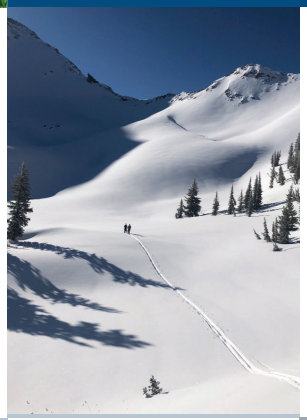
Respect

Utah State Health Assessment 2019

Effective

Service

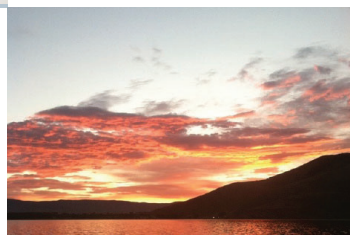


Evidence-based

Trustworthy

Integrity

Innovation



Transparency

Collaboration

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This report is also available on the Internet at https://ibis.health.utah.gov/pdf/opha/publication/SHAReport2019.pdf

We invite anyone to provide feedback on this report. Please do so through email (chdata@utah.gov) or by filling out an online form: https://forms.gle/mtXj3CvgaXv1LaHM7

This State Health Assessment version 1 is being presented to the public for review and opportunity for comment. Once comments have been reviewed and incorporated version 2 will be posted.

Suggested citation:
Utah Department of Health Office of Public Health Assessment. (2020). *Utah State Health Assessment 2019*. Salt Lake City, UT: Utah Department of Health.

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August 1, 2020

We are pleased to present the 2019 Utah State Health Assessment. This report is the result of a multi-agency, collaborative process which gathered feedback from communities and assessed health data to identify areas of greatest need. The purpose of this assessment is to provide a comprehensive view of the health status of Utah, understand factors influencing health, and identify populations at risk for poor health outcomes. Ultimately, the state health assessment process and its findings are used to prioritize health efforts for the Utah Health Improvement Plan.

The 2019 Utah State Health Assessment report includes data for more than 40 essential health indicators. Health indicators examine rates by age, gender, race/ethnicity, income, education, and local health district. In the Special Populations section there are six population groups profiled who are particularly vulnerable to experiencing health inequities – racial and ethnic minority populations, veterans, persons experiencing homelessness, refugees, LGBT individuals, people with disabilities, and tribes. Additionally, the Local Health District Profiles highlight areas at risk for experiencing health disparities by looking at key health indicators as well as Utah Health Improvement Index scores (a composite measure for social and economic factors that determine health) for Utah Small Areas. With accurate up-to-date data, public health system partners will be able to make informed decisions in their valuable efforts to improve health in Utah.

Data collection was completed for the Utah State Health Assessment at the end of 2019. Since then, the COVID-19 pandemic emerged, impacting Utah along with the rest of the world. Public health professionals along with its partners have been working non-stop and are dedicated to fighting the disease. In some ways, the important day-to-day work of public health has been overshadowed by this unprecedented threat to our society. However, the issues presented in this report are still high priorities and continue to impact the health and well-being of Utahns. The COVID-19 outbreak clearly illustrates how some populations are overly burdened by poor health outcomes and demonstrates the importance of addressing health inequities. It is even more important now in the era of COVID-19 to protect our most vulnerable citizens (e.g., individuals with disabilities and chronic illness, racial/ethnic minority populations, etc.). It is our hope this health assessment will provide insight into factors that create high-risk individuals and populations, vulnerable to not only diseases such as COVID-19, but to other diseases and conditions leading to illness and premature death.

We wish to thank all of the agency representatives and everyone around the state for the valuable input and contributions put forth in the 2019 Utah State Health Assessment process. We recognize the complexity of public health issues takes a focused and collective effort to effect change. Our public health team is fortunate to have strong partners dedicated to working together for better health in Utah. We welcome feedback on the State Health Assessment process and this report. Feedback may be submitted to chdata@utah.gov.

Utah Health Improvement Plan Committee

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Acknowledgments

Several individuals representing multiple agencies gave guidance and input into the Utah State Health Assessment process and prioritization of the health issues. We acknowledge their contributions below and thank them sincerely for their efforts. This report would not have been possible without their efforts. We also wish to thank all of the community members who attended the community input meetings around the state; their insights regarding the needs of their communities were invaluable.

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As there were so many people who contributed to this process we may have inadvertently left someone off the list. If you participated and we do not have you listed we apologize, please let us know so we can update the list.

Thank you to the following Utah Department of Health employees who gave permission to use their photography in this State Health Assessment.

Name	Photo	Page
Anna Dillingham	Great Salt Lake Shorelands	cover, top right
Dan Anthony	Logan Canyon	page 17, Description of State: Transportation
Joel Hoffman	Deer Creek Sunrise	cover, bottom center
Jolene Whitney	Wildflowers on Guardsmans Pass State Capitol	cover, left side page 18, Description of State: Governor's Priority and Health Initiatives
Lori Savoie	Lone Tree	cover, bottom right
Lynn Meiner	Springtime in Zion	cover, top left
Tanya Wilson	Rise Above the Fog	page 16, Description of State: Environmental Influencers of Health
Tom Hudachko	Cross-country Skiing	cover, bottom left

Executive Summary

This report provides information on the Utah State Health Assessment process and results. The Utah State Health Assessment is a comprehensive evaluation of population health and the needs and strengths of the collaborative public health system charged with protecting the health of all Utah residents. The purpose of this report is to inform public health system partners and interested members of the public what process was used to gather feedback from community members, evaluate data on health issues, review other assessments, and prioritize concerns. The results of the process are also presented. The state health assessment process informs the prioritization of health issues for inclusion in the Utah Health Improvement Plan (UHIP).

The Process

The Utah Department of Health (UDOH) completes a state health assessment approximately every three years. The last comprehensive state health assessment for Utah was completed in 2016, which resulted in three statewide health priorities: 1) Mental Health and Suicide Prevention, 2) Opioid Misuse, Abuse and Overdose, and 3) Obesity and Related Chronic Conditions.

This 2019 assessment looks at the latest data available and includes qualitative data gathered specifically for the assessment. A similar process was used for this assessment as was conducted for the 2016 assessment, both based on the *Association of State and Territorial Health Official State Health Assessment Guidance and Resources*. It represents a collaborative effort with many UDOH partners and UHIP collaborative groups participating in the process. Data on more than 100 health indicators, broken out where possible by age, sex, race, and ethnicity, as well as trends over time, were reviewed and prioritized by a group representing the UDOH and local health departments with a variety of subject matter expertise. Input was gathered from stakeholders in a series of 19 community input meetings around the state in the fall of 2018 and into the spring of 2019. Additionally, a series of input meetings were held with tribal entities. A summary of the qualitative data collected from community input meetings, along with data for the prioritized health indicators were shared at the 2019 UHIP Coalition Annual Meeting. This group discussed current state health priorities and brainstormed potential new priorities. Participants at this meeting also participated in Strength, Weaknesses, Opportunities, and Threats analysis.

The 2019 Utah State Health Assessment Report

The 2019 Utah Health Assessment includes information from a variety of sources to describe health issues of importance for the state. This report highlights the top 40 prioritized health indicators, including some key social determinants of health such as poverty, education, housing, and food insecurity. Included for each of these 40 indicators is a description of the issue; data broken down by age, gender, race, ethnicity, education, income, and local health district; known risk factor information; health disparities; trend data; and comparisons with U.S. data. Each indicator also has an overview of current efforts and evidenced-based practices being used to address the health issue, with highlights of available services and resources that can be leveraged to address the health issue.

New to the 2019 Utah State Health Assessment is the Special Populations section which contains a “mini” assessment for some of the priority populations at higher risk in Utah: racial and ethnic minority populations; veterans, the homeless, the LGBTQ community, individuals with disabilities, refugees/immigrants, and American Indian populations. Attention was paid to these groups because they often experience health inequities that contribute to health disparities, some of which are highlighted in this report.

There are local health district (LHD) profiles in this assessment summarizing health indicator data for each district. The LHD profiles also include scores from the Utah Health Improvement Index (HII) for each of the Utah Small Areas in the district. HII scores help to identify areas at greater risk for experiencing health disparities. A small handful of additional health indicators (e.g., infant mortality rate, percentage racial/ethinic minority, and percentage of adults reporting fair/poor health) are also included for Small Areas within each district.

The Results

The data collected during the state health assessment process has been shared with the UHIP Executive Committee for consideration in prioritizing health issues for inclusion in the UHIP for the next several years. The UDOH will continue to work collaboratively with partners to address priority health issues as the UHIP plan is reviewed and updated in 2020.

Collaboration

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Service

State Health Assessment Process

2019

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

State Health Assessment Process Overview

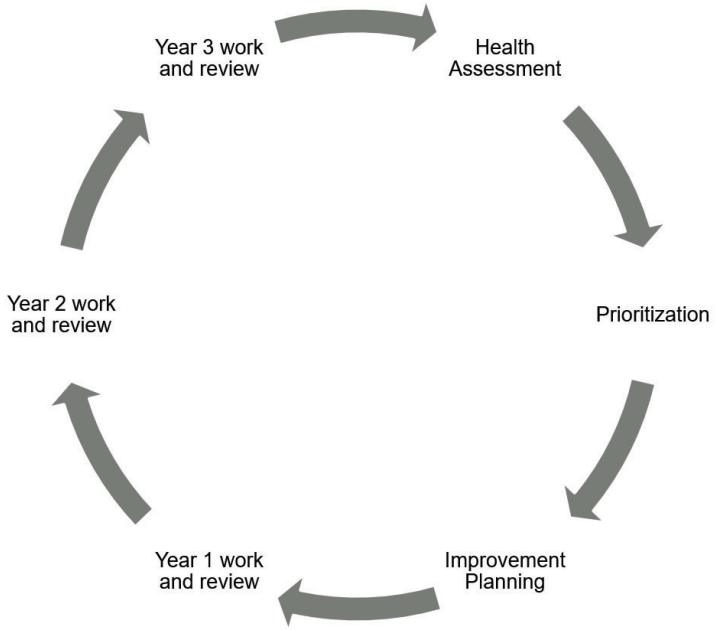
This section describes the process followed by the Utah Department of Health (UDOH) as it facilitated the Utah State Health Assessment.

Purpose

A state level health assessment serves multiple important purposes. The first of the *Ten Essential Services of Public Health* is to "Monitor health status to identify and solve community health problems."[1] It is the data collected through monitoring efforts that serve as the foundation for conducting many of the other Essential Services of Public Health. According to the Public Health Accreditation Board (PHAB), a state-level community health assessment provides necessary information to inform priorities, program development and planning, changes in policy, funding applications, partner collaboration efforts, all of which contribute to the improvement of the health of the population.[2]

The UDOH completes a state health assessment approximately every three years. The last comprehensive state assessment for Utah was completed in 2016. Many subject or population-specific assessments and reports have been conducted by UDOH program staff since 2016, however this assessment represents an overall health status of the state of Utah and is used to assess the highest priority needs of the state. The state health assessment process informs the prioritization of health issues for the Utah Health Improvement Plan (UHIP). More information about improvement plans for priority health issues can be found in the 2017–2020 Utah Health Improvement Plan. Figure 1 shows the UDOH cycle for the health assessment and health improvement planning processes.

Figure 1: State Health Assessment and Improvement Planning Cycle



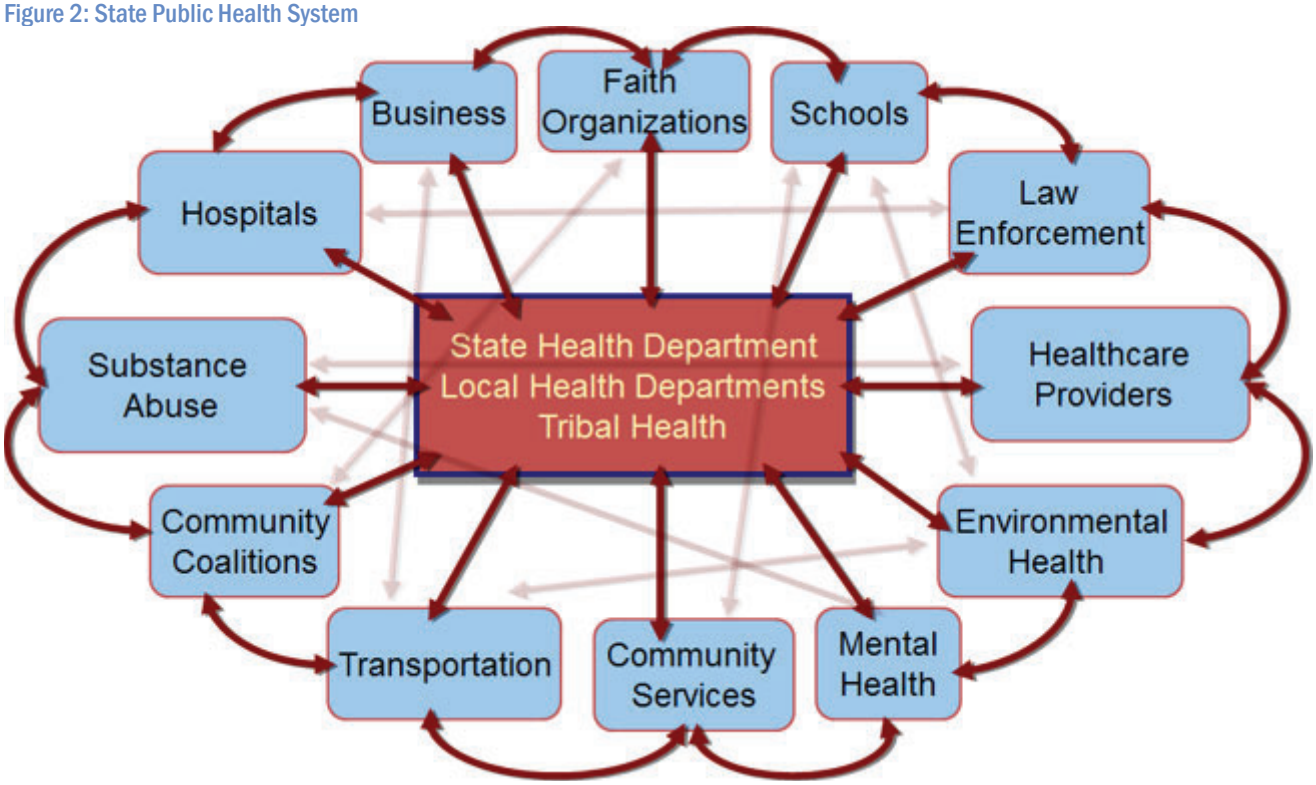
The UDOH was designated national accreditation status by PHAB in November 2017. Conducting a comprehensive, collaborative state health assessment regularly (at least every five years) is a requirement for maintaining accreditation status. The state health assessment must include information from a variety of sources; describe health issues of importance to the state, address populations experiencing health inequities; highlight factors that contribute to health issues (e.g., social determinants of health); and include information about community assets and resources that can be leveraged to improve health.[3]

1 CDC—Public Health System and the 10 Essential Public Health Services. National Public Health Performance Standards. Accessed online 10/19/19 at http://www.cdc.gov/nphpsp/essentialservices.html.
2 Public Health Accreditation Board Standards & Measures, Version 1.5. PHAB. December 2013.
3 Public Health Accreditation Board Standards & Measures, Version 1.5. PHAB. December 2013.

State Public Health System

The Centers for Disease Control and Prevention (CDC) defines the public health system as "all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction."[1] The state health system for this assessment process is defined as "all entities that contribute to the health and well-being of the residents in the state of Utah." While the UDOH took on the role as convener and facilitator for the state health assessment process, the assessment represents the needs of the entire state of Utah public health system. Figure 2 represents potential entity types that are involved in the state system and interactions between the entities.

Figure 2: State Public Health System



Public health agencies make up the center of the Utah public health system. In Utah, public health is decentralized. It consists of the UDOH, 13 local health departments (LHDs), and the tribal health departments, each operating individually. The UDOH, along with local and tribal health departments, works to deliver the essential services of public health, including detecting and preventing disease outbreaks, promoting healthy lifestyles and safe behaviors, preparing for and protecting citizens from man-made and natural disasters, developing policies that support health, and providing access to healthcare services for Utah's most vulnerable populations.

Local Public Health

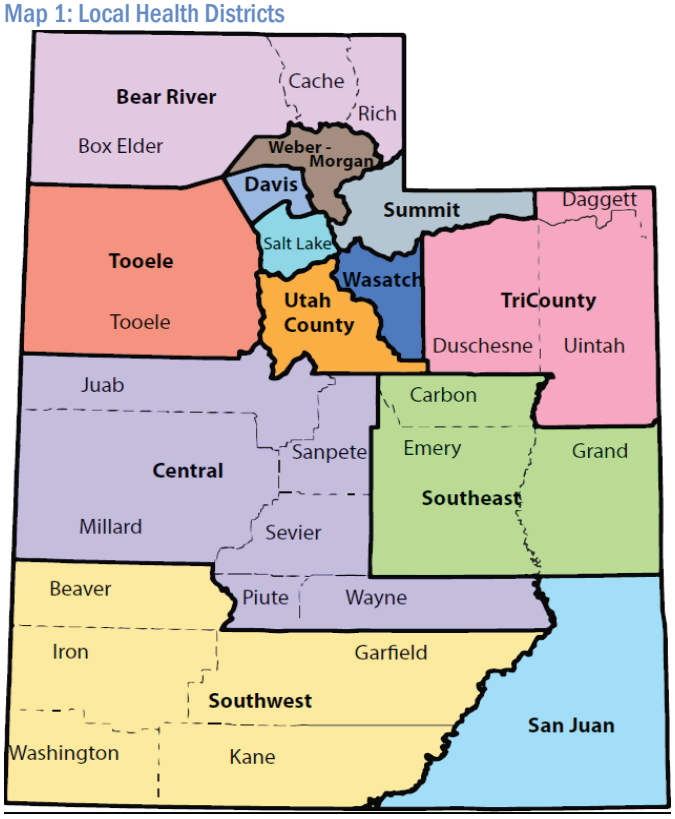
At the local level, public health services in Utah are organized into 13 health districts. Seven of the 13 local health districts are single-county and six are multi-county districts.

1 CDC—Public Health System and the 10 Essential Public Health Services. National Public Health Performance Standards. Accessed online 10/19/19 at http://www.cdc.gov/nphpsp/essentialservices.html.

The local health districts (LHDs) in Utah include the following (Map 1):

- Bear River (Box Elder, Cache, Rich counties)
- Central Utah (Juab, Millard, Piute, Sevier, Wayne, Sanpete counties)
- Davis County
- Salt Lake County
- San Juan County
- Southeast Utah (Carbon, Emery, Grand counties)
- Southwest Utah (Garfield, Iron, Kane, Washington, Beaver counties)
- Summit County
- Tooele County
- TriCounty (Daggett, Duchesne, Uintah counties)
- Utah County
- Wasatch County
- Weber-Morgan Counties

Map 1: Local Health Districts



LHDs provide many essential health services including investigation of disease outbreaks, regulation of known sources of health hazards such as food establishments, and health education and prevention services such as immunizations and preventive health screenings.

The highest priority health problems vary among health districts, especially between the more urbanized Wasatch Front districts and rural and frontier districts.

LHDs are often the front line for reporting communicable diseases and other events, such as signs and symptoms of exposure to biologic agents of terrorism. The Utah Notification and Information System (UNIS), Utah's health alert network, consists of a network of local, state, and private health providers who share information through instantaneous electronic transmission to provide a timely response to disease outbreaks whether natural or the result of terrorism. The UNIS has expanded to include many emergency management, homeland security, and other response partners.

For more information about local public health in Utah, see the Utah Association of Local Health Departments website at www.ualhd.org.

Tribal Public Health

The tribes and tribal epidemiology centers are recognized public health authorities in Utah. The Utah Indian Health Advisory Board (UIHAB) is made up of representatives from each of the eight sovereign Indian tribes of Utah and the Urban Indian Center of Salt Lake. The UIHAB advises and makes recommendations for tribal healthcare services and related policy to the UDOH, the Utah Native American Legislative Liaison Committee, and the Governor's office on behalf of American Indians and Alaska Natives (AI/ANs) in Utah. Its work also includes fostering mutual respect between the UDOH, tribal organizations, and American Indian organizations; increasing cultural competency; and advising on the "physical, mental, emotional and spiritual health" of the AI/AN population.[1] Additionally, the UDOH has an AI/AN Health Liaison that works with the Tribes to raise the health status of the AI/AN population in Utah.[2]

Healthcare Partners

The private healthcare systems, including hospitals, physicians, health plans, schools, and private-nonprofit agencies, deliver many important local public health services as well. The UDOH and LHDs collaborate with the private healthcare system to improve the overall health of the population.

Community health centers are available to provide care to vulnerable populations. There are 13 health centers operating 58 health clinics throughout Utah. Utah Community Health Centers play an important role in the public health system,

1 Utah Indian Health Advisory Board Bylaws. February 2017. Accessed online at http://health.utah.gov/indianh/pdfs/UIHABBylaws2017.pdf.
2 Indian Health. Utah Department of Health. Accessed online 10/24/19 at http://health.utah.gov/indianh/.

serving underserved locations or populations, providing care regardless of insurance status or ability to pay.[1] The Association for Utah Community Health (AUCH) represents Utah Community Health Centers and their patients. The association strives to "reduce barriers to healthcare through health promotion, community engagement and development, education, and policy analysis."[2] Many other free or low-cost health medical services are provided by a network of community health clinics, nonprofits, and volunteer groups around the state, providing a very critical safety net for uninsured and under-insured populations.

State Agencies

In addition to health agency partners, the Utah health system also includes other state agencies. The Utah Department of Environmental Quality works with the UDOH and the LHDs on issues related to air and water quality and contaminants. The Division of Substance Abuse and Mental Health collaborates with the UDOH to assess behavioral health needs across the state and develop interventions. The Utah State Office of Education collaborates on school-based assessment and interventions.

Community-based Organizations

There are many community-based organizations that work on health issues for target populations, that work in specific geographic areas, or that focus on specific health concerns.

Utah's public health capacity is provided by state and local public health entities, healthcare systems, tribal healthcare services, community health centers, other government agencies, and community-based organizations. A Strengths, Weak-nesses, Opportunities, and Threats Analysis of Utah's state public health system was conducted in conjunction with public health system partners. See the health data section for more information.

State Health Assessment Process

The state health assessment process is a collaborative process with community and stakeholder involvement. The Association of State and Territorial Health Officials (ASTHO) State Health Assessment Guidance and Resources was used as a guide for the State Health Assessment and State Health Improvement Plan processes. The ASTHO guidance document refers to *Principles to Consider for the Implementation of a Community Health Needs Assessment Process* by Sara Rosen-baum. Of these, the key principles that guided the Utah health assessment and health improvement planning process include:

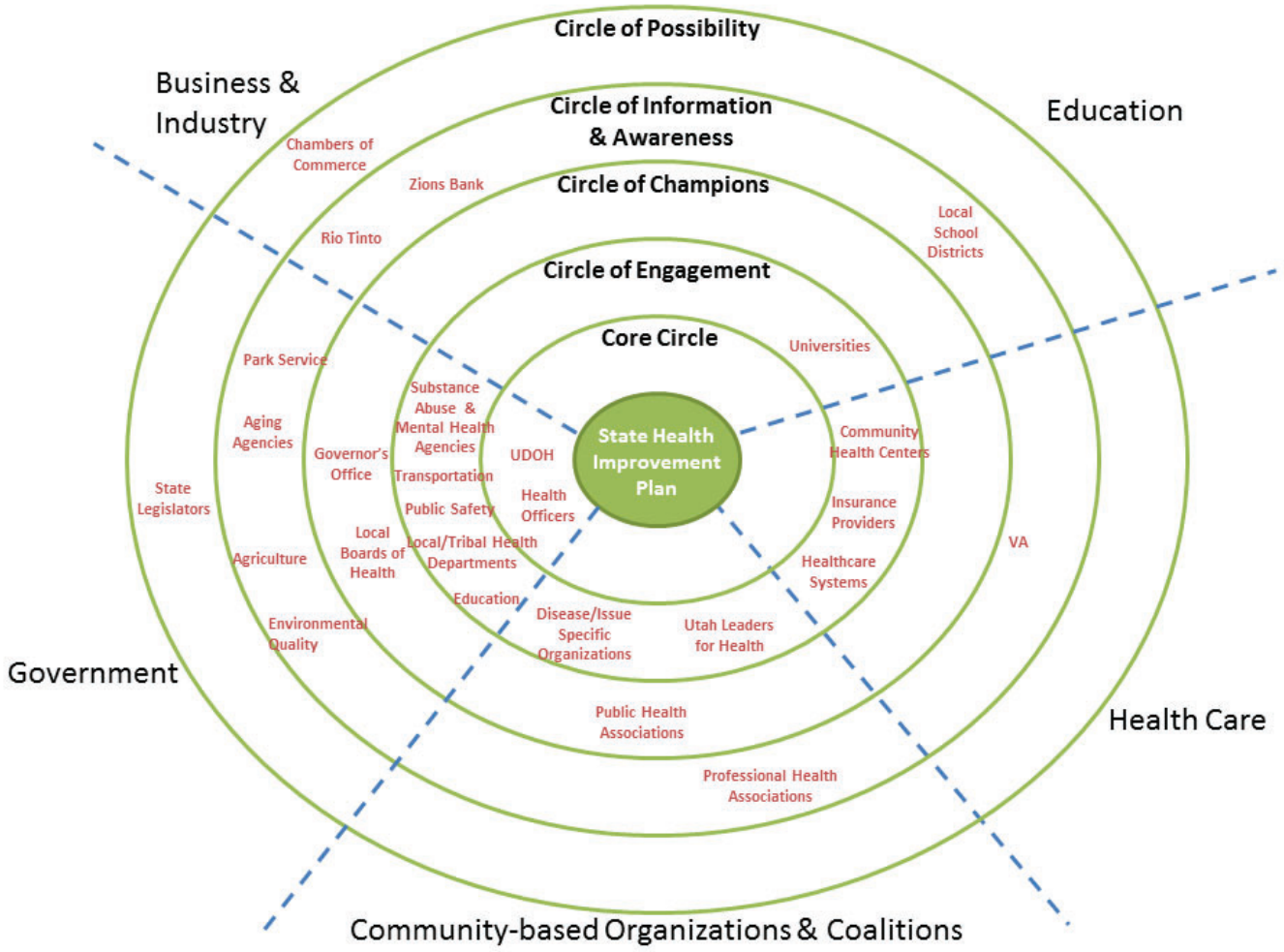
- Multi-sector collaborations that support shared ownership of all phases of community health improvement, including assessment, planning, investment, implementation, and evaluation.
- Proactive, broad, and diverse community engagement to improve results.
- Maximum transparency to improve community engagement and accountability.
- Use of the highest quality data pooled from, and shared among, diverse public and private sources.[3]

1 Association for Utah Community Health—Utah's Health Centers. Accessed online 10/24/19 at https://auch.org/community-health-centers/what-are-community-health-centers.
2 Association for Utah Community Health—Overview. Accessed online 10/24/19 at https://auch.org/about-auch.
3 State Health Assessment Guidance and Resources. Association of State and Territorial Health Officials. Accessed online 12/30/2019 at: https://www.astho.org/Accreditation-and-Performance/State-Health-Assessment-Guidance-and-Resources/.

Collaboration

The latest iteration of the State Health Assessment and Utah Health Improvement Plan focuses on involving a broad range of partners needed to engage in health improvement strategies. Figure 3 shows agencies that are involved or are included in the state public health system. Below are descriptions of the different levels of involvement.[1]

Figure 3: Utah Health Improvement Plan Stakeholder Asset Map



Core Circle:
The Core Circle of participants are those that plan and facilitate the implementation of the Utah Health Improvement Plan, as well as coordinate participation of people in all the circles. They are most heavily involved in the development of the plan and the creation of its objectives. They facilitate the meetings; prepare the materials, processes, and reports; and enlist the support of others.

Circle of Engagement:
The Circle of Engagement includes people committed to the plan who can be called on to help with specific tasks at particular times. They don't see themselves as the primary drivers of the implementation effort but are willing to assume their fair share of responsibility for specific aspects of it. This circle includes people who may or may not have been involved in the development of the plan.

Circle of Champions:
The Circle of Champions are people who typically hold positions of leadership in their respective organizations and are, or need to be, committed to the plan. They may not be very involved in the daily activities of its implementation. They are the authorizers of the effort, advocates for it, the ones whose blessings can clear away some of the

1 Modified from Institute of Cultural Affairs, Technology of Participation, Circle of Involvement

roadblocks. They need to be kept informed of what's happening (big picture) and where to plug in strategically without having to be involved in the details.

Circle of Information and Awareness:
The Circle of Information and Awareness are people who aren't very close to the plan or its implementation but should be kept in the loop as things progress. They are able, because of their positions and roles, to lend support to the efforts or to raise questions and to provide valuable feedback. They may be people who weren't involved in the development of the plan but are impacted in some way by it.

Circle of Possibility:
The Circle of Possibility are people you wouldn't immediately think of as being at all related to the plan or its implementation but who just might find areas of common interest. Even though they may not have been around wh en the plan was developed, they could turn out to be interested in partnering, be able to provide helpful resources for it, or give it some kind of boost.

Multiple groups and individuals from these circles of involvement participated in the State Health Assessment process. Below is a list of the collaborator groups and the contributions they made. Individual contributors are listed in the Acknowledgments section.

- **Community Advisory Panel (CAP)**: The CAP is a group of leaders from Intermountain Healthcare, the UDOH, LHDs, the Association for Utah Community Health (AUCH), Utah's public behavioral health system, and the Utah Hospital Association. This group was formed in 2015 to collaborate and share resources for community health needs assessment and improvement planning efforts. Initially, this group agreed upon a process to gather community input across the state, develop a list of more than 100 key health indicators, and facilitated data sharing to increase access to information by local health district area and hospital catchment area. The group continues to meet regularly to share information, leverage resources, and evalu-ate shared community health improvement strategies.
- **Community Health Needs Assessment (CHNA) Collaborative**: Related to the work of the CAP is the CHNA Collaborative. This group is made up of individuals within organizations that are responsible for doing the work of data analysis, community health assessments, and improvement planning. Goals of this group include developing expertise in the requirements for completing CHNAs and Community Health Assessments, providing technical assistance, coordinating efforts to collect and analyze health data, and creating and/or sharing resources for conducting health assessments.
- **Community Input Partners**: Nineteen community input meetings were held in 2018–2019 around the state to gather input on current health priorities and on other emerging health needs. These meetings were held as a collaborative process between Intermountain Healthcare, the UDOH, and the LHDs.
- **Utah Health Improvement Plan Coalition**: This group contains representatives from several partner agencies including LHDs, healthcare systems, environmental health, substance abuse and mental health, transportation, academia, health insurances/payers, community organizations, business, race/ethnic groups—African Americans, Hispanics, Asians, Pacific Islanders, American Indian Tribes of Utah—health advocacy organizations, education systems, and religious organizations. This group provides input for selection of health priorities, and gives feedback on the UHIP throughout the development, implementation, and evaluation process.
- **Utah Health Improvement Plan Operational Committee**: This committee ensures that the UHIP process is moving forward. It is composed of members of the UDOH and LHDs. This group receives updates and gives feedback on the Utah State Health Assessment process, works closely with health priority workgroups, and assists in planning for the annual meetings of the Utah Health Improvement Plan Coalition.
- **Utah Health Improvement Plan Executive Committee**: This group is the decision-making body for the final Utah State Health Assessment priorities as well as the UHIP.

Health system partners recognize the importance of collaboration to reduce duplication of efforts, share resources, and reduce potential gaps in execution. Additionally a collective impact approach allows for priority areas to be targeted by multiple agencies through multiple paths which will increase likelihood of improvement.

Vision and Mission

The following vision and mission statements for the UHIP, and the related health assessment process, were adopted in 2015, and reaffirmed in 2019 by the Utah Health Improvement Plan Coalition.

Vision statement: A unified Utah public health system that improves the health of the people of Utah

Mission statement: To unite the Utah Public Health System and improve the health of the people of Utah

Community Input

The UDOH, Intermountain Healthcare, and the LHDs worked together to host 19 focus group meetings around the state to gather feedback regarding the health needs and disparities of each community. Many representatives from the community were invited to attend input meetings, including:

- State, local, tribal, public health departments
- Healthcare advocates
- Nonprofit and community-based organizations (e.g., food pantries)
- Academia
- Local government officials
- Local school districts
- Healthcare providers, including behavioral health providers
- Community health centers and other safety net clinics
- Private businesses and workforce representatives
- Representatives of medically underserved, low-income, and minority populations
- Human services agencies
- Law enforcement

Attendees were asked about the current state health priorities (mental health; substance abuse, specifically prescription opioids; and obesity and associated chronic diseases), as well as any other emerging health issues in their communities. The discussion questions were:

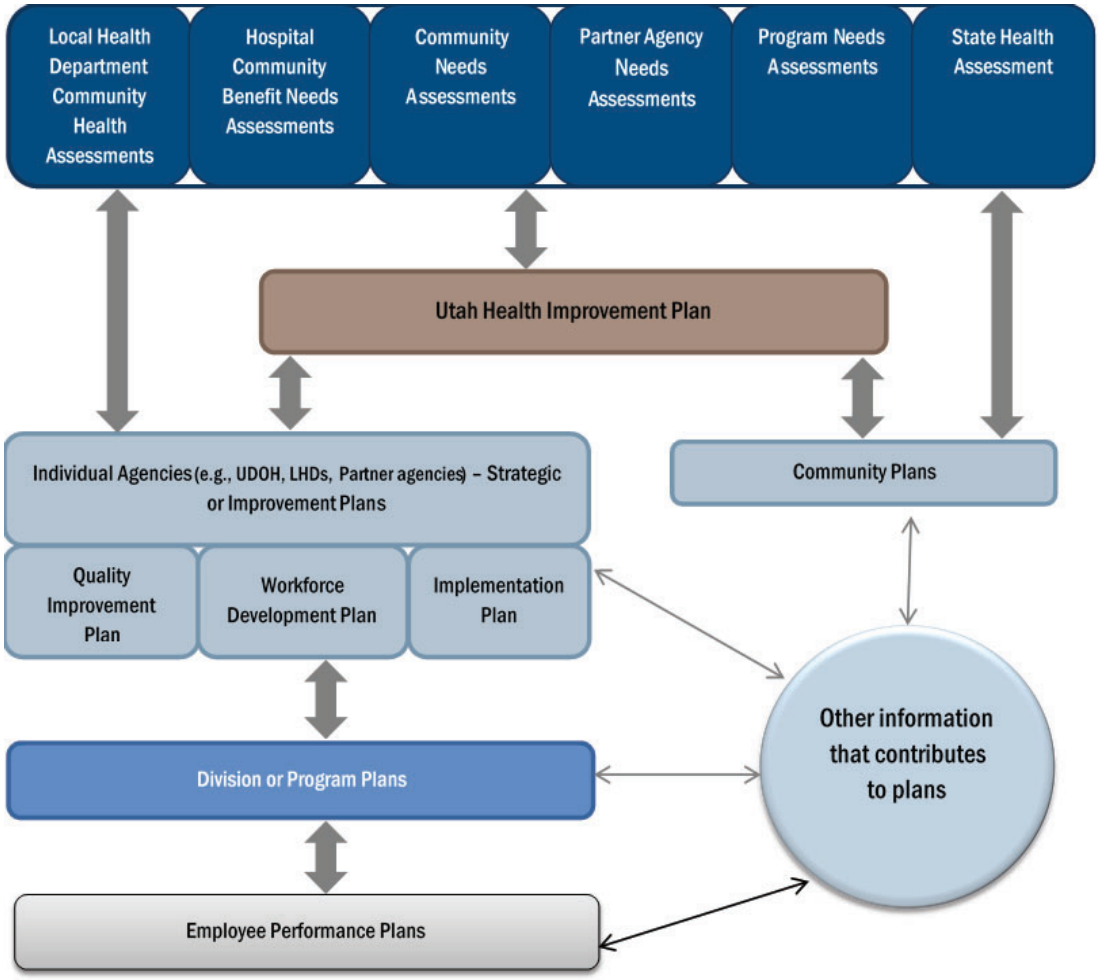
- How is [health issue] affecting the health of your community?
- What barriers exist in your community that cause [health issue] to persist as a health priority?
- What other health issues are affecting your community that we may not have discussed yet?

A summary of the findings from the 2018–2019 community input meetings can be found in the Health Data section.

Review of Other Health Assessments

Health needs assessments are conducted by state health programs, LHDs, health systems, and community agencies. These assessments are part of the data collection process and help inform the prioritization process. Figure 4 explains how different plans and assessments within the state health system might interconnect.

