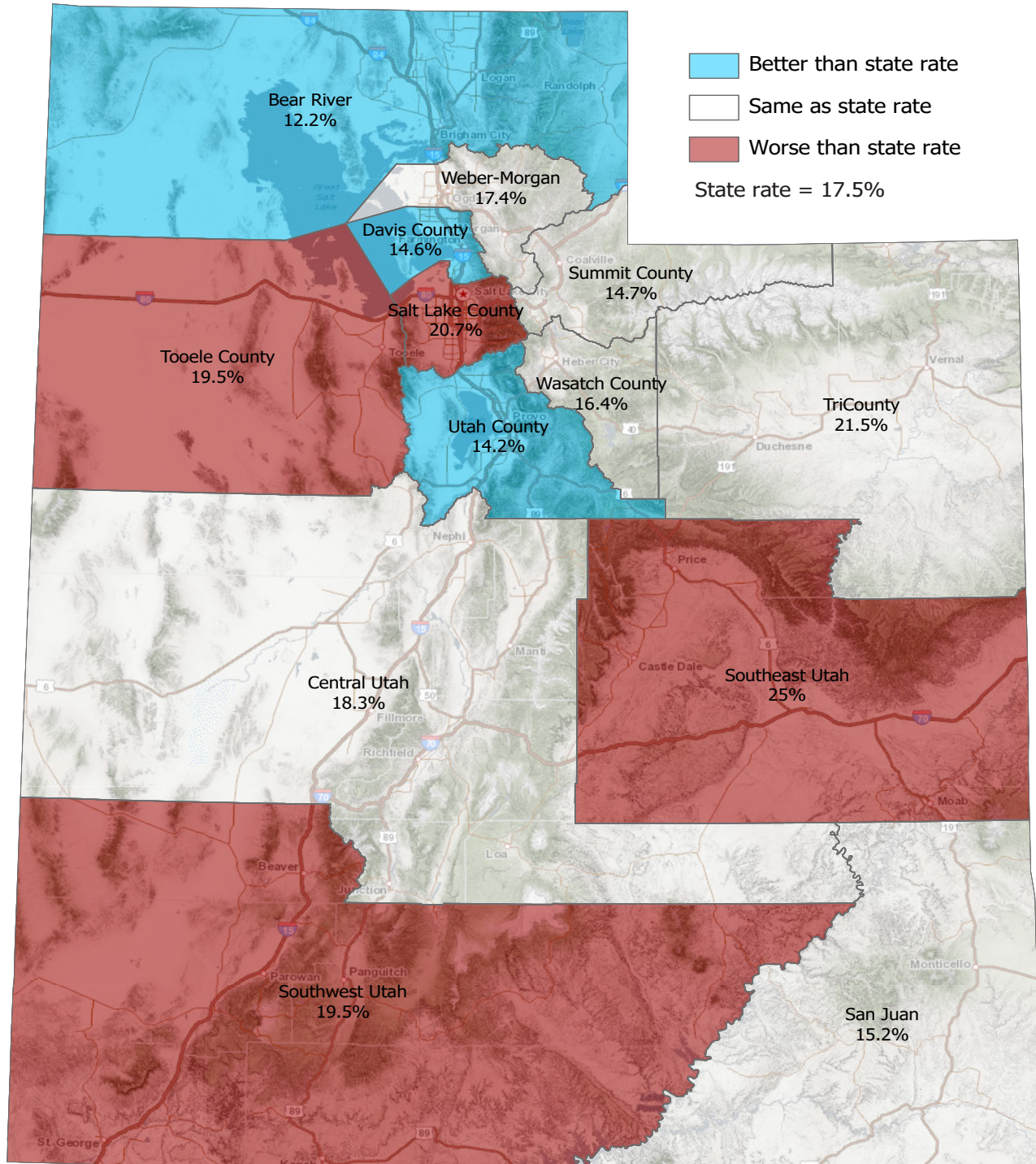
Figure 53: Percent of Utah Students (Grades 8, 10, 12) Who Were in the Same Room With Someone Who Smoked Cigarettes in the Past 7 Days by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Substance Abuse:

Secondhand Smoke Exposure

Figure 54: Percent of Utah Students (Grades 8, 10, 12) Who Were in the Same Room With Someone Who Smoked Cigarettes in the Past 7 Days by Local Health District Map, Utah, 2019



Violence and Injury:

Driver Talking on Cell Phone

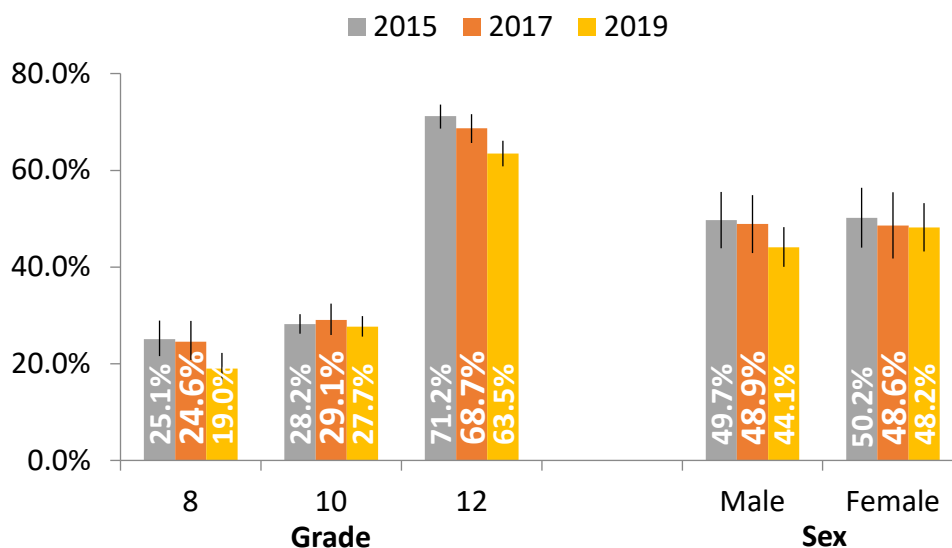
Talking on a cell phone while driving is a form of distracted driving. It can distract the driver manually if they take their hand off the wheel and can also distract the driver cognitively by taking their mind off of driving.²⁷ Younger drivers have the highest rates of distraction-related crashes.²⁸

In 2019, 46.1% of students in grades 8, 10, and 12 reported talking on the phone while driving. This is not significantly more than the 2017 percentage of 48.8%. Eighth grade students reported on this question regardless of the fact that 16 is the legal driving age.

No significant differences were noted between male and female students. In Utah during 2019, levels of talking on a cell phone while driving increased significantly as grade level increased, with 8th graders reporting 19%, 10th graders at 27.7% and 12th at 63.5% (**Figure 55**).

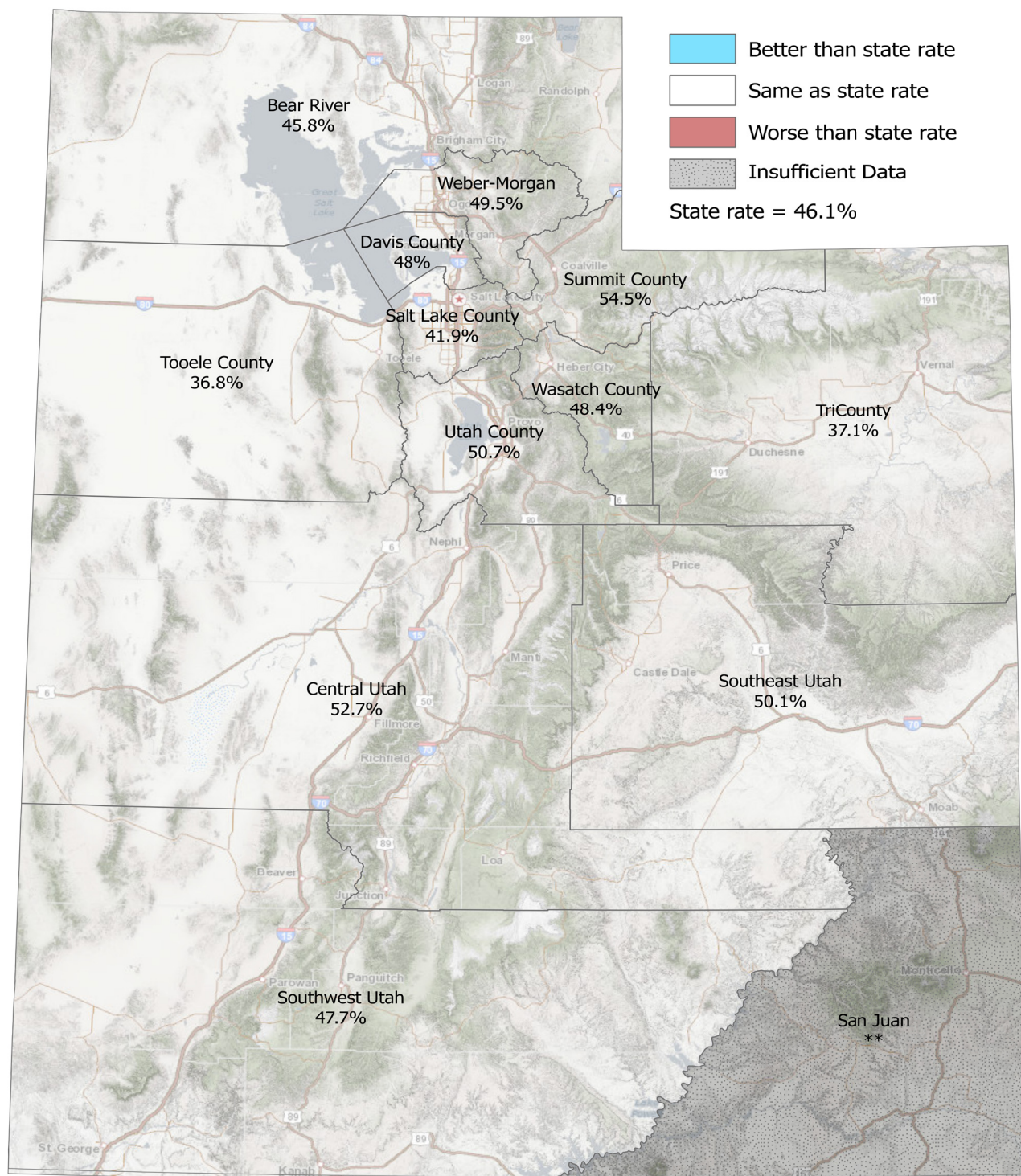
Among local health districts, none reported significantly higher or lower percentages of students driving while talking on cell phones than the state percentage (46.1%) in 2019 (**Figure 56**).

Figure 55: Percent of Utah Students (Grades 8, 10, 12) Who Reported Talking on a Cell Phone While Driving in the Past 30 Days by Grade and Sex, Utah, 2015, 2017, 2019



Violence and Injury: Driver Talking on Cell Phone

Figure 56: Percent of Utah Students (Grades 8, 10, 12) Who Reported Talking on a Cell Phone While Driving in the Past 30 Days by Local Health District Map, Utah, 2019



Violence and Injury:

Texting while Driving

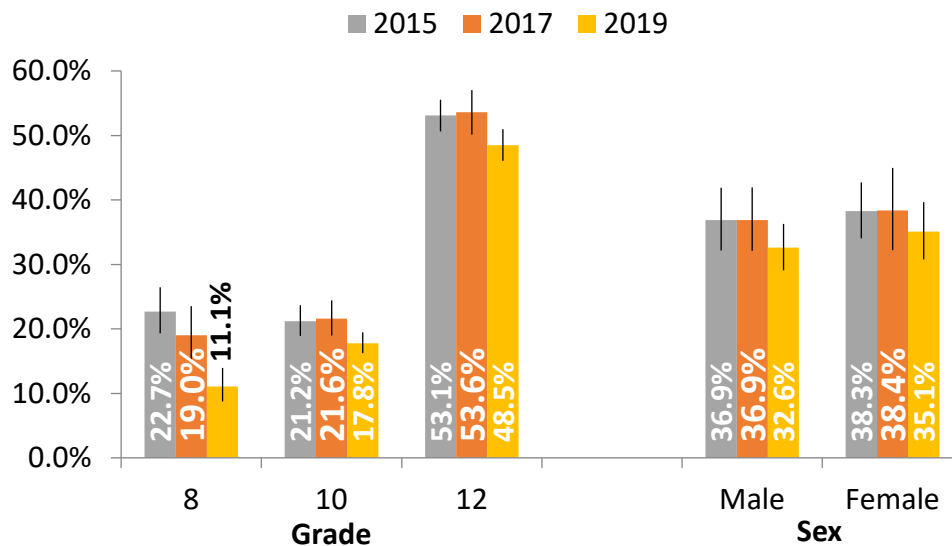
Texting while driving is the most dangerous form of distracted driving because it requires the driver to take their eyes off of the road, their hands off of the wheel, and their mind off of driving.²⁹ Younger drivers have the highest rate of distraction-related crashes.

In 2019, 33.9% of students in grades 8, 10, and 12 reported texting while driving in the past 30 days. This is not a significant decrease from the 2017 percentage of 37.6%. Eighth grade students reported on this question regardless of the fact that 16 is the legal driving age.

With increasing grade levels, there was a significant increase in reporting texting and driving, with 8th graders reporting 11.1%, 10th graders reporting 17.8%, and 12th graders reporting 48.5%. There was not a significant difference reported in texting while driving between males and females (**Figure 57**).

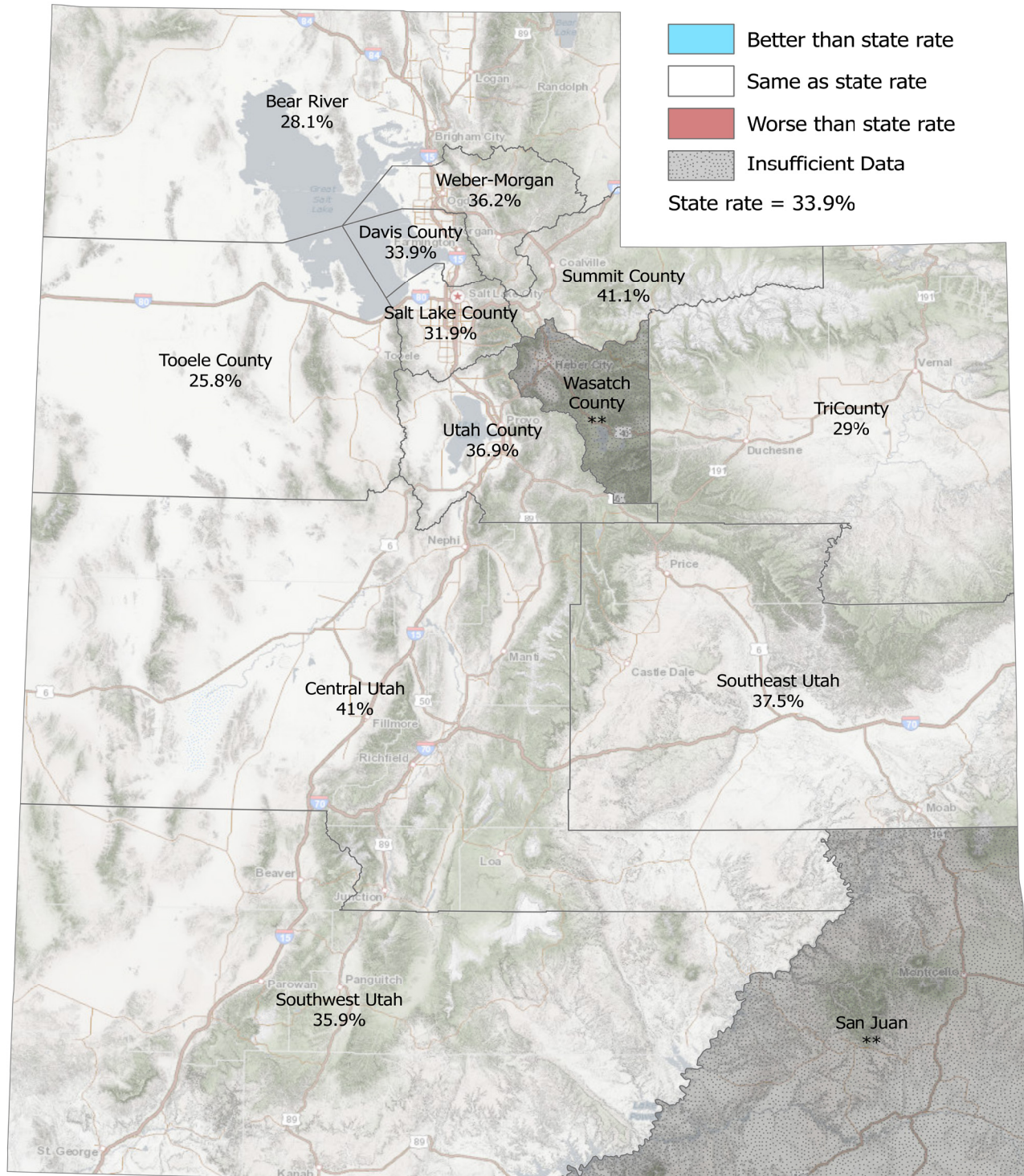
Among local health districts, none reported significantly higher or lower percentages of students texting while driving than the state percentage (33.9%) in 2019 (**Figure 58**).