Figure 4: State Health System Integration with Various Plans and Assessments



Prioritization of Health Indicators

The shared health indicator list developed by the Community Advisory Group in 2015 was again used as a starting point for prioritization (see Appendix B for a full list of health indicators used by the UDOH). Data was gathered for almost 120 health indicators (e.g., trend data, comparisons with U.S. data, race/ethnicity comparisons, etc.) and then prioritized based on a set of criteria and feedback from UHIP coalition members.

Step One: The Utah Department of Health Office of Public Health Assessment (OPHA) staff gathered data on 119 health indicators. The indicators were grouped into the following categories:

- Social Determinants of Health
- Environmental Health
- Respiratory Conditions
- Cancers
- Cardiovascular Conditions
- Diabetes Conditions
- Overweight and Obesity
- Other Chronic Conditions
- Vaccine Preventable Diseases
- Other Infectious Diseases
- Mental Health
- Addictive Behaviors
- Care Access
- Preventive Services
- Maternal and Child Health
- Violence and Injury Prevention

Step Two: A group of data users and subject matter experts from the UDOH and LHDs gathered for a half-day meeting, broke into groups, reviewed the data, and scored each health indicator by a consensus vote on a scale of 1 to 10 using the below criteria. Participants at this meeting included representation from various programs (e.g., health promotion, infectious diseases, maternal and child health), and individuals with expertise in conducting health assessments. Additionally, the score for "Size" was determined by OPHA staff by calculating the health burden. Staff from the UDOH Offic e of Health Disparities provided a score for "Health Equity." Each health indicator was given a score for each of the below six criteria, scores were then averaged for a final priority score.

Health Indicator—Criteria for Scores

Magnitude of Public Health Issue

1. Seriousness: The degree to which the health indicator reflects health issues with high severity such as mortality and morbidity, severe disability, significant pain and suffering, or trending negatively.
2. Size: The number of individuals affected by the health issue.

Importance of Public Health Issue

3. Upstream: The extent to which the health issue is upstream from and a root cause of other health issues.
4. Health Equity: The degree by which the health indicator measures issues that disproportionately affect population subgroups.
5. Return on Investment: The degree to which addressing this health indicator can result in more affordable healthcare. Perceived return on investment.

Feasibility

6. Feasibility: The degree to which we have the ability to change the health indicator (e.g., there are evidence-based interventions and strategies to address, resources and community support exist to work on the issue).

More information about the results from prioritizing health indicators can be found in the Health Data section.

Step Three: Data from the top scoring health indicators were shared with UHIP Coalition members leading to a group discussion about current state health priorities, changes to these priorities, and potential new priorities. Discussion questions included:

- What is the case for continuing with our current UHIP priorities (i.e., mental health/suicide, obesity, prescription drug misuse/abuse)?
- Are there suggestions for how we could modify the goals/objectives/strategies for the current priorities to make them more effective?
- Are there strategies we should consider to address multiple priorities?
- Are there any other health issues we should consider as potential UHIP priorities? What is the case for adding them?

Feedback gathered during the group discussion was shared with the UHIP Executive Committee for final decision-making about state health priorities.

Final Results

As a result of these analyses, discussions, and prioritization, a list of potential health priorities was created and given to the Utah Health Improvement Plan Executive Committee for consideration for the update of the UHIP.

Collaboration

Respect

Description of State

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Geography

Utah covers 84,899 square miles and is the 13th largest state in the nation.[1]

There are 29 counties in Utah (see Map 2). Most (80%) of the Utah population resides in five counties (Cache, Weber, Davis, Salt Lake, and Utah).[2] These are the only five counties in Utah classified as "urban" (100 or more persons per square mile). The remaining 29 counties are split between "rural" (more than six but fewer than 100 persons per square mile) and "frontier" (less than 6 or fewer persons per square mile). These sparsely populated areas are susceptible to limited infrastructure.[3]

There are eight federally recognized Indian tribes in the state of Utah: Confederated Tribes of Goshute Indians, Navajo Nation, Northwestern Band of Shoshone Nation, Paiute Indian Tribe of Utah, San Juan Southern Paiute, Skull Valley Band of Goshute, Ute Indian Tribe, and Ute Mountain Ute Tribe (see Map 3).[4]

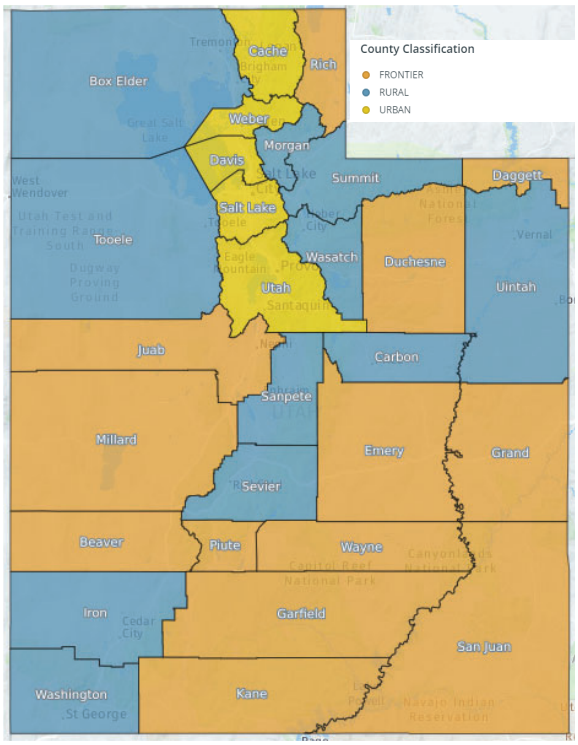
The topography of Utah is diverse including salt flats, mountain ranges, forests, flat lands, colorful gorges, sinks, lakes, and desert. The variation in landscape, large expanses of sparsely inhabited land, and winter weather extremes create challenges for organizations that provide health care services in underserved communities.[5]

The geography of Utah is characterized by three major provinces (see Map 4): the Great Basin, Colorado Plateau, and Rocky Mountains, each with their own climate, landforms, soils, and vegetation.[6]

The Great Basin region, located in the western part of the state, is characterized by its flatlands, small mountain ranges, and its arid climate.[7]

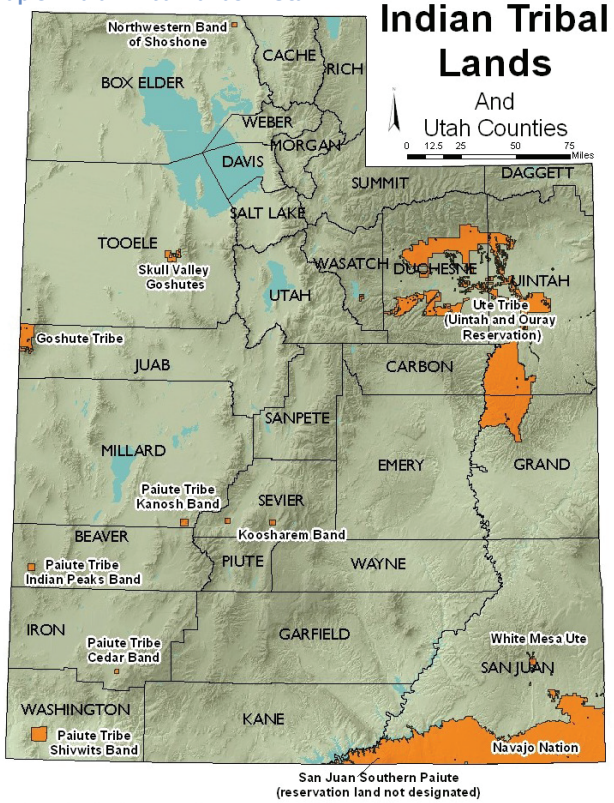
The Colorado Plateau, located in the southern part of the state, is known for its layered, multi-colored sedimentary rocks, and large hydrocarbon deposits. Due to its beauty and unique land formations, this region contains five national parks, six national monuments, and a number of state parks.

Map 2: County Classifications, Utah



Map downloaded from Utah Department of Health Office of Primary Care & Rural Health website, https://ruralhealth.health.utah.gov/portal/county-classifications-map/.

Map 3: Indian Tribal Lands in Utah



Map downloaded from Utah Department of Health Indian Health website, http://health.utah.gov/indianh/history.html.

1 Utah Primary Care Needs Assessment, March 2018. Office of Primary Care and Rural Health (OPCRH), Utah Department of Health (UDOH). Accessed 2/6/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.

2 Table 6. Population density by total area and by land area (frontier, rural and urban) and county of residence: Utah, 2017. Utah's Vital Statistics: Births and Deaths, 2017, P S-11. Accessed 9/19/2019 at https://vitalrecords.utah.gov/wp-content/uploads/Births-and-Deaths-2017-Utah-Vital-Statistics.pdf.

3 Utah Primary Care Needs Assessment, March 2018. OPCRH, UDOH. Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.

4 Utah Department of Health Federally Recognized Tribes of Utah Consultation & Title V Urban Indian Organization Conferment Process Policy, February 6, 2017. Accessed 10/16/19 at http://health.utah.gov/indianh/pdfs/2017ConsultationPolicy.pdf.

5 Utah Primary Care Needs Assessment, March 2016. OPCRH, UDOH. Accessed 9/23/19 at https://ruralhealth.health.utah.gov/wp-content/uploads/2018/11/UT-PCNA-Mar-2016_FINAL.pdf.

6 Utah Primary Care Needs Assessment, March 2018. OPCRH, UDOH. Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.

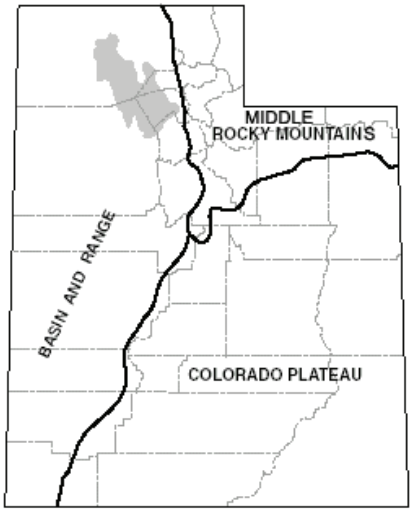
7 Utah Primary Care Needs Assessment, March 2018. OPCRH, UDOH. Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.

Like the Great Basin Region, this region is also relatively flat and arid in nature.[1]

Finally, the Rocky Mountain region, located in the northeast corner of the state, is an extension of the Rocky Mountain range that runs from Canada to Arizona. Due to its mountainous nature and higher elevation, this region tends to be more humid, leading to more inclement weather during the winter months.[2]

The five urban counties are all located in the northernmost part of the state, along the border between the Rocky Mountain and Great Basin regions. These urban counties make up approximately 5.8% of the state and house approximately 79.5% of the population.[3]

Map 4: Three Major Provinces in Utah



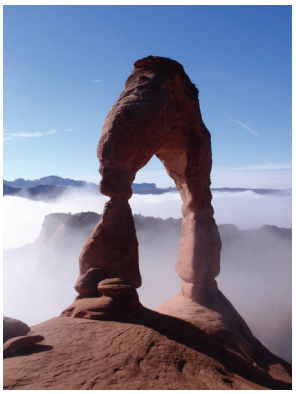
Map downloaded from Utah Geological Survey website, https://geology.utah.gov/popular/general-geology/utah-landforms/physiographic-provinces/.

Environmental Influencers of Health

The environment plays a key role in the public health of Utah. From air and water quality to radon and lead, there are many environmental factors that can influence the health of our residents.[4] For example, the majority of the population lives along the Wasatch Front, and during the winter the valleys in this region experience temperature inversion, where warmer air traps air near the ground and stops it from mixing. This keeps particulate matter levels high, endangering Utahns' health.[5]

Utah is a seismically active region, with about 700 earthquakes (includes aftershocks) annually. Only about 2% of the earthquakes are felt. There are several faults in Utah, the longest of which is the Wasatch fault that runs north-south and is 240 miles in length. Utah's most populous cities are located along this fault, including Salt Lake City, Ogden, and Provo. An earthquake with a magnitude of 5.5 or higher can cause extensive damage to infrastructure, fires, hazardous materials spills, serious injury, and fatalities.

The climate can negatively impact human health in many ways. A changing climate can lead to environmental conditions that increase exposure to allergens, viral or bacterial disease, and hotter temperatures. Such consequences include respiratory illness, food- and vector-borne disease, and heat waves.[6]



The design and layout of cities and neighborhoods influence the health of all Utahns. For example, it is difficult to be physically active if sidewalks and parks are not available and accessible; eating a healthy diet is hard if healthy food choices are not available in your community. More than a quarter of the population in Utah has low food access, and in some frontier areas that number jumps to more than 50%.[7] Urban sprawl, inadequate public transportation, and energy inefficient buildings not only affect human health but also have a distinct impact on climate change through the generation of greenhouse gas emissions.

Healthy community design means planning and designing communities that make it easier to live a healthy life.

- Lowers vehicle dependence by building homes, businesses, schools, churches, and parks closer together to encourage walking and biking
- Provides opportunities for people to be active and social closer to home, thereby improving physical and mental health
- Allows people to age in a community that reflects their changing lifestyles and physical capabilities

Source: Community Design. Accessed 9/20/19 at https://epht.health.utah.gov/epht-view/topic/CommunityDesign.html

1 Utah Primary Care Needs Assessment, March 2018. Office of Primary Care and Rural Health (OPCRH), Utah Department of Health (UDOH). Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.
2 Utah Primary Care Needs Assessment, March 2018. OPCRH, UDOH. Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.
3 Utah Primary Care Needs Assessment, March 2018. OPCRH, UDOH. Accessed 5/26/20 at https://ruralhealth.health.utah.gov/workforce-development/primary-care-office-pco/primary-care-needs-assessment/.
4 Environmental Topics. Accessed 9/20/19 at https://ibis.health.utah.gov/ibisph-view/topic/Environment.html.
5 Air Pollution and Public Health. Accessed 2/6/20 at https://www.health.utah.gov/utahair/.
6 Climate-Related Health Impacts. Accessed 9/20/19 at https://epht.health.utah.gov/epht-view/topic/CChangeHealth.html.
7 CARES Engagement Network. Accessed 2/6/20 at https://engagementnetwork.org/.

Transportation

Transportation agencies in Utah have partnered to create Utah's Unified Transportation Plan. Their work is based on rigorous technical analysis and robust stakeholder input that reflects community and regional values and proactively plans for the future. The Plan articulates the transportation needs of the state and local communities and identifies the balanced investments in road, transit, bike, and pedestrian infrastructure needed across Utah to stay ahead of future growth and take care of the infrastructure investments which have already been made.[1]

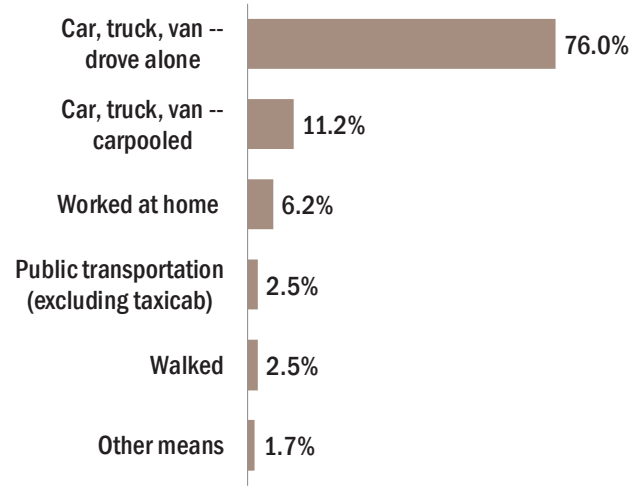
Utah has two major interstates that divide the state: north to south (I-15) and east to west (I-80). The Utah Transit Authority operates the public transportation system that includes travel by bus and rail (TRAX and FrontRunner). The bus system serves seven Utah counties—Box Elder, Davis, Salt Lake, Summit (limited to a Salt Lake City/Park City shuttle), Tooele, Utah, and Weber.[2] The three TRAX rail lines only serve Salt Lake County. The fourth rail line, the FrontRunner, runs north to south and back again. It serves almost the entire length of the Wasatch Front by running from the Pleasant View Central Station in Weber County (north of Salt Lake and Davis counties) to the Provo Central Station in Utah County (south of Salt Lake County).[3]

Utah currently has eight regional transit systems.[4]

- Cache Valley Transit District: Provides fixed-route and paratransit service throughout Cache County and Preston, Idaho
- Utah Transit Authority (UTA): Provides transit, paratransit, and ride-share services throughout Box Elder, Davis, Salt Lake, Tooele, Utah, and Weber counties
- Cedar Area Transportation System: Under Cedar City authority, provides fixed-route and paratransit service throughout the city
- SunTran: Under City of St. George authority, provides fixed-route and paratransit service throughout the city
- Park City Transit: Under Park City authority, provides fixed-route and paratransit service throughout Park City and surrounding areas within Summit County
- Basin Transit Association: Provides fixed-route service to Duchesne, Roosevelt, and Vernal
- Navajo Transit System: Provides fixed-route service throughout the Navajo Nation in Arizona, New Mexico, and Utah (including the Aneth, Blanding, and Bluff communities in Utah)
- Ute Tribe Transit: Provides transit service throughout the Ute reservation

The Utah Department of Transportation (UDOT) also supports active transportation (human-powered travel like walking or biking). One UDOT strategic goal includes developing facilities for the use of pedestrians and bicyclists. They also provide maps of walking and biking trails throughout the state (https://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:11,77223).[5] According to data from the American Community Survey (ACS), an estimated 76.0% of Utah workers drove to work alone in 2014–2018, and 11.2% carpooled (Figure 5). Among those who commuted to work, it took them on average 21.7 minutes to get to work.[6]

Figure 5: Percentage of Workers Aged 16 Years and Older Commuting by Mode in Utah, 2014–2018



1 Utah's Unified Transportation Plan. Accessed 9/20/19 at http://unifiedplan.org/wp-content/uploads/2015/12/Utah_Unified_Plan_Web_2015-2040.pdf.
2 Utah Transit Authority. Accessed 11/16/2019 at https://www.rideuta.com/Rider-Tools/Schedules-and-Maps.
3 Utah Primary Care Needs Assessment, March 2016. Office of Primary Care and Rural Health, Utah Department of Health. Accessed 9/23/19 at https://ruralhealth.health.utah.gov/wp-content/uploads/2018/11/UT-PCNA-Mar-2016_FINAL.pdf.
4 2018 State Management Plan Policies and Procedures. UDOT Public Transit Team. Accessed 9/20/19 at https://www.udot.utah.gov/main/uconowner.gf?n=3236456446420640.
5 Active Transportation. Utah Department of Transportation. Accessed 9/20/19 at http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:11,.
6 2018 Narrative Profiles, 2014–2018 American Community Survey (ACS) 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

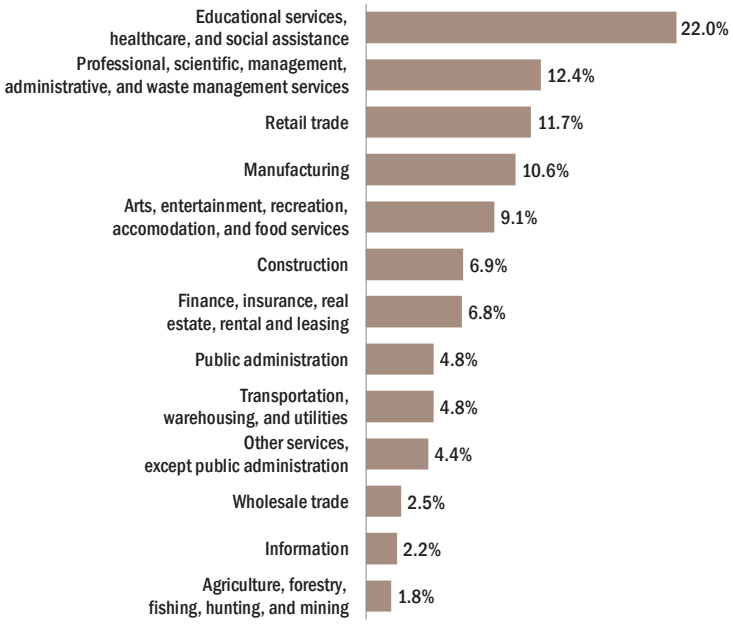
Occupation and Industry[1]

Industry data describe the kind of business conducted by a person's employing organization. Occupation describes the kind of work the person does on the job.

In 2014–2018, the majority of the civilian employed population 16 years and older in Utah worked in the following industries: educational services, healthcare, and social assistance (22.0%); professional, scientific, management, administrative, and waste management services (12.4%); retail trade (11.7%); and manufacturing (10.6%). (Figure 6)

Occupations for the civilian employed population 16 years and older in Utah in 2014–2018 included management, business, sciences, and arts occupations (38.1%); sales and office occupations (2 4.4%); service occupations (15.3%); production, transportation, and material moving occupations (13.4%); and natural resources, construction, and maintenance occupations (8.8%).

Figure 6: Percentage of Civilian Employed Population Aged 16 Years and Older by Industry in Utah, 2014–2018



Politics

Percent voting

Current data indicate that 86.8% of registered voters are active. Almost half (46.4%) of the total registered voters are affiliated with the Republican party, followed by 34.4% who are unaffiliated and 14.4% who are affiliated with the Democratic party (Table 1).[2]

For the 2018 general election, 75.6% of active registered voters cast ballots. Percentages varied by county ranging from 67.3% in Utah County to 84.5% in Grand County.[3]

Table 1: Voters by Party and Status, Utah[4]

	Active	Inactive*	Total
Republican	715,526	83,997	799,523
Unaffiliated	489,546	103,887	593,433
Democratic	220,193	27,399	247,592
Independent American	46,786	6,480	53,266
Libertarian	16,052	3,439	19,511
Constitution	5,490	1,181	6,671
Green	1,956	284	2,240
United Utah	1,774	143	1,917
Total	1,497,343	226,810	1,724,153

* An "Inactive Voter" is a voter that has not voted in 2 regular general elections and has failed to respond to a notice sent to them by the county clerk.

Structure of Legislature and Districts

The Utah Legislature is comprised of 29 Senators and 75 members of the House of Representatives. The majority of both entities (approximately 80%) are Republican (six Senators and 16 Representatives are affiliated with the Democratic Party).[4]

Governor's Priority and Health Initiatives[5]

Governor Gary Herbert highlighted several key issues for Utah on his website, including: air quality, healthcare, transportation, and education.

Air quality is an issue of concern consistently identified by Utah citizens. Air quality issues in Utah affect health, tourism, and recruitment of new businesses. In the Governor's 2020 budget, $100 million was proposed for finding and implementing data-driven solutions for reducing emissions.

1 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
2 Current Voter Registration Statistics. Accessed 5/13/2020 at https://voteinfo.utah.gov/current-voter-registration-statistics/.
3 2018 General Election Canvass Report. Downloaded on 9/23/19 from https://elections.utah.gov/election-resources/election-results.
4 Legislative Roster. Accessed 5/22/2020 at https://le.utah.gov/Documents/find.htm.
5 Governor Gary R. Herbert. Accessed 11/16/2019 at https://governor.utah.gov/.

The health of the state is driven by the individual health of its residents. Ensuring healthcare is efficient, effective, and affordable is essential to maintaining the status of Utah as one of the healthiest states in the country.

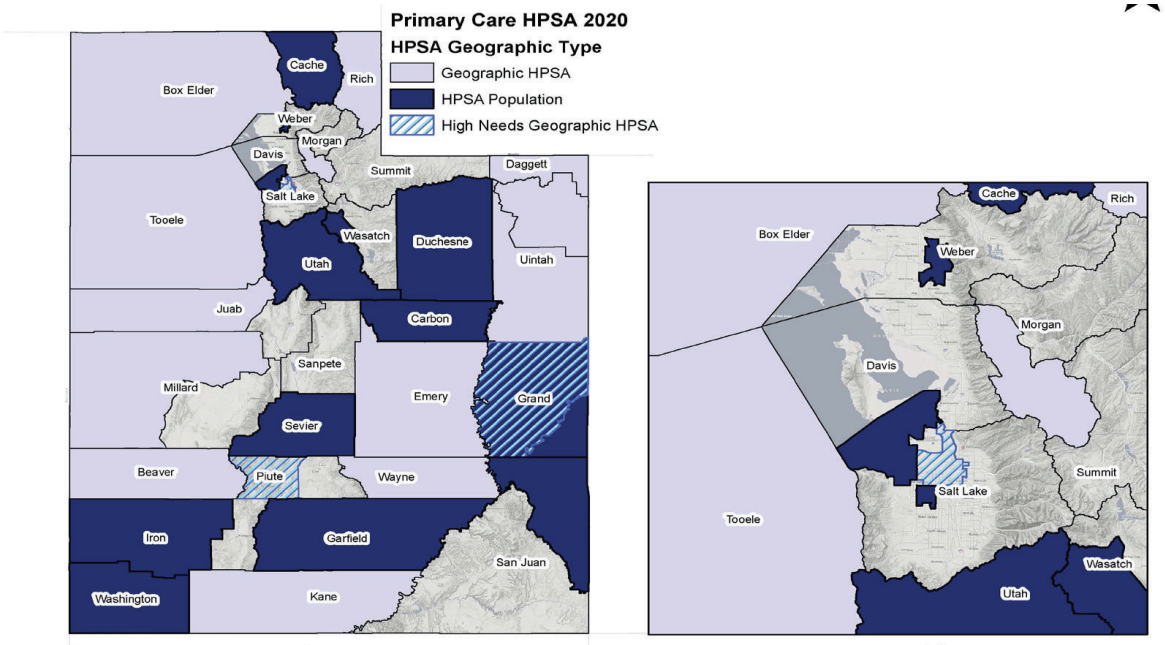
According to Governor Herbert, "education is the best investment in Utah's future," and is the highest budget priority. In fact, Governor Herbert included a $382 million increase in education spending in his 2019 Fiscal Year Budget Proposal, an amount that represents 72% of all new state revenue for the fiscal year.

Utah is one of the fastest growing states in the nation. A significant investment in transportation infrastructure is needed to prepare for this growth. In addition to increased funding to build highways and roads, investments are being made to increase transit options which will help to lessen the environmental impact of the growing population in Utah.

Health Professional Shortage Areas

According to America's Health Rankings, despite being ranked fifth in the nation for overall health, one of the state's challenges is it's low rate of primary care physicians. In fact, Utah is ranked at 49 with a rate of 102.0 primary care physicians per 100,000 population. The Utah Department of Health (UDOH) Office of Primary Care and Rural Health (OPCRH) conducted a Primary Care Needs Assessment in 2018 to report on health status and healthcare access throughout Utah. The report examines Health Professional Shortage Areas (HPSAs), which are federal designations for areas that indicate health care provider shortages in primary care, dental health, or mental health. There are three types of HPSAs: geographic, population, and facility. Geographic and population-based HPSAs factor in the number of primary care providers in the area and the population for whom poverty status has been determined. In addition to the number of providers, a population-based HPSA will also consider the percentage of the population who meet high-risk criteria (e.g., the percentage of the population who is low-income or eligible for Medicaid/Medicare is greater than 30%). A facility HPSA designation is granted to facilities that treat high-risk populations, such as correctional facilities, state mental hospitals, and federally qualified health centers.

Map 5: Utah Primary Medical Care Health Professional Shortage Areas

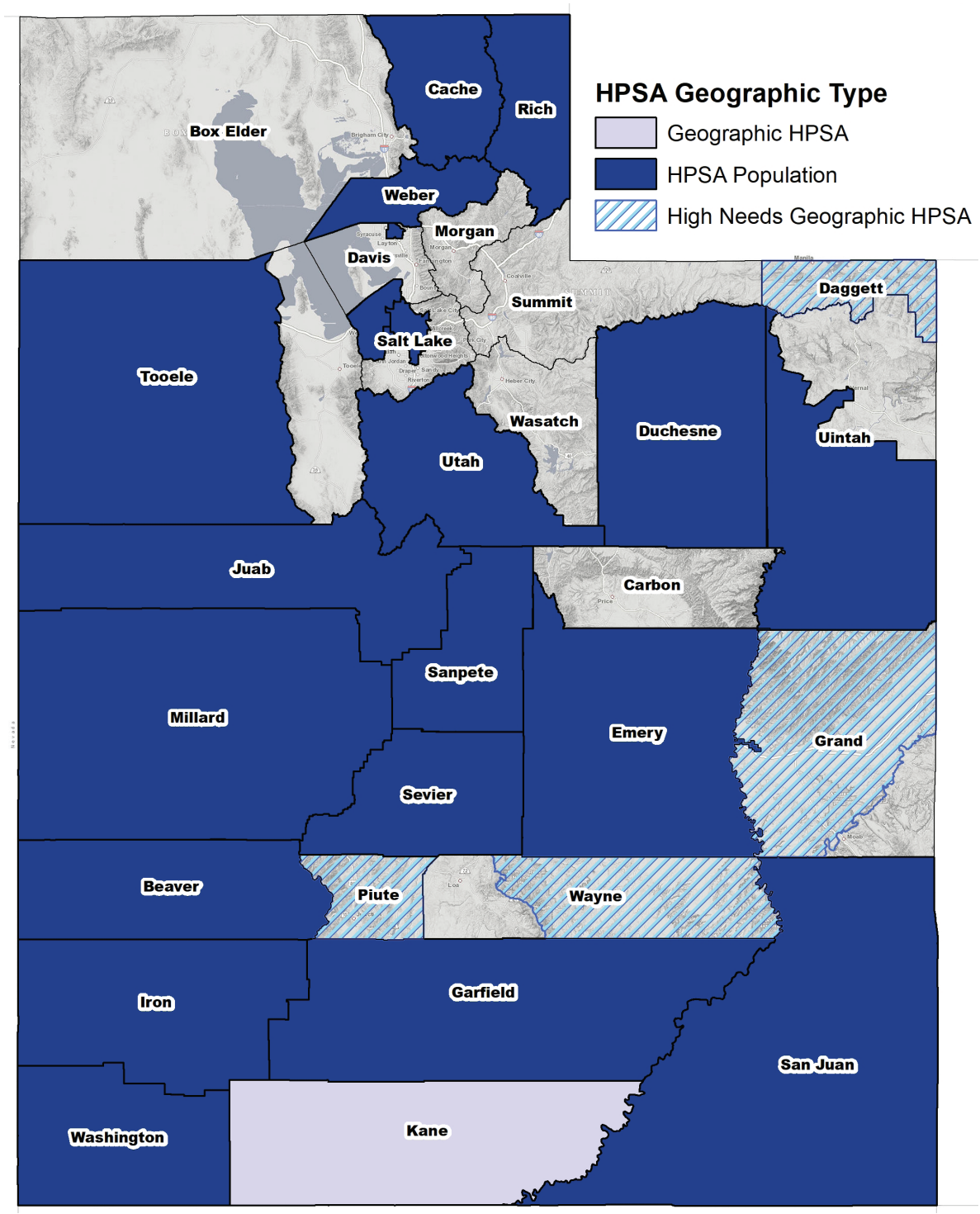


In primary medical care, Utah had 26 counties with shortage areas based on either geography, population group, or facility (Map 5).[1] It is estimated that only 61% of the need is met for the 778,230 persons living in those areas and that 101 more practitioners would be needed to no longer be designated as a shortage area.[2]

1 Utah Department of Health Office of Primary Care and Rural Health.
2 Designated Health Professional Shortage Areas Statistics. Health Resources and Services Administration. Downloaded 6/4/2020 from https://data.hrsa.gov/topics/health-workforce/shortage-areas.

In dental care, Utah had 24 counties with shortage areas based on either geography, population group, or facility (Map 6).[1] It is estimated that only 58% of the need is met for the 686,300 persons living in those areas and that 72 more practitioners would be needed to no longer be designated as a shortage area.[2]

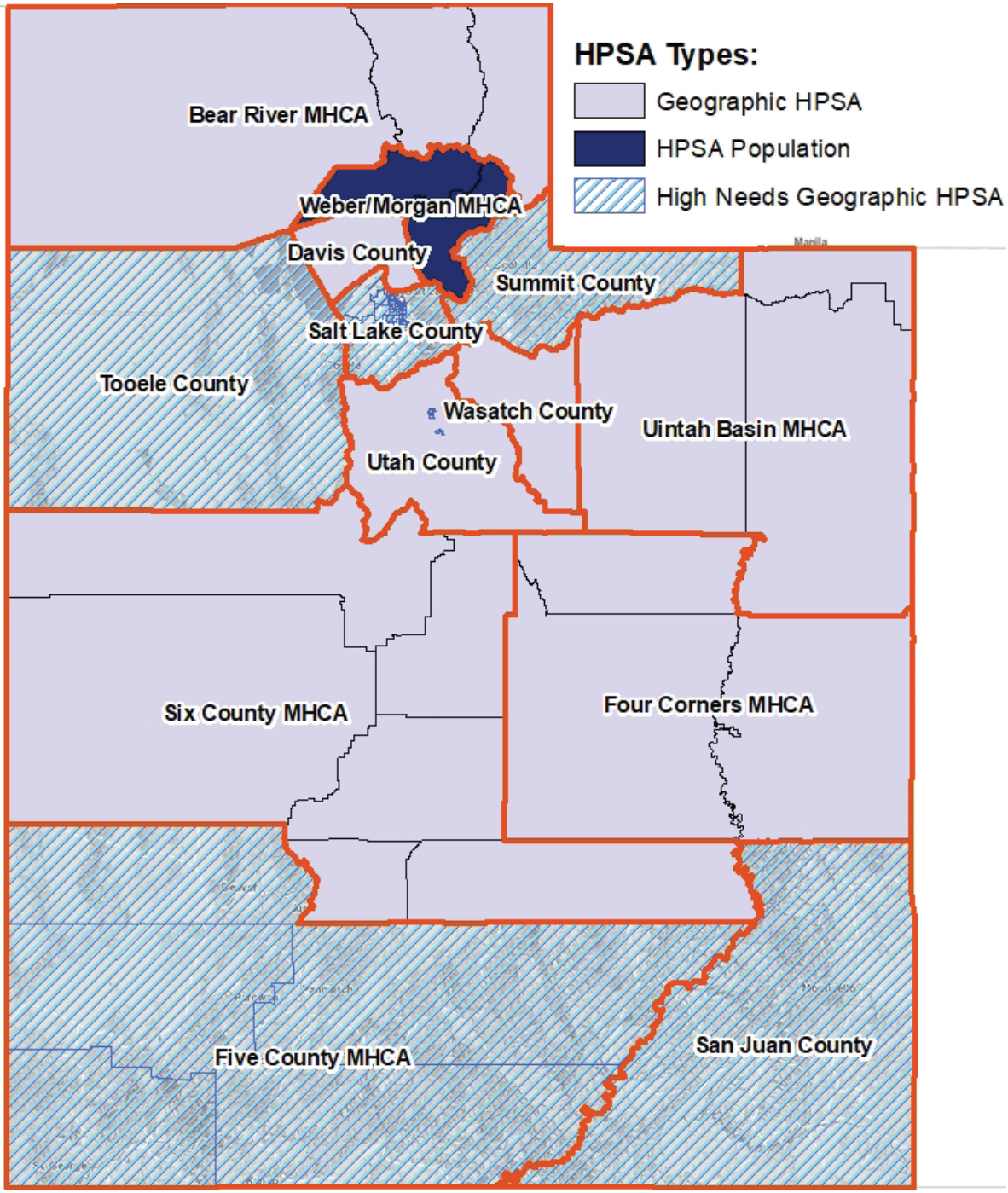
Map 6: Utah Dental Care Health Professional Shortage Areas



1 Utah Department of Health Office of Primary Care and Rural Health.
2 Designated Health Professional Shortage Areas Statistics. Health Resources and Services Administration (HRSA). Downloaded 6/4/2020 from https://data.hrsa.gov/topics/health-workforce/shortage-areas.

In mental healthcare, all 29 Utah counties were designated as shortage areas based on either geography, population group, or facility (Map 7).[1] It is estimated that only 47% of the need is met for the state population and that 87 more practitioners would be needed to no longer be designated as a shortage area.[2]

Map 7: Utah Mental Healthcare Health Professional Shortage Areas



The UDOH OPCRH utilizes these designations to access federal programs that provide resources to help combat provider shortages.

1 Utah Department of Health Office of Primary Care and Rural Health.
2 Designated Health Professional Shortage Areas Statistics. Health Resources and Services Administration (HRSA). Downloaded 6/4/2020 from https://data.hrsa.gov/topics/health-workforce/shortage-areas.