Figure 57: Percent of Utah Students (Grades 8, 10, 12) Who Reported Texting While Driving in the Past 30 Days by Grade and Sex, Utah, 2015, 2017, 2019



Violence and Injury: Texting while Driving

Figure 58: Percent of Utah Students (Grades 8, 10, 12) Who Reported Texting While Driving in the Past 30 Days by Local Health District Map, Utah, 2019



Violence and Injury:

Seat Belt Use

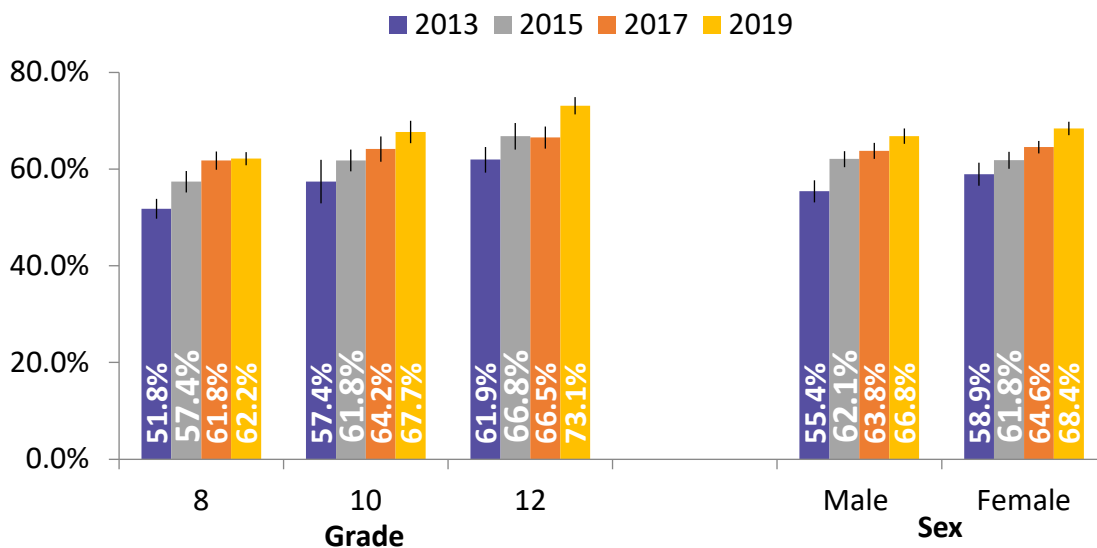
Seat belts are the single most effective safety device for preventing serious injuries and death from motor vehicle crashes. In Utah during 2016, people who were not wearing a seat belt in a crash were 240 times more likely to be ejected from a motor vehicle and 24 times more likely to be killed than people who were wearing a seat belt.³⁰

Teens buckle up less frequently than any other age group. In 2015, Utah's seat belt law became a primary enforcement law. Primary seat belt laws allow law enforcement officers to ticket a driver for not wearing a seat belt without any other traffic offense taking place.³¹ Everyone in the vehicle must wear a seat belt and children ages 8 and younger must be properly restrained in a car seat or booster seat.

In 2019, 67.6% of students in grades 8, 10, and 12 reported that they always wear a seat belt. The percentage of students wearing seat belts has been steadily increasing since 2013, and the 2019 percentage is significantly higher than 2013 (57.1%). There were no significant differences among sex or grade levels reporting seat belt usage in 2019 (**Figure 59**).

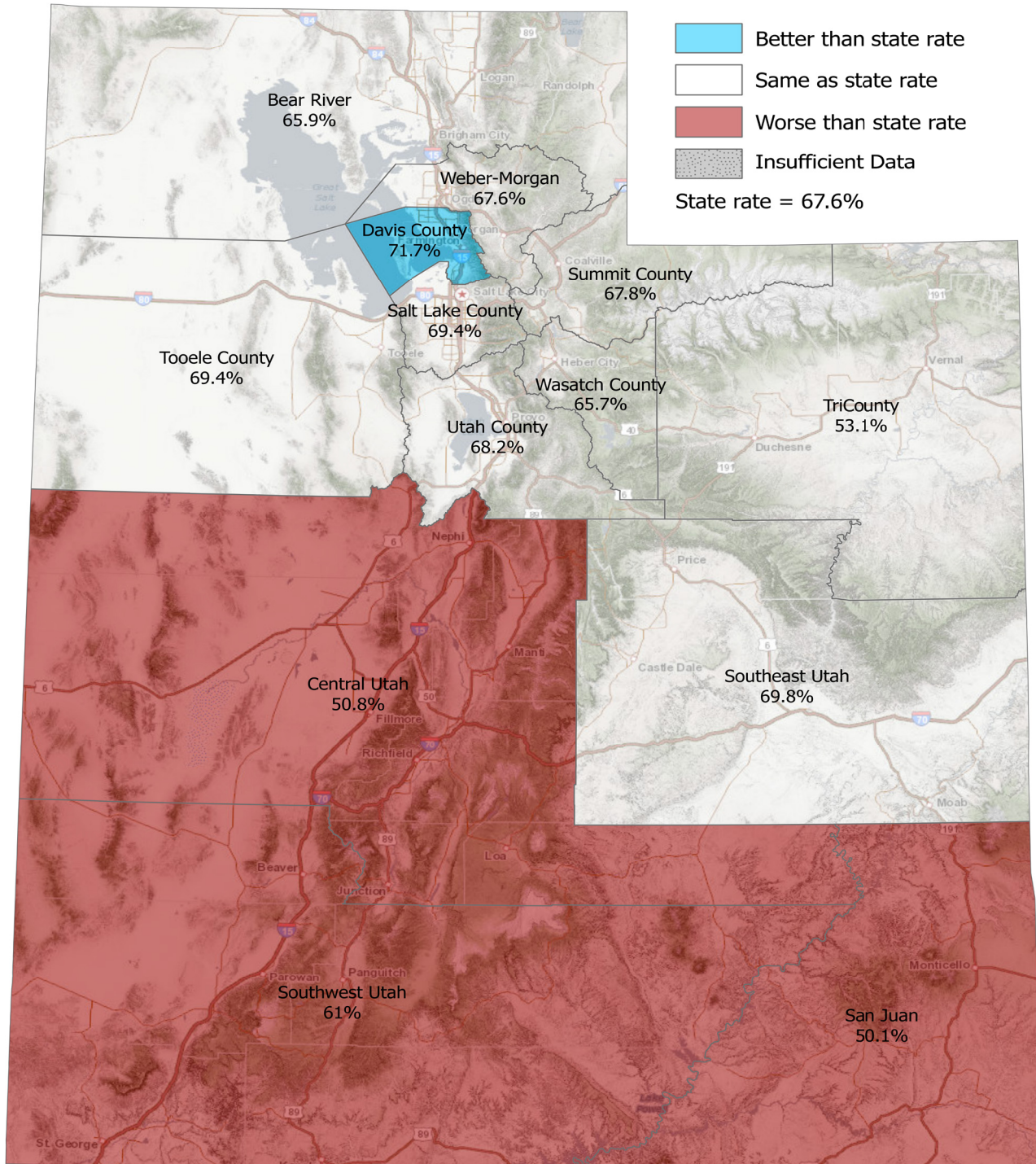
Among local health districts, students in Davis County (71.7%) reported significantly higher percentages of seat belt use than the state percentage (67.6%) in 2019. Students in San Juan County (50.1%), Central (50.8%), and Southwest (61.1%) reported a significantly lower percentage of seat belt use than the state percentage in 2019 (**Figure 60**).

Figure 59: Percent of Utah Students (Grades 8, 10, 12) Who Always, Most of the Time, or Sometimes Wear a Seat Belt When Riding in a Car Driven by Someone Else by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Violence and Injury: Seat Belt Use

Figure 60: Percent of Utah Students (Grades 8, 10, 12) Who Always, Most of the Time, or Sometimes Wear a Seat Belt When Riding in a Car Driven by Someone Else by Local Health District Map, Utah, 2019



Violence and Injury:

Bullied at School

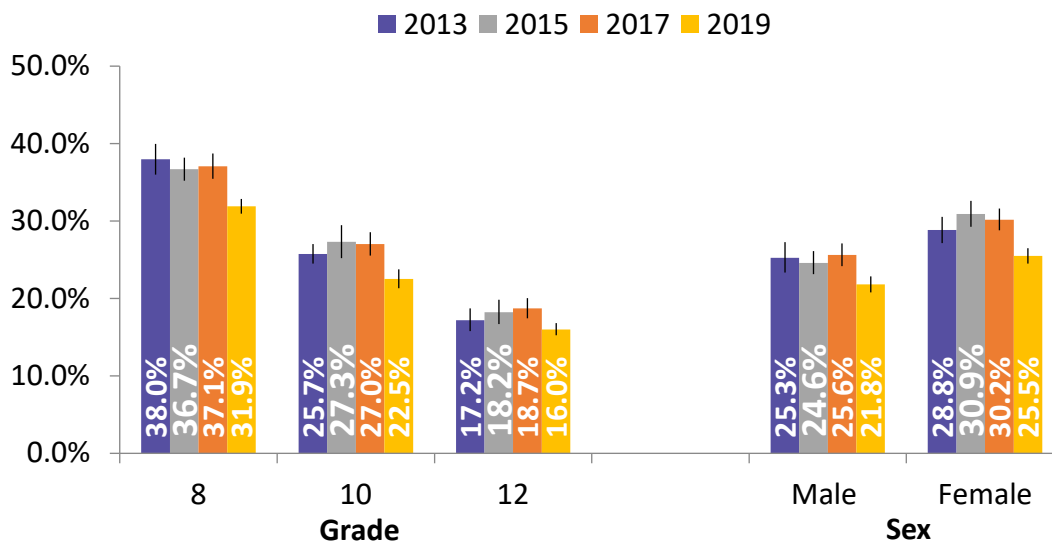
Bullying is a form of adolescent violence. Bullying is defined as any unwanted, aggressive behavior(s) by another adolescent or group of adolescents who are not siblings or current dating partners that involves an observed or perceived power imbalance.³² The behavior is repeated, or has the potential to be repeated, over time. Bullying can include actions that are physical (hitting), verbal (teasing), or relational/social (spreading rumors).

In 2019, 23.8% of students in grades 8, 10, and 12 reported that during the past 12 months they were picked on or bullied by a student on school property. This is a significant decrease from 2017 (27.6%).

Reported bullying decreased significantly as students increased in age. Students in 8th grade (31.9%) reported significantly more bullying and students in 10th grade (22.5%) and 12th grade (16%) reported significantly less bullying when compared to the 2019 state percentage of 23.8%. Females (25.5%) were significantly more likely to be bullied than males (21.8%) in 2019 (**Figure 61**).

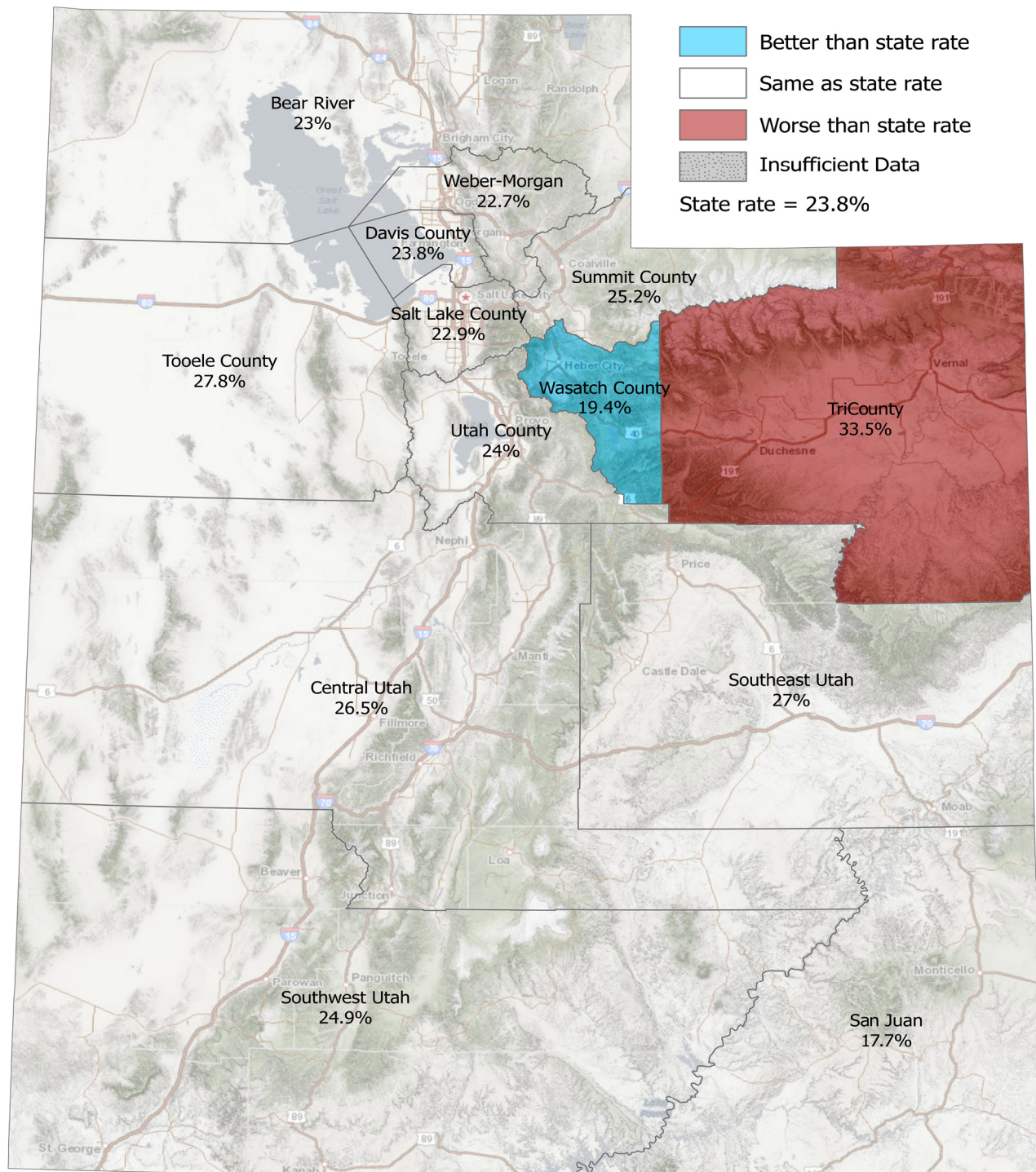
Among local health districts, students in TriCounty (33.5%) reported significantly higher percentages of being bullied than the state percentage (23.8%) in 2019. Wasatch County (19.4%) reported significantly lower percentages of being bullied than the state percentage in 2019 (**Figure 62**).