Collaboration

Respect

Demographics

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Overall Population

Population Counts and Anticipated Growth

In 2018, Utah had a total population of 3.2 million.[1] The Utah population is projected to increase to 5.8 million in 2065, an annual average rate of change of 1.3%. Anticipated growth can be attributed to a positive natural increase (i.e., births minus deaths), as well as net migration to the state.[2]

Utah growth rates are expected to exceed national growth rates, despite a projected deceleration in the next 50 years.[3]

Population Dispersion

Almost 80% of the Utah population reside in urban counties (Salt Lake, Davis, Weber, Utah, and Cache counties). The remainder of the population lives in rural (17.9%) and frontier (2.7%) counties, according to 2018 estimates.[4]

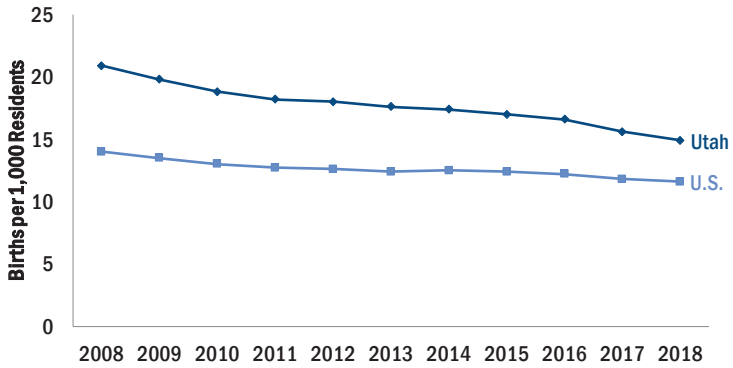
Birth Rates[5]

Birth rate is the number of live births in a given year per 1,000 persons in the total population. Tracking birth rate patterns among Utah and U.S. women as a whole is critical to understanding population growth and change in the United States and in Utah. Birth rates directly relate to a population's need for timely and appropriate preconception, prenatal, neonatal, and postpartum care.

In 2018, there were 47,211 live births to Utah residents, a rate of 14.9 per 1,000 Utahns. This is a 5% decrease from the 2017 birth rate of 15.6, and ultimately, the lowest birth rate in a decade.

Utah continued to report the highest birth rate in the U.S. with 14.9 live births per 1,000 total population in 2018. The U.S. birth rate decreased from the 2017 rate of 11.8 (Figure 7).

Figure 7: Birth Rates, Utah and U.S., 2008–2018

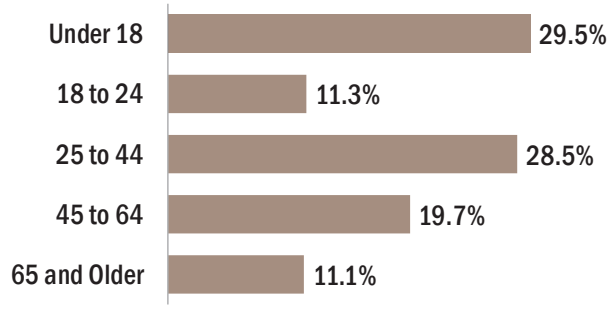


Distribution by Age

Utahns, on a percentage basis, are on average younger than the rest of the U.S. population. According to the Census Bureau 2018 Population Estimates Program, Utah had the youngest state population in the U.S. with a median age of 31 years versus 38.2 years nationally.[6]

The largest age group in the population during 2018 was children (29.5% younger than age 18), followed by adults aged 25–44 (28.5%) and adults aged 45–64 (19.7%) (Figure 8).[7]

Figure 8: Age Distribution of People in Utah, 2018



Gender

In 2018, the Utah population was 49.6% females and 50.4% males.[8]

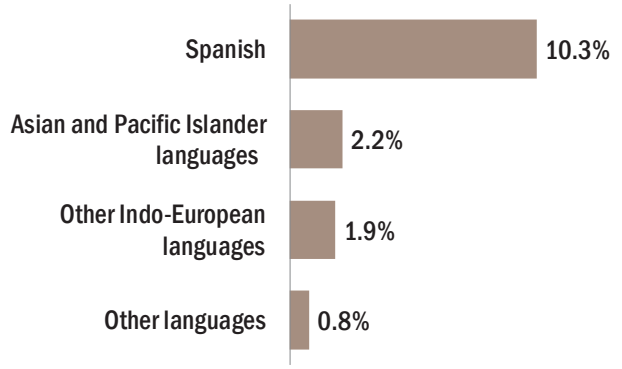
1 National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.
2 Utah's Long-Term Demographic and Economic Projections Summary. Kem C. Gardner Policy Institute. The University of Utah. July 2017. Accessed 12/26/19 from https://gardner.utah.edu/wp-content/uploads/Projections-Brief-Final-Updated-Feb2019.pdf.
3 Utah's Long-Term Demographic and Economic Projections Summary. Kem C. Gardner Policy Institute. The University of Utah. July 2017. Accessed 12/26/19 from https://gardner.utah.edu/wp-content/uploads/Projections-Brief-Final-Updated-Feb2019.pdf.
4 NCHS through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.
5 Birth Rates. Retrieved on 12/26/19 from Utah Department of Health (UDOH), Center for Health Data and Informatics (CHDI), Indicator-Based Information System for Public Health (IBIS-PH) website: https://ibis.health.utah.gov/indicator/view/BrthRat.UT_US.html.
6 Utah Population Characteristics: Age Distribution of the Population, Retrieved on 12/26/19 from UDOH,CHDI, IBIS-PH website: https://ibis.health.utah.gov/ibisph-view/indicator/view/AgeDistPop.Ut_US.html.
7 Population Estimates. Retrieved on 12/26/19 from UDOH, CHDI, IBIS-PH website: https://ibis.health.utah.gov/ibisph-view/query/result/pop/PopMain/Count.html.
8 Population Estimates. Retrieved on 12/26/19 from UDOH, CHDI, IBIS-PH website: https://ibis.health.utah.gov/ibisph-view/query/result/pop/PopMain/Count.html.

Race and Ethnicity

For people reporting one race alone in 2018, 90.7% were White; 2.7% were Asian; 1.5% were American Indian or Alaska Native; 1.4% were Black or African American; and 1.1% were Native Hawaiian or Other Pacific Islander. An estimated 2.6% reported two or more races. An estimated 14.2% of the people in Utah were people who are Hispanic. People of Hispanic origin may be of any race.[1]

According to American Community Survey (ACS) data, among people at least five years old living in Utah in 2014–2018, 15.2% spoke a language other than English at home. Spanish was spoken by 10.3% of people at least five years old; 4.9% reported that they did not speak English "very well" (Figure 9).[2]

Figure 9: Percentage of the Population 5 Years and Older Who Speak a Language Other Than English, Utah, 2014–2018

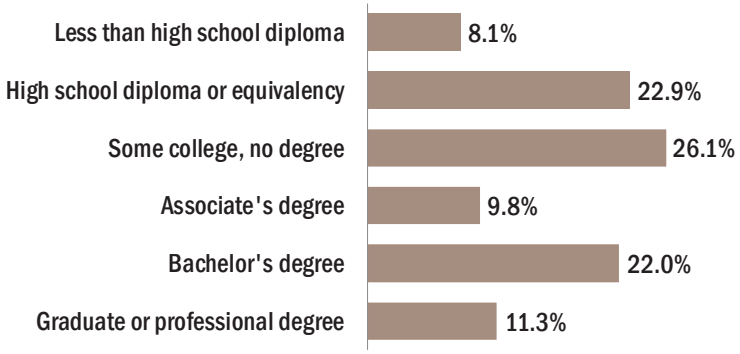


Education[3]

In 2014–2018, 92.0% of people aged 25 years and older had at least graduated from high school and 33.3% had a bachelor's degree or higher. An estimated 8.1% did not complete high school (Figure 10).

The total school enrollment in Utah was 972,456 in 2014–2018. Nursery school enrollment was 60,216 and kindergarten through 12th grade enrollment was 661,708. College or graduate school enrollment was 250,532.

Figure 10: Educational Attainment of Adults Aged 25+ in Utah, 2014–2018



Income[4]

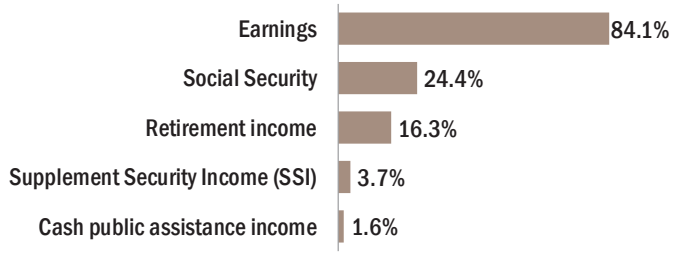
In 2014–2018, the median income of households in Utah was $68,374. An estimated 4.2% of households had incomes below $10,000 a year and 5.7% had incomes of $200,000 or more.

Median earnings for full-time year-round workers was $46,684. Male full-time year-round workers had median earnings of $53,583. Female full-time year-round workers had median earnings of $37,413 (Figure 11).

An estimated 84.1% of the households received earnings and 16.3% received retirement income other than Social Security. An estimated 24.3% of the households received Social Security (Figure 12). The average income from Social Security was $20,394. These income sources are not mutually exclusive; that is, some households received income from more than one source.

Figure 11: Median Earnings for Full-time Year-round Workers by Sex, Utah, 2014–2018

Figure 12: Proportion of Households by Income Sources in Utah, 2014–2018



1 Population Estimates. Retrieved on 12/26/19 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/query/result/pop/PopMain/Count.html.

2 2018 Narrative Profiles, 2014–2018 American Community Survey (ACS) 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

3 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

4 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Poverty

In 2014–2018, 10.3% of Utahns were in poverty. An estimated 11.5% of children younger than 18 were below the poverty level, compared with 6.4% of people 65 years old and older. An estimated 10.4% of people 18 to 64 years were below the poverty level.[1]

Households and Types[2]

The American Community Survey (ACS) defines a housing unit as "a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters." A household includes all the people who occupy a housing unit as their usual place of residence.

In 2014–2018, Utah had a total of 1.1 million housing units, 10.2% of which were vacant. Of the total housing units, 74.7% were single-family houses either not attached to any other structure or attached to one or more structures (commonly referred to as "townhouses" or "row houses"). 21.7% of the housing units were located in multi-unit structures, or those buildings that contained two or more apartments, and 3.5% were mobile homes (Figure 13).

An estimated 7.7% of the housing inventory was comprised of houses built since 2010, while 7.1% of the houses were first built in 1939 or earlier. The median number of rooms in all housing units in Utah was 6.4 rooms, and of these housing units 71.5% had three or more bedrooms.

In 2014–2018, Utah had 957,619 occupied housing units—69.9% owner-occupied and 30.1% renter-occupied. The average household size of owner-occupied houses was 3.25 and in renter-occupied houses it was 2.85. An estimated 21.2% of householders of these occupied houses had moved into their house since 2015, while 11.1% moved into their house in 1989 or earlier. Households without a vehicle available for personal use comprised 4.1% and another 29.9% had three or more vehicles available for use.

Most homes in Utah were heated by gas (85.1%) which includes utility, bottled, tank, or LP gas. Electricity heated 12.7% of homes. The remaining 2.2% of homes were heated by fuel oil, kerosene, other fuels, or no fuels at all (Figure 14).

According to the 2014–2018 ACS, there were a total of 957,619 households in Utah with an average size of 3.13 people. Most households were married-couple families (61.4%). Almost 20% of households were people living alone, and 5.1% were female-headed households with children (no husband present) (Figure 15).

Figure 13: Types of Housing Units in Utah (percentage distribution), 2014–2018

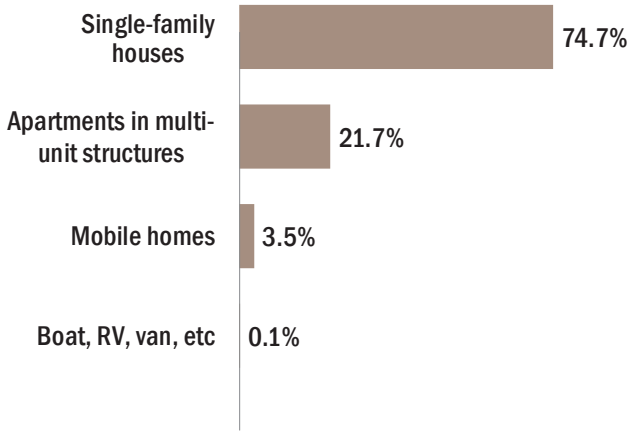


Figure 14: House Heating Fuel Used (percentage distribution) in Utah, 2014–2018

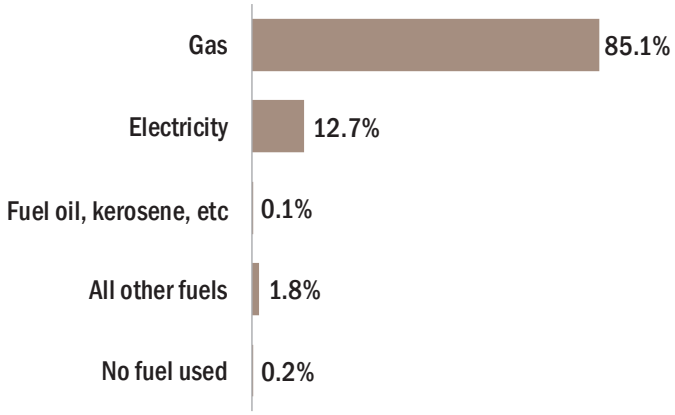
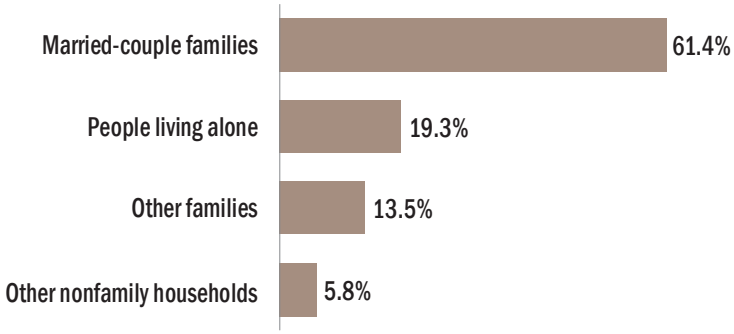


Figure 15: Types of Households in Utah, 2014–2018



1 2018 Narrative Profiles, 2014–2018 American Community Survey (ACS) 5-Year Narrative Profile, Utah. Accessed 2/13/20 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
2 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Financial Characteristics and Housing Costs[1]

In 2014–2018, the median property value for owner-occupied houses in Utah was $256,700.

Of the owner-occupied households, 70.6% had a mortgage. 29.4% owned their houses "free and clear," that is without a mortgage or loan on the house. The median monthly housing costs for owners with a mortgage was $1,497 and for owners without a mortgage it was $418.

For renter-occupied houses, the median gross rent for Utah was $988. Gross rent includes the monthly contract rent and any monthly payments made for electricity, gas, water and sewer, and any other fuels to heat the house.

Households that pay 30% or more of their income on housing costs are considered cost-burdened. In 2014–2018, cost-burdened households in Utah accounted for 24.2% of owners with a mortgage, 7.9% of owners without a mortgage, and 45.1% of renters.

Computer and Internet Use[2]

In 2014–2018, 94.4% of households in Utah had a computer,and 85.7% had broadband internet. An estimated 86.9% of households had a desktop or laptop, 83.7% had a smartphone, 66.2% had a tablet or other portable wireless computer, and 3.5% had some other computer (Figure 16).

Among all households, 63.2% had a cellular data plan; 71.7% had a broadband subscription such as cable, fiber optic, or DSL; 9.2% had a satellite internet subscription; 0.5% had dial-up alone; and 0.2% had some other service alone (Figure 17).

Figure 16: Types of Computers in Utah, 2014–2018

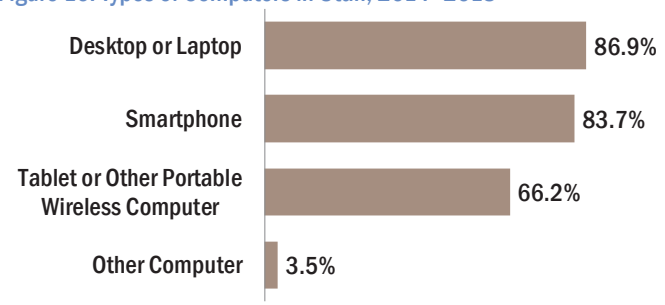
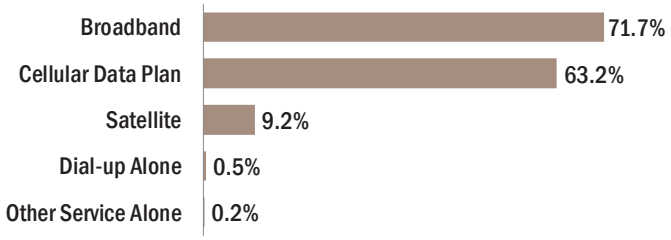


Figure 17: Types of Internet Subscriptions in Utah, 2014–2018



Employment[3]

In Utah, 63% of the population aged 16 and older were employed; 32% were not currently in the labor force.

An estimated 79% of the people employed were private wage and salary workers; 16% were federal, state, or local government workers; and 5% were self-employed in their own (not incorporated) business.

Religion

According to data from the Behavioral Risk Factor Surveillance System (BRFSS) in 2014, the majority (59%) of Utah adults were members of the Church of Jesus Christ of Latter-day Saints, with the next highest category being "No religion" (19%) (Figure 18).[4]

According to 2017 Gallup data, 54% of Utah adults are very religious (religion is important in their lives and say they attend religious services weekly or nearly weekly), 16% are moderately religious (religion is not important in their lives but attend religious services weekly or nearly weekly, or religion is important in their lives but do not attend religious services weekly or nearly weekly), and 30% are nonreligious (religion is not important in their lives and they seldom or never attend religious services). Nationwide, 37% are very religious, 30% are moderately religious, and 33% are nonreligious.[5]

1 2018 Narrative Profiles, 2014–2018 American Community Survey (ACS) 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
2 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
3 2018 Narrative Profiles, 2014–2018 ACS 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
4 2014 Utah Behavioral Risk Factor Surveillance System
5 State of the States. Gallup, Inc. Accessed 9/23/19 at http://www.gallup.com/poll/125066/State-States.aspx?g_source=WWWV7HP&g_medium=topic&g_campaign=tiles.

Nativity and Foreign Born[1]

In 2014–2018, an estimated 91.6% of the people living in Utah were U.S. natives. 61.9% of the Utah population were living in the state where they were born.

Approximately 8.4% of Utah residents in 2014–2018 were foreign-born. 38.6% of foreign born were naturalized U.S. citizens and an estimated 79.9% entered the country before the year 2010.

Foreign-born residents of Utah come from different parts of the world. Figure 19 displays the percentage of foreign born from each world region of birth in 2014–2018 for Utah.

Figure 18: Religious Affiliation of Utah Adults Aged 18+, 2014

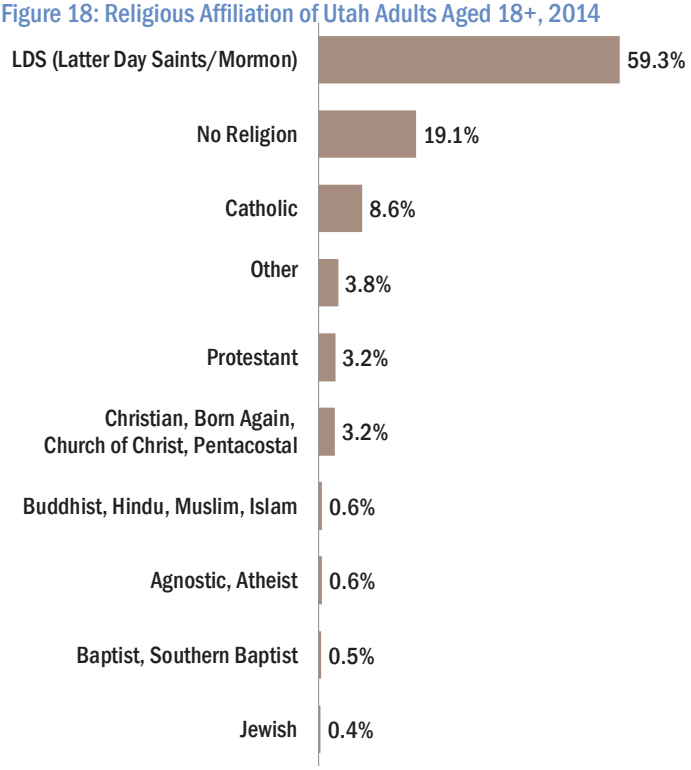
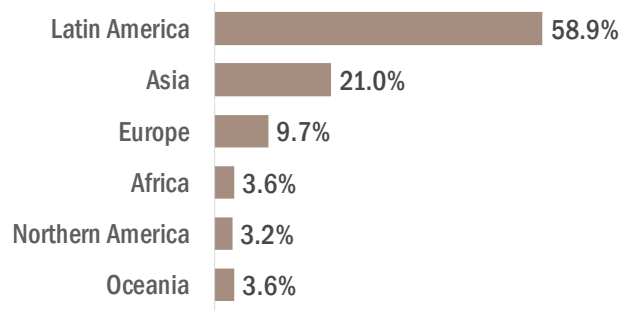


Figure 19: Region of Birth for the Foreign-born Population in Utah, 2014–2018



1 2018 Narrative Profiles, 2014–2018 American Community Survey 5-Year Narrative Profile, Utah. Accessed 12/26/19 at https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Collaboration

Respect

Special Populations

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Special Populations

Health disparities are differences in health outcomes that affect groups of people who are disadvantaged in opportunities and resources, often due to differences in environmental, social and/or economic conditions. A disparity implies differences in health outcomes are avoidable and unfair. In order to achieve health equity within Utah communities, or in other words, ensure the highest level of health potential for all people, it is important to identify groups that are at higher risk for experiencing health disparities, and seek to understand and address the factors contributing to the disparities.

This section includes a brief assessment for the following population groups: Racial & Ethinic Minorities; Tribes/American Indians; Lesbian, Gay, Bisexual and Transgender Individuals; Homeless Individuals; Veterans; Individuals with Disabilities; and Refugees/Immigrants. Please note this is not an exhaustive list of populations in Utah at risk for experiencing health disparities, but represents some of the priority populations experiencing barriers to good health.

Race/Ethnic Minority Populations

At the time of the 2000 U.S. Census, 85% of Utah's population was non-Hispanic White, but this percentage has decreased to approximately 78.0% in 2019. Black, Asian, Pacific Islander, and Hispanic/Latino populations are growing at faster rates than the Utah population as a whole, with roughly one in five Utahns belonging to a racial or an ethnic minority group.

The largest race/ethnic minority group in Utah is Hispanic, making up almost 14% of the state's population. People who are Hispanic in Utah experience greater rates of poverty than the state average. The disparity is particularly pronounced in children, with 18.7% of Hispanic children living in poverty in 2018 which is almost double the state rate of 9.5%.[3] According to the Behavioral Risk Factor Surveillance System (BRFSS), in 2018, Hispanic individuals (37.4%) were less likely than non-Hispanic (8.8%) individuals to not have health insurance, and insurance, and to report that they were unable to receive needed healthcare due to cost (20.0% or Hispanics vs. 11.7% for non-Hispanics). Hispanic (12.1%) adults have higher rates of cigarette smoking than the state rate (9.2%). Further, Hispanic youth (19.0%) have higher rates of e-cigarette use than the state rate (12.4%), according to the 2019 Prevention Needs Assessment (PNA), a survey of 8, 10, and 12 grade students. PNA data also show that Hispanic youth (17.1%) had higher rates of obesity than the state rate (9.8%), and significantly lower rates of recommended physical activity than the state (14.9% vs 17.9%).

Table 1: Race Ethnicity, Utah, 2018

Race/Ethnicity	Average Annual Population	Percentage	90% CI (Lower)	90% CI (Upper)
Am. Indian/AK Native	54,797	1.8	1.7	1.9
Asian	103,138	3.4	3.3	3.5
Black/African American	52,703	1.7	1.6	1.8
Native Hawaiian/Pacific Islander	44,632	1.5	1.4	1.6
White	2,713,400	89.1	88.9	89.3
Hispanic	422,123	13.9	N/A	N/A
All Utahns	3,045,350			

Chart Note: Groups are not mutually exclusive and will not sum to total.

Although Native Hawaiians/Pacific Islanders (NHPI) make up just 1.5% of the population, Salt Lake City and West Valley City have the largest and second largest population of Tongans of any city in the U.S., and Salt Lake City has the fourth largest Samoan community in the U.S. The overall proportion of NHPIs in Salt Lake City is greater than any other city in the continental U.S. In 2018, the NHPI populations had higher age-adjusted rates than the state rate for obesity (50% vs 28.4%, respectively) and diabetes (15.9% vs 8.8 respectively). They also are significantly more likely to be uninsured (30.9%, age- adjusted) and report cost being a barrier to care (26.4%, age adjusted).

1.7% of the Utah population of people who are Black. Although the incidence of high blood pressure among the Black population has decreased in the past few years, in 2017, people who are Black Utahns had a higher rate of doctor-diagnosed high blood pressure (47.0%) that was almost double the general Utah population (25.7%). People who are Black aslos experienced a significantly higher rate of new HIV infections in 2018, with a rate of 22.0 per 100,000 vs. the state rate of 3.8 per 100,000.

3 American Community Survey.
4 Behavior Risk Factor Surveillance System. Accessed 11/01.2019 from theIBIS-PH Web site: http://ibis.health.utah.gov.
5 2019 Prevention Needs Assessment.
6 Native Hawaiian and Pacific Islander Health. Office of Health Disparities, Utah Department of Health. Accessed 8/31/2020
7 Behavior Risk Factor Surveillance System. Accessed 11/01.2019 from theIBIS-PH Website: http://ibis.health.utah.gov.
8 Bureau of Epidemiology, Utah Department of Health.

Health Disparities affecting American Indian/Native Alaskan populations are included in the following section which also outlines the tribal health system and some of its unique challenges. Throughout the Data section in each of the health indicators, more race and ethnicity information is included. Disparities for these groups are highlighted when applicable. Additionally, the Utah Office of Health Disparities completes a Utah Health Status by Race & Ethnicity report every five years, which provides a more comprehensive look at the health disparities experienced by racial and ethinic minority communities. The 2015 report can be found at: https://www.health.utah.gov/disparities/data/race-ethnicity-report/2015HealthStatusbyRace&Ethnicity.pdf.

Tribes/American Indian

There are eight federally recognized tribes within the state of Utah: Confederated Tribes of the Goshute Reservation, Navajo Nation, Northwestern Band of Shoshone Nation, Paiute Indian Tribe of Utah, San Juan Southern Paiute, Skull Vall ey Band of Goshute, Ute Indian Tribe, and Ute Mountain Ute Tribe. Each of the eight tribes are sovereign governments, and has an independent relationship with the state of Utah. In addition, each tribe has an independent relationship with each other.

In 2017, the tribes and the state of Utah updated and signed a formal agreement (policy) outlining the framework for a government to government relationship. The model developed by the Utah Department of Health (UDOH) Office of Americ an Indian/Alaska Native (AI/AN) Health Affairs includes three components: the AI/AN office, formal Consultation policy, and facilitation of the Utah Indian Health Advisory Board (UIHAB). The UIHAB consists of appointed representatives from each of the eight tribal governments and the Urban Indian Organization located in Salt Lake City. The preliminary step to begin the formal communication process has been established through monthly meetings between the UDOH and the UIHAB. In addition to meeting with the UIHAB, the Office reports quarterly to the Utah Tribal Leadership (UTL) on health and public health issues raised by the UIHAB and the community at large and annually to the Utah Native American Legislative Liaison Committee on prospective health and public health policy concerns.

The Indian Health Service (IHS) office is a federal division that seeks to help improve the mental, physical, social, and spiritual health of AI/ANs. It does this through providing primary care and specialty services. It also provides public health nursing, dental care, and health education.[1] There are 12 tribal epidemiology centers (TECs) throughout the United States. One piece of their mission statement is "identifying and understanding health problems and disease risks."[2] The IHS and the TECs both play an important role in collecting AI/AN health status data that can be tribally specific. The state of Utah has data sharing agreements with two TECs—the Intertribal Council of Arizona Tribal Epi Center and the Navajo Tribal Epi Center. There is potential to build on these data sharing agree-ments and to negotiate new agreements with additional TECs that provide coverage to other Utah tribes.

Despite data sharing agreements with TECs, collecting data that is valid and reliable for AI/AN populations is challenging for several different reasons. Accessing regional, state, or local data is difficult due to issues such as small sample sizes. Often we collect health data through sources like the Behavioral Risk Factor Surveillance System (BRFSS). The sample size of AI/AN who respond to the BRFSS is small, so the data is under reported and may not reflect what is happening in each Tribal community.

Some measures that illustrate disparities among the AI/AN population include: AI/AN have the highest rates of smoking (21.3%, Figure 20), depression (25.7%, Figure 21), suicide (22.4 per 100,000, Figure 22), and binge drinking (14.6%, Figure 23). They also had the second highest rates of poor mental health (20.8%) and diabetes (15.3%) during 2016–2018. In addition, AI/AN had a significantly higher rate of obesity (36.7%) than the state (28.4%) for 2017–2018.[1] More information about some of these measures can be found within the health indicator sections.

Figure 20: Age-adjusted Smoking Rates by Race, Utah, 2017–2018

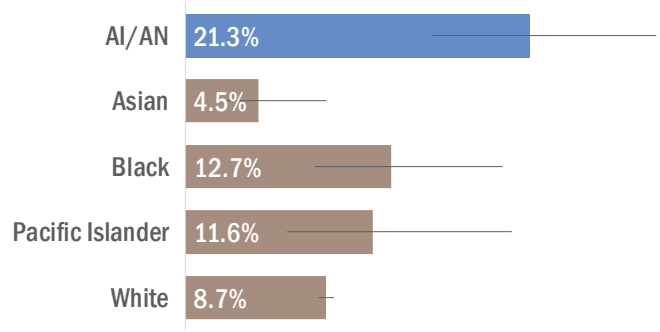


Figure 21: Age-adjusted Depression Rates by Race, Utah, 2016–2018

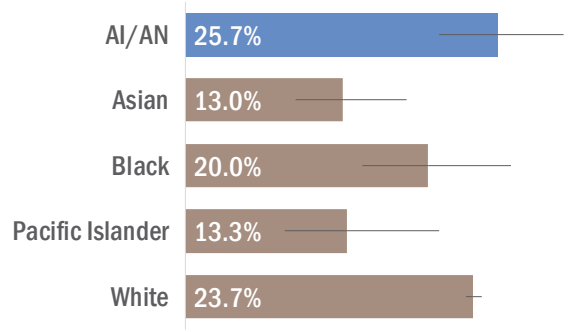
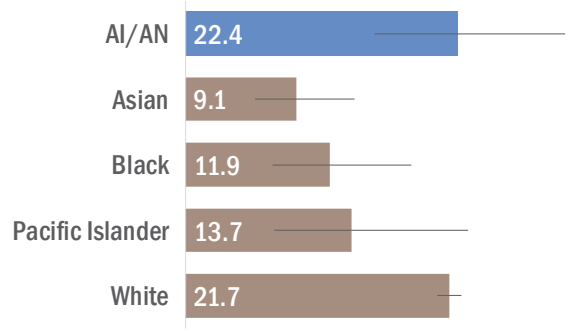


Figure 22: Age-adjusted Suicide Rates per 100,000 by Race, Utah, 2016–2018

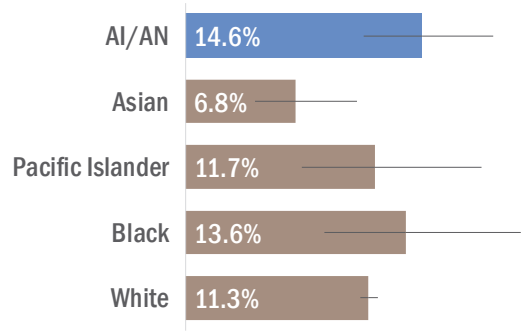


1 About IHS. Indian Health Services (IHS). Accessed 1/9/20 from https://www.ihs.gov/aboutihs/.
2 About. Tribal Epidemiology Centers. Accessed 1/9/20 from https://tribalepicenters.org/about/.

In 2018, the Office of AI/AN Health Affairs worked with UTL, the UIHAB, and the AI/AN community at large to discuss a few open-ended questions about what health looks like in their communities. Four preliminary themes emerged:

- Overall Wellbeing
  - Access to services
  - Cultural preservation of traditional values and practices
  - Health equity
- Dietary Needs
  - Access to foods with nutritional value
  - Access to clean water
  - Traditional dietary practices
- Behavioral Health
  - Domestic violence
  - Suicide
  - Elder abuse
- Strengthening Respect for Communities and Families
  - Developing resilience
  - Breaking the cycle of addiction (alcohol, drug, and food)
  - Health literacy
  - Indian Child Welfare Act

Figure 23: Age-adjusted Binge Drinking Rates by Race, Utah, 2016–2018



Understanding tribal health and public health needs is a priority for the UDOH. Acknowledging and developing policy and processes to address these needs can only contribute to improved health outcomes for AI/AN communities and Utah overall.

LGBT

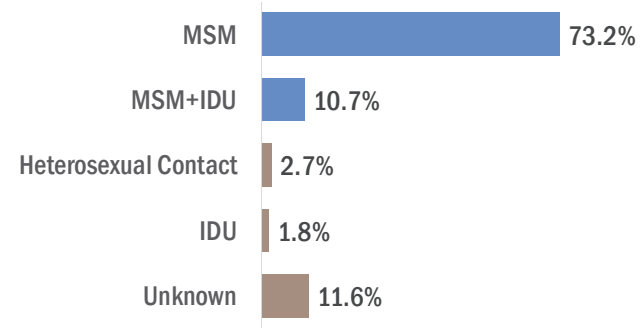
Individuals who identify as lesbian, gay, bisexual, or transgender (LGBT) have unique health needs and often face many health inequities. Many of these health disparities are the result of societal discrimination and lead to a myriad of health problems such as substance abuse, psychiatric disorders, depression, obesity, and suicide among LGBT individuals.[2,3] In 2018 in Utah, 4.1% of the population identified as lesbian, gay, bisexual, or other."[4] The 2018 BRFSS did not collect data on a person's gender identity. Without collecting consistent information regarding a person's sexual orientation and gender identity, it will be difficult to adequately meet the health needs of the LGBT populations in Utah.

Table 2: Age-adjusted Percentage of Adults Reporting Each Condition by Sexual Orientation, Utah, 2018

	Heterosexual		LGB	
General Health Fair/Poor	14.1%	*(13.3%–15.0%)*	24.7%	*(19.9%–30.2%)*
Current Smoker	8.9%	*(8.2%–9.7%)*	13.4%	*(9.9%–17.8%)*
Binge Drink	10.2%	*(9.4%–11.0%)*	14.9%	*(11.6%–19.9%)*
Did Not Meet Recommended Physical Activity*	44.7%	*(43.3%–46.0%)*	60.8%	*(54.7%–66.6%)*

The most recent data for this indicator came from 2017.

Figure 24: New HIV Infections Among Utah Males, 2018



1 Retrieved Thu, 12 December 2019 from the Utah Department of Health, Indicator-Based Information System for Public Health Web site: http://ibis.health.utah.gov.
2 Lesbian, Gay, Bisexual, and Transgender Health. Healthy People 2020. Accessed 12/27/19 at https://www.healthypeople.gov/2020/topics-objectives/topic/lesbian-gay-bisexual-and-transgender-health?topicid=25.
3 Recommendations for Gay and Bisexual Men's Health. CDC. Accessed 12/27/19 at https://www.cdc.gov/msmhealth/for-your-health.htm.
4 Utah Behavioral Risk Factor Surveillance System.

According to age-adjusted rates from the 2018 BRFSS, lesbian, gay, and bisexual (LGB) adults in Utah reported higher rates of fair or poor health overall than did their heterosexual counterparts—24.7% compared with 14.1%. LGB adults were more likely to smoke and binge drink than heterosexual adults. They were also less likely to meet the recommendations for physical activity in 2017 (Table 2).[1] These factors increase LGB individuals' risk for many other chronic diseases.

Gay men are the most at-risk population in Utah (and in the U.S.) for contracting HIV. In a recent report published by the UDOH, men who have sex with men (MSM) and MSM and intravenous drug users (IDU) accounted for 83.9% of all the newly diagnosed HIV cases among men in Utah in 2018 (Figure 24).[2]

LGB adults were two and a half times more likely not to have health care coverage. Along with this, they reported higher rates of not having a personal physician (Figure 25).[3] This may make opening up about specific health problems more challenging, which then makes getting adequate care difficult.