Figure 61: Percent of Utah Students (Grades 8, 10, 12) Who Were Bullied at School in the Past 12 Months by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Violence and Injury: Bullied at School

Figure 62: Percent of Utah Students (Grades 8, 10, 12) Who Were Bullied at School in the Past 12 Months by Local Health District Map, Utah, 2019



Violence and Injury:

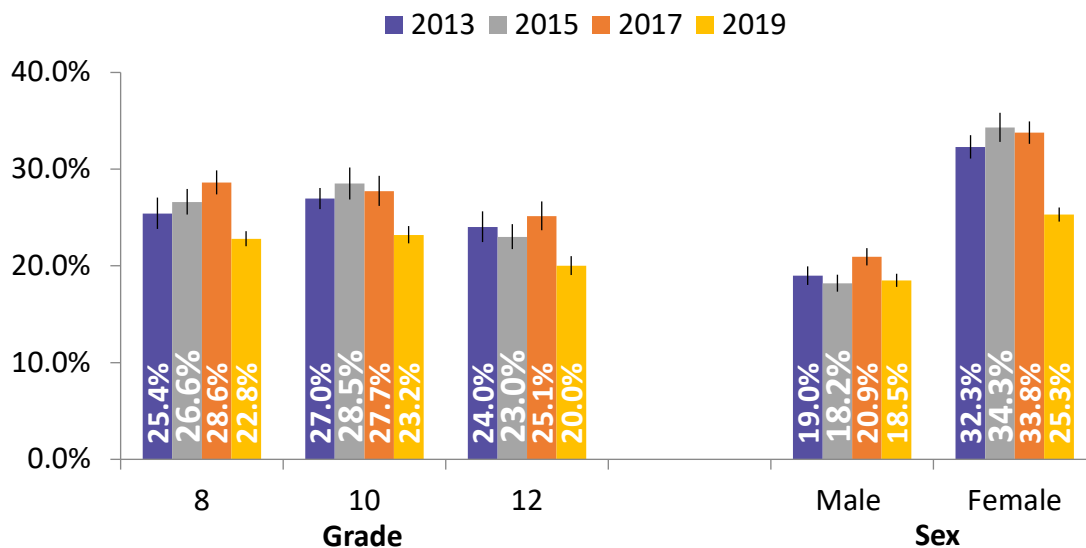
Electronic Bullying

An increasing number of adolescents are becoming victims of electronic bullying or cyberbullying. Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets. Cyberbullying can occur through SMS; texting; and apps; or online in social media, forums, or gaming where people can view, participate in, or share content.³² Cyberbullying includes sending, posting, or sharing content about someone else that is negative, harmful, false, or mean. It can include sharing personal or private information about someone else causing embarrassment or humiliation.

In 2019, 22.1% of Utah students in grades 8, 10, and 12 reported being threatened or harassed over the internet, by email, or by someone using a cell phone. The 2019 percentage is a significant decrease from 2017 (27.2%). Females (25.3%) were significantly more likely than males (18.5%) to be electronically bullied in 2019. In 2019, 8th (22.8%) and 10th (23.2%) grade students were significantly more likely to be electronically bullied than 12th grade students (19.9%) (**Figure 63**).

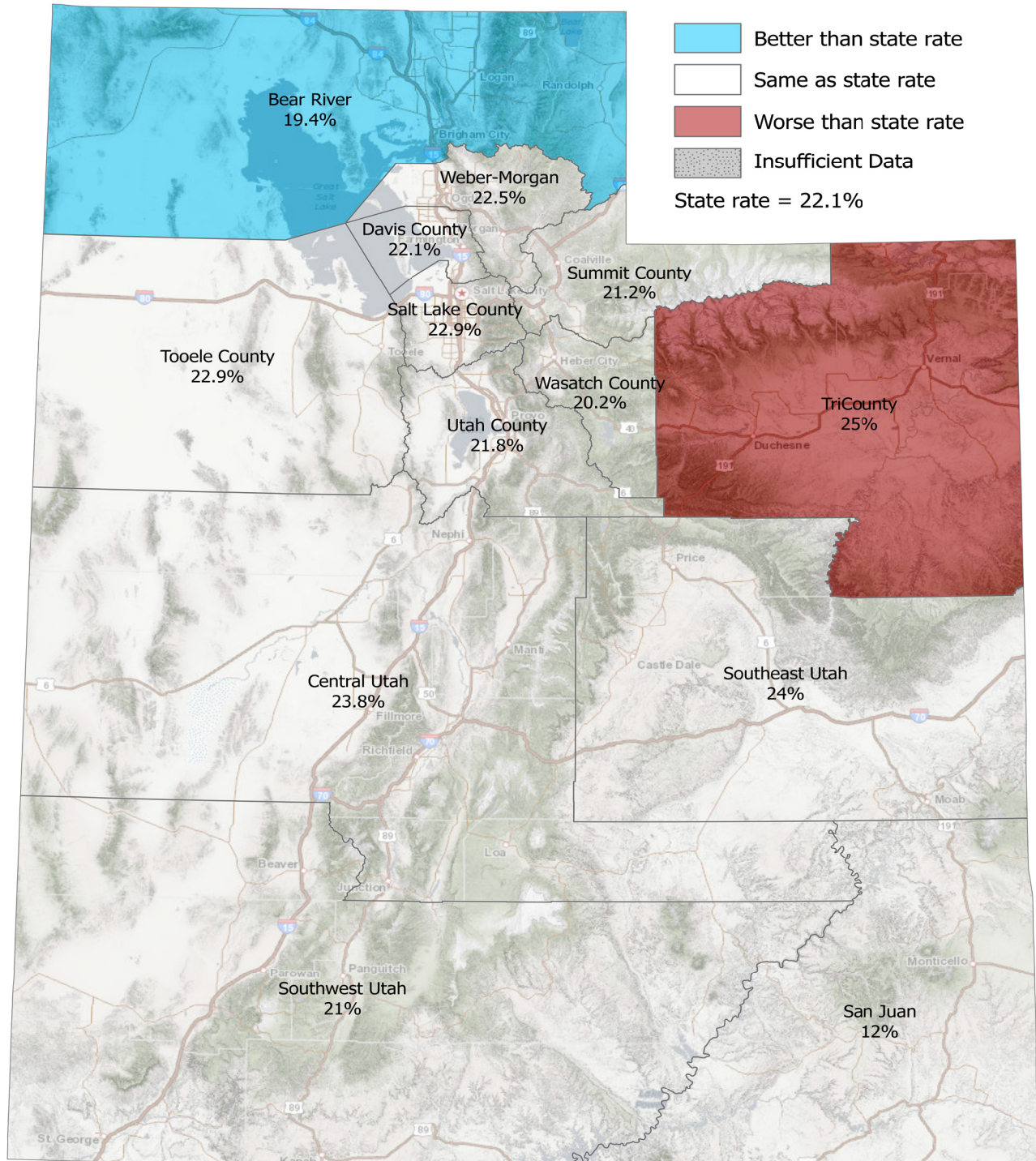
Among local health districts in 2019, students in Bear River (19.4%) reported significantly lower percentages of being electronically bullied in the past year than the state percentage (22.1%) in 2019. Tri County (25.0%) reported significantly higher percentages of electronic bullying in 2019 than the state percentage (**Figure 64**).