The 2019 Student Health and Risk Prevention (SHARP) Survey included a sexual orientation/gender identity module for the first time. The results cleared up key disparities in mental health between heterosexual and LGBT youth in Utah. LGBT youth in Utah were significantly more likely to have seriously considered suicide than heterosexual youth. They were also more likely to have felt sad/hopeless almost every day for two weeks or more (Figure 26 and Figure 27). Gay and lesbian youth were more than two and a half times as likely to feel isolated than heterosexual youth (Figure 28).[4] Youth who identify as LGBT often feel isolated, which leads to poor mental health. Changing this social isolation will bolster mental health in these populations.

The adult LGB populations in Utah are also at risk for poor mental health. They were more likely to report having seven or more days in the past month of poor mental health than heterosexual adults. They were also more likely to report having a physician tell them they had a depressive disorder (Table 3). More than one-third of the LGB populations in Utah (36.2%) have depression in some form (age-adjusted rate).[1]

Figure 25: Age-adjusted Percentage of Adults With No Health Care Coverage and No Personal Doctor by Sexual Orientation, Utah, 2018

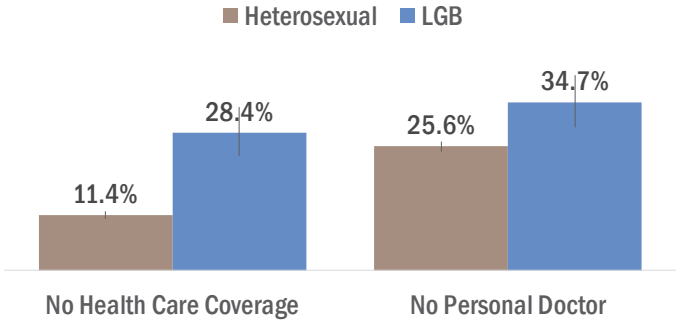


Figure 26: Mental Health/Suicidal Ideation by Sexual Orientation in Youth, Utah, 2019

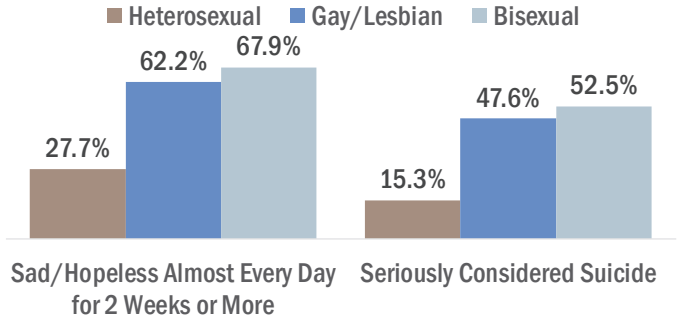


Figure 27: Mental Health/Suicidal Ideation by Gender in Youth, Utah, 2019

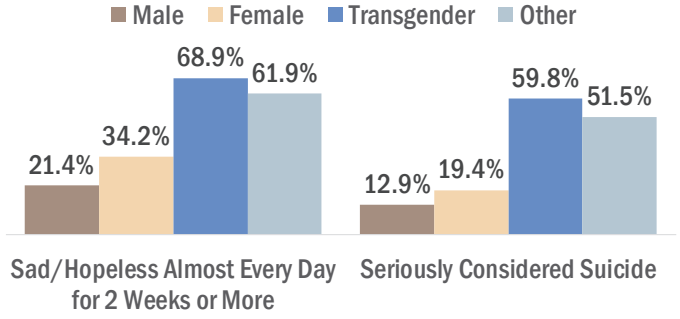
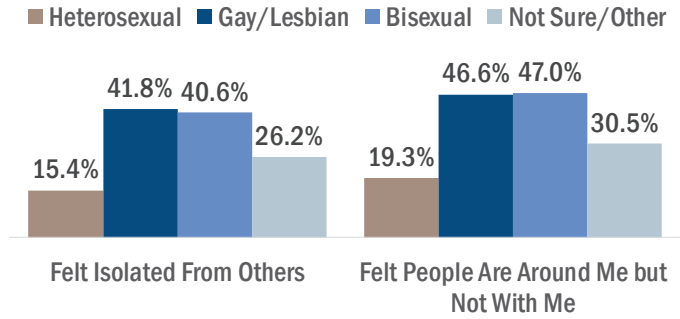


Figure 28: Social Isolation by Sexual Orientation in Youth, Utah, 2019



1 Retrieved Fri, 01 November 2019 from the Utah Department of Health (UDOH), Indicator-Based Information System for Public Health (IBIS-PH) Web site: http://ibis.health.utah.gov.

2 2018: Annual HIV Surveillance Report. UDOH. Accessed 3/1/2020 at http://health.utah.gov/epi/diseases/hivaids/surveillance/2018_HIV_Surveillance_Report.pdf.

3 Retrieved Fri, 01 November 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.

4 2019 SHARP Survey: Youth Suicide Prevention Collaborative Data Overview Presentation. October 28, 2019.

Table 3: Age-adjusted Percentage of Adults Reporting Poor Mental Health and Depression by Sexual Orientation, Utah, 2018

	Heterosexual		LGB	
7 or more days of not good mental health	17.6%	*(16.6%–18.6%)*	25.3%	*(21.1%–30.0%)*
Doctor told you have a depressive disorder	23.6%	*(22.5%–24.7%)*	36.2%	*(31.3%–41.5%)*

Homeless

Persons experiencing homelessness are a vulnerable population in Utah. Beyond the obvious housing insecurity faced by this population, they are also dealing with a host of other concerns attendant to their lack of permanent housing—such as food insecurity, exposure to violence and drugs, infectious diseases, and mental health issues.

Each year on an appointed day in January there is an exhaustive effort across Utah to count every person who meets the Department of Housing and Urban Development definition of literal homelessness called the Point-in-Time Count (PIT Count). The January 23, 2019 PIT Count recorded 1,844 individuals experiencing homelessness, or roughly 9 of every 10,000 people in Utah experienced homelessness that night. Table 4 is a snapshot of what was discovered about the population from the 2019 PIT Count.[2]

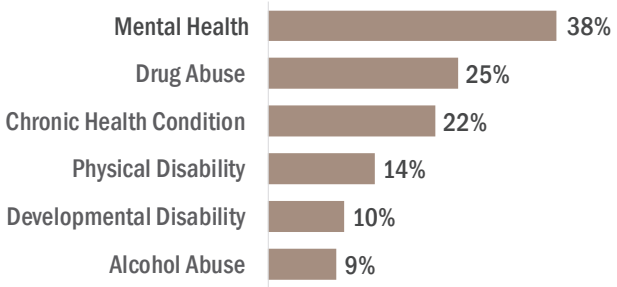
Table 4: Point-in-Time Count Subpopultions, Utah, January 2019[4]

Survivors of Domestic Abuse (adults and minors)	22%
Survivors of Domestic Abuse (adults only)	13%
Adults with HIV/AIDS	1%
Adults with Substance Abuse Disorders	23%
Veterans	8%
Adults with Mental Illness	32%

In 2017, Crossroads Urban Center, located in Salt Lake City, published a report after interviewing 77 women experiencing homelessness who were collectively responsible for 202 children. Ninety-one percent of the women become homeless after some type of crisis (e.g., job loss or domestic violence).[3] Roughly 66% of the women interviewed had experi-enced domestic violence. The Utah Department of Workforce Services (DWS) found 59% of the people in the Utah Homeless Management Information System were experiencing homelessness for the first time. The DWS concluded there was need to identify and prevent problems that cause homelessness before they occur.[4] Given the information from the report, efforts to prevent homelessness should include identifying and addressing triggers, such as domestic violence, to help reduce the incidence of homelessness in Utah.

Utah is exploring the connection between intergenerational poverty (IGP) and homelessness. IGP parents who experience homelessness are a subset of this population facing difficult health conditions (Figure 29).1 Addressing the needs of this population may be an upstream solution to preventing homelessness in the future.

Figure 29: Challenges of Homeless IGP Parents, Utah 2019 Report on Homelessness



1 Retrieved Fri, 01 November 2019 from the Utah Department of Health, Indicator-Based Information System for Public Health Web site: http://ibis.health.utah.gov.
2 State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.
3 More Help For Our Kids: Mothers Experiencing Homelessness Speak Out. (December 2017). Crossroads Urban Center. Accessed 12/27/19 at https://www.crossroadsurbancenter.org/uploads/5/2/3/8/52385067/moms_project_report_final.pdf.
4 State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.

People experiencing homelessness are particularly susceptible to infectious diseases due to the conditions in which they live. It is often difficult to maintain personal hygiene or access sufficient/healthy foods. Additionally, when they are sheltered it is often in crowded conditions, making it easy for contagious diseases to spread quickly. As an example of this, over the past two years, Utah has been dealing with an outbreak of Hepatitis A. As of the writing of this report, the homeless population comprised 43.4% of the cases.[2]

Salt Lake City recently closed its largest homeless shelter.[3] There was an abundance of drug trafficking, violence, and other crimes in and around the shelter.[4] Authorities and legislators believe closing the shelter and cleaning up the surrounding area will enhance public safety for the homeless population and others in the area. In place of one large shelter, three new centers were opened.[5] These new centers are designed to be homeless resource centers where people can come to get not only shelter, but assistance to help them transition into more stable housing and work, with services such as employment help, food security, and access to case managers.[6] Homeless advocates continue to seek ways to prevent homelessness and lessen the long-term impacts, not only in Salt Lake City, but around the state.

Veterans

According to 2014–2018 American Community Survey (ACS) data, Utah was home to around 123,000 veterans—or about 5.8% of the adult population. Only 6.9% of those veterans were female. Roughly 35% of Utah veterans served during the Vietnam War era. Approximatley two-thirds (67.2%) of them were older than age 55. The median income for Utah veterans was $44,111, and around three-fourths of Utah veterans had at least some college education. Veterans' unemployment rate in Utah was 4.1%—a little lower than the national rate of 5.8%.[7]

In some ways, veterans' health in Utah is doing well. Veterans are less likely than the general population to be unable to get needed medical care due to cost. They are also less likely to have doctor-diagnosed depression and less likely to report their mental health is not good. The likelihood of them having a disability is nearly the same as the general population (Table 5).[8]

A national report in 2017 regarding veterans and suicide highlights some challenges faced by veterans. Nationally, veterans make up 13.5% of all suicides, but only 7.9% of the population. The vast majority (70.7%) of male veteran suicides were by firearms. Additionally, of veterans who died by suicide in 2017 who had also accessed a Veterans Health Administration facility in either 2016 or 2017, 58.7% had been diagnosed with a mental health or substance use disorder.[9]

Table 5: Age-adjusted Percentage of Adults Reporting Each Condition by Veteran Status, Utah, 2018

	Veteran		Total Population	
Doctor-diagnosed Depression	21.5%	*(17.7-26.0)*	24.2%	*(23.2-25.3)*
Poor Mental Health	16.8%	*(12.9-21.6)*	18.2%	*(17.3-19.1)*
Cost as a Barrier to Health Care	8.4%	*(5.9-11.9)*	12.9%	*(12.1-13.7)*
Have a Disability	23.5%	*(19.8-27.5)*	23.1%	*(22.1-24.1)*
Current Smoking	16.9%	*(13.1-21.5)*	9.2%	*(8.5-9.9)*
Binge Drinking	13.1%	*(9.9-17.0)*	10.5%	*(9.8-11.3)*
Fair/Poor General Health	15.9%	*(12.6-19.9)*	14.9%	*(14.1-15.8)*
Diabetes	10.4%	*(8.3-13.0)*	8.8%	*(8.2-9.5)*
COPD	5.4%	*(3.6-7.9)*	4.4%	*(3.9-4.9)*
High Blood Pressure	27.0%	*(23.4-30.9)*	25.7%	*(24.8-26.7)*
Cancers (other than skin)	7.4%	*(5.5-9.8)*	6.5%	*(6.0-7.1)*

Data gathered from BRFSS shows that veterans are more likely than the general population of Utah to smoke and binge drink. Veterans also reported "fair/poor" health

1 State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.
2 Hepatitis A Outbreak. Utah Department of Health (UDOH). Accessed 12/27/19 at http://health.utah.gov/epi/diseases/hepatitisA/HAVoutbreak_2017.
3 State of Utah Annual Report on Homelessness 2018. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2018.pdf.
4 State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.
5 State of Utah Annual Report on Homelessness 2018. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2018.pdf.
6 Resource Center FAQ. Housing and Neighborhood Development. Accessed 12/27/19 at https://www.slc.gov/hand/homeless-services/resource-center-faq/.
7 Table S2101. Percent Veterans—Civilian Population 18 Years and Over—Estimate. U.S. Census Bureau, 2014–2018 American Community Survey 5-year estimates.
8 Retrieved Tue, 31 December 2019 from the UDOH, Indicator-Based Information System for Public Health Web site: http://ibis.health.utah.gov.
9 2019 National Veteran Suicide Prevention Annual Report. Office of Mental Health and Suicide Prevention. U.S. Department of Veterans Affairs. Accessed 1/3/20 at https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019_National_Veteran_Suicide_Prevention_Annual_Report_508.pdf.

more than the general population. Veterans experience higher rates of chronic health conditions than the general population (Table 5).[1]

Of the 123,000 veterans in Utah, nearly 33,000 of them live in rural areas. Map 8 illustrates veterans as a percentage of the county population. The counties with the highest percentage of veterans are rural or frontier counties.[2] This can make accessing care when they need it quite difficult. Considering that they experience higher rates of many chronic diseases, this is potentially dangerous for our rural veteran population. In order to better meet these needs, Utah recently was awarded a grant from the Rural Veterans Health Access Program. It is designed to bring rural health care stakeholders and VA administrators together to create trainings and resources for veterans living in rural and frontier areas. This grant aims to improve healthcare access for rural veterans.

Individuals With Disabilities

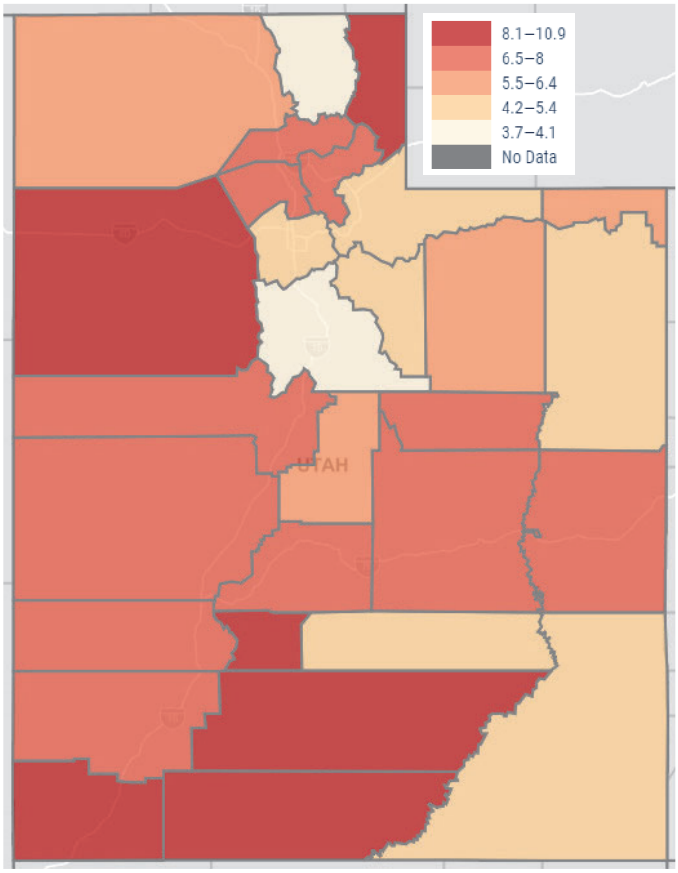
People with disabilities make up a large portion of the citizenship of Utah. Nearly 23% of Utahns report having some type of disability that affects mobility, cognition, independent living, vision, hearing, or self-care (Figure 30).[3] The following definitions are encompassed within the term "disability" throughout this section:

- *Mobility Disability:* Serious difficulty walking or climbing stairs
- *Cognitive Disability:* Serious difficulty concentrating, remembering, or making decisions
- *Independent Living Disability:* Difficulty doing errands alone such as visiting a doctor's office or shopping
- *Blind/Difficulty Seeing:* Blind or serious difficulty seeing, even when wearing glasses
- *Deaf/Difficulty Hearing:* Serious difficulty hearing
- *Self-care Disability:* Difficulty dressing or bathing

Most reported disabilities increase by age group, thus the elderly population is disproportionately affected by disability (Figure 31).[4]

Although disabilities range in type and severity, the data show that people living with a disability are more likely to suffer from adverse health conditions. Heart disease, cancer, strokes, and kidney disease are listed among the top ten causes of death in Utah and people with disabilities have higher rates of each of those conditions than those without disabilities.[1]

Map 8: Utah Veterans as a Percentage of the County Population, 2014–2018



Map downloaded from U.S. Census website, https://data.census.gov/cedsci/.

Figure 30: Percentage of Adults With Disabilities, Utah, 2018

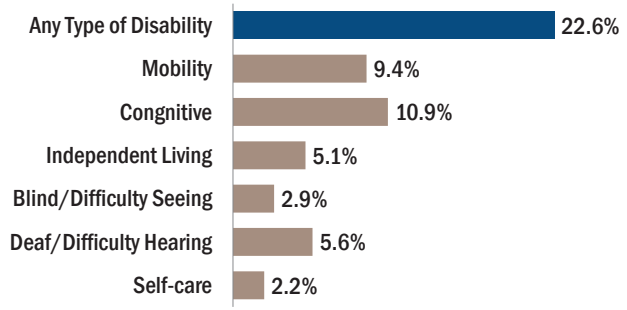
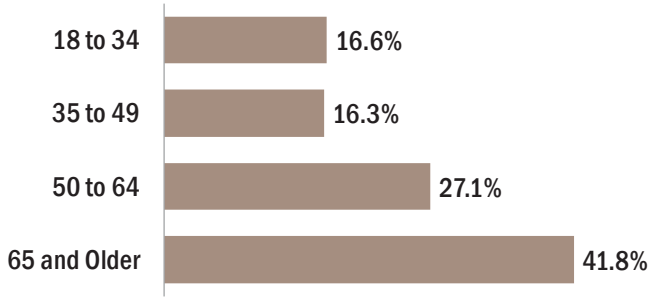


Figure 31: Percentage of Adults Living With Disabilities by Age Group, Utah, 2018



1 Retrieved Tue, 31 December 2019 from the Utah Department of Health (UDOH), Indicator-Based Information System for Public Health (IBIS-PH) Web site: http://ibis.health.utah.gov.
2 Table S2101. Percent Veterans—Civilian Population 18 Years and Over—Estimate. U.S. Census Bureau, 2014–2018 American Community Survey 5-year estimates.
3 Retrieved Tue, 08 October 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.
4 Retrieved Tue, 08 October 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.

In fact, people with disabilities are more than twice as likely to suffer from asthma, arthritis, chronic obstructive pulmonary disease (COPD), kidney disease, stroke, coronary heart disease, and heart attack (Figure 32).[2]

For most conditions, there is not enough information to say with certainty whether the disability causes the health condition or the health condition causes the disability. However, facing the day to day challenges of living with a disability can inhibit making lifestyle choices that could help improve some health outcomes. For instance, disabled persons are less likely to eat three or more vegetables per day, and also are less likely to get the recommended amount of physical activity. They are nearly 2.5 times more likely to smoke as non-disabled persons—over 17% of people with a disability smoke, compared to 7% of people who do not live with a disability.[3]

In addition to the physical challenges shouldered by those with disabilities, they also carry a significant mental load. When asked how many days in the past 30 days their mental health was "not good," people with disabilities were more than three times as likely to report seven or more days of "not good" mental health as opposed to people without disabilities. They were also 2.7 times more likely to have been diagnosed with a depressive disorder (Figure 33).[4]

Figure 32: Age-adjusted Disease Burden Comparison, Utah, 2018

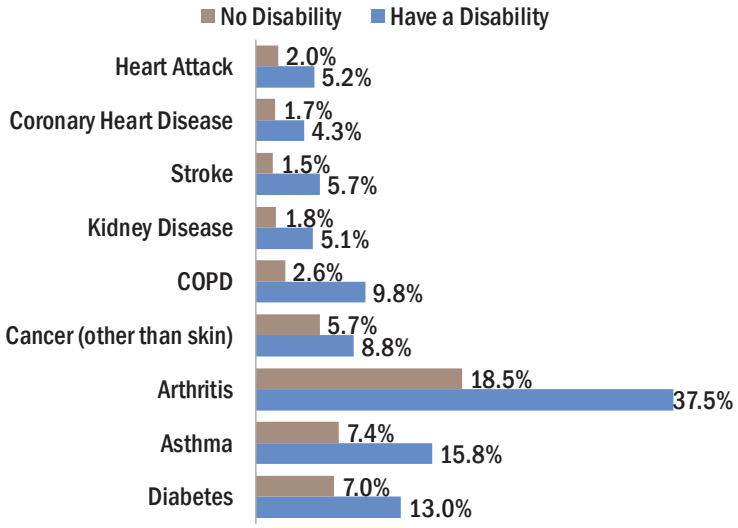
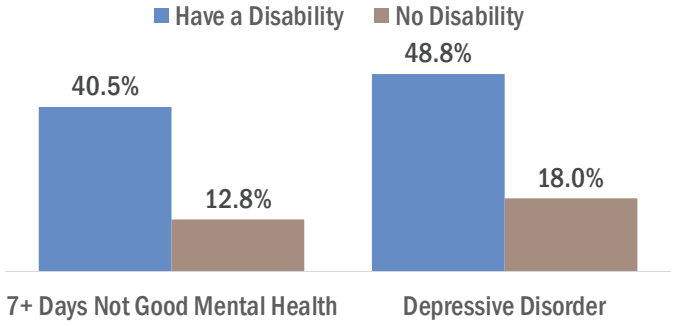


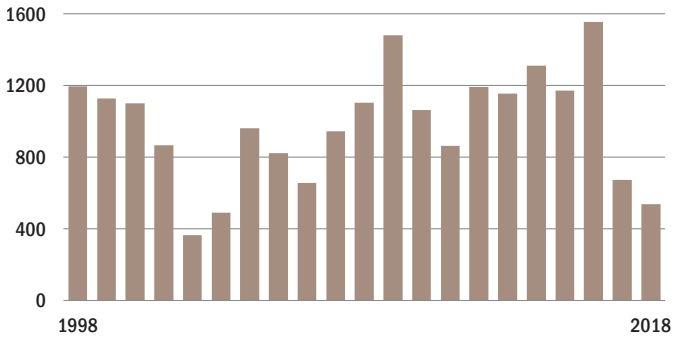
Figure 33: Age-adjusted Mental Health Burden Comparison, Utah, 2018



Refugees/Immigrants

A refugee, as defined by the United Nations, is "someone who has been forced to flee his or her country because of persecution, war or violence. A refugee has a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership, in a particular social group."[5] Utah has traditionally been a state where refugees are welcomed and integrated into the social structure of the state as quickly as possible.[6] In 2018, Utah admitted 539 refugees—the lowest number admitted since 2003 (Figure 34).[7] The number of refugees allowed into the United States overall had been significantly lowered, which corresponded to the lower number in Utah.

Figure 34: Number of Refugee Arrivals, Utah, 1998–2018

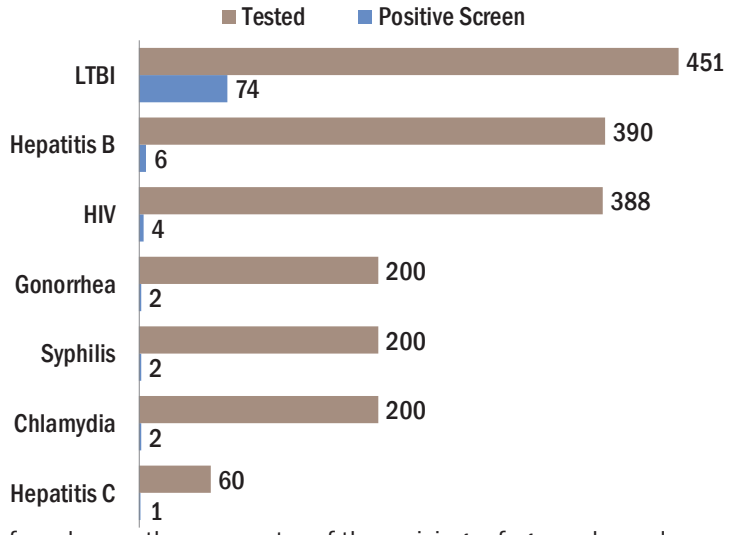


1 State of the State of Utah. 2017. Centers for Disease Control and Prevention. Accessed 12/27/19 at https://www.cdc.gov/nchs/pressroom/states/utah/utah.htm.
2 Retrieved Tue, 01 October 2019 from the Utah Department of Health (UDOH), Indicator-Based Information System for Public Health (IBIS-PH) Web site: http://ibis.health.utah.gov.
3 Retrieved Tue, 01 October 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.
4 Retrieved Tue, 01 October 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.
5 What is a Refugee? Definition and Meaning. USA for UNHCR. Accessed 12/30/19 at https://www.unrefugees.org/refugee-facts/what-is-a-refugee/.
6 Gov. Gary Herbert wants more refugees to resettle in Utah. November 1, 2019. Salt Lake Tribune. Accessed 12/30/19 at https://www.sltrib.com/news/2019/11/01/utah-governor-asks-trump/.
7 Retrieved Mon, 11 November 2019 from the UDOH, IBIS-PH Web site: http://ibis.health.utah.gov.

Toward the end of 2019, Governor Herbert responded to an executive order asking states whether they would like to opt in or opt out of the refugee resettlement process by asking President Trump to allow Utah to admit more refugees. Governor Herbert cited the growing number of refugees around the world and the positive history in Utah with welcoming refugees as reasons why Utah should be allowed to accept more refugees.[1]

Refugees undergo a health screening process before they are admitted to the United States. Six months prior to migrating to the United States all refugees are screened for inadmissible health conditions. They receive another screening examination 24–48 hours before departure as well.[2] Upon arrival, the UDOH Refugee Health Program seeks to continue "culturally appropriate health screening [and] education."[3] The program collaborates with resettlement agencies to ensure health screenings occur within 30 days of arrival to Utah and that the appropriate monitoring, follow up, and referrals occur within 90 days.[4] Because of that, there is good data on the reportable health conditions of refugees as they enter Utah. By far the most common disease found during these screenings is a positive test for latent tuberculosis (LTBI) (Figure 35).[5]

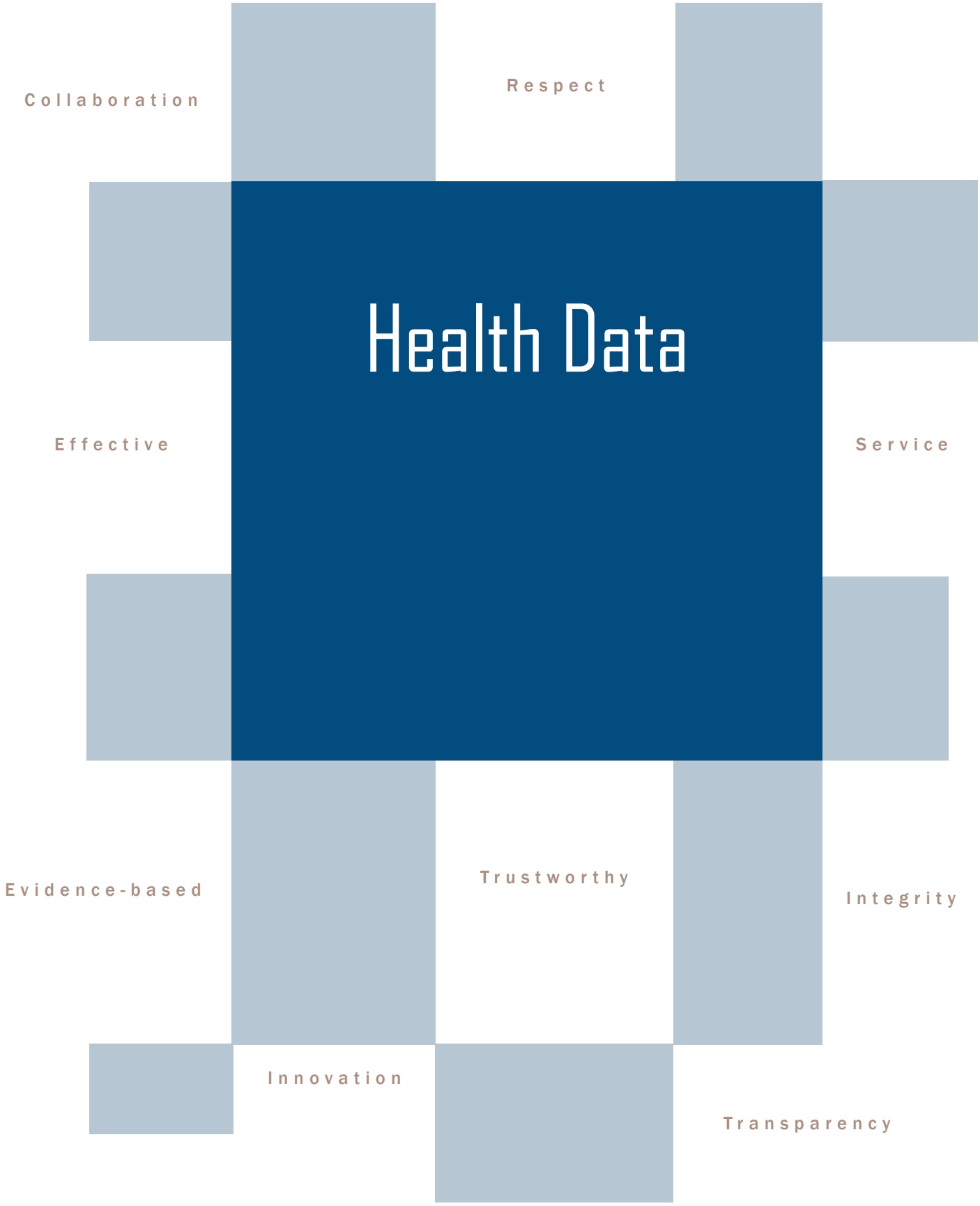
Figure 35: Reportable Conditions of Domestic Refugee Screenings, Utah, 2018



Mental health is an area where refugees can be particularly vulnerable. A study done by the UDOH in 2015 found more than a quarter of the arriving refugees showed symptoms of mental health conditions, and in some nativities (Iraqi, Sudanese, and Afghani) that number jumped to nearly half. The most common risk factor for having a mental health condition was past experience with violence and torture; this stayed true after controlling for age and nativity/culture. When looking at mental health conditions by age group, adults between the ages of 45 and 64 had the highest burden (41% of this population had a mental health condition). Women were also twice as likely as men to be referred for mental health services after an initial screening.[6]

Utah has established policies to help the refugee population—there are specific targets set for monitoring the health of refugees entering Utah and the follow up that needs to occur after the initial screening. More data is needed to see how well those policies are being carried out and how they are affecting the health of the refugee population in Utah.

1 Gov. Gary Herbert wants more refugees to resettle in Utah. November 1, 2019. Salt Lake Tribune. Accessed 12/30/19 at https://www.sltrib.com/news/2019/11/01/utah-governor-asks-trump/.
2 Congolese Refugee Health Profile. March 1, 2016. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Accessed 12/30/19 at https://www.cdc.gov/immigrantrefugeehealth/pdf/congolese-health-profile.pdf.
3 Utah Refugee Health Program Manual. October 2018. Bureau of Epidemiology Prevention, Treatment & Care Program. Accessed 12/30/19 at http://health.utah.gov/epi/healthypeople/refugee/Refugee_Health_Program_Manual_2018.pdf.
4 Utah Refugee Health Program Manual. October 2018. Bureau of Epidemiology Prevention, Treatment & Care Program. Accessed 12/30/19 at http://health.utah.gov/epi/healthypeople/refugee/Refugee_Health_Program_Manual_2018.pdf.
5 Utah Department of Health (UDOH), Bureau of Epidemiology, Refugee Health Program, November 2019.
6 Mental Health on Arrival: An Analysis of Refugee Mental Health in Utah. January 2015. UDOH. Accessed 12/30/19 at https://health.utah.gov/epi/healthypeople/refugee/mh_analysis(Feb2015).pdf.


Collaboration
Respect
Health Data
Effective
Service
Evidence-based
Trustworthy
Integrity
Innovation
Transparency

As described in the Process section, data was collected by various means and from various sources to inform this State Health Assessment. This data is used to help the Utah Public Health System prioritize key health issues for the state. This section is a brief summary of data collected.

Community Input Meetings

Nineteen community input meetings were held around the state, in partnership with the Utah Department of Health (UDOH), Intermountain Healthcare, and the local health departments (see Appendix C for a list of meeting locations). Questions focused on both current state health priorities and other health issues affecting the community. Table 6 summarizes findings from the community input meetings.

Table 6: 2018/2019 Community Input Meetings in Utah

Mental Health	Opioid/substance Abuse
• Suicide is a concern among all ages, not isolated just to youth • A lack of providers and treatment options are common barriers • Social isolation is another key barrier. Contributing factors include individuals spending more time with screens, social media, and a perception of unsafe neighborhoods. • Chronic stress is a growing concern—people working longer hours, multiple jobs, balancing multiple activities, caregiving, managing unaffordable housing costs • There is a strong relationship between mental health and other chronic conditions	• Linked to mental health needs • Opioid misuse is one area that many participants noted the positive results of community efforts • Vaping, especially among adolescents, is a growing concern
Obesity	**Other Emerging Issues**

• A result of sedentary behaviors
• Screen time and chronic stress are considered key barriers
• A lack of confidence in nutritional knowledge and access to health foods (financial cost and/or time constraints leading to choosing convenience over healthful options)—affects all groups.
• The financial cost associated with activities that promote physical activity are too high, especially associated with youth recreation and sports.
	• Social determinants of health are key barriers to addressing health issues
	• Air quality (both from inversions and wildfires)
	  • Can lead to poor mental health
	  • Communities are unwalkable and lack public transit
	• The three current Utah Health Improvement Plan (UHIP) priorities are highly interrelated, share multiple risk factors, and impact one another

Additionally, input was gathered from the Utah Indian Health System through a series of input meetings. Identified priority issues include 1) overall well-being (e.g., access to services, health equity, cultural preservation), 2) dietary needs (access to nutritious foods and clean water, traditional dietary practices), 3) behavioral health (domestic violence, suicide, elder abuse), and 4) strengthening respect for communities and families (developing resiliency, health literacy).

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of the State Public Health System

At the 2019 annual meeting of the Utah Health Improvement Plan Coalition, public health system partners were asked to contribute to a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. At the Coalition meeting, posters were hung throughout the room and participants were asked to use sticky notes to write their thoughts about the strengths, weaknesses, opportunities, and threats for the Utah Public Health System. Input was also gathered at a meeting of local and state health department health education directors.

The most common themes identified for each question are identified below:

- STRENGTHS: What are the characteristics of the Utah Health System that will help it achieve successful outcomes or reach it goals?
  - Strong partnerships and good collaboration
  - Efforts are data-driven
- WEAKNESSES: What are the characteristics of the Utah Health System that might hinder successful outcomes or reaching its goals?
  - Access to healthcare (e.g., rural areas, shortage of behavioral health providers, uninsured)
  - Public health workforce issues (e.g., retention, recruitment)
  - Effectively reaching the general public with public health messaging
  - Silos in programming, agencies—leads to redundancies and ineffectiveness in addressing big cross-cutting issues
- OPPORTUNITIES: What are the external factors that might influence/contribute to successful outcomes? Any new opportunities or changes coming to Utah?
  - New tools and policies (e.g., medical cannabis, Utah Health Improvement Index, new technologies)
  - Inclusive partnerships, collaborating and working on shared strategies, leveraging shared data and resources
  - Working upstream (e.g., adverse childhood experiences [ACEs], risk and protective factors)
- THREATS: What are the external factors that might prevent successful outcomes?
  - Insufficient funding
  - emerging threats and public health's ability to respond/adapt

This SWOT analysis was shared with the Utah Health Improvement Plan Executive Committee for consideration as potential support or barriers that may impact efforts to improve state health priorities.

Prioritization of Health Indicators

Data was gathered (e.g., trend data, comparison with U.S., race/ethnicity comparisons, etc.) on 127 health indicators (see full list in Appendix B). An ad hoc group was convened to review data and score each health indicator based on a set of criteria. Data from the top scoring health indicators were shared with the partners at the 2019 UHIP Coalition Meeting (Table 7). Summary findings from the community input meetings were also shared at this meeting. Following these presentations, UHIP Coalition partners discussed current state health priorities and im-provement plans, as well as potential changes to the priorities.

Table 7: Health Issues Rising to the Top In Prioritization Process

Social Determinants of Health
Poverty
Housing
Education
Homelessness
Environmental Health
Low Food Access
Care Access
No Health Insurance
Dental Visits
Cardiovascular Health
High Blood Pressure
High Cholesterol
Diabetes
Immunizations (Childhood, Influenza, HPV)

Overweight/obesity
Overweight
Obesity
Physical Activity
Infectious Disease
HIV
Mental Health
Mental Health
Depression
Maternal and Child Health
Prenatal Care
Low Birth Weight
Teen Pregnancies
ACEs

UHIP Coalition partners agreed that current state health priorities are still relevant and a continued collective effort is needed. There was consensus that improvement plans around these three priorities could have a greater focus on prevention, with a greater emphasis on upstream factors and social determinants of health in improvement strategies. Additionally, partners brainstormed potential new priorities, such as vaping, immunizations, air quality, and social determinants of health.

State Health Assessment Health Indicators

The following sections highlight data for health indicators significantly affecting the health of Utah's citizens. Health indicator sections include:

- UHIP highlights, where applicable
- Description of the measure
- Narrative indicating how the state of Utah is doing, how it compares with national data
- Information regarding known disparities
- Chart(s) to highlight disparate groups or other relevant data
- Maps show statistically significant differences for local health departments compared with the state rate (better or worse)
- A chart that shows performance over time
- Risk factors for the health issue, or where the area of concern may contribute to poor health outcomes
- What is currently being done to improve performance on the indicator and related evidence-based practices. Note this information is not an inclusive list of all efforts related to the health issue.
- Data interpretation issues
- Available services and resources
- Data broken down by:
    - Age
    - Gender
    - Race
    - Ethnicity
    - Education
    - Income
    - Local health district

Not all breakouts were available for all data. Additionally, where possible, both crude and age-adjusted rates were provided. Crude rates are provided to inform of the overall burden of the health issue in the state. Age-adjusted rates are provided to allow for comparison across the breakouts not due to differences in the age distribution of the population.

In order to obtain as many data breakouts as possible, estimates may have come from different sources or cover different year time periods. The year time periods are included in the data sheets and explanations of data sources are included in the data sources section of the report.

As we compare across breakouts, we have flags indicating whether each breakout is statistically significantly different than the state rate. A green check (✓) indicates the community is performing BETTER than the state. A red exclamation point (!) indicates the community is performing WORSE than the state. These comparison flags, as well as national rankings, are based on age-adjusted rates.

The Utah Indicator-based Information System for Public Health

This State Health Assessment highlights 40 health indicators. To find out more about the health status of Utah and explore other health issues affecting health, visit the Utah Indicator-based Information System for Public Health (IBIS-PH) at: https://ibis.health.utah.gov/ibisph-view/.

IBIS-PH provides statistical numerical data as well as contextual information on the health status of Utahns and the state of the Utah health care system. The data available on IBIS come from 31 different national and state-specific data sets and covers a wide range of health issues.

The site provides:

- Health Topics - access to Indicator Reports, dataset queries, and publications for 28 health topics.
- Interactive views of almost 200 Health Indicator Reports - online reports containing detailed numerical and contextual data information including data sources, background on why the issue is important, charts, and maps.
- Interactive exploration of 40 Health Query Modules - for advanced users to specify their own filter criteria; allows for more flexibility in output; includes charts, maps, and tables of information.
- Community Snapshot Reports - dynamic summary tables and footnotes that use existing IBIS Indicator Reports to display data for a Utah community, along with comparison data for Utah and the U.S. where available. Community Snapshots are available at the local health jurisdiction level, as well as for 99 Utah Small Areas.
- Access to Health Data Publications - more than 400 Utah Department of Health publications and access to more than 7,000 publications through searching the Utah Public Health Library. Publications generally answer the most common and frequently asked questions concerning current Utah health issues.

Collaboration

Respect

Effective

Service

Social Determinants of Health

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Persons Living in Poverty

American Community Survey (ACS)

Description

Persons living in poverty is defined as the percentage of persons living in households whose income is at or below the federal poverty threshold as defined by the U.S. Census Bureau.

How Are We Doing?

According to the American Community Survey, approximately 9.0% of Utah residents, or 280,773 Utahns, were living in poverty in 2018 (Figure 38). This includes 87,445 children aged 17 and younger.

National Comparison

Utah had a lower percentage of persons living in poverty when compared with the nation (9.0% vs. 13.1% in 2018).

Disparities

Persons younger than 18 years of age had a higher poverty rate than the rest of the state in 2018. Males were less likely to live in poverty. American Indian/Alaska (AK) Native, Asian, Black, Hispanic, and those with two or more races had higher poverty rates than the overall state rate (Figure 36). People with less than high school education were more likely to live in poverty. In 2018, Davis County, Summit County, Tooele County, and Wasatch County local health districts (LHDs) had poverty rates lower than the state rate. Bear River, Central Utah, San Juan, Southeast Utah, Southwest Utah, and TriCounty LHDs had rates that were higher than the state rate (Map 9).

Risk Factors

Poverty increases risk for poor diet/nutrition, tobacco use, alcohol use, and hypertension.[1]

People living in poverty are less likely to have health insurance coverage and often find it more difficult to pay for needed medical care.

Some literature suggests that they are more likely to be hospitalized for conditions that should have been controlled in the outpatient setting ("ambulatory care sensitive conditions").

Being in poor mental or physical health can influence an individual's ability to be employed. People with little education are less likely to earn a living wage.

What Is Being Done?

Healthcare "safety net" programs, such as Medicaid, CHIP (Children's Health Insurance Program), and the Primary Care Network (PCN) provide some relief to those who are eligible. Utah community health centers also fill a critical niche in providing high-quality healthcare services to Utahns of any income level.

Programs such as Head Start and those that provide assistance linking people with jobs, aim to reduce poverty by increasing social functioning and self-sufficiency. Other programs, such as minimum wage requirements, food stamps, Temporary Assistance for Needy Families

- 9.0% of Utah residents lived in poverty in 2018; 3rd lowest in nation
- Rate decreases with age
- Significantly higher among females
- Disparities include American Indian/AK Native, Asian, Black, and Hispanic adults
- Higher rates among adults aged 25+ with less than a high school education
- Significantly higher for San Juan, Southeast Utah, Bear River, Central Utah, TriCounty, and Southwest Utah LHDs

Figure 36: Poverty by Race, Utah, 2018

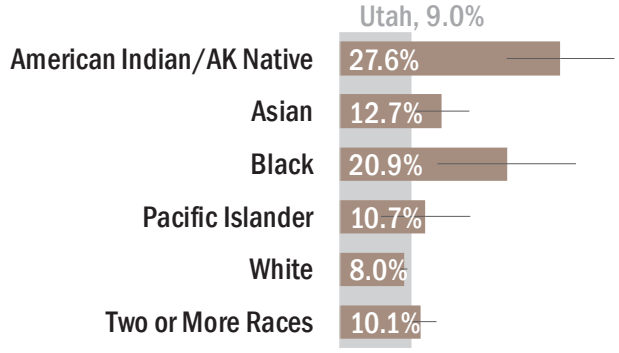
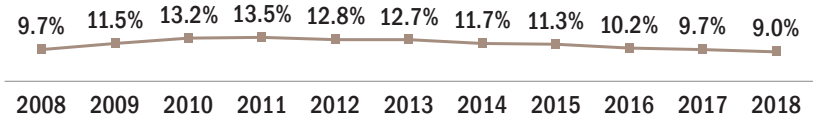


Figure 37: Percentage of Persons Living in Poverty by Year, Utah, 2008–2018



1 Blakely et al (2005), Distribution of Risk Factors by Poverty. Accessed 12/31/19 from http://www.who.int/publications/cra/chapters/volume2/1941-2128.pdf.

(TANF), and government-subsidized health insurance and child care, provide assistance to families needing additional support.

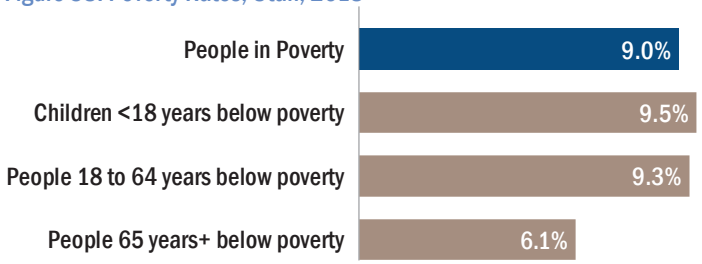
Utah has an intergenerational poverty (IGP) initiative that involves several state agencies collaborating to analyze data related to IGP and work toward a goal to "reduce the number of Utah families in the cycle of poverty, improving their quality of life, and helping them become economically stable."[1] To reduce the cycle of poverty, the initiative is focusing on early childhood development, education, family economic stability, and health. For more information see http://www.jobs.utah.gov/edo/intergenerational/index.html.

Data Interpretation Issues

Poverty status is determined by comparing annual income to a set of dollar values called thresholds that vary by family size, number of children, and age of householder. If a family's before tax income is less than the dollar value of their thresh-old, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual's income to his or her threshold.

The poverty threshold for a family of four including two children was $25,465 in 2018.[1] Poverty thresholds are updated annually to allo w for changes in the cost of living using the CPI-U. They do not vary geographically.

Figure 38: Poverty Rates, Utah, 2018



Map 9: Poverty by Local Health District, Utah, 2018

Table 8: Poverty Rates State Comparison, by Age, Gender, Race, Ethnicity, Education, and Local Health District, 2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**90% CIs**	
U.S.	13.1%	*13.0% - 13.2%*	
UTAH (3rd of 51)	9.0%	*8.5% - 9.5%*	
AGE IN YEARS (2018)			
<18	9.5%	*8.9% - 10.1%*	
18–64	9.3%	*8.8% - 9.8%*	
65+	6.1%	*5.4% - 6.8%*	✓
GENDER (2018)			
Male	8.1%	*7.5% - 8.7%*	✓
Female	9.9%	*9.4% - 10.4%*	!
RACE (2018)			
American Indian/AK Native	27.6%	*20.9% - 34.3%*	!
Asian	12.7%	*9.2% - 16.2%*	!
Black	20.9%	*12.2% - 29.6%*	!
Pacific Islander	10.7%	*5.1% - 16.3%*	
White	8.0%	*7.5% - 8.5%*	✓
Two or More Races	10.1%	*8.1% - 12.1%*	
ETHNICITY (2018)			
Hispanic	15.8%	*14.2% - 17.4%*	!
White, Non-Hispanic	7.2%	*6.7% - 7.7%*	✓
EDUCATION—Adults 25+ (2018)			
Below High School	18.3%	*16.4% - 20.2%*	!
High School or GED	9.3%	*8.5% - 10.1%*	
Some College	6.2%	*5.6% - 6.8%*	✓
Bachelor's degree or higher	3.9%	*3.5% - 4.3%*	✓
LOCAL HEALTH DISTRICT (2018)‡			
Bear River	11.1%	*9.8% - 12.4%*	!
Central Utah	12.5%	*11.1% - 13.9%*	!
Davis County	5.7%	*4.6% - 6.8%*	✓
Salt Lake County	9.0%	*8.2% - 9.8%*	
San Juan	22.6%	*17.8% - 27.4%*	!
Southeast Utah	13.2%	*11.4% - 15.0%*	!
Southwest Utah	10.8%	*9.5% - 12.1%*	!
Summit County	6.2%	*5.1% - 7.3%*	✓
Tooele County	6.8%	*5.4% - 8.2%*	✓
TriCounty	11.5%	*9.8% - 13.2%*	!
Utah County	9.4%	*8.5% - 10.3%*	
Wasatch County	5.3%	*4.1% - 6.5%*	✓
Weber-Morgan	9.2%	*7.9% - 10.5%*	

‡ Data for local health district based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.

1 Utah Department of Workforce Services. Utah's Intergenerational Poverty Initiative. Accessed 12/31/19 from https://jobs.utah.gov/edo/intergenerational/index.html.

Available Services/Resources

Utah Department of Workforce Services
P.O. Box 45249
Salt Lake City, UT 84145-0249
Phone: (801) 526-WORK (9675)
Fax: (801) 526-9211
Email: dwscontactus@utah.gov
http://jobs.utah.gov/

Community Action Partnership of Utah
http://caputah.org/index.php

1 Poverty Thresholds. United States Census Bureau. Accessed 12/31/19 from https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html.

Child Poverty

American Community Survey (ACS)

Description

Child poverty is defined as the percentage of children (aged 17 and younger) living in households whose income is at or below the federal poverty threshold as defined by the U.S. Census Bureau.

How Are We Doing?

According to the American Community Survey, approximately 9.5% of Utah children aged 17 and younger (approximately 919,114 Utah children) were living in poverty in 2018.

Children born into poverty are less likely to have regular healthcare, proper nutrition, and opportunities for mental stimulation and enrichment.

National Comparison

Utah had a lower percentage of children in poverty than the U.S. as a whole (9.5% vs. 18.0% in 2018).

Disparities

In 2018, the percentage of Hispanic children in poverty (18.7%) was almost double the state rate (Figure 39).

Central Utah, San Juan, Southeast Utah, Southwest Utah, and TriCounty local health districts (LHDs) had child poverty rates higher than the state. Davis County, Summit County, Tooele County, Utah County, and Wasatch County LHDs had child poverty rates that were lower than the state (Map 10).

Risk Factors

Being a younger or single parent increases the risk of living in poverty.

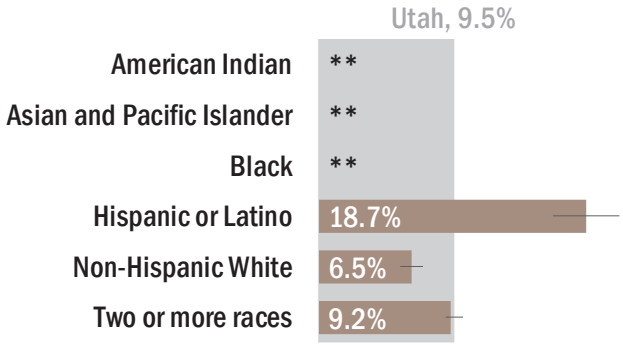
Families in poverty are less likely to have private health insurance coverage. Many children living at or near the poverty level are eligible for public health insurance programs, such as Medicaid and the Children's Health Insurance Plan (CHIP).

One of the best ways for adults to avoid poverty is to get a good education. Adolescents who give birth are more likely to live in poverty since they are more likely to limit their education.

The association between poverty and health status is probably bi-directional. That is, persons with chronic mental or physical illness are less able to achieve their educational goals and get good jobs. At the same time, persons who have lower incomes are less able to afford healthcare and may have less healthy lifestyles. For instance, persons with lower education and income levels are more likely to smoke cigarettes and less likely to get regular exercise. Low socio-economic status is a risk factor for many diseases and health problems for persons of all ages. Children in poverty are at higher risk for health problems such as asthma and dental disease.

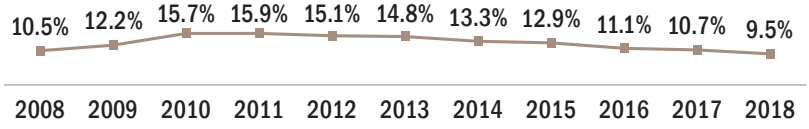
- 9.5% of children lived in poverty in 2018
- Lower rates among children aged 12–15 years
- Significantly higher rate for Hispanic children
- Significantly higher for Central Utah, San Juan, Southeast Utah, Southwest Utah, and TriCounty LHDs
- Significantly lower for Davis County, Summit County, Tooele County, Utah County, and Wasatch County LHDs

Figure 39: Child Poverty by Race/Ethnicity, Utah, 2018



Source: Kids Count Data Center.

Figure 40: Percentage of Children in Poverty in Utah by Year, 2008–2018



Children in poverty are also at increased risk of hunger and poor performance in school. An important goal of services to children in poverty is to break the "cycle of poverty" in which children in poverty are raised in conditions that promote poverty in adulthood.

What Is Being Done?

Utah has an intergenerational poverty (IGP) initiative that involves several state agencies collaborating to analyze data related to IGP and work toward a goal to "reduce the number of Utah families in the cycle of poverty, improving their quality of life, and helping them become economically stable."[1] To reduce the cycle of poverty the initiative is focusing on early childhood development, education, family economic stability, and health. For more information see https://jobs.utah.gov/edo/intergenerational/index.html.

There are programs such as Medicaid and CHIP that pay for healthcare for eligible children.

Data Interpretation Issues

Poverty status is determined by comparing annual income to a set of dollar values called thresholds that vary by family size, number of children, and age of householder. If a family's before tax income is less than the dollar value of their threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual's income to his or her threshold.

The poverty thresholds are updated annually to allow for changes in the cost of living using the CPI-U. They do not vary geographically. The poverty threshold for a family of four including two children was $25,465 in 2018.[2]

Available Services/Resources

For information on the Medicaid program:
In the Salt Lake City area, call 801-538-6155.

Map 10: Child Poverty by Local Health District, Utah, 2018

Table 9: Child Poverty Rates State Comparison, by Age, Gender, Race/Ethnicity, and Local Health District, 2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**90% CIs**	
U.S.	18.0%	*17.8% - 18.2%*	
UTAH (1st of 51)	9.5%	*8.6% - 10.4%*	
AGE IN YEARS (2018)			
Under 5	10.5%	*9.3% - 11.7%*	
5 years	8.2%	*5.8% - 10.6%*	
6–11 years	10.5%	*9.2% - 11.8%*	
12–14 years	7.4%	*6.1% - 8.7%*	✓
15 years	6.9%	*5.2% - 8.6%*	✓
16–17 years	9.5%	*7.9% - 11.1%*	
GENDER (2018)			
Male	10.0%	*9.0% - 11.0%*	
Female	8.9%	*8.1% - 9.7%*	✓
RACE/ETHNICITY (2018)^			
American Indian	**		
Asian and Pacific Islander	**		
Black	**		
Hispanic or Latino	18.7%	*16.4% - 21.0%*	!
Non-Hispanic White	6.5%	*5.7% - 7.3%*	✓
Two or more races	9.2%	*8.9% - 10.1%*	
LOCAL HEALTH DISTRICT (2018)‡			
Bear River	10.9%	*9.1% - 12.7%*	
Central Utah	15.1%	*12.9% - 17.3%*	!
Davis County	6.4%	*4.9% - 7.9%*	✓
Salt Lake County	10.4%	*8.9% - 11.9%*	
San Juan	26.8%	*19.4% - 34.2%*	!
Southeast Utah	16.7%	*13.9% - 19.5%*	!
Southwest Utah	13.1%	*10.6% - 15.6%*	!
Summit County	5.8%	*4.1% - 7.5%*	✓
Tooele County	7.4%	*5.2% - 9.6%*	✓
TriCounty	13.5%	*11.0% - 16.0%*	!
Utah County	7.5%	*6.2% - 8.8%*	✓
Wasatch County	6.4%	*4.6% - 8.2%*	✓
Weber-Morgan	10.9%	*8.9% - 12.9%*	

^ Data for race/ethnicity from Kids Count Data Center.
** Estimates suppressed when the confidence interval around the percentage is greater than or equal to 10 percentage points.
‡ Data for local health district based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.

1 Utah Department of Workforce Services. Utah's Intergenerational Poverty Initiative. Accessed 1/2/20 from https://jobs.utah.gov/edo/intergenerational/index.html.
2 Semega, Jessica, Melissa Kollar, John Creamer, and Abinash Mohanty, U.S. Census Bureau, Current Population Reports, P60–266, Income and Poverty in the United States: 2018, U.S. Government Printing Office, Washington, DC, 2019. Accessed 12/13/2019 from https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf.

In Utah, Idaho, Wyoming, Colorado, New Mexico, Arizona, and Nevada, call toll-free 1-800-662-9651.
In other states, call 1-801-538-6155.
Medicaid Customer Service staff are available to take inquiries.
Or visit the Utah Medicaid website:
http://www.health.utah.gov/medicaid/

For information on CHIP and the Utah Primary Care Network (PCN):
Call the Health Resource Line: 1-888-222-2542
Or visit the their websites:
CHIP: Children's Health Insurance Program (for children 0–18)—http://www.health.state.ut.us/chip
PCN: Utah Primary Care Network (for low-income adults)—http://www.health.utah.gov/pcn/

Voices for Utah Children is a private, not-for-profit organization that advocates for children. Information about their activities may be found on their website—http://www.utahchildren.org.

Food Insecurity

Map the Meal Gap Hunger Study

Description

This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.

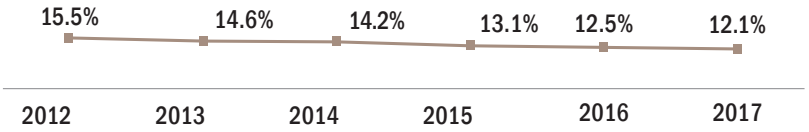
The United States Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life." The USDA Economic Research Service Office sponsors an annual survey conducted by the U.S. Census Bureau as an addition to the Current Population Survey. The survey asks an adult in each household several questions related to food insecurity. Food insecure status depends on the number of food insecure conditions indicated by the questions for the adult or their children.[1]

- An estimated 12.1% of the population experienced food insecurity during 2017
- San Juan County was the most food insecure area of the state at 19.4%

How Are We Doing?

An estimated 12.1% of the total population experienced food insecurity during 2017. An estimated 14.7% of children youngerder 18 years of age experienced food insecurity. According to the Feeding America Network, individuals struggling with hunger report needing a total of $179 million collectively in Utah, just to feed themselves and their families. An estimated 40% of Utahns would qualify for federal nutrition as sistance programs, such as SNAP (Figure 43).[2]

Figure 41: Percentage of Persons Who Experienced Food Insecurity in Utah by Year, 2012–2017



National Comparison

The Utah 2017 reported rate of food insecurity was 12.1% of the total population. This was lower than the United States rate of 12.5%.

Disparities

San Juan County was the most food insecure area of the state at 19.4% (Figure 42).

Risk Factors

Nationally, food insecurity rates were higher than the national average for households with children (especially if there were children younger than age 6), single parent households, households headed by people who are Black or Hispanic persons, and low-income households (below 185 percent of the poverty threshold).[3]

What Is Being Done?

Feeding America is the nation's network of more than 200 food banks and the largest hunger-relief charity in the United States. Each year, Feeding America secures and distributes more than three billion pounds of food and grocery products through 60,000 agencies nationwide. The agency network provides charitable food assistance to an estimated one in seven Americans annually. In addition to outreach, Feeding America works with other foundations to produce hunger studies such as Map the Meal Gap to help combat hunger by learning about food insecurity at the local level.[4] There are several food banks and pantries throughout the state of Utah to assist families in being able to obtain food. There is a mobile pantry that assists in underserved communities or areas where clients may not be able to access other food pantries. The Utah Department of Workforce Services provides food stamps to families who qualify through their Supplemental Nutrition Assistance Program (SNAP).

1 Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2019. Household Food Security in the United States in 2018, ERR-270, U.S. Department of Agriculture (USDA), Economic Research Service. Accessed 11/26/2019 from https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1.

2 Feeding America. Accessed 11/26/2019 from https://map.feedingamerica.org/.

3 Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2019. Household Food Security in the United States in 2018, ERR-270, USDA, Economic Research Service. Accessed 11/26/2019 from https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1.

4 Feeding America. Accessed 11/26/2019 from https://map.feedingamerica.org/.

Figure 42: Food Insecurity by Local Health District, Utah, 2017

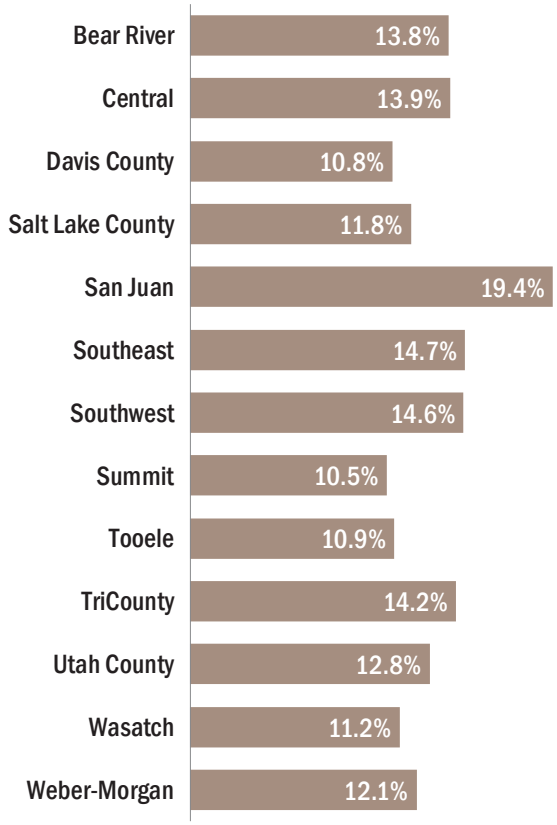
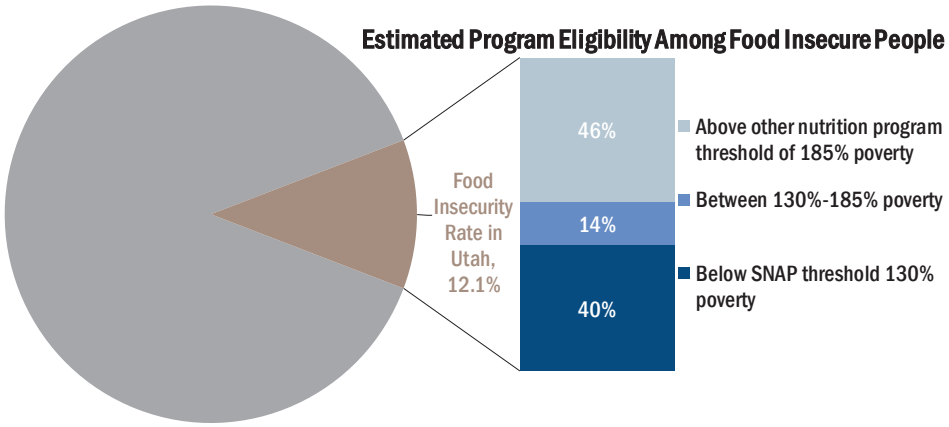


Table 10: Food Insecurity Rates State Comparison and by Local Health District, 2017

STATE COMPARISON (2017)	Crude Rate (burden)
U.S.	12.5%
UTAH (24th of 51)	12.1%
LOCAL HEALTH DISTRICT (2017)	
Bear River	13.8%
Central Utah	13.9%
Davis County	10.8%
Salt Lake County	11.8%
San Juan	19.4%
Southeast Utah	14.7%
Southwest Utah	14.6%
Summit County	10.5%
Tooele County	10.9%
TriCounty	14.2%
Utah County	12.8%
Wasatch County	11.2%
Weber-Morgan	12.1%

Figure 43: Overall Food Insecurity in Utah, 2017

373,850	Food Insecure People in Utah
$2.81	Average Cost of a Meal
$179,279,000	Additional Money Required to Meet Food Needs



Source: Feeding America Map the Meal Gap website, http://map.feedingamerica.org/county/2017/overall/utah.

Available Services/Resources

Utah Food Bank
https://www.utahfoodbank.org/

Utahns Against Hunger
http://www.uah.org/

Education

American Community Survey (ACS)

Description

Percentage of Utah adults aged 25 and older with at least a high school diploma.

How Are We Doing?

Among Utah adults aged 25 and older in 2018, 92.4% were high school graduates or higher and 34.9% had a bachelor's or advanced degree.

National Comparison

Education levels in the U.S. have also improved markedly, although Utahns on average still tend to have more years of schooling than their American counterparts. In 2018, 11.7% of U.S. residents aged 25 and older had not completed high school, while only 7.6% of Utahns in the same age group had not completed high school.

Disparities

Persons of Hispanic ethnicity were significantly less likely to have at least a high school education (Figure 44).

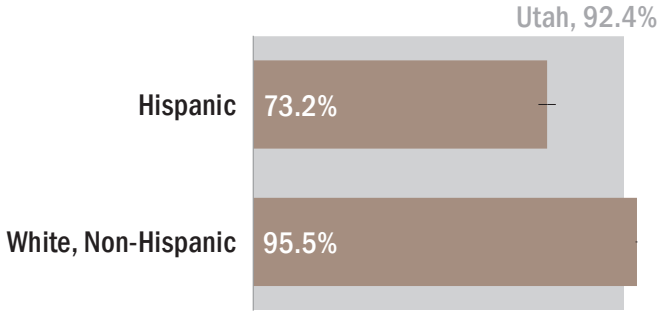
Adults living in San Juan and TriCounty local health districts (LHDs) were significantly less likely to have a high school education than the state. Adults in Davis County and Utah County LHDs had the highest rates of having at least a high school education (Map 11).

Risk Factors

Socio-economic status (including income and education) is strongly related to health status outcomes. It is unclear to what extent poor education status leads to poor health outcomes, or whether poor health leads to an inability to complete one's educational goals. Both are probably true to some extent.

- 7.6% of Utah adults aged 25+ had less than a high school education
- Hispanic adults were less likely to have high school education
- Significantly lower rates of high school graduation for San Juan and TriCounty LHDs
- Significantly higher rates of high school graduation for Davis County and Utah County LHDs

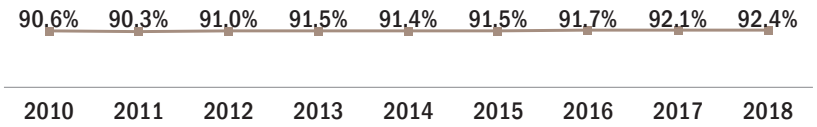
Figure 44: At Least High School Education by Ethnicity, Utah 2018



What Is Being Done?

Given the relationship between education, poverty, and health status, the Utah Intergenerational Welfare Reform Commission (a joint initiative between the Utah Department of Workforce Services, Utah Department of Human Services, Utah Department of Health, the Utah State Board of Education [USBE], and the Juvenile Courts) includes education goals in its Five and Ten-year Plans. The five-year goal seeks to align systems assisting with educational outcomes to ensure efforts are focused in schools disproportionately impacted by intergenerational poverty. The ten-year goal aims to reduce the high school graduation rate gap between children at risk for remaining in poverty and the statewide rate.[1]

Figure 45: Percentage of Adults 25+ With at Least a High School Education by Year, Utah, 2010–2018



Additionally, the USBE strategic plan includes specific targets for students who are economically disadvantaged, have disabilities, are learning English, and who identify as racial minorities, in an effort to reduce the significant educational gaps experienced by these groups. More information can be found at: https://www.schools.utah.gov/board/utah/strategicplan.[2]

1 Utah's Eighth Annual Report on Intergenerational Poverty, Welfare Dependency and the Use of Public Assistance. 2019. Accessed 1/24/2020 at: https://jobs.utah.gov/edo/intergenerational/annualreport.html.

2 Board Strategic Plan, Utah State Board of Education. Accessed 1/24/2020 at: https://www.schools.utah.gov/board/utah/strategicplan.

Available Services/Resources

The vision of the USBE is that, "upon completion, all Utah students are prepared to succeed and lead by having the knowledge and skills to learn, engage civically, and lead meaningful lives." Contact the USBE for more information about the state's goals, current progress, and programs:

Utah State Board of Education
PO Box 144200
Salt Lake City, Utah 84114-4200
https://www.schools.utah.gov/

Map 11: At Least High School Education by Local Health District, Utah, 2014–2018

Table 11: At Least High School Education Rates State Comparison, by Age, Gender, Race, Ethnicity, 2018 and Local Health District, 2014–2018

	Crude (burden)		
STATE COMPARISON (2018)	Rate	90% CIs	
U.S.	88.3%	*88.2% - 88.4%*	
UTAH (8th of 51)	92.4%	*92.0% - 92.8%*	
AGE IN YEARS (2018)			
25–34	93.1%	*92.2% - 94.0%*	
35–44	91.7%	*90.9% - 92.5%*	
45–64	92.4%	*91.8% - 93.0%*	
65+	92.4%	*91.6% - 93.2%*	
GENDER (2018)			
Male	92.1%	*91.6% - 92.6%*	
Female	92.7%	*92.2% - 93.2%*	
RACE (2018)			
American Indian/AK Native	81.5%	*76.4% - 86.6%*	!
Asian	89.3%	*86.8% - 91.8%*	!
Black	87.2%	*80.9% - 93.5%*	
Pacific Islander	92.6%	*89.1% - 96.1%*	
White	94.0%	*93.6% - 94.4%*	✓
Two or More Races	93.6%	*91.2% - 96.0%*	
ETHNICITY (2018)			
Hispanic	73.2%	*71.0% - 75.4%*	!
White, Non-Hispanic	95.5%	*95.2% - 95.8%*	✓
LOCAL HEALTH DISTRICT (2014–2018)			
Bear River	93.2%	*91.2% - 95.2%*	
Central Utah	89.8%	*87.3% - 92.3%*	
Davis County	95.5%	*93.7% - 97.3%*	✓
Salt Lake County	90.4%	*90.1% - 90.7%*	!
San Juan	83.8%	*78.1% - 89.5%*	!
Southeast Utah	91.6%	*87.7% - 95.5%*	
Southwest Utah	92.5%	*90.2% - 94.8%*	
Summit County	94.9%	*91.4% - 98.4%*	
Tooele County	91.0%	*86.9% - 95.1%*	
TriCounty	86.9%	*83.6% - 90.2%*	!
Utah County	94.2%	*93.9% - 94.6%*	✓
Wasatch County	95.1%	*89.3% - 100.9%*	
Weber-Morgan	90.6%	*88.9% - 92.3%*	

Housing Cost Burden

CARES Engagement Network

Description

This indicator reports the percentage of households where housing costs exceed 30% of total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

- 26.3% of Utah households were cost-burdened
- Washington County had the highest percentage of cost-burdened households (29.5%)
- Almost half (48.5%) of the cost-burdened households in Utah were rental households

How Are We Doing?

Of the owner-occupied households in Utah during 2014–2018, 70.6% had a mortgage and 29.4% owned their houses "free and clear," that is without a mortgage or loan on the house. The median monthly housing costs for owners with a mortgage was $1,497 and for owners without a mortgage it was $418.[1]

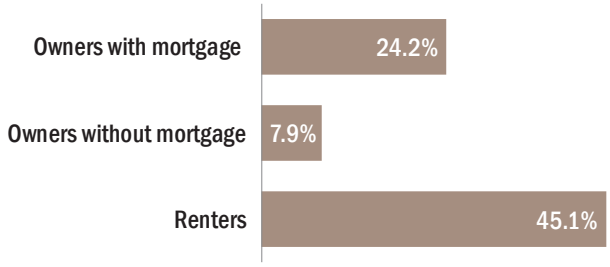
For renter-occupied houses, the median gross rent for Utah was $988. Gross rent includes the monthly contract rent and any monthly payments made for electricity, gas, water and sewer, and any other fuels to heat the house.[2]

Households that pay 30% or more of their income on housing costs are considered cost-burdened. In 2014–2018, cost-burdened households in Utah accounted for 24.2% of owners with a mortgage, 7.9% of owners without a mortgage, and 45.1% of renters (Figure 46).[3]

National Comparison

During 2014–2018, the percentage of Utah households that were cost-burdened (26.3%) was lower than the percentage of U.S. households that were cost-burdened (31.6%). This was true for all tenures (rental households, owner-occupied households with mortgages, and owner-occupied households without mortgages).[4]

Figure 46: Occupants With a Housing Cost Burden, Utah, 2014–2018



Source: 2018 Narrative Profiles. American Community Survey, https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Disparities

No counties in Utah had more than 35% of households cost-burdened (the highest level on the scale). However, five counties (Washington, 29.5%; Wasatch, 29.1%; Iron, 28.9%; Cache, 28.8%; and Utah, 28.1%) had between 28% and 35% of households that were cost burdened (Map 12).

Almost half (48.5%) of the cost-burdened households in Utah were rental households.[5]

Risk Factors

Cost-burdened households have fewer funds to spend monthly on necessities such as food, clothing, utilities, and health care. Some racial/ethnic minority households (Black and Hispanic) have the worst burden and are almost twice as likely as White households to be cost-burdened. Housing costs exceeding what a household can afford could result in foreclosure and eviction.[6]

What Is Being Done?