Figure 63: Percent of Utah Students (Grades 8, 10, 12) Who Reported Electronic Bullying by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Violence and Injury: Electronic Bullying

Figure 64: Percent of Utah Students (Grades 8, 10, 12) Who Reported Electronic Bullying by Local Health District Map, Utah, 2019



Violence and Injury:

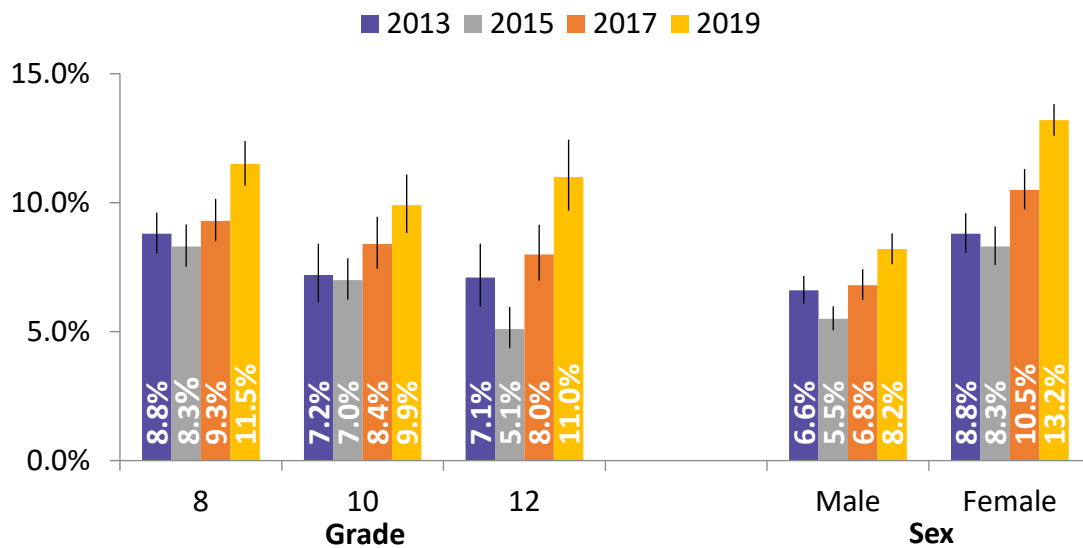
Unsafe at School

A safe environment is a prerequisite for productive learning. If students feel unsafe it may lead to decreased academic performance and increased absences.

The majority of students felt safe at their school (89.1%). There was no significant difference among grades. Female students (13.2%) reported feeling unsafe at school significantly higher than male (8.2%) students (**Figure 65**).

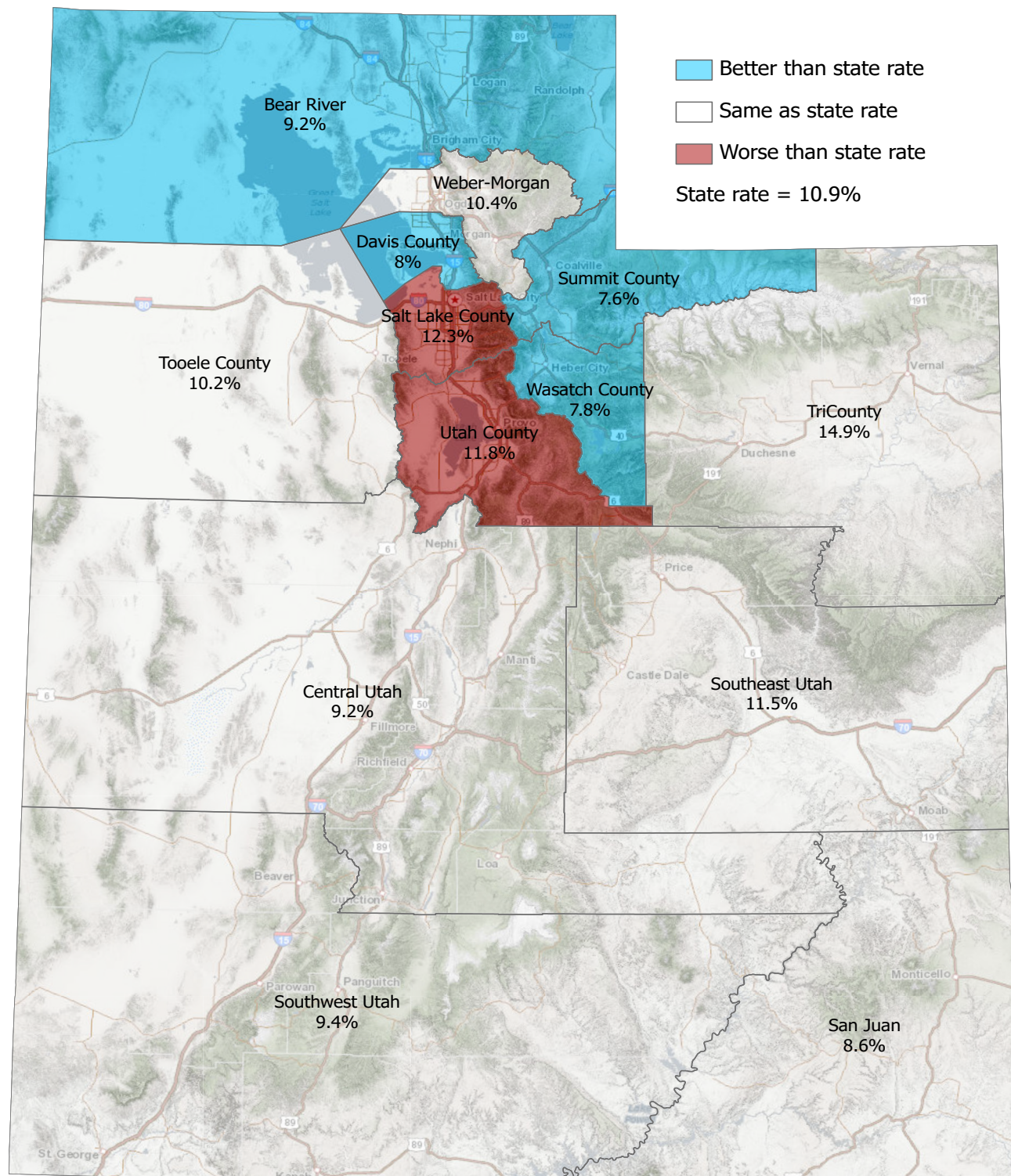
Students in Salt Lake County (12.3%) and Utah County (11.8%) had significantly higher percentages of feeling unsafe at school than the state percentage (10.9%). Students in Summit County (7.6%), Wasatch County (7.8%), Davis County (8.0%), and Bear River (9.2%) had significantly lower percentages of feeling unsafe at school than the state percentage (10.9%) (**Figure 66**).