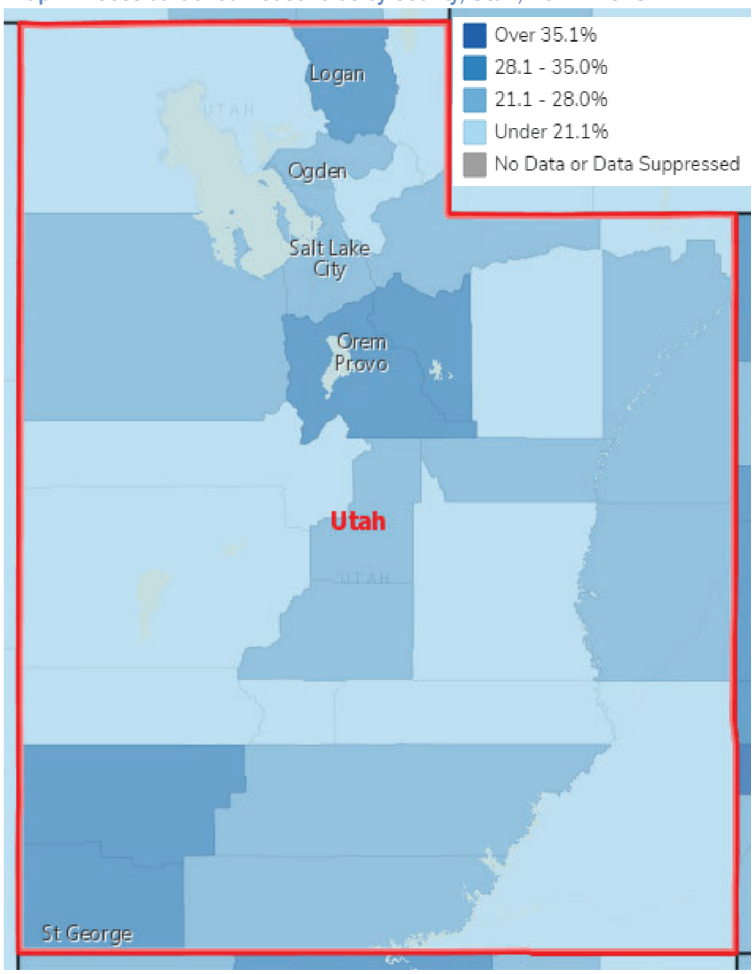
The federal government offers housing subsidies which provide financial assistance toward rent for low-income households. Applicants for subsidized housing may be on waitlists for several years before receiving assistance. Limited funding and the high demand of households in need limits eligible households receiving federal housing subsi-dies to approximately 26%.[1]

1 2018 Narrative Profiles. American Community Survey (ACS). Accessed 1/24/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
2 2018 Narrative Profiles. ACS. Accessed 1/24/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
3 2018 Narrative Profiles. ACS. Accessed 1/24/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
4 Health Indicators Report, Utah, Physical Environment, Housing Cost Burden. CARES Engagement Network. Accessed 4/6/2020 from https://engagementnetwork.org.
5 Health Indicators Report, Utah, Physical Environment, Housing Cost Burden. CARES Engagement Network. Accessed 4/6/2020 from https://engagementnetwork.org.
6 Housing Instability. Healthy People 2020. Accessed 11/26/2019 from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/housing-instability.

Table 12: Housing Cost Burden Rates State Comparison and by Local Health District, 2014–2018

STATE COMPARISON (2014–2018)	Crude Rate (burden)
U.S.	31.6%
UTAH (15th of 51)	26.3%
LOCAL HEALTH DISTRICT (2014–2018)	
Bear River	25.9%
Central Utah	20.0%
Davis County	21.8%
Salt Lake County	27.8%
San Juan	18.2%
Southeast Utah	22.0%
Southwest Utah	28.6%
Summit County	26.4%
Tooele County	23.8%
TriCounty	21.7%
Utah County	28.1%
Wasatch County	29.1%
Weber-Morgan	24.3%

Map 12: Cost-burdened Households by County, Utah, 2014–2018



Map downloaded from CARES Engagement Network website, https://engagementnetwork.org/.

Available Services/Resources

Utah Housing Corporation
https://utahhousingcorp.org/

The U.S. Department of Housing and Urban Development helps apartment owners offer reduced rents to low-income tenants.
https://www.hud.gov/states/utah/renting

For questions regarding eligibility for low-income housing programs, housing vouchers, and low-income rental housing availability, contact the Public Housing Authority near you.[2]

PUBLIC HOUSING AUTHORITIES:
BEAR RIVER Housing Authority
170 North Main
Logan, UT 84431
435-752-7242

BEAVER City Housing Authority
65 North 400 East
Beaver, UT 84713
435-438-2935

CEDAR CITY Housing Authority
364 South 100 East
Cedar City, UT 84720
435-586-8462

DAVIS County Housing Authority
PO Box 328
Farmington, UT 84025
801-451-2587

1 Housing Instability. Healthy People 2020. Accessed 11/26/2019 from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/housing-instability.
2 Find Housing - Department of Workforce Services. Accessed 11/26/2019 from https://jobs.utah.gov/jsp/housing/.

EMERY County Housing Authority
Box 551
Castle Dale 84513
435-381-2902

Housing Authority of CARBON County
251 S 600 E #2647
Price, UT 84501
435-637-5170

Housing Authority of the City of OGDEN
2661 Washington Blvd., #102
Ogden, UT 84401
801-627-5851

Housing Authority of Salt Lake City
1776 S West Temple
SLC, UT 84101
801-487-2161

Housing Authority of the COUNTY OF SALT LAKE
3595 South Main
SLC, UT 84115
801-284-4420

Housing Authority of Southeastern Utah
321 East Center Street
Moab, UT 84532
435-259-5891

MILLARD County Housing Authority
274 West 100 South
Delta, UT 84624
435-864-2908

MYTON CITY Housing Authority
58 East 100 North (83-11)
Roosevelt, UT 84066
435-722-3952

PROVO CITY Housing Authority
650 West 100 North
Provo, UT 84601
801-852-7090

ROOSEVELT Housing Authority
192 So 100 East
Roosevelt, UT 84066
435-722-5858

ST GEORGE Housing Authority
975 N 1725 W
St. George, UT 84770
435-628-3648

TOOELE County Housing Authority
118 Vine
Tooele, UT 84074
435-882-7875

UTAH County Housing Authority
240 East Center Street
Provo, UT 84606
801-373-8333

WEBER County Housing Authority
237 26th Street, Suite 223
Ogden, UT 84401
801-399-8692

WEST VALLEY CITY Housing Authority
3600 So. Constitution Blvd
WVC, UT 84119
801-963-3524

Goshute Housing Authority
PO Box 6035
Ibapah, UT 84034
435-234-1174

Navajo Nation Housing Authority
PO Box 4980
Window Rock, AZ 86515
928-871-2600

NW Band of Shoshone Nation Housing Authority
862 South Main St, Suite 6
Brigham City, UUT 84302-3300 435-723-3013

Paiute Tribe Housing Authority
665 North 100 East
Cedar City, UT 84720
435-586-1122

Ute Indian Tribe
PO Box 250
Fort Duchesne, UT 84026
435-722-4656

White Mesa Ute Council
PO Box 7096
White Mesa, UT 84511
(435) 678-3685

Collaboration

Respect

Effective

Environmental Health

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Air Quality ($PM_{2.5}$)

U.S. EPA Air Quality System

Description

Air quality is measured as the percentage of days with $PM_{2.5}$ levels over the National Ambient Air Quality Standards (NAAQS). The percentage reflects the number of days sampled in the county during the year, not total days of the year.

Particulate matter that measures 2.5 micrometers in diameter or less is often called $PM_{2.5}$. Particulate matter 10 (PM_{10}) measures one-seventh the width of a strand of human hair, is composed of metals, allergens, nitrates, sulfates, organic chemicals, soil, and dust that are emitted from sources such as combustion products, soot from fireplaces, and blowing dust from construction sites and agricultural activities.

- In 2016, Utah ranked 50 out of 51 for the mean percentage of days with $PM_{2.5}$ levels over the National Ambient Air Quality Standards
- Urban areas of the state have worse air quality than the rural areas
- In 2018, percentages in Utah ranged from 0.0% in Garfield, San Juan, Uintah, and Wayne counties to 4.4%in Utah County

How Are We Doing?

Several of the most urban counties in Utah have days that do not comply with the $PM_{2.5}$ standard. This may be due in part to the unique geography and seasonal conditions in Utah. $PM_{2.5}$ levels increase seasonally in the winter, often due to inversions. The Utah Department of Environmental Quality (DEQ) is working to decrease the number of days over the $PM_{2.5}$ standard.

Particulate matter is composed of many different compounds and chemicals, including soil, dust, salts, acids, soot, metals, and organic chemicals. When thinking about where particulate matter comes from, it is divided into two categories: 1) primary particles (release d directly from a source) and 2) secondary particles (formed in complex reactions involving atmospheric pollutants. The majority of $PM_{2.5}$ pollution is comprised of secondary p articles, both nationally and within Utah.

Approximately one third (33.2%) of primary $PM_{2.5}$ particle emissions in Utah during 2014 came from dust (Figure 47). Fires contributed to 16.2%, while fuel combustion and mobiles sources emitted 15.0% and 12.5% of the total primary $PM_{2.5}$ particles, respectively.[1]

National Comparison

In 2016, Utah ranked 50 out of 51 for the mean percentage of days with $PM_{2.5}$ levels over the NAAQS.

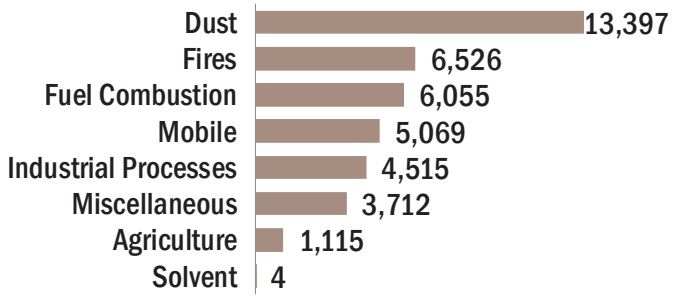
Disparities

Urban areas of the state have worse air quality than the rural areas.

Risk Factors

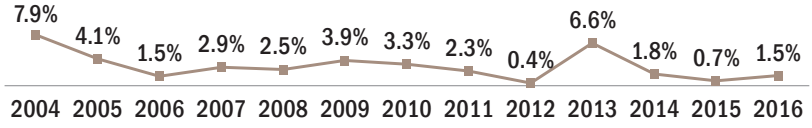
Exposure to particulate matter is associated with harmful heart and lung health effects. People with heart failure, coronary heart disease, asthma, and chronic obstructive pulmonary disease (COPD); older adults; and children may be sensitive to air pollution. People who are sensitive may experience shortness of breath, chest tightness or pain, coughing, or irregular heartbeat. Doctor or emergency room visits, hospital stays, and school and work absences may increase due to these effects.[2]

Figure 47: 2014 Primary $PM_{2.5}$ Particle Emissions by Source Sector in Utah, EPA



Source: Particulate Matter (PM). Utah Department of Health Bureau of Epidemiology. Accessed 11/27/2019 from http://www.health.utah.gov/utahair/pollutants/PM/index.html#Sources.

Figure 48: Mean Percentage of Days $PM_{2.5}$ Over NAAQS Standard in Utah by Year, 2004–2016



Percentages for each year represent the mean of all counties in Utah that reported data for that year.

1 Utah Air: Particulate Matter. Utah Department of Health (UDOH) Bureau of Epidemiology. Accessed 11/27/2019 from http://www.health.utah.gov/utahair/pollutants/PM/index.html#Sources.

2 Utah Air: Particulate Matter. UDOH Bureau of Epidemiology. Accessed 11/27/2019 from http://www.health.utah.gov/utahair/pollutants/PM/index.html#Health.

What Is Being Done?

The DEQ is working to decrease $PM_{2.5}$ emissions in Utah to comply with national standards. Because the majority of particulate matter is caused by automobile emissions, the DEQ encourages the public to use mass transit and stay indoors on days with high pollution levels, which you can check at http://www.health.utah.gov/utahair. In addition, the DEQ has studied the effects of high particulate matter levels on children playing outside at recess so schools may make informed decisions about when to keep children indoors.

The DEQ uses a 3-day air quality forecast that gives an air quality index to help people plan activities to minimize the effects of pollution on their health and an action forecast notifying the public of voluntary or mandatory actions they need to take.

Ultimately, air quality in Utah depends on each individual taking steps to reduce the amount of energy being used and pollution being emitted.

Table 13: Air Quality ($PM_{2.5}$) State Comparison, 2016 and by County, 2018

STATE COMPARISON (2016)	Crude Rate (burden)
U.S. mean	0.3%
UTAH mean (50th of 51)	1.5%
COUNTY (2018)	
Box Elder	1.1%
Cache	1.4%
Davis	0.3%
Duchesne	0.8%
Garfield	0.0%
Salt Lake	1.6%
San Juan	0.0%
Tooele	1.1%
Uintah	0.0%
Utah	4.4%
Washington	0.8%
Wayne	0.0%
Weber	0.6%

Data Interpretation Issues

Data on $PM_{2.5}$ levels are only available where air monitors exist. The U.S. Environmental Protection Agency (EPA) and the DEQ have scientifically determined where in Utah $PM_{2.5}$ is likely to exceed the NAAQS standard.

Data for this report represent ambient air, or outside air quality. The relationship between ambient concentrations and personal exposure can vary significantly depending upon the pollutant, activity patterns, and micro-environments.

Data for this report came from the EPA and may differ slightly from other sources. One reason for a possible difference is this data includes exceptional events, which includes air pollution generated from fireworks, construction, fires, and other sources.

Available Services/Resources

The Air Quality and Public Health in Utah web page (http://www.health.utah.gov/utahair/) provides a wide range of air quality-related topics. These topics include:

- Air Quality Index
- Information about specific air pollutants
- Health effects from air pollution
  - Adverse birth outcomes
  - Asthma
  - COPD
  - Heart disease and heart attacks

Air Quality and Public Health in Utah
This Utah Department of Health website provides information on particulate matter, its sources, ways to reduce exposure, and trend data.
http://www.health.utah.gov/utahair/pollutants/PM/

AirNow
This U.S. Government website provides information on air quality from a collaboration of different agencies.
http://www.airnow.gov

Choose Clean Air Utah
This DEQ website provides information about air pollution in Utah and information on how to make healthy choices.
https://air.utah.gov/

Environmental Protection Agency (EPA)
This EPA web page provides information about particulate matter (PM), adverse health effects, research, and regulations.
https://www.epa.gov/pm-pollution/particulate-matter-pm-basics

Centers for Disease Control and Prevention (CDC)

These CDC websites provide information about specific air pollutants and the way they can harm human health.

- Air Pollutants (http://www.cdc.gov/air/pollutants.htm)
- Air Quality (http://www.cdc.gov/air/)

Substandard Housing

CARES Engagement Network

Description

This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30%, and 5) gross rent as a percentage of household income greater than 30%.

Selected conditions provide information in assessing the quality of the housing inventory and its occupants. This data is used to easily identify homes where the quality of living and housing can be considered substandard.

Lacking complete plumbing facilities means the housing is missing either—hot and cold running water, a flush toilet, or a refrigerator.

Lacking complete kitchen facilities means the housing is missing either—a sink with a faucet, a stove or a range, or a refrigerator.

- 27.7% of occupied housing units in Utah had one or more substandard conditions
- Nationally, rental properties tend to have more problems than owner-occupied dwellings among metropolitan areas; more problems tend to be found in central city housing than housing outside the central city
- Percentages of housing units in substandard conditions varied from 10.7% in Rich County to 32.1% in Washington County

How Are We Doing?

During 2014—2018, 26.0% of Utah households had one substandard living condition; 1.7% had two or three substandard conditions, and 0.01% (approximately 96 housing units) had four or more substandard conditions (Figure 49).

The largest contributor to substandard housing in Utah was monthly housing costs being more than 30% of income (25.4%) in 2018. Almost four percent (3.8%) of Utah households had more than one occupant per room, 0.9% lacked complete kitchen facilities, and 0.4% lacked complete plumbing facilities (Figure 50).[1]

National Comparison

During 2014—2018, the percentage of occupied housing units with one or more substandar d conditions in Utah was 27.7% which was lower than the U.S. rate of 32.5%.

Disparities

No counties in Utah had more than 34% of households with substandard housing (the highest level on the scale). However, eight counties (Washington, 32.1%; Grand, 31.1%; Wasatch, 30.8%; Utah, 29.9%; Cache, 29.5%; Iron, 29.5%; Salt Lake, 28.8%; and San Juan, 28.0%) had between 28% and 34% of households with one or more substandard conditions (Map 13).

Nationally, rental properties among metropolitan areas tend to have more problems than owner-occupied dwellings. More problems tend to be found in central city housing than housing outside the central city. The age of housing and poverty levels may also influence a community's housing.[2]

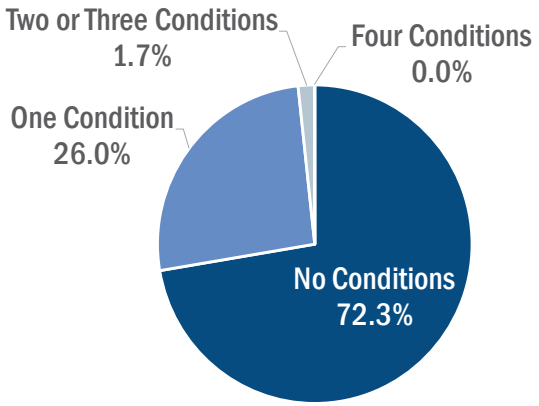
Risk Factors

Substandard housing increases risks for environmental diseases and injuries.

What Is Being Done?

Assisting citizens with locating affordable housing is done by the Utah Division of Housing and Community Development (HCD) and local housing authorities around the state. For a list of HCD programs see https://jobs.utah.gov/housing/hcdprograms.html.

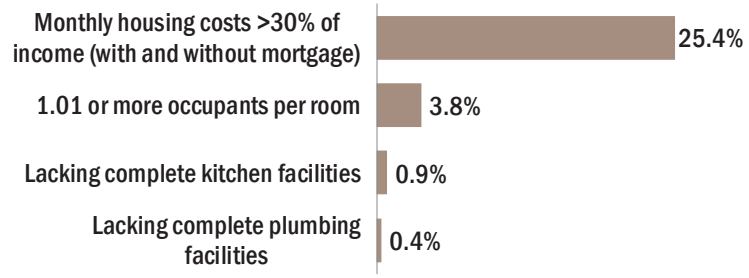
Figure 49: Percentage of Housing Units in Utah Having Substandard Condition by Number of Conditions, 2014–2018



Source: CARES Engagement Network website, https://engagementnetwork.org/.

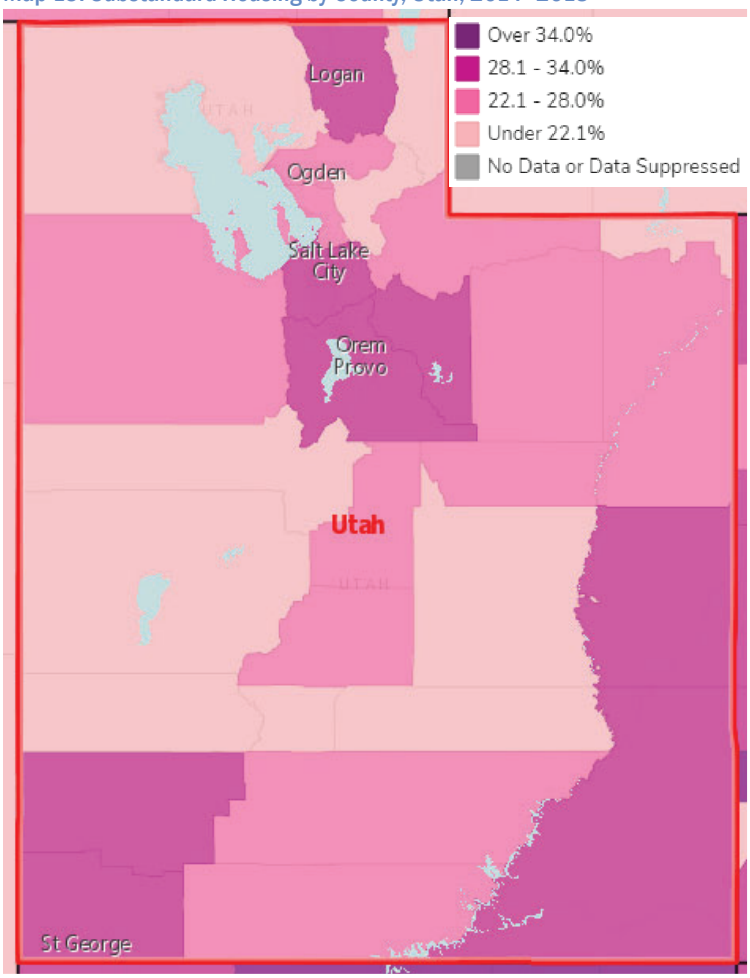
1 2018 Narrative Profiles. American Community Survey. Accessed 1/24/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.
2 State of Healthy Housing Executive Summary. National Center for Healthy Housing. Accessed 11/27/2019 from https://nchh.org/tools-and-data/data/state-of-healthy-housing/executive-summary/.

Figure 50: Percentage of Housing Units in Utah Having Substandard Condition by Type of Condition, 2018



Source: 2018 American Community Survey.

Map 13: Substandard Housing by County, Utah, 2014–2018



Map downloaded from CARES Engagement Network website, https://engagementnetwork.org/.

Table 14: Substandard Housing State Comparison and by Local Health District, 2014–2018

STATE COMPARISON (2014–2018)	Crude Rate (burden)
U.S.	32.5%
UTAH (16th of 51)	27.7%
LOCAL HEALTH DISTRICT (2014–2018)	
Bear River	26.7%
Central Utah	22.4%
Davis County	22.2%
Salt Lake County	28.8%
San Juan	28.0%
Southeast Utah	25.5%
Southwest Utah	30.7%
Summit County	26.3%
Tooele County	24.4%
TriCounty	24.2%
Utah County	29.9%
Wasatch County	30.8%
Weber-Morgan	26.0%

Available Services/Resources

U.S. Department of Housing and Urban Development
https://www.hud.gov/states/utah

Utah Housing Coalition
http://www.utahhousing.org/

Description

This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store.

- 26.3% of the Utah population has low food access
- Low food access ranged from 12.9% of the population in Salt Lake County LHD to 51.2% of the population in San Juan LHD

How Are We Doing?

All counties in Utah had at least one census tract that had low food access (Map 14).

National Comparison

Utah had the 34th lowest percentage of the population with low food access. The percentage for Utah (26.3%) was higher than the percentage for the U.S.(22.4%).

Disparities

In 2015, low food access varied by local health district (LHD), ranging from 12.9% in Salt Lake County to 51.2% in San Juan LHD (Table 15).

Three counties (Daggett, Piute, and Rich) had 100% of the population with low food access.

Table 15: Low Food Access State Comparison and by Local Health District, 2015

STATE COMPARISON (2015)	Crude Rate (burden)
U.S.	22.4%
UTAH (34th of 51)	26.3%
LOCAL HEALTH DISTRICT (2015)	
Bear River	31.3%
Central Utah	24.4%
Davis County	37.2%
Salt Lake County	12.9%
San Juan	51.2%
Southeast Utah	17.7%
Southwest Utah	44.8%
Summit County	40.8%
Tooele County	31.1%
TriCounty	30.6%
Utah County	35.4%
Wasatch County	43.0%
Weber-Morgan	26.2%

Risk Factors

Populations with limited access to supermarkets and grocery stores may not be able to eat a healthy diet. Barriers to food access may include income, transportation, and distance.[1]

What Is Being Done?

The Food Access Research Atlas (FARA) allows web-based investigation of access to grocery stores at the census-tract level using meaures of distance to store, income, and vehicle access. The Healthy Food Financing Initiative provides loans and grants for food retailers which help identify and target communities with low food access.[2]

Data Interpretation Issues

The FARA provides data which is derived from the analysis of multiple datasets.

This indicator displays the percentage of population without access to a supermarket or large grocery store. Census tract-level data was acquired from the USDA FARA and aggregated to generate county and state-level estimates.

The FARA provides data which is derived from the analysis of multiple datasets. First, a directory of supermarkets and large grocery stores within the United States, including Alaska and Hawaii, was created by merging the 2015 STARS directory of stores authorized to accept Supplemental Nutrition Assistance Program benefits and the 2015 Trade Dimensions TDLinx directory of stores. Stores met the definition of a supermarket or large grocery store if they reported at least $2 million in annual sales and contained all the major food departments found in a traditional supermarket, including fresh meat and poultry, dairy, dry and packaged foods, and frozen foods. The combined list of supermarkets and large grocery stores was converted into a GIS-usable format by geocoding the street address into storepoint locations. Population data are obtained at the block level from the 2010 Census of Population and Housing, while data on income are drawn at the block group-level from the 2010 to 2014 American Community Survey. Distance to nearest supermarket was determined for population blocks. These numbers and shares are then similarly aerially allocated down

1 Rhone, Alana, Ver Ploeg, Michele, Dicken, Chris, Williams, Ryan, and Breneman, Vince. *Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015*, EIB-165, U.S. Department of Agriculture (USDA), Economic Research Service, January 2017. Accessed 12/6/19 from https://www.ers.usda.gov/webdocs/publications/82101/eib-165.pdf?v=0.

2 Rhone, Alana, Ver Ploeg, Michele, Dicken, Chris, Williams, Ryan, and Breneman, Vince. *Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015*, EIB-165, USDA, Economic Research Service, January 2017. Accessed 12/6/19 from https://www.ers.usda.gov/webdocs/publications/82101/eib-165.pdf?v=0.

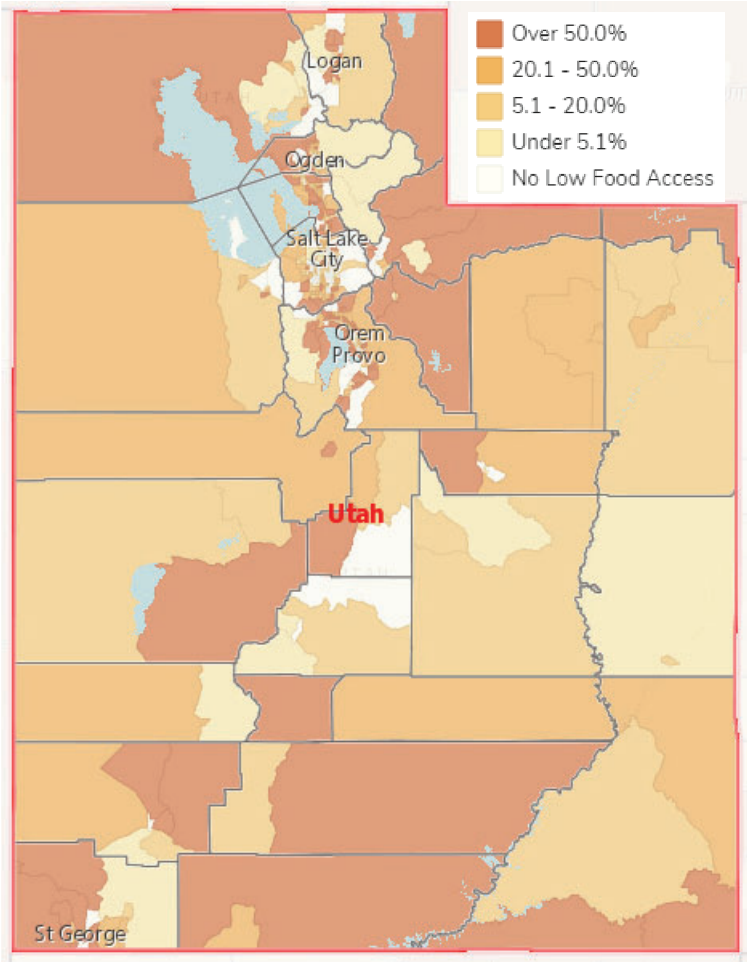
to the ½-kilometer-square grid level. For each ½-kilometer-square grid cell, the distance was calculated from its geographic center to the center of the grid cell with the nearest supermarket. Then, the number of households and population living more than 1, 10, and 20 miles from a supermarket or large grocery store was aggregated to the tract level and divided by the underlying population.

Rural or urban status is determined using population size. A census tract is considered rural if the population-weighted centroid of that tract is located in an area with a population with fewer than 2,500; all other tracts are considered urban tracts. Low-income is defined as annual family income of less than or equal to 200 percent of the federal poverty threshold given family size.

Available Services/Resources

Many healthy food sources are available in your area if you know where to look. The Healthy Foods page on the Utah Department of Health website has some resources that may help you shop healthier and improve your food choices.

Map 14: Percentage of Population With Low Food Access by Census Tract, Utah, 2015



Map downloaded from CARES Engagement Network website, https://engagementnetwork.org/.

Transportation Use

American Community Survey (ACS)

Description

This indicator reports the percentage of Utah workers aged 16 years or older who drove alone to work.

- 75.7% of Utah workers commuted by driving alone
- Significantly higher for ages 45–54; significantly lower for ages 20–24
- Significantly higher for males; significantly lower for females
- Higher for Davis County, TriCounty, and Weber-Morgan LHDs; lower for Salt Lake County, Summit County, and Utah County LHDs

How Are We Doing?

During 2018, three quarters of Utah workers reported commuting to work by driving alone. Only three percent of workers reported active transportation.

Mean travel time reported was much higher for workers using public transit (44.4 minutes) than those who carpooled (24.6 minutes) or drove alone (21.2 minutes) (Figur e 51).

National Comparison

Nationally, the rates were similar to Utah (76.3% of workers drove alone and 3.1% chose active transportation).

Disparities

Utah males were more likely to drive alone (76.9%) than females (74.3%).

Geographically, rates were highest for commuters in Weber-Morgan (80.6%), TriCounty (80.0%), and Davis County (79.6%) local health districts (LHDs) during 2014 to 2018 (Map 15).

Risk Factors

Taking public transportation, carpooling, walking, or bicycling to work can have environmental, economic, and personal health benefits.[1] Walking, bicycling, and public transportation promote regular physical activity, reduce traffic congestion, and decrease air pollution from cars, which in turn reduce chronic disease rates, obesity rates, and traffic-related fatalities.[2]

Higher rates of walking and bicycling to work are related to a lower percentage of obesity levels in communities. Commuting by car has generally been associated with reduced physical activity, increased body mass index, and increased levels of obesity.[3] Commuting by bicycle or walking provides an opportunity to achieve recommended amounts of daily physical activity. Public transportation also provides an opportunity for physical activity as users often combine it with walking or bicycling. Supportive infrastructure such as sidewalks, bike lanes, and public transportation make these commute options feasible and safer.[4]

Figure 51: Mean Travel Time to Work (in minutes) by Means of Transportation to Work, Utah, 2018

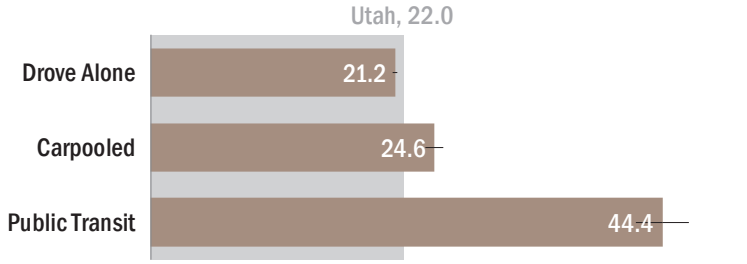
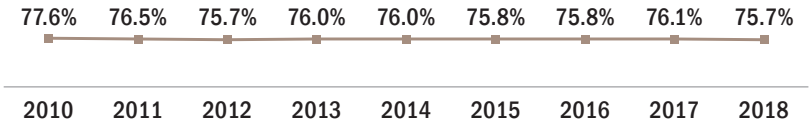


Figure 52: Percentage of Workers Driving Alone to Work by Year, 2010–2018



1 Pucher J, Dill J, Handy S. Infrastructure, programs, and policies to increase bicycling: An international review. Preventive Medicine. 2010;50(S):S106–S25.
2 Jilcott, S.B., et al., Commute times, food retail gaps, and body mass index in North Carolina counties. Prev Chronic Dis, 2010. 7(5): p. A107.
3 Christian, T.J., Trade-offs between commuting time and health-related activities. J Urban Health, 2012. 89(5): p. 746–57.
4 Yang, W., et al., Evaluation of personal and built environment attributes to physical activity: a multilevel analysis on multiple population-based data sources. J Obes, 2012. 2012: p. 548910.

Map 15: Drove Alone to Work by Local Health District, Utah, 2014–2018

Table 16: Driving Alone to Work State Comparison, by Age, and Gender, 2018 and Local Health District, 2014–2018

STATE COMPARISON (2018)	Crude Rate	(burden 90% CIs	
U.S. UTAH (16 of 51)	76.3%	*76.2% - 76.4%*	
	75.7%	*75.0% - 76.4%*	
AGE IN YEARS (2018)			
16–19	72.0%	*67.9% - 76.1%*	
20–24	71.7%	*69.2% - 74.2%*	
25–44	75.9%	*74.8% - 77.0%*	
45–54	78.1%	*76.3% - 79.9%*	
55–59	77.6%	*74.4% - 80.8%*	
60–64	78.6%	*74.6% - 82.6%*	
65+	75.3%	*70.9% - 79.7%*	
GENDER (2018)			
Male	76.9%	*76.0% - 77.8%*	!
Female	74.3%	*73.2% - 75.4%*	✓
LOCAL HEALTH DISTRICT (2014–2018)			
Bear River	75.6%	*74.3% - 76.9%*	
Central Utah	74.9%	*72.9% - 76.9%*	
Davis County	79.8%	*78.7% - 80.9%*	!
Salt Lake County	74.9%	*74.3% - 75.5%*	✓
San Juan	77.1%	*72.5% - 81.7%*	
Southeast Utah	78.8%	*75.5% - 82.1%*	
Southwest Utah	77.2%	*75.6% - 78.8%*	
Summit County	71.5%	*69.1% - 73.9%*	✓
Tooele County	74.9%	*72.3% - 77.5%*	
TriCounty	79.1%	*76.1% - 82.1%*	!
Utah County	73.4%	*72.7% - 74.1%*	✓
Wasatch County	80.2%	*76.9% - 83.5%*	!
Weber-Morgan	80.8%	*79.7% - 81.9%*	!

What Is Being Done?[1]

The Utah Department of Health and its partners have developed the Utah Bicycle and Pedestrian Master Plan Design Guide. This Guide has been designed to provide local cities and towns the tools they need to make their community a place where the active choice is the healthy choice.

As part of the American Reinvestment and Recovery Act funding for Communities Putting Prevention to Work, this Guide provides the tools and resources necessary to engage community members, identify goals, and take the steps to make their community's policies and environments active transportation friendly.

Data Interpretation Issues

This dataset only captures commute to work and does not capture the distance or duration of the trip.

Available Services/Resources[2]

The Utah Active Transportation Benefits Study is a collaboration between numerous partners in order to quantify the economic and health benefits bicycling and walking bring to Utah. Quantifying these benefits, better enables us to assess future programs and projects as to their effectiveness in improving access to bicycling and walking for both transportation and recreation.

- Literature Review
- Economic Impacts of Active Transportation
- Best Practices in Promoting Active Transportation
- Economic Impacts Calculator

A set of standards has been compiled to create a more comprehensive network of active transportation facilities in Utah that can be more readily implemented.

1 Bike and Pedestrian Information. EPICC Program. Accessed 12/5/2019 from http://choosehealth.utah.gov/your-health/your-community/bike-and-pedestrian-info.php.
2 Bike and Pedestrian Information. EPICC Program. Accessed 12/5/2019 from http://choosehealth.utah.gov/your-health/your-community/bike-and-pedestrian-info.php.

Download your copy of the Active Transportation Plan.

As we work to improve the places where people walk we consider all of the things that make it easier to walk or roll in your community. Here is what a number of national organizations have to say about active transportation in Utah.

Safe Routes Partnership—Safe Routes to School Scorecard

League of American Bicyclists—Bicycle Friendly States

Collaboration

Respect

Respiratory Conditions

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Uncontrolled Asthma

Emergency Department Encounter Database

Description

Uncontrolled asthma is reported as the number of emergency department (ED) visits due to asthma per 10,000 Utah residents.

- 18.3 asthma ED visits per 10,000
- Highest rate for children aged 0–4
- Higher rates of asthma among adolescent and adult females
- Significantly higher for Salt Lake County, Southeast Utah, Tooele County, TriCounty, and Weber-Morgan local health districts

How Are We Doing?

In Utah in 2018, the overall ED visit rate due to asthma was 18.3 per 10,000 population (crude rate). Since the change to ICD-10 codes in 2015, ED visit rates due to asthma have decreased (Figure 54).

Disparities

Utah children aged 0–4 had the highest asthma ED rate compared to other age groups. Asthma ED visits are highest among young male children when compared to young female children. However, among adolescents and adults, females have higher rates (Figure 53).

Risk Factors

Environmental factors such as allergens, cigarette smoke, and air pollution may contribute to asthma. Individuals need to avoid risk factors and triggers to assist in controlling their asthma.

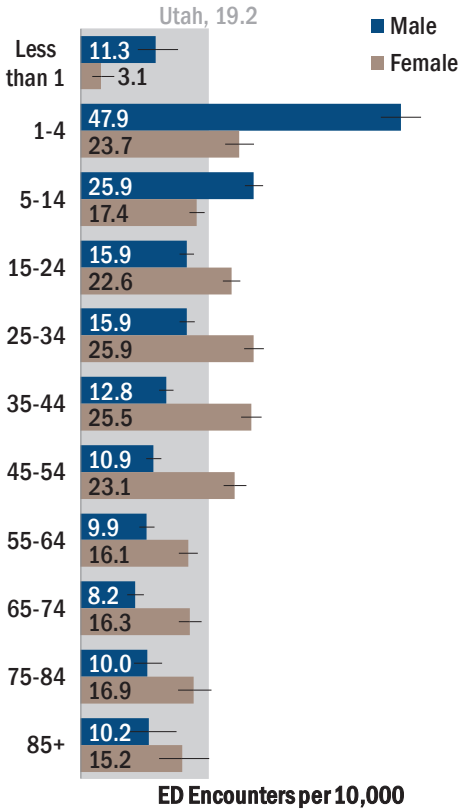
What Is Being Done?

The Utah Asthma Program (UAP) works with the Utah Asthma Task Force and other partners to maximize the reach, impact, efficiency, and sustainability of comprehensive asthma control services in Utah. This is accomplished by providing a seamless alignment of asthma services across the public health and health care sector, ensuring that people with asthma receive all of the services they need.

The UAP focuses on building program infrastructure and implementing strategies improve asthma control, reduce asthma-related ED visits and hospitalizations, and reduce health care costs. Program infrastructure is strengthened through a focus on strategies to create and support a comprehensive asthma control program. These strategies include: strengthening leadership, building strategic partnerships, and using strategic communication, surveillance, and evaluation. In addition, the UAP implements strategies outlined in the Centers for Disease Control and Prevention (CDC) EXHALE technical package to improve asthma control. The six strategy areas outlined in the EXHALE technical package are: 1. education on asthma self-management, 2. e-Xtinguishing smoking and secondhand smoke, 3. Home visits for trigger reduction and asthma self-management, 4. achievement of guidelines-based medical management, 5. linkages and coordination of care across settings, 6. environmental policies or best practices to reduce asthma triggers from indoor, outdoor, and occupational sources.

These strategies are expected to improve asthma control and quality of life by increasing access to health care and increasing coordination and coverage for comprehensive asthma control services both in the public health and health care sectors. Specifically, these strategies include identifying people with poorly controlled asthma, linking them to health care providers and NAEPP EPR-3 guidelines-based care, educating them on asthma self-management strategies, providing a supportive school environment, and referring to or providing home trigger reduction services for those who need them.

Figure 53: Uncontrolled Asthma by Age and Sex, Utah, 2017—2018



Data Interpretation Issues

All ED encounters are included in the presented data, which includes treat and release visits, as well as those that resulted in hospital admission.

International Classification of Diseases or ICD is a coding system maintained by the World Health Organization (WHO) and the U.S. National Center for Health Statistics. This system is used to classify causes of death on certificates and diagnoses, injury causes, and medical procedures for hospital and ED visits. These codes are updated every decade or so to account for advances in medical technology. The U.S. is currently using the 10th revision (ICD-10) to code causes of death. The 9th revision (ICD-9) was used for hospital and ED visits until the 3rd quarter of 2015. The ICD-10 was used fr om the 4th quarter of 2015.

Available Services/Resources

Individual programs in the Utah Department of Health Bureau of Health Promotion provide information and education to citizens, physicians, and healthcare providers on chronic conditions. Users can find helpful information on disease management and prevention at the Utah Asthma Program website: http://www.health.utah.gov/asthma/.

A list of UAP services for clinicians, community health workers, and people with asthma can be found at: http://health.utah.gov/asthma/pdfs/CAC.pdf.

CDC EXHALE package: https://www.cdc.gov/asthma/pdfs/EXHALE_technical_package-508.pdf

Community Resources

Asthma and Allergy Foundation of America
http://www.aafa.org

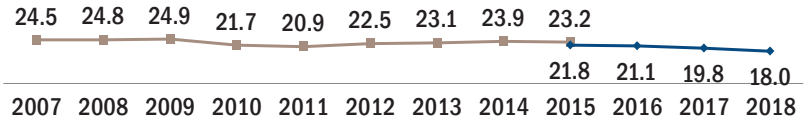
American Lung Association in Utah
http://www.lungusa.org/utah

Asthma and outdoor air pollution
http://www.epa.gov/airnow/asthma-flyer.pdf

Map 16: Uncontrolled Asthma by Local Health District, 2018

Map depicts age-adjusted rates.

Figure 54: Uncontrolled Asthma per 10,000 Persons in Utah by Year, 2007–2018



The U.S. is currently using the 10th revision (ICD-10) to code causes of death. The 9th revision (ICD-9) was used for hospital and ED visits until 3rd quarter of 2015 (brown line). The ICD-10 was used from the 4th quarter of 2015 (blue line). Trend graph depicts age-adjusted rates.

Table 17: Uncontrolled Asthma Overall, by Age, Gender, and Local Health District, 2018

	Crude (burden)		Age-adjusted (comparison)		
OVERALL (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
UTAH	18.3	*17.8 - 18.8*	18.0	*17.5 - 18.5*	
AGE IN YEARS (2018)					
0–4	28.6	*26.5 - 30.7*	--	-- --	!
5–64	18.2	*17.6 - 18.7*	--	-- --	
65+	11.9	*10.8 - 13.1*	--	-- --	✓
GENDER (2018)					
Male	16.8	*16.2 - 17.5*	16.0	*15.4 - 16.6*	✓
Female	19.8	*19.1 - 20.5*	19.9	*19.2 - 20.7*	!
LOCAL HEALTH DISTRICT (2018)					
Bear River	13.8	*12.2 - 15.6*	14.3	*12.5 - 16.2*	✓
Central Utah	17.3	*14.6 - 20.4*	17.6	*14.8 - 20.9*	
Davis County	15.3	*14.0 - 16.6*	15.0	*13.7 - 16.3*	✓
Salt Lake County	22.6	*21.8 - 23.5*	22.4	*21.5 - 23.2*	!
San Juan	20.7	*14.2 - 29.2*	19.2	*13.0 - 27.4*	
Southeast Utah	22.5	*18.1 - 27.6*	24.1	*19.3 - 29.7*	!
Southwest Utah	13.4	*12.0 - 15.0*	14.1	*12.6 - 15.7*	✓
Summit County	11.7	*8.6 - 15.5*	12.1	*8.9 - 16.0*	✓
Tooele County	26.3	*22.7 - 30.4*	25.3	*21.7 - 29.3*	!
TriCounty	26.8	*22.7 - 31.4*	27.7	*23.3 - 32.6*	!
Utah County	12.1	*11.3 - 13.0*	12.5	*11.5 - 13.4*	✓
Wasatch County	14.4	*10.7 - 19.2*	14.9	*10.9 - 19.8*	
Weber-Morgan	22.7	*20.9 - 24.5*	22.8	*21.0 - 24.7*	!

Collaboration

Respect

Cardiovascular Conditions

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

High Blood Pressure

Behavioral Risk Factor Surveillance System

Description

This measure reports the proportion of adults who have ever been told by a doctor, nurse, or other health professional that they have high blood pressure. High blood pressure is defined as a systolic (upper) number of 140 or greater and a diastolic (lower) number of 90 or greater.

How Are We Doing?

The proportion of Utah adults who reported being told they had high blood pressure has remained relatively constant over the past decade (Figure 56). In 2017, approximately (25.7%) Utah adults reported being told they had high blood pressure (age-adjusted rate).

National Comparison

The most recent year available for U.S. data was 2017. In that year, Utah had a lower age-adjusted high blood pressure prevalence than the U.S. (30.3%).

Disparities

The percentage of adults who reported being told they had high blood pressure was much lower for women than men in every age group up to age 65.

Adults in households with annual incomes above $75,000 had a lower rate of high blood pressure compared with the state rate. Those in households in the lowest income categories (<$50,000) had a higher rate of high blood pressure compared with the state rate (Figure 55).

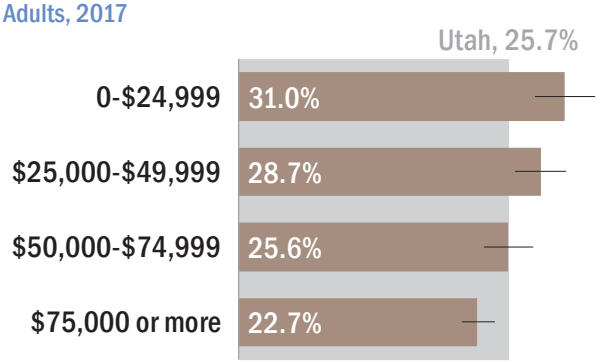
Doctor-diagnosed high blood pressure varied by educational level. College graduates (24.9%) had lower rates than those with less than a high school education (33.0%).

In 2017, Utahns who are Black Utahns had a higher rate of doctor-diagnosed high blood pressure (47.0%) compared with the general Utah population (25.7%). Although the incid ence among the Black population has come down in the last two years.

Among local health districts (LHDs), TriCounty and Weber-Morgan had significantly higher rates of high blood pressure than the state overall. Summit County and Utah County LHDs had rates statistically significantly lower than rest of the state (Map 17).

- 24.5% of Utah adults have high blood pressure
- Rate increases with age
- Higher among males
- Disparity among Black population
- Higher rates among lower income levels
- Higher rate among adults aged 25+ with a high school or equivalent education
- Significantly higher for TriCounty and Weber-Morgan LHDs; significantly lower for Summit County and Utah County LHDs

Figure 55: High Blood Pressure by Income (age-adjusted rates), Utah Adults, 2017

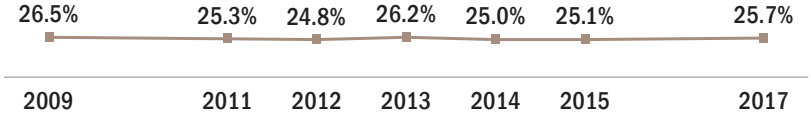


Risk Factors

High blood pressure is one of the most common primary diagnoses in the U.S.[1] Risk for developing hypertension increases with age. Oral contraceptives may increase risk of high blood pressure in women, especially if the women are older or obese.[2]

Some risk factors for high blood pressure can be reduced through lifestyle changes. These include exercise, reducing excess weight, tobacco cessation, and low-sodium diet. The Health and Medicine Division also recommends increasing dietary potassium, which can be achieved by eating more fruits and vegetables. Some risk factors are more difficult to control, such as family history and genetics. Certain medications canaffect blood pressure as well. Individuals are encouraged to discuss their risk factors with a physician and monitor their blood pressure regularly.

Figure 56: Percentage of Utahns Aged 18+ With High Blood Pressure by Year, 2009–2017



Trend graph depicts age-adjusted rates.

1 IOM (Institute of Medicine). 2010. *A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension.* Washington, DC: The National Academies Press.

2 Heart Disease and Stroke Statistics—2009 Update. A Report From the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Circulation. 2009;119:e1–e161.

What Is Being Done?

The Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was formed in 2013, consolidating three Utah Department of Health (UDOH) programs (Diabetes Prevention and Control Program, Heart Disease and Stroke Prevention Program, and the Physical Activity, Nutrition and Obesity Program). The purpose of the consolidation was to ensure a productive, collaborative, and efficient program focused on health outcomes.

The EPICC Program aims to reduce the incidence of diabetes, heart disease, and stroke by targeting risk factors including reducing obesity, increasing physical activity and nutritious food consumption, and improving diabetes and hypertension control.

Map 17: High Blood Pressure by Local Health District, 2017

Map depicts age-adjusted rates.

Table 18: High Blood Pressure State Comparison, by Age, Gender, Race, Ethnicity, Income, Education, and Local Health District, 2017

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2017)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	32.4%	*32.1% - 32.7%*	30.3%	*30.0% - 30.5%*	
UTAH (3rd of 51)	24.5%	*23.5% - 25.5%*	25.7%	*24.8% - 26.7%*	
AGE IN YEARS (2017)					
18–34	8.4%	*7.2% - 9.8%*	--	--	✓
35–49	17.4%	*15.7% - 19.3%*	--	--	✓
50–64	37.2%	*34.9% - 39.7%*	--	--	!
65+	56.3%	*53.9% - 58.7%*	--	--	!
GENDER (2017)					
Male	27.8%	*26.3% - 29.4%*	29.7%	*28.2% - 31.2%*	!
Female	21.2%	*19.9% - 22.5%*	21.7%	*20.6% - 22.9%*	✓
RACE (2017)†					
American Indian/AK Native	26.0%	*18.2% - 35.8%*	28.3%	*20.0% - 38.4%*	
Asian	16.0%	*9.8% - 25.2%*	19.5%	*11.7% - 30.5%*	
Black	36.8%	*24.8% - 50.7%*	47.0%	*35.6% - 58.7%*	!
Pacific Islander	17.7%	*9.8% - 30.0%*	28.8%	*15.9% - 46.4%*	
White	24.6%	*23.6% - 25.7%*	24.5%	*23.6% - 25.5%*	
ETHNICITY (2017)					
Hispanic	20.6%	*17.6% - 24.1%*	27.3%	*24.0% - 30.8%*	
Non-Hispanic	25.1%	*24.0% - 26.1%*	25.7%	*24.7% - 26.7%*	
INCOME (2017)					
0–$24,999	29.2%	*26.4% - 32.2%*	31.0%	*28.2% - 33.9%*	!
$25,000–$49,999	27.6%	*25.3% - 30.1%*	28.7%	*26.3% - 31.1%*	!
$50,000–$74,999	23.2%	*20.8% - 25.7%*	25.6%	*23.3% - 28.0%*	
$75,000 or more	22.0%	*20.4% - 23.7%*	22.7%	*21.2% - 24.4%*	✓
EDUCATION—Adults 25+ (2017)					
Below High School	32.2%	*27.0% - 37.9%*	33.0%	*28.1% - 38.2%*	
High School or GED	30.4%	*28.1% - 32.8%*	31.7%	*29.5% - 33.9%*	!
Some Post High School	28.8%	*26.9% - 30.8%*	29.0%	*27.2% - 30.9%*	
College Graduate	24.1%	*22.6% - 25.7%*	24.9%	*23.5% - 26.5%*	✓
LOCAL HEALTH DISTRICT (2017)					
Bear River	26.1%	*22.1% - 30.5%*	28.7%	*24.8% - 32.9%*	
Central Utah	30.3%	*25.9% - 35.0%*	29.0%	*24.9% - 33.5%*	
Davis County	24.6%	*21.5% - 28.0%*	25.5%	*22.6% - 28.7%*	
Salt Lake County	25.4%	*23.6% - 27.3%*	26.6%	*24.9% - 28.3%*	
San Juan	25.2%	*18.0% - 34.1%*	24.8%	*18.0% - 33.2%*	
Southeast Utah	30.0%	*24.7% - 35.9%*	24.9%	*20.8% - 29.6%*	
Southwest Utah	28.1%	*24.5% - 32.0%*	25.2%	*21.6% - 29.0%*	
Summit County	19.6%	*14.6% - 25.9%*	18.1%	*13.4% - 23.8%*	✓
Tooele County	29.4%	*24.1% - 35.3%*	30.1%	*25.1% - 35.7%*	
TriCounty	34.2%	*29.1% - 39.6%*	34.6%	*30.4% - 39.1%*	!
Utah County	17.1%	*15.2% - 19.2%*	21.2%	*19.2% - 23.5%*	✓
Wasatch County	22.4%	*16.4% - 29.8%*	21.8%	*16.8% - 27.9%*	
Weber-Morgan	29.6%	*26.1% - 33.4%*	29.5%	*26.3% - 32.9%*	!

† Age-adjusted using 3 age groups.

Evidence-based Practices

Healthcare organizations can improve high blood pressure control among their patient populations. Some strategies that have proven effective and sustainable include:

- Maximizing use of electronic medical records that allow providers to track patient care over time, and incorporate prompts and reminders to improve care.
- Integrating team-based care that makes full use of the skills of the team members to identify and treat patients with high blood pressure, provide patient support and follow-up care, and help patients manage their medicines and stick to a blood pressure control plan.
- Reinforcing the importance of behaviors that affect blood pressure, such as eating a healthy, low sodium diet; being physically active; maintaining a healthy weight; and not smoking.

Data Interpretation Issues

In order to be accurately diagnosed with hypertension, a patient must have had a blood pressure reading of more than 140/90 on two separate visits. The questionnaire does not capture whether a patient was told they had high blood pressure on a single visit or whether they were actually diagnosed with hypertension.

Available Services/Resources

The UDOH EPICC Program works with healthcare organizations and other partners to improve the accuracy of blood pressure measurement and to improve medication adherence for people with high blood pressure.

In 2012, the UDOH published a statistical report titled *The Impact of Heart Disease and Stroke in Utah*. This report describes overall patterns in cardiovascular disease and risk factors at the state and national levels and among Utah sub-populations (age group, sex, race, ethnicity, and Utah Small Area).

To download the full report, visit http://choosehealth.utah.gov/documents/pdfs/reports/HD_Stroke_Burden_Report2012.pdf.

Heart disease and stroke are the first and fourth leading causes of death in the United States. Heart disease is responsible for one of every three deaths in the country. Million Hearts is a national initiative that seeks to prevent heart disease and stroke.

Million Hearts aims to prevent heart disease and stroke by:

- Improving access to effective care
- Improving the quality of care for the ABCS (appropriate **aspirin** prescription, **blood pressure** control, **cholesterol** control, and smoking cessation)
- Focusing clinical attention on the prevention of heart attack and stroke
- Activating the public to lead a heart-healthy lifestyle
- Improving the prescription and adherence to appropriate medications for the ABCS

For information about the Million Hearts initiative, visit http://www.millionhearts.hhs.gov.

Centers for Disease Control and Prevention Blood Pressure website: http://www.cdc.gov/bloodpressure/

American Heart Association: http://www.heart.org/HEARTORG/

High Cholesterol

Behavioral Risk Factor Surveillance System

Description

This measure reports the proportion of adults who have ever been told by a doctor, nurse, or other health professional that they have high blood cholesterol.

- 22.2% of Utah adults have high cholesterol
- Rate increases with age
- Higher among males

How Are We Doing?

In 2017, the age-adjusted percentage of Utah adults who reported being told they had high cholesterol was 23.7% (one inf four adults).

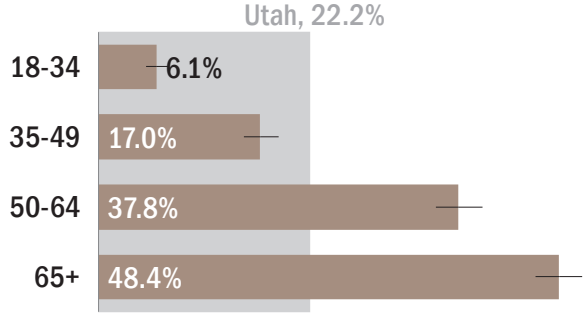
National Comparison

In 2017, the age-adjusted U.S. estimate for high cholesterol was 27.3% of adults (compared with 23.7% for adults in Utah).

Disparities

In 2017, doctor-diagnosed high cholesterol was different by gender (22.1% for females and 25.3% for males). High cholesterol prevalence increased with age. Among Utahns aged 65 and older, 48.4% were diagnosed with high cholesterol, compared with 6.1% of adults aged 18 to 34 (Figure 57).

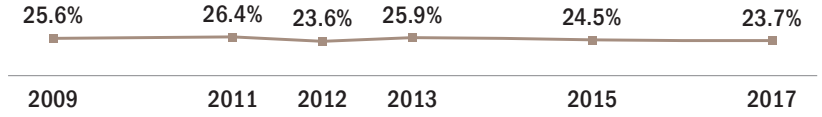
Figure 57: High Cholesterol by Age Group, Utah Adults, 2017



Risk Factors

The risk factors for high cholesterol include lack of exercise, overweight and obesity, cigarette smoking, and a high cholesterol diet. Some risk factors can be reduced through lifestyle changes. Others, such as family history and liver function, are more difficult to control. Certain medicationscan contribute to high cholesterol as well. Individuals are encouraged to discuss their risk factors with a physician and request blood cholesterol screening at least every five years.

Figure 58: Percentage of Utahns Aged 18+ With High Cholesterol by Year, 2009–2017



Trend graph depicts age-adjusted rates.

What Is Being Done?

The Utah Department of Health (UDOH) Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was formed in 2013, consolidating three UDOH programs (Diabetes Prevention and Control Program, Heart Disease and Stroke Prevention Program, and the Physical Activity, Nutrition and Obesity Program). The purpose of the consolidation was to ensure a productive, collaborative, and efficient program focused on health outcomes.

The EPICC Program aims to reduce the incidence of diabetes, heart disease, and stroke by targeting risk factors including reducing obesity, increasing physical activity and nutritious food consumption, and improving diabetes and hypertension control.

Evidence-based Practices

High cholesterol is one of the most commonly treated medical conditions. Aggressive treatment focuses on lowering LDL ("bad" cholesterol levels). Lowering LDL cholesterol reduces the risk of coronary heart disease and ischemic stroke. Low cholesterol diet, increased exercise, and statin medications are the first line of treatment.

Data Interpretation Issues

Doctor-diagnosed hypercholesterolemia is based on the answer to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have high blood cholesterol?" This question is asked on the Behavioral Risk Factor Surveillance System in odd-numbered years.

Available Services/ Resources

Impact of Heart Disease and Stroke in Utah
In 2012, the Utah Heart Disease and Stroke Prevention Program published a statistical report titled the *Impact of Heart Disease and Stroke in Utah*. This report describes overall patterns in cardiovascular disease and risk factors at the state and national levels and among Utah subpopulations (age group, sex, race, ethnicity, and Utah Small Area).

To download the full report, please visit http://choosehealth.utah.gov/documents/pdfs/reports/HD_Stroke_Burden_Report2012.pdf.

Million Hearts Initiative
Heart disease and stroke are the first and fourth leading causes of death in the United States. Heart disease is responsible for one of every three deaths in the country. Million Hearts is a national initiative that seeks to prevent heart disease and stroke.

Million Hearts aims to prevent heart disease and stroke by:

- Improving access to effective care

Map 18: High Cholesterol by Local Health District, 2017

Map depicts age-adjusted rates.

Table 19: High Cholesterol State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2017 and Race, 2015 and 2017 combined

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2017)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	29.0%	*28.7% - 29.3%*	27.3%	*27.0% - 27.5%*	
UTAH (5th of 51)	22.2%	*21.3% - 23.2%*	23.7%	*22.7% - 24.6%*	
AGE IN YEARS (2017)					
18–34	6.1%	*5.0% - 7.3%*	–	–	✓
35–49	17.0%	*15.3% - 18.9%*	–	–	✓
50–64	37.8%	*35.4% - 40.3%*	–	–	!
65+	48.4%	*45.9% - 50.8%*	–	–	!
GENDER (2017)					
Male	23.3%	*21.9% - 24.7%*	25.3%	*23.9% - 26.7%*	!
Female	21.2%	*19.9% - 22.6%*	22.1%	*20.8% - 23.4%*	✓
RACE (2015 and 2017)†					
American Indian/AK Native	14.3%	*10.2% - 19.8%*	16.1%	*11.8% - 21.5%*	✓
Asian	13.4%	*9.5% - 18.6%*	18.4%	*13.1% - 25.3%*	
Black	20.2%	*13.7% - 28.9%*	28.0%	*20.0% - 37.7%*	
Pacific Islander	11.3%	*6.9% - 18.0%*	20.6%	*12.9% - 31.1%*	
White	23.3%	*22.6% - 24.0%*	23.7%	*23.1% - 24.4%*	
ETHNICITY (2017)					
Hispanic	20.0%	*16.9% - 23.5%*	25.0%	*21.4% - 28.9%*	
Non-Hispanic	22.6%	*21.6% - 23.6%*	23.5%	*22.5% - 24.4%*	
INCOME (2017)					
0–$24,999	23.9%	*21.3% - 26.8%*	26.3%	*23.5% - 29.4%*	
$25,000–$49,999	22.6%	*20.5% - 25.0%*	24.0%	*21.8% - 26.4%*	
$50,000–$74,999	21.3%	*19.1% - 23.8%*	23.6%	*21.4% - 25.9%*	
$75,000 or more	23.9%	*22.3% - 25.7%*	24.4%	*22.6% - 25.8%*	
EDUCATION—Adults 25+ (2017)					
Below High School	26.8%	*22.0% - 32.4%*	27.3%	*22.8% - 32.2%*	
High School or GED	25.9%	*23.8% - 28.2%*	26.9%	*24.8% - 29.0%*	
Some Post High School	25.5%	*23.7% - 27.4%*	25.8%	*24.0% - 27.6%*	
College Graduate	27.0%	*25.4% - 28.7%*	27.9%	*26.4% - 29.5%*	
LOCAL HEALTH DISTRICT (2017)					
Bear River	21.3%	*17.9% - 25.2%*	24.5%	*21.0% - 28.3%*	
Central Utah	27.1%	*23.0% - 31.7%*	26.3%	*22.4% - 30.6%*	
Davis County	25.0%	*21.9% - 28.4%*	26.0%	*23.0% - 29.2%*	
Salt Lake County	23.1%	*21.4% - 24.9%*	24.0%	*22.4% - 25.7%*	
San Juan	19.4%	*13.4% - 27.3%*	19.2%	*13.2% - 26.9%*	
Southeast Utah	25.1%	*19.9% - 31.0%*	20.9%	*16.7% - 25.7%*	
Southwest Utah	27.1%	*23.5% - 30.9%*	24.7%	*21.5% - 28.3%*	
Summit County	20.6%	*15.5% - 26.7%*	18.6%	*14.5% - 23.5%*	✓
Tooele County	27.6%	*21.7% - 34.4%*	28.3%	*23.3% - 33.8%*	
TriCounty	21.8%	*18.0% - 26.0%*	23.1%	*19.9% - 26.7%*	
Utah County	18.4%	*16.5% - 20.6%*	23.1%	*20.9% - 25.4%*	
Wasatch County	19.3%	*13.3% - 27.1%*	19.0%	*13.3% - 26.3%*	
Weber-Morgan	21.4%	*18.3% - 24.8%*	21.7%	*18.8% - 25.0%*	

† Age-adjusted using 3 age groups.

- Improving the quality of care for the ABCS (appropriate **aspirin** prescription, **blood pressure** control, **cholesterol** control, and smoking cessation)
- Focusing clinical attention on the prevention of heart attack and stroke
- Activating the public to lead a heart-healthy lifestyle
- Improving the prescription and adherence to appropriate medications for the ABCS

See what you can do to be part of the solution. Visit http://choosehealth.utah.gov/healthcare/million-hearts.php for more information.

Diabetes Conditions

Collaboration

Respect

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Diabetes Prevalence

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of Utah adults (18+) who reported being told by a healthcare professional they have diabetes (excludes women who were told they had diabetes only during pregnancy or those who reported they had "borderline" or prediabetes).

- 8.8% of Utah adults have diabetes
- Rate increases with age
- Higher rates among low income and lower education levels
- Disparities include American Indian/AK Native, and Pacific Islander populations as well as the Hispanic population
- Significantly higher rates for Tooele and TriCounty LHDs
- Significantly lower rate for Wasatch County LHD

How Are We Doing?

The rising prevalence of diabetes in Utah appears to be slowing. However, many Utah adults are overweight or obese, and/or lead sedentary lifestyles, adding to the number of people at risk for developing diabetes.

A large number of individuals have prediabetes. Prediabetes is a condition in which blood sugar rates are elevated but not yet high enough to reach the clinical threshold of a diabetes diagnosis. An estimated 86 million Americans aged 20 and older have prediabetes. Unless those individuals take steps to reduce their risk of diabetes, such as increasing physical activity, eating a more nutritious diet, or losing weight, the majority will have diabetes within 10 years.

National Comparison

According to the 2018 Behavioral Risk Factor Surveillance System, Utah adults have an age-adjusted rate of 8.8% of diagnosed with diabetes, compared with the U.S. age-adjusted rate of 10.4%.

Disparities

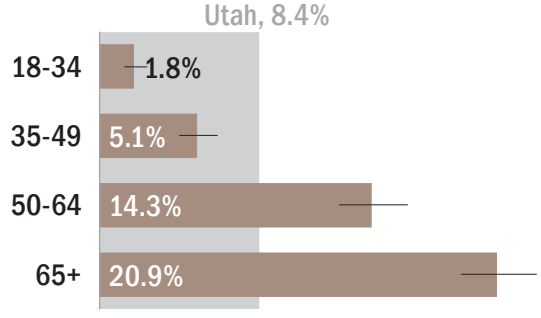
For both males and females, the highest rates of diabetes are observed for adults aged 65 and older. Overall, one of five adults aged 65 and older has been diagnosed with diabetes (Figure 59).

Prevalence of diabetes is especially high for people who are Pacific Islander (15.9%) and American Indian/Alaska (AK) Native (15.3%) populations. In 2018, the age-adjusted rate for Hispanic adults was 13.5%, compared with 8.2% for non-Hispanic adults.

The highest rates of diabetes among adults aged 25 and older are for adults who have less than a high school degree (17.6%).

Tooele and TriCounty local health districts (LHDs) had significantly higher rates of diabetes prevalence than the state overall, with a rate of 12.7% and 11.1%, respectively. The Wasatch County LHD had a significantly lower rate than the state at 4.7% (Map 19).

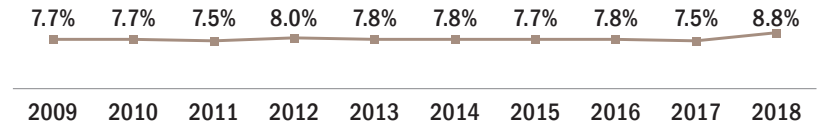
Figure 59: Adult Diabetes Prevalence by Age Group, Utah, 2018



Risk Factors

Anyone can develop diabetes, but the risk is greater for those who are older, overweight or obese, physically inactive, or belong to a minority racial or ethnic group. As the Utah population ages, and as the proportion of high-risk minority ethnic and racial groups in the population increases, a greater percentage of Utahns will be at risk for developing diabetes.

Figure 60: Percentage of Utahns Aged 18+ With Diabetes by Year, 2009–2018



Trend graph depicts age-adjusted rates.

Being overweight or obese is a major risk factor for developing diabetes. The risk of developing diabetes can be substantially reduced through weight loss and regular physical activity. The Diabetes Primary Prevention Study (DPP) showed weight loss and participation in regular physical activity can significantly decrease the risk. The DPP clinical trial included more than 3,000 people who had impaired fasting glucose and were at an increased risk for developing diabetes.

Participants who engaged in moderately intense physical activity for 30 minutes per day and lost 5 to 7 percent of their body weight decrease d their risk of diabetes dramatically. This behavioral activity was effective for all participants in the study, regardless of age or ethnic group.[1] Some risk factors cannot be modified, such as older age or membership in a minority racial or ethnic group. Nevertheless, risk can be substantially reduced through adhering to a nutritious diet and participating in regular physical activity.

What Is Being Done?

The Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program encourages people with diabetes to enroll in a diabetes self-management education class. These classes have been shown to help individuals develop the skills they need to manage their diabetes and are usually taught by dietitians, nurses, or pharmacists, who may also hold the status of Certified Diabetes Educator.

Map 19: Adult Diabetes Prevalence by Local Health District, Utah, 2017–2018

Map depicts age-adjusted rates.

Table 20: Diabetes Prevalence State Comparison, by Age, Gender, Ethnicity, Income, and Education, 2018, Race, 2015–2018, and Local Health District, 2017–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	11.4%	*11.2% - 11.6%*	10.4%	*10.2% - 10.6%*	
UTAH (12th of 51)	8.4%	*7.8% - 9.0%*	8.8%	*8.2% - 9.5%*	
AGE IN YEARS (2018)					
18–34	1.8%	*1.3% - 2.5%*	–	– –	✓
35–49	5.1%	*4.2% - 6.2%*	–	– –	✓
50–64	14.3%	*12.6% - 16.2%*	–	– –	!
65+	20.9%	*19.0% - 23.0%*	–	– –	!
GENDER (2018)					
Male	8.8%	*8.0% - 9.8%*	9.6%	*8.7% - 10.5%*	
Female	7.8%	*7.0% - 8.7%*	8.0%	*7.2% - 8.9%*	
RACE (2015–2018)†					
American Indian/AK Native	13.9%	*11.1% - 17.3%*	15.3%	*12.4% - 18.9%*	!
Asian	3.7%	*2.4% - 5.7%*	6.0%	*3.9% - 9.1%*	
Black	6.0%	*3.8% - 9.3%*	8.6%	*5.7% - 12.9%*	
Pacific Islander	9.5%	*6.0% - 14.8%*	15.9%	*10.1% - 24.0%*	!
White	7.2%	*7.0% - 7.6%*	7.2%	*6.9% - 7.5%*	✓
ETHNICITY (2018)					
Hispanic	9.8%	*7.7% - 12.3%*	13.5%	*10.6% - 17.1%*	!
Non-Hispanic	8.1%	*7.5% - 8.8%*	8.2%	*7.6% - 8.9%*	
INCOME (2018)					
0–$24,999	13.0%	*11.0% - 15.4%*	14.7%	*12.4% - 17.3%*	!
$25,000–$49,999	10.0%	*8.6% - 11.6%*	10.2%	*8.7% - 11.9%*	
$50,000–$74,999	7.4%	*6.1% - 8.9%*	8.1%	*6.8% - 9.7%*	
$75,000 or more	5.9%	*5.1% - 6.9%*	6.2%	*5.4% - 7.2%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	14.7%	*11.4% - 18.9%*	17.6%	*14.0% - 22.0%*	!
High School or GED	11.4%	*9.9% - 13.0%*	11.7%	*10.2% - 13.4%*	!
Some Post High School	9.8%	*8.6% - 11.1%*	9.6%	*8.5% - 10.9%*	
College Graduate	7.0%	*6.1% - 7.9%*	7.1%	*6.3% - 8.1%*	✓
LOCAL HEALTH DISTRICT (2017–2018)					
Bear River	6.7%	*5.4% - 8.4%*	7.7%	*6.2% - 9.6%*	
Central Utah	9.1%	*7.3% - 11.4%*	8.3%	*6.6% - 10.3%*	
Davis County	8.1%	*6.9% - 9.6%*	8.2%	*7.0% - 9.6%*	
Salt Lake County	7.8%	*7.1% - 8.6%*	8.1%	*7.4% - 9.0%*	
San Juan	8.5%	*5.5% - 13.0%*	8.6%	*5.7% - 12.7%*	
Southeast Utah	12.1%	*9.3% - 15.6%*	10.1%	*8.0% - 12.8%*	
Southwest Utah	8.9%	*7.4% - 10.7%*	7.9%	*6.5% - 9.7%*	
Summit County	5.6%	*3.3% - 9.2%*	5.5%	*3.4% - 8.7%*	
Tooele County	12.1%	*9.3% - 15.8%*	12.7%	*10.0% - 16.0%*	!
TriCounty	10.8%	*8.9% - 13.1%*	11.1%	*9.2% - 13.3%*	!
Utah County	5.8%	*5.0% - 6.7%*	7.4%	*6.4% - 8.5%*	
Wasatch County	5.0%	*3.4% - 7.3%*	4.7%	*3.2% - 6.7%*	✓
Weber-Morgan	8.9%	*7.4% - 10.7%*	9.1%	*7.6% - 10.8%*	

† Age-adjusted using 3 age groups.

1 Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med* 2002;346:393–403, accessed on 11/22/2019 from http://www.nejm.org/doi/full/10.1056/NEJMoa012512.

The Utah Arthritis Program supports Chronic Disease Self-Management Programs and Diabetes Self-Management Programs throughout the state. This program is also called the Living Well with Chronic Conditions Program. This free six-week program is available throughout the state and taught by community members.

Evidence-based Practices

Diabetes Self-Management Classes have been shown to improve blood sugar control among participants. Programs recognized by the American Diabetes Association or certified by the American Association of Diabetes Educators are available. Information on classes in Utah is available on the Living Well Utah website at livingwell.utah.gov.