Figure 65: Percent of Utah Students (Grades 8, 10, 12) Who Reported Feeling Unsafe at School by Grade and Sex, Utah, 2013, 2015, 2017, 2019



Violence and Injury: Unsafe at School

Figure 66: Percent of Utah Students (Grades 8, 10, 12) Who Reported Feeling Unsafe at School by Local Health District Map, Utah, 2019



Violence and Injury:

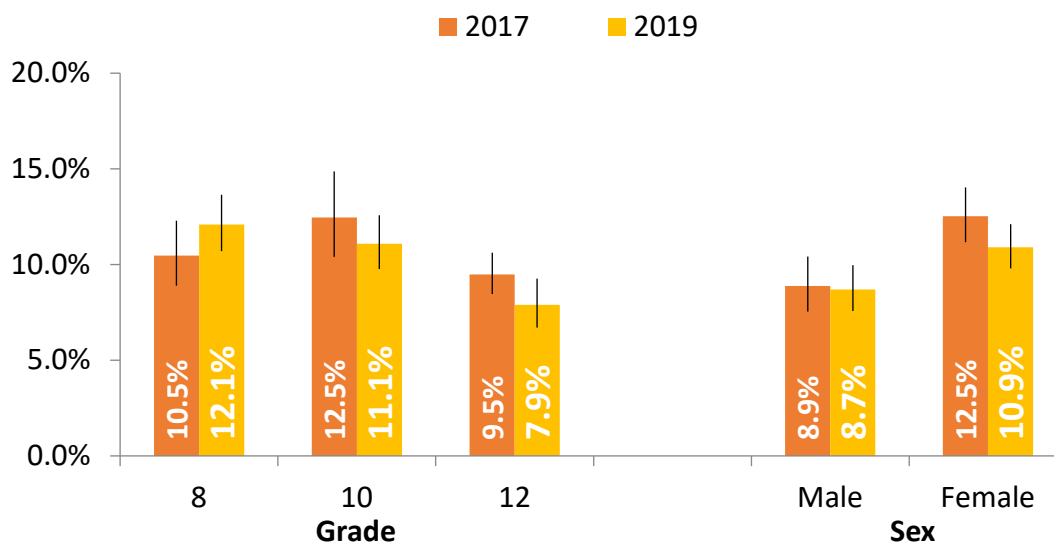
Dating Violence

Dating violence is defined by the Centers for Disease Control and Prevention as “the physical, sexual, psychological, or emotional aggression within a dating relationship, including stalking.”³³ Dating violence may occur in-person or electronically, and with a former or current partner. Adolescents who experience unhealthy dating relationships are more likely to have depression; anxiety; suicidal thoughts; use tobacco; drugs and alcohol; and display antisocial behavior. Additionally, adolescents who experience dating violence in high school are more likely to be victims of dating violence later in life.³⁴

In 2019, 9.9% of students in grades 8, 10, and 12 reported experiencing dating violence (including such things as being hit, slammed into something, or injured with an object or weapon) in the past 12 months. There was not a significant difference in dating violence across grades or between sexes (**Figure 67**).

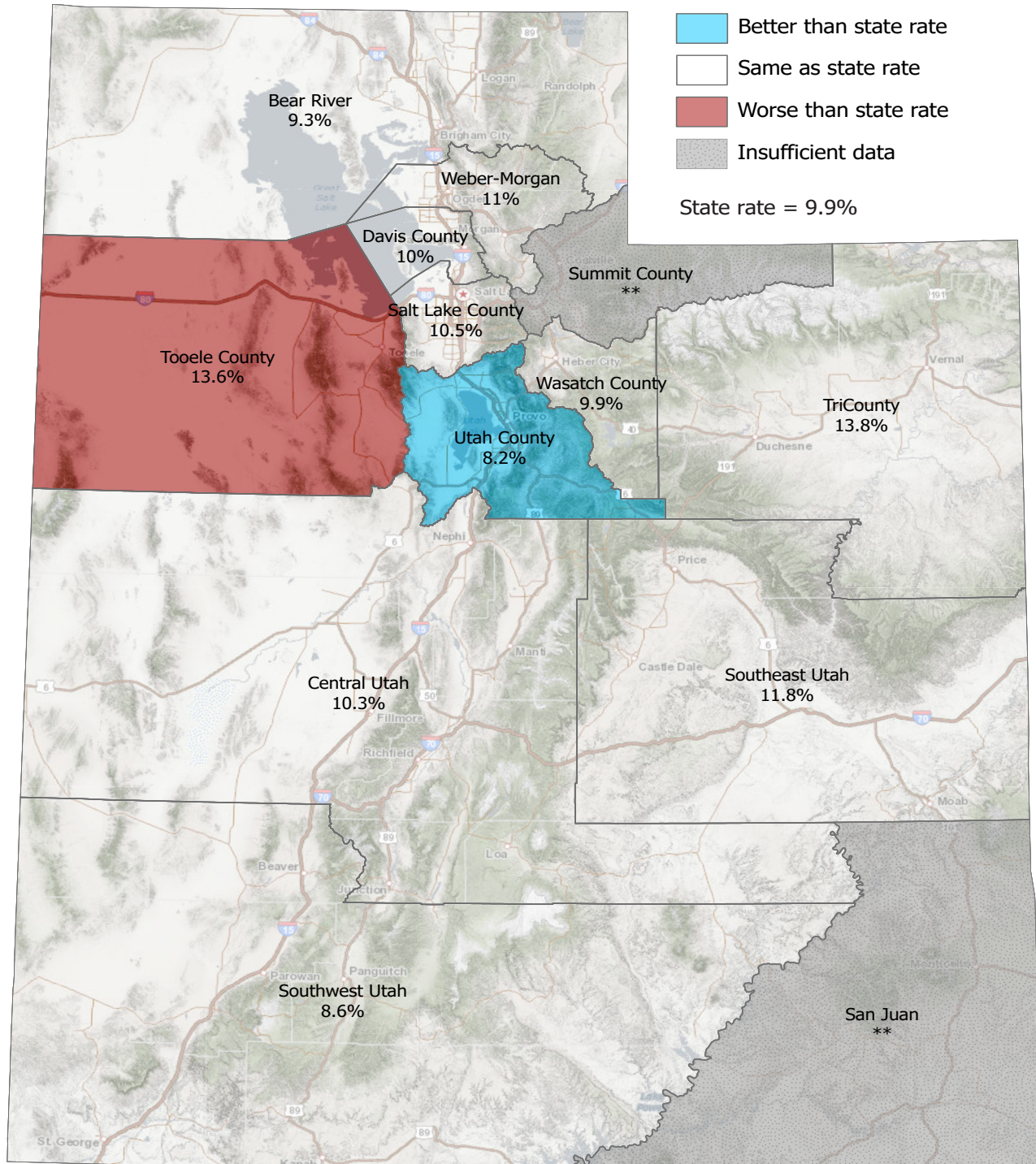
Tooele County (13.6%) reported higher rates of dating violence than the state percentage (10.4%). Utah County (8.2%) reported significantly lower rates of dating violence than the state percentage (9.9%) (**Figure 68**).

Figure 67: Percent of Utah Students (Grades 8, 10, 12) Who Reported Experiencing Dating Violence by Grade and Sex, Utah, 2017, 2019



Violence and Injury: Dating Violence

Figure 68: Percent of Utah Students (Grades 8, 10, 12) Who Reported Experiencing Dating Violence by Local Health District Map, Utah, 2019



Methodology

The Utah Department of Health (UDOH) partners with the Utah Department of Human Services Division of Substance Abuse and Mental Health (DSAMH) and the Utah State Board of Education (USBE) to conduct the School Health and Risk Prevention (SHARP) survey in Utah public schools in the spring of odd-numbered years. The SHARP survey project includes two separate questionnaires, the Prevention Needs Assessment (PNA) and the Adolescents Risk Behavior Survey (YRBS). The Utah SHARP collaboration started in 2003.

PNA Questionnaire: The PNA was developed by the DSAMH with a primary focus on assessing risk and protective factors and trends related to substance abuse. In 2009, the UDOH Tobacco Prevention and Control Program discontinued its Adolescents Tobacco Survey and integrated a subset of tobacco questions in the PNA. Beginning in 2011, the UDOH added further health-related questions to the PNA to assess risk factors and behaviors related to asthma, diabetes, healthy weight, physical activity, nutrition, and violence and injury. To accommodate the additional questions, the PNA was split into a core questionnaire and a form A and B. Most health-related questions are listed on PNA questionnaire form B.

Sampling: Students in Utah public schools in grades 6, 8, 10, and 12 are eligible to complete the PNA survey. In 2019, 38 of 41 school districts and 27 charter schools participated in the PNA. Of the 38 participating school districts, 35 sampled all schools within their district. The remaining three large school districts conducted a random sample. An honesty scale is also calculated based on five criteria: 1) used drugs (not including alcohol or tobacco) on more than 120 occasions in the past 30 days, 2) reported using a fictitious drug, 3) reported that they were “not honest at all” in completing the questionnaire, 4) more than one marking of a 30-day use for a substance that they had not used in their lifetime, or 5) their age and grade did not match, such as a student 19 years of age who marked grade 6. Dishonest students were excluded from this analysis. This report focuses on middle and high school age students, therefore responses from students in grade 6 were not included in the analysis. The total number of honest students in grades 8, 10, and 12 included in the analysis was 58,689. The total sample size for individual indicators depends on which questionnaire the item or items were placed.

Analysis: The data were weighted to account for probability of selection and to adjust to the demographic distribution of students enrolled in Utah public schools. Design weights were constructed to account for district, school, and classroom sampling percentages. Iterative proportional fitting (raking) further adjusted the design weights to account for additional demographic information (grade, race, district, grade by school district, sex by school district, and race/ethnicity by school district.) This methodology reduces bias and improves estimates. The data were analyzed using SAS 9.4 software.

Limitations

The PNA does not include students in private or alternative schools, school dropouts, or adolescents in correctional facilities and treatment centers. Due to an active parental consent law in Utah for school-based surveys, students who did not return their consent forms were not represented.

1. Utah's Indicator-Based Information system for Public Health Website. Health Indicator Report of Asthma: Child Prevalence. <https://ibis.health.utah.gov/ibisph-view/indicator/view/AsthChiPrev.html>. Published July 8, 2020. Accessed August 24, 2020.
2. Asthma Action Plan. (2020, April 13). Retrieved August 24, 2020, from <https://www.cdc.gov/asthma/actionplan.html>.
3. National Institute of Diabetes and Digestive and Kidney Diseases. Helping the Student with Diabetes Succeed. (2020, May 01). Retrieved August 24, 2020, from <https://www.niddk.nih.gov/health-information/professionals/clinical-tools-patient-management/diabetes/helping-student-diabetes-succeed-guide-school-personnel?dkrd=hispt1099>.
4. Bloomgarden, Z. T., Alberti, G., Shaw, J., Zimmet, P., Kaufman, F., & Silink, M. (2004). Type 2 Diabetes in the Young: The evolving epidemic. *Diabetes Care*, 27(4), 998-1010. doi:10.2337/diacare.27.4.998.
5. Diabetes Medical Management Plan. (n.d.). Retrieved August 27, 2020, from <https://www.diabetes.org/resources/know-your-rights/safe-at-school-state-laws/written-care-plans/diabetes-medical-management-plan>.
6. Secretary, H., & President's Council on Sports, F. (2019, February 01). Physical Activity Guidelines for Americans. Retrieved August 27, 2020, from <https://www.hhs.gov/fitness/be-active/physical-activity-guidelines-for-americans/index.html>.
7. Childhood Obesity Causes & Consequences. (2020, September 02). Retrieved August 27, 2020, from <https://www.cdc.gov/obesity/childhood/causes.html>.
8. Defining Childhood Obesity. (2018, July 03). Retrieved August 27, 2020, from <https://www.cdc.gov/obesity/childhood/defining.html>.
9. Stanford Children's Health. Family Meals: More Than Good Nutrition (2020). Accessed August 27, 2020, from <https://www.stanfordchildrens.org/en/topic/default?id=family-meals-more-than-good-nutrition-1-2152>.
10. American Academy of Child and Adolescent Psychiatry. (2018, October). Depression in Children and Teens. Retrieved August 27, 2020, from https://www.aacap.org//AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/The-Depressed-Child-004.aspx.
11. Harvard Medical School National Comorbidity Survey. K10 and K6 Scales. https://www.hcp.med.harvard.edu/ncs/k6_scales.php. Accessed August 27, 2020.
12. Novotney, A. (2019). The Risks of Social Isolation. *American Psychological Association*, 20(5). Retrieved from <https://www.apa.org/monitor/2019/05/ce-corner-isolation>.
13. Self-injury/cutting. (2018, December 07). Retrieved December 23, 2020, from <https://www.mayoclinic.org/diseases-conditions/self-injury/symptoms-causes/syc-20350950>.
14. Utah's Indicator-Based Information System for Public Health. (n.d.). Complete Health Indicator Report of Suicide. Retrieved September 10, 2020, from https://ibis.health.utah.gov/ibisph-view/indicator/complete_profile/SuicDth.html.
15. Centers for Disease Control and Prevention. Underage Drinking. (2020, September 03). Retrieved September 10, 2020, from <https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>.
16. Underage Drinking. (2020, October 23). Retrieved December 23, 2020, from <https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>.
17. American Academy of Pediatrics. (2015). The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update. *Pediatrics*, 135(3), 584-587. doi:10.1542/peds.2014-4146.
18. Health Effects. (2018, February 27). Retrieved December 24, 2020, from <https://www.cdc.gov/marijuana/health-effects.html>.
19. What You Need to Know About Marijuana Use in Teens. (2017, April 13). Retrieved December 24, 2020, from <https://www.cdc.gov/marijuana/factsheets/teens.htm>.
20. Utah Department of Health. Violence and Injury Prevention Program. Opioid Overdoses. (n.d.). Retrieved September 10, 2020, from <https://health.utah.gov/vipp/topics/prescription-drug-overdoses/>.
21. Utah's Indicator-Based Information System for Public Health. (n.d.). Health Indicator Report of Smoking Among Adolescents. Retrieved September 11, 2020, from <https://ibis.health.utah.gov/ibisph-view/indicator/view/CigSmokAdol.html>.
22. Levin, P. (2007, November 6). The ABCs of the Tobacco Master Settlement Agreement. *National Association of Attorneys General Gazette*, 1, 1-3.
23. Centers for Disease Control and Prevention. (2020, August 13). Smokeless Tobacco: Health Effects. Retrieved September 11, 2020, from https://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/health_effects/index.htm.
24. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *MMWR* 1994; 43(No. RR-2): 7-9. <ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4302.pdf>.
25. Hill, Karl G. et al., Family influences on the risk of daily smoking initiation, *Journal of Adolescent Health*, Volume 37, Issue 3, 202-210.
26. Centers for Disease Control and Prevention. Smoking and tobacco use: Health effects of Secondhand Smoke. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/health_effects/index.htm. Updated January 11, 2017. Accessed September 11, 2020.

References

27. Centers for Disease Control and Prevention. Distracted driving. https://www.cdc.gov/motorvehiclesafety/Distracted_Driving/. Updated June 9, 2017. Accessed September 12, 2020.
28. United States Department of Transportation. National Highway Traffic Safety Administration. Distracted Driving. (2020, March 06). Retrieved September 12, 2020, from <https://www.nhtsa.gov/risky-driving/distracted-driving>.
29. Centers for Disease Control and Prevention. Violence Prevention. Preventing Bullying. (2019, September 25). Retrieved September 12, 2020, from <https://www.cdc.gov/violenceprevention/youthviolence/bullyingresearch/fastfact.htmlwhat-is-it>.
30. Utah's Indicator-Based Information system for Public Health Website. Complete Health Indicator Report of Seat Belts: Safety Restraint Use. https://ibis.health.utah.gov/ibisph-view/indicator/complete_profile/SeatBelt.html. Published November 7, 2019. Accessed September 26, 2020.
31. Utah Department of Public Safety. Primary Seatbelt Law. (n.d.). Retrieved September 26, 2020, from <https://highwaysafety.utah.gov/seat-belts-and-car-seats/primary-seat-belt-law/>.
32. What Is Cyberbullying. (2020, July 21). Retrieved September 12, 2020, from <https://www.stopbullying.gov/cyberbullying/>.
33. Centers for Disease Control and Prevention. Violence Prevention. Preventing Teen Violence. (2020, January 27). Retrieved September 12, 2020, from <https://www.cdc.gov/violenceprevention/intimatepartnerviolence/teendatingviolence/fastfact.html>.
34. Consequences. (n.d.). Retrieved December 24, 2020, from <https://youth.gov/youth-topics/teen-dating-violence/consequences>.

2019 Utah Adolescent Health Report

Utah Department of Health
Bureau of Health Promotion