Available Services/Resources

The American Diabetes Association is a resource for all types of information on diabetes. Call 1-800-DIABETES or visit the website at http://www.diabetes.org.

The National Diabetes Education Program (http://www.yourdiabetesinfo.org) has resources for diabetes management for professionals, businesses, and patients. Most materials are available upon request at no charge.

The National Diabetes Prevention Program (https://www.cdc.gov/diabetes/prevention/index.html) has resources for diabetes prevention for employers, insurers, health care professionals, program providers, and individuals.

The Utah Health Resource Line can provide information about enrolling in diabetes self-management classes. Call 1-888-222-2542 for more information.

The EPICC website provides information of diabetes self-management at http://choosehealth.utah.gov/your-health/lifestyle-change/dsme.php.

Association of Diabetes Educators
http://www.diabeteseducator.org
800-338-3633

Collaboration

Respect

Obesity/Physical Activity

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Obesity—Adult

Behavioral Risk Factor Surveillance System

UHIP Highlights

Reducing Obesity and Obesity-related Chronic Conditions is one of the health priorities for the 2017–2020 Utah Health Improvement Plan (UHIP). For the past three years, a workgroup has been working to tackle obesity rates by facilitating a culture of wellness within worksites. Worksites were identified as a gap in statewide efforts around obesity. The UHIP workgroup has been successful in getting more than 120 worksites to assess their wellness culture. The workgroup was also successful in compiling and providing a variety of wellness resources, including the Centers for Disease Control and Prevention (CDC) Work@Health® program, to help worksites improve their wellness assessment scores.

- 27.8% of Utah adults are obese (crude rate)
- Lower rates among Utahns aged 18–34
- Disparities include Pacific Islander and American Indian/AK Native populations
- Lower rates among Asian population
- Lower rates among higher income and education levels
- Significantly higher rates for Central Utah, Southeast Utah, Tooele County, and TriCounty LHDs

Description

This measure is defined as the percentage of survey respondents aged 18 years and older who have a body mass index (BMI) greater than or equal to 30.0 kg/m^2 calculated from self-reported weight and height.

How Are We Doing?

Since 2000, the age-adjusted percentage of Utah adults who were obese has increased from 19.5% in 2000 to 28.4% in 2018 (Figure 62). Nevertheless, the rate of obesity in Utah is lower than most states.

National Comparison

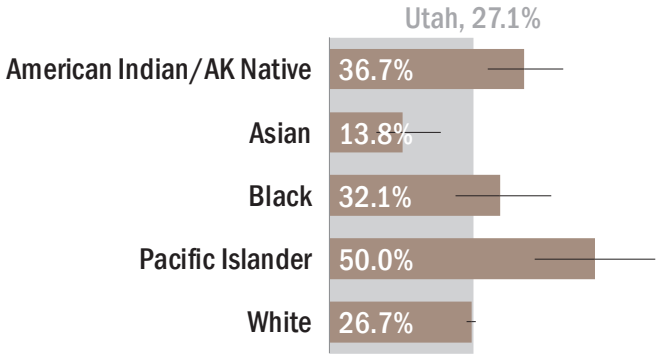
The age-adjusted prevalence of obesity in Utah adults is slightly lower than the U.S. In 2018, the obesity prevalence rate for Utah adults was 28.4% while the obesity prevalence or U.S. adults in 2018 was 31.1%. Utah ranked 13th among the 50 states and the District of Columbia.

Disparities

Adults aged 18–34 had obesity rates lower than the state rate.

Age-adjusted rates are used to compare rates for race and local health districts (LHDs) to account for the differences in ages. In 2018, the Pacific Islander and American Indian/Alaska (AK) Native populations had higher rates than the state, while the Asian population had a lower rate than the state (Figure 61). Central Utah, Southeast Utah, Tooele County, and TriCounty LHDs had higher rates of obesity than the state (Map 20).

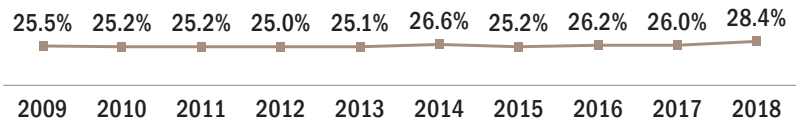
Figure 61: Obesity by Race (age-adjusted rates), Utah Adults, 2017–2018



Risk Factors

Genetics, family history, some diseases (e.g., polycystic ovary syndrome), and some drugs (e.g., steroids) are risk factors for obesity that are often outside of one's control. But there are things people can do that can reduce their risk of obesity. Behaviors such as engaging in physical activity and having a healthy diet can have a significant impact on reducing the risk.[1]

Figure 62: Percentage of Utahns Aged 18+ Who Were Obese by Year, 2009–2018



Trend graph depicts age-adjusted rates.

What Is Being Done?

The Utah Department of Health (UDOH) Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was established through funding from the CDC. The EPICC Program works in schools, worksites, communities, healthcare, and childcare to promote healthy lifestyles in Utah.

1 Centers for Disease Control and Prevention, Overweight & Obesity: Adult Obesity Causes & Consequences. Accessed 11/18/2019 from https://www.cdc.gov/obesity/adult/causes.html.

Evidence-based Practices

The EPICC Program promotes evidence- based practices collected by the Center for Training and Research Translation (Center TRT). The Center TRT bridges the gap be- tween research and practice and supports the efforts of public health practitioners working in nutrition, physical activity, and obesity prevention by:

- Reviewing evidence of public health impact and disseminating population-level interventions
- Designing and providing practice-relevant training both in-person and web-based
- Addressing social determinants of health and health equity through training and translation efforts
- Providing guidance on evaluating policies and programs aimed at impacting healthy eating and physical activity

Appropriate evidence-based interventions can be found at http://www.centertrt.org/?p=interventions_interventions_overview.

Map 20: Adult (18+) Obesity by Local Health District, 2018

Map depicts age-adjusted rates.

Table 21: Adult Obesity Prevalence State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2018 and Race, 2017–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	30.9%	*30.6% - 31.2%*	31.1%	*30.8% - 31.4%*	
UTAH (13th of 51)	27.8%	*26.7% - 28.9%*	28.4%	*27.3% - 29.5%*	
AGE IN YEARS (2018)					
18–34	21.8%	*19.8% - 23.8%*	--	-- --	✓
35–49	30.9%	*28.8% - 33.1%*	--	-- --	!
50–64	33.4%	*31.0% - 35.8%*	--	-- --	!
65+	29.2%	*27.0% - 31.5%*	--	-- --	
GENDER (2018)					
Male	28.7%	*27.2% - 30.2%*	29.4%	*27.9% - 30.9%*	
Female	26.8%	*25.2% - 28.4%*	27.4%	*25.8% - 29.0%*	
RACE (2017–2018)†					
American Indian/AK Native	36.2%	*29.7% - 43.3%*	36.7%	*29.9% - 44.0%*	!
Asian	14.0%	*9.3% - 20.6%*	13.8%	*8.8% - 21.0%*	✓
Black	30.1%	*22.1% - 39.5%*	32.1%	*23.7% - 41.8%*	
Pacific Islander	43.3%	*32.2% - 55.1%*	50.0%	*38.6% - 61.4%*	!
White	26.2%	*25.4% - 27.1%*	26.7%	*25.9% - 27.6%*	
ETHNICITY (2018)					
Hispanic	30.0%	*26.4% - 33.8%*	29.4%	*25.6% - 33.4%*	
Non-Hispanic	27.5%	*26.4% - 28.7%*	28.2%	*27.0% - 29.3%*	
INCOME (2018)					
0–$24,999	28.3%	*25.5% - 31.4%*	31.3%	*28.1% - 34.7%*	
$25,000–$49,999	30.3%	*27.7% - 33.0%*	32.1%	*29.3% - 34.9%*	!
$50,000–$74,999	30.3%	*27.6% - 33.2%*	31.0%	*28.4% - 33.8%*	
$75,000 or more	26.6%	*24.9% - 28.4%*	25.7%	*23.9% - 27.6%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	32.1%	*26.9% - 37.9%*	33.5%	*28.3% - 39.2%*	
High School or GED	34.3%	*31.8% - 36.8%*	34.3%	*31.8% - 36.8%*	!
Some Post High School	31.3%	*29.2% - 33.5%*	31.5%	*29.3% - 33.7%*	
College Graduate	25.1%	*23.5% - 26.7%*	25.2%	*23.6% - 26.9%*	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	28.3%	*24.2% - 32.9%*	29.7%	*25.5% - 34.2%*	
Central Utah	34.3%	*29.2% - 39.7%*	35.0%	*29.8% - 40.5%*	!
Davis County	25.9%	*22.7% - 29.4%*	26.3%	*23.1% - 29.7%*	
Salt Lake County	28.0%	*26.1% - 30.0%*	28.4%	*26.4% - 30.4%*	
San Juan	38.1%	*26.9% - 50.8%*	37.0%	*27.7% - 47.5%*	
Southeast Utah	37.5%	*30.1% - 45.5%*	36.9%	*30.3% - 44.1%*	!
Southwest Utah	25.1%	*21.5% - 29.0%*	26.0%	*22.1% - 30.2%*	
Summit County	13.1%	*8.6% - 19.4%*	13.4%	*9.0% - 19.6%*	✓
Tooele County	43.5%	*37.2% - 50.1%*	43.0%	*36.7% - 49.5%*	!
TriCounty	33.0%	*28.6% - 37.7%*	33.5%	*29.2% - 38.2%*	!
Utah County	25.9%	*23.4% - 28.6%*	28.5%	*26.0% - 31.1%*	
Wasatch County	29.6%	*21.0% - 39.9%*	25.2%	*18.2% - 33.8%*	
Weber-Morgan	30.4%	*26.6% - 34.5%*	30.3%	*26.5% - 34.3%*	

† Age-adjusted using 3 age groups.

Data Interpretation Issues

BMI is calculated using self-reported height and weight and are subject to being misreported.

Available Services/Resources

Action for Healthy Kids Local School Policy CD - for more information, call 801-538-6142.

The UDOH houses the EPICC Program. The EPICC Program website has information on healthy living, including prevention of diabetes, heart disease, and stroke at http://www.choosehealth.utah.gov.

The Utah Worksite Wellness Council is a non-profit organization made up of volunteers from organizations across Utah. Information is available at http://utahworksitewellness.org.

Resources:
Making the Healthy Choice the Easy Choice, The Utah Nutrition and Physical Activity Plan 2010–2020
http://choosehealth.utah.gov/documents/pdfs/U-PAN_State_Plan.pdf

The National Center for Chronic Disease Prevention and Health Promotion provides consumer information at https://www.cdc.gov/obesity/index.html.

National Heart, Lung, and Blood Institute Obesity Education Initiative
https://www.nhlbi.nih.gov/about/org/oei

The State of Obesity: Better Policies for a Healthier America
http://healthyamericans.org/report/115/

More information on the Behavioral Risk Factor Surveillance System may be found on the website of the CDC—http://www.cdc.gov/brfss/.

Trust for America's Health
https://www.tfah.org/

References:
Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual Medical Spending Attributable to Obesity: Payer-and Service-Specific Estimates. Health Affairs, 28(5): w822–831, 2009.

Nguyen NT, Nguyen XM, Lane J, Wang P.Obes Surg. 2011 Mar;21(3):351–5. doi: 10.1007/s11695-010-0335-4. Relationship between obesity and diabetes in a US adult population: findings from the National Health and Nutrition Examination Survey, 1999–2006. https://www.ncbi.nlm.nih.gov/pubmed/21128002.

Kim D D; Basu A. Estimating the Medical Care Costs of Obesity in the United States: Systematic Review, Meta-Analysis, and Empirical Analysis. https://www.valueinhealthjournal.com/article/S1098-3015(16)00055-3/pdf.

Obesity—Minor

Youth Risk Behavior Surveillance System

Description

For individuals aged 2 to 20, overweight and obesity is determined by calculating the individual's body mass index (BMI) and comparing it to age and sex standardized growth charts distributed by the Centers for Disease Control and Prevention (CDC). Children and adolescents are considered obese if their BMI is greater than or equal to the 95th percentile for BMI by age and sex based on the 2000 CDC Growth Charts.

- 9.8% of Utah adolescent students are obese (2019)
- Higher rates among males
- Disparities include Pacific Islander (28.3%) and Hispanic (17.1%) adolescents
- Significantly lower in Summit County, TriCounty, and Utah County LHDs
- Significantly higher in Tooele County and Weber-Morgan LHDs

How Are We Doing?

The percentage of obese children in Utah increased dramatically in the first decade of the century. From 1994 to 2010 the number of obese third grade boys increased by 97%, from 6.0% in 1994 to 11.8% in 2010. The percentage of obese third grade girls increased by 40% over the same time period. In 2010, 8.4% of third grade girls were obese compared with 6.0% in 1994. Childhood obesity in Utah seems to have leveled off since 2010. In 2018, 12.1% of third grade boys and 8.3% of girls were obese.[1]

National Comparison

In the U.S. there has been more than a 200% increase during the past 38 years in the number of obese children aged 2 to 19 years (5.2% in 1971–74 and 16.9% in 2011–12).[2] An increase has also been observed in Utah between 1994 and 2010 with the number of overweight third grade boys and girls increasing by 97% and 40%, respectively.[3]

In 2017, 14.8% of American public high school students were obese. In 2017, 9.6% of Utah public high school students were obese.

Disparities

Among adolescents in 2019, 9.8% of Utah public high school students were obese; boys more than twice as likely as girls to be obese (13.2% compared with 6.3%).

The obesity rate in 2019 among adolescents in grades 8, 10, and 12 was lower in Summit County (4.7%), TriCounty (4.7%), and Utah County (8.6%) local health districts (LHDs) than the state rate (9.8%). The obesity rate among adolescents in grades 8, 10, and 12 was higher in Weber-Morgan (12.1%) and Tooele County (12.2%) LHDs than the state rate (Map 21).

Adolescent obesity rates varied dramatically by race and ethnicity. According to the 2019 Prevention Needs Assessment data, youth who are Pacific Islander (28.3%) and Hispanic (17.1%) in grades 8, 10, and 12 both had higher rates of obesity than the state rate (9.8%). White adolescents (7.8%) had lower rates than the state rate (Figure 63).

Figure 63: Adolescent Obesity by Race/Ethnicity, Utah, 2019

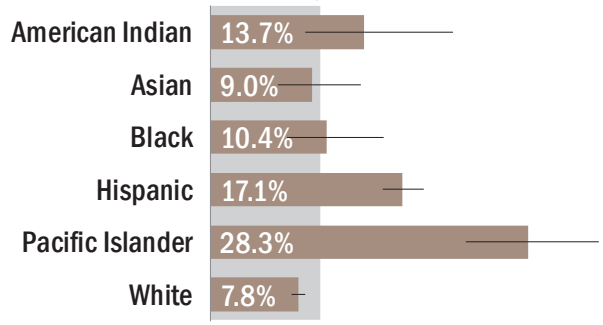
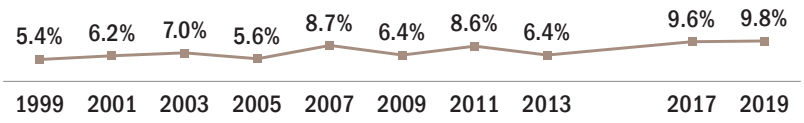


Figure 64: Percentage of Adolescents Who Were Obese in Utah by Year, 1999–2019



Risk Factors

Children and adolescents are at risk for obesity through less optimal nutrition (intake of fresh fruits and vegetables) and inadequate physical activity (fewer than 60 minutes per day).

1 Utah Department of Health (UDOH), Bureau of Health Promotion, Physical Activity, Nutrition and Obesity Program Height/Weight Measurement

2 National Center for Health Statistics, Centers for Disease Control and Prevention. *Prevalence of overweight among children and adolescents: United States, 1963–1965 Through 2011–2012*. Accessed 12/14/2015 from http://www.cdc.gov/nchs/data/hestat/obesity_child_11_12/obesity_child_11_12.pdf.

3 UDOH, Bureau of Health Promotion, Physical Activity, Nutrition and Obesity Program Height/Weight Measurement.

Healthy eating in childhood and adolescence is important for proper growth and development and to prevent various health conditions. The 2015–2020 Dietary Guidelines for Americans recommend that people aged 2 years or older follow a healthy eating pattern that includes the following:

- A variety of fruits and vegetables
- Whole grains
- Fat-free and low-fat dairy products
- A variety of protein foods
- Oils

These guidelines also recommend individuals limit calories from solid fats (major sources of saturated and trans fatty acids) and added sugars, and reduce sodium intake. Unfortunately, most children and adolescents do not follow the recommendations set forth in the *Dietary Guidelines for Americans*.[1,2]

What Is Being Done?

The Utah Department of Health (UDOH) Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was established through funding from the CDC.

The EPICC Program focuses on environmental approaches that promote Health, specifically promoting policies around healthy eating and active living. The EPICC Program works in schools, communities, healthcare, and childcare to promote healthy lifestyles in Utah.

Map 21: Adolescent Obesity by Local Health District, Utah, 2019

Table 22: Adolescent Obesity Prevalence State Comparison, 2017 and by Grade, Gender, Race/ethnicity, and Local Health District, 2019

	Crude (burden)		
STATE COMPARISON (2017)	**Rate**	**95% CIs**	
U.S.	14.8%	*13.8% - 15.8%*	
UTAH (2nd of 39)	9.6%	*8.0% - 11.5%*	
GRADE IN SCHOOL (2019)			
Grade 9	10.4%	*7.3% - 14.7%*	
Grade 10	10.9%	*7.6% - 15.3%*	
Grade 11	10.0%	*7.5% - 13.1%*	
Grade 12	7.5%	*4.3% - 12.7%*	
GENDER (2019)			
Male	13.2%	*10.8% - 16.1%*	!
Female	6.3%	*4.4% - 9.0%*	✓
RACE/ETHNICITY (Grades 8, 10, and 12, 2019)			
American Indian	13.7%	*8.4% - 21.6%*	
Asian	9.0%	*6.0% - 13.4%*	
Black	10.4%	*6.8% - 15.4%*	
Hispanic	17.1%	*15.4% - 19.0%*	!
Pacific Islander	28.3%	*22.7% - 34.6%*	!
White	7.8%	*7.2% - 8.4%*	✓
LOCAL HEALTH DISTRICT (Grades 8, 10, and 12, 2019)^			
Bear River	9.9%	*8.2% - 11.9%*	
Central Utah	10.2%	*8.0% - 12.8%*	
Davis County	8.5%	*7.2% - 9.9%*	
Salt Lake County	11.1%	*9.7% - 12.5%*	
San Juan	9.7%	*6.5% - 14.3%*	
Southeast Utah	8.1%	*5.9% - 11.1%*	
Southwest Utah	9.7%	*8.0% - 11.6%*	
Summit County	4.7%	*3.2% - 6.9%*	✓
Tooele County	12.2%	*9.9% - 15.0%*	!
TriCounty	4.7%	*2.5% - 8.6%*	✓
Utah County	8.6%	*7.6% - 9.6%*	✓
Wasatch County	7.6%	*4.8% - 11.7%*	
Weber-Morgan	12.1%	*10.3% - 14.2%*	!

^ Data by race/ethnicity and local health district are from the 2019 Prevention Needs Assessment.

1 2015–2020 Dietary Guidelines. U.S. Department of Health and Human Services. Accessed 3/6/2020 from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines/guidelines/.

2 How to Reduce Sodium. Centers for Disease Control and Prevention. Accessed 3/6/2020 from https://www.cdc.gov/salt/reduce_sodium_tips.htm.

Evidence-based Practices

The EPICC Program promotes evidence-based practices collected by the Center for Training and Research Translation (Center TRT). The Center TRT bridges the gap between research and practice and supports the efforts of public health practitioners working in nutrition, physical activity, and obesity prevention by:

- Reviewing evidence of public health impact and disseminating population-level interventions
- Designing and providing practice-relevant training both in-person and web-based
- Addressing social determinants of health and health equity through training and translation efforts
- Providing guidance on evaluating policies and programs aimed at impacting healthy eating and physical activity

Appropriate evidence-based interventions can be found at http://www.centertrt.org/?p=interventions_interventions_overview.

Data Interpretation Issues

It is likely these data, based on self-reported height and weight, underrepresent the prevalence of overweight or obesity among high school students.

Available Services/Resources

Action for Healthy Kids Program—for more information, visit http://www.actionforhealthykids.org/.

UDOH EPICC website
http://choosehealth.utah.gov

Information for school wellness policies is available at Action for Healthy Kids, http://www.actionforhealthykids.org.

Physical Activity—Adult

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who meet aerobic physical activity recommendations of getting at least 150 minutes per week of moderate-intensity activity, or 75 minutes of vigorous-intensity activity, or an equivalent combination of moderate-vigorous intensity activity.

- 54.0% of Utah adults exercise (crude rate)
- More activity among Utahns aged 65+
- Disparities include Hispanic populations
- Lower income and education levels are also associated with less physical activity
- Significantly higher physical activity levels for Summit County and Davis County LHDs

How Are We Doing?

The Healthy People 2020 U.S. target for recommended aerobic physical activity is 47.9%. This target has been reached both in Utah and nationwide.

National Comparison

Compared with the nation, Utahns are more physically active. Data from 2017 show 54.3% of Utah adults reported getting the recommended amount of aerobic physical activity (age-adjusted). Nationally, the 2017 rate was 50.2%.

Disparities

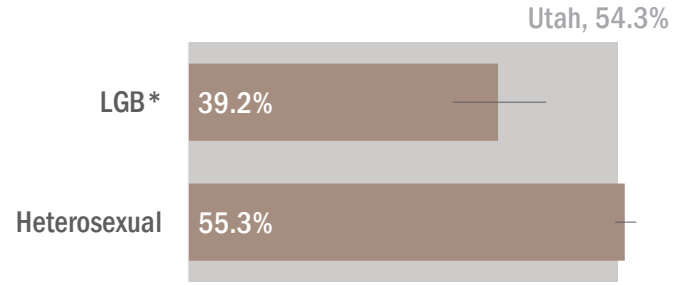
Adults who are Hispanic were less likely to get the recommended physical activity levels than non-Hispanic adults. Lower income and education levels are also associated with less activity. Davis and Summit County local health districts (LHDs) had higher activity levels than the rest of the state (Map 22).

According to age-adjusted rates from the 2017 Behavioral Risk Factor Surveillance System (BRFSS), LGB (lesbian, gay, or bisexual) adults in Utah were less likely to meet the recommendations for physical activity than heterosexual adults (39.2% vs. 55.3%, respectively) (Figure 65).

Risk Factors

Lack of physical activity can be a risk factor for high blood pressure, coronary heart disease, obesity, diabetes, certain cancers, anxiety, depression, falls, and poor bone health along with other chronic diseases.[1,2]

Figure 65: Recommended Physical Activity by Sexual Orientation (age-adjusted rates), Utah Adults, 2017



*Homosexual/Bisexual/Something else/Don't know

What Is Being Done?

The Utah Department of Health (UDOH) Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was established through funding from the Centers for Disease Control and Prevention (CDC). The EPICC Program focuses on environmental approaches that promote health, specifically promoting policies around healthy eating and active living. The EPICC Program works:

In Worksites:

1. The Utah Health Improvement Plan (UHIP)—a public and private partnership—has selected worksites as their priority for the goal of preventing obesity and Related Chronic Conditions. The UHIP Obesity workgroup works to create a culture of health within businesses in the state of Utah.

Figure 66: Percentage of Adults Reporting Physical Activity in Utah by Year, 2011–2017

Trend graph depicts age-adjusted rates. Physical activity questions are generally asked in odd years only. Utah added the questions for the 2012 BRFSS. Changes to the questionnaire in 2012 may have had an effect on the 2012 rate for Utah.

1 Risks of Physical Inactivity. Johns Hopkins Medicine Health Library. Accessed 11/29/2019 from http://www.hopkinsmedicine.org/healthlibrary/conditions/cardiovascular_diseases/risks_of_physical_inactivity_85,p00218/.

2 World Health Organization. Physical Activity. Accessed 11/29/2019 from http://www.who.int/dietphysicalactivity/pa/en/.

2. The Utah Council for Worksite Health Promotion recognizes businesses that offer employee fitness and health promotion programs.
3. The EPICC Program partners with LHDs to encourage worksites to complete the CDC Scorecard and participate in yearly health risk assessments for their employees. The EPICC Program provides toolkits and other resources for employers interested in implementing wellness programs through the choosehealth.utah.gov website: http://choosehealth.utah.gov/worksites/why-worksite-wellness.php.

In Communities:

1. LHDs receive federal funding to partner with schools, worksites, and other community-based organizations to increase access to fresh fruits and vegetables through food service guidelines, farmers markets, and retail stores. LHDs also work with cities within their jurisdictions to create a built environment that encourages physical activity.

Map 22: Adult Physical Activity by Local Health District, 2017

Map depicts age-adjusted rates.

Table 23: Adult Physical Activity State Comparison, by Age, Gender, Race, Ethnicity, Income, Education, and Local Health District

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2017)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	50.3%	*50.0% - 50.6%*	50.2%	*49.9% - 50.6%*	
UTAH (11th of 51)	54.0%	*52.7% - 55.3%*	54.3%	*53.1% - 55.6%*	
AGE IN YEARS (2017)					
18–34	51.7%	*49.3% - 54.2%*	–	–	–
35–49	54.3%	*51.8% - 56.7%*	–	–	–
50–64	54.6%	*52.0% - 57.2%*	–	–	–
65+	59.1%	*56.5% - 61.6%*	–	–	– ✓
GENDER (2017)					
Male	53.4%	*51.6% - 55.2%*	54.0%	*52.2% - 55.8%*	
Female	54.5%	*52.7% - 56.4%*	54.8%	*53.0% - 56.6%*	
RACE (2017)†					
American Indian/AK Native	50.0%	*39.2% - 60.7%*	55.4%	*45.3% - 65.2%*	
Asian	49.4%	*38.4% - 60.4%*	50.4%	*38.0% - 62.8%*	
Black	41.8%	*28.5% - 56.4%*	43.1%	*29.0% - 58.4%*	
Pacific Islander	42.7%	*26.0% - 61.3%*	40.1%	*24.7% - 57.8%*	
White	55.8%	*54.4% - 57.1%*	56.2%	*54.8% - 57.5%* ✓	
ETHNICITY (2017)					
Hispanic	40.5%	*36.4% - 44.7%*	41.4%	*37.1% - 45.8%* !	
Non-Hispanic	55.9%	*54.5% - 57.2%*	56.2%	*54.9% - 57.5%* ✓	
INCOME (2017)					
0–$24,999	42.7%	*39.3% - 46.2%*	40.9%	*37.4% - 44.4%* !	
$25,000–$49,999	50.3%	*47.4% - 53.2%*	50.2%	*47.2% - 53.2%* !	
$50,000–$74,999	55.3%	*52.1% - 58.4%*	55.4%	*52.2% - 58.5%*	
$75,000 or more	63.3%	*61.2% - 65.3%*	64.3%	*62.1% - 66.3%* ✓	
EDUCATION—Adults 25+ (2017)					
Below High School	33.0%	*27.6% - 39.0%*	33.4%	*28.1% - 39.2%* !	
High School or GED	47.8%	*45.0% - 50.5%*	47.7%	*45.0% - 50.5%* !	
Some Post High School	55.9%	*53.6% - 58.2%*	56.0%	*53.6% - 58.3%*	
College Graduate	62.2%	*60.3% - 64.1%*	62.6%	*60.7% - 64.4%* ✓	
LOCAL HEALTH DISTRICT (2017)					
Bear River	57.5%	*52.2% - 62.6%*	58.6%	*53.7% - 63.4%*	
Central Utah	48.9%	*43.5% - 54.3%*	49.3%	*44.0% - 54.6%*	
Davis County	57.8%	*53.8% - 61.8%*	58.5%	*54.5% - 62.3%* ✓	
Salt Lake County	53.3%	*51.0% - 55.6%*	53.5%	*51.3% - 55.8%*	
San Juan	52.6%	*42.1% - 62.8%*	51.6%	*42.5% - 60.7%*	
Southeast Utah	51.4%	*44.4% - 58.3%*	51.0%	*43.7% - 58.2%*	
Southwest Utah	56.7%	*52.2% - 61.0%*	55.9%	*51.1% - 60.6%*	
Summit County	63.7%	*54.8% - 71.8%*	63.5%	*54.4% - 71.7%* ✓	
Tooele County	48.9%	*42.0% - 55.8%*	49.1%	*42.4% - 55.8%*	
TriCounty	56.9%	*51.0% - 62.6%*	57.1%	*51.4% - 62.7%*	
Utah County	52.7%	*49.6% - 55.9%*	53.6%	*50.6% - 56.5%*	
Wasatch County	59.1%	*49.6% - 68.0%*	58.7%	*49.1% - 67.7%*	
Weber-Morgan	57.1%	*52.8% - 61.2%*	57.0%	*52.8% - 61.1%*	

† Age-adjusted using 3 age groups.

In Healthcare:

1. The EPICC Program works with healthcare systems to establish community clinical linkages to support individuals at risk for or diagnosed with diabetes or hypertension to engage in lifestyle change programs such as chronic disease self-management and diabetes prevention programs.

Evidence-based Practices

The EPICC Program promotes evidence-based practices collected by the Center for Training and Research Translation (Center TRT). The Center TRT bridges the gap between research and practice and supports the efforts of public health practitioners working in nutrition, physical activity, and obesity prevention by:

- Reviewing evidence of public health impact and disseminating population-level interventions
- Designing and providing practice-relevant training both in-person and web-based
- Addressing social determinants of health and health equity through training and translation efforts
- Providing guidance on evaluating policies and programs aimed at impacting healthy eating and physical activity

Appropriate evidence-based interventions can be found at
http://www.centertrt.org/?p=interventions_interventions_overview.

Available Services/Resources

Visit http://www.choosehealth.utah.gov for more information about physical activity.

Walk to School Day; Safe Routes to School - for more information, call (801) 538-9362.

Information of Worksite Wellness programs
http://choosehealth.utah.gov/worksites/why-worksite-wellness.php

The Cancer Control Program at the UDOH is also promoting physical activity by assisting communities to develop and implement bicycle and pedestrian master plans.

More information on the BRFSS may be found on the website of the CDC—http://www.cdc.gov/brfss/.

Description

This measure reports the percentage of public high school students who were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on all of the past seven days.

- 21.0% of Utah students met the physical activity recommendations in 2019
- High school seniors (grade 12) significantly less likely to meet recommendations
- Females significantly less active
- Adolescentswhoare Hispanic had significantly lower rates
- Significantly higher physical activity levels for Central Utah and Southeast Utah LHDs

How Are We Doing?

National Comparison

Utah high school students reported significantly lower rates of recommended physical activity in 2017 (19.1%) than the U.S. (26.1%).

Disparities

In 2019, 14.0% of girls and 28.0% of boys in Utah high schools reported getting at least 60 minutes of physical activity on all seven days of the week (Figure 67).

From the 2019 Prevention Needs Assessment (PNA) survey, adolescents in grades 8, 10, and 12 in Central Utah (25.8%) and Southeast Utah (22.4%) local health districts (LHDs) had higher rates of getting at least 60 minutes of physical activity every day than the state rate (17.9%) (Table 23).

Utah 2019 PNA rates also differed by race/ethnicity. Students who are Hispanic (14.9%) had significantly lower rates of recommended physical activity than the state (17.9%).

Risk Factors

Pre-school children (ages 3–5) are at risk if they are not moving around three hours each day. Excessive screen time often leads to physical inactivity.

Children ages 6–17 are at risk if they are not moving for an hour or more a day. These activities need to be balanced between strength and aerobic activities.

What Is Being Done?

The Utah Department of Health (UDOH) Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) Program was established through funding from the Centers for Disease Control and Prevention.

The EPICC Program focuses on environmental approaches that promote health, specifically promoting policies around healthy eating and active living. The EPICC Program works:

In Schools

1. Schools are encouraged to adopt the Comprehensive School Physical Activity Program. This framework encourages students to be physically active for 60 minutes a day through school, home, and community activities.
2. Height and weight trends are being tracked in a sample of elementary students to monitor Utah students.
3. Action for Healthy Kids brings partners together to improve nutrition and physical activity environments in Utah schools by implementing the school-based state plan strategies and working with local school boards to improve or develop policies for nutritious foods in schools. This includes recommendations for healthy vending options.

Figure 67: Adolescent Physical Activity by Sex, Utah, 2019

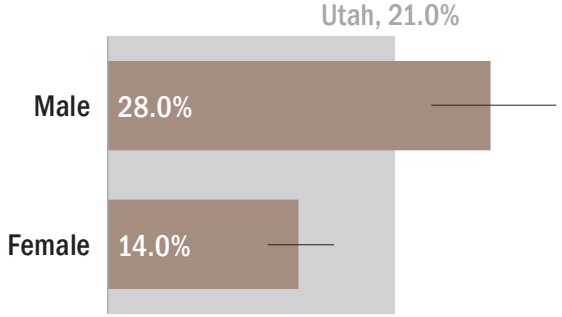


Figure 68: Percentage of Adolescents Reporting Physical Activity in Utah by Year, 2011–2019

In Communities

1. LHDs receive federal funding to partner with schools, worksites, and other community-based organizations to increase access to fresh fruits and vegetables through food service guidelines, farmers markets, and retail stores. LHDs also work with cities within their jurisdictions to create a built environment that encourages physical activity.

In Childcare

1. Ten LHDs statewide have implemented the Teaching Obesity Prevention in Early Child Care Settings (TOP Star program), which aims to improve the nutrition, physical activity, and breastfeeding environments and achieve best practice in child care centers and homes.
2. The EPICC Program works with state and local partners through the Childcare Obesity Prevention Workgroup to implement policy and systems changes in early care and education across agencies statewide.

Evidence-based Practices

The EPICC Program promotes evidence-based practices collected by the Center for Training and Research Translation (Center TRT). The Center TRT bridges the gap between research and practice and supports the efforts of public health practitioners working in nutrition, physical activity, and obesity prevention by:

- Reviewing evidence of public health impact and disseminating population-level interventions
- Designing and providing practice-relevant training both in-person and web-based

Map 23: Adolescent Physical Activity by Local Health District, 2019

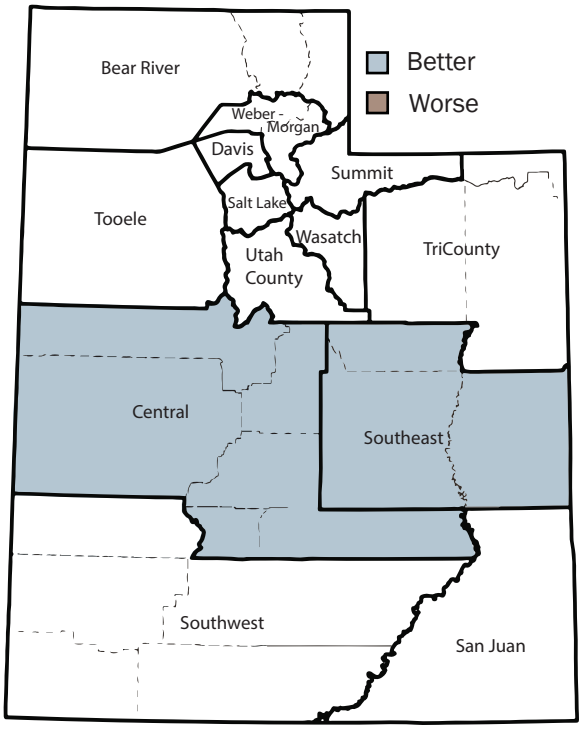


Table 24: Adolescent Physical Activity State Comparison, 2017 and by Grade, Gender, Race/Ethnicity, and Local Health District, 2019

		Crude (burden)	
STATE COMPARISON (2017)	**Rate**	**95% CIs**	
U.S.	26.1%	*24.1% - 28.3%*	
UTAH (37th of 39)	19.1%	*16.1% - 22.4%*	
GRADE IN SCHOOL (2019)			
Grade 9	24.7%	*20.8% - 29.2%*	
Grade 10	24.2%	*20.2% - 28.8%*	
Grade 11	19.6%	*15.3% - 24.8%*	
Grade 12	14.9%	*11.5% - 19.1%*	!
GENDER (2019)			
Male	28.0%	*23.6% - 32.8%*	✓
Female	14.0%	*11.7% - 16.6%*	!
RACE/ETHNICITY (Grades 8, 10, and 12, 2019)^			
American Indian	22.6%	*16.0% - 30.9%*	
Asian	14.5%	*11.5% - 18.1%*	
Black	23.1%	*17.1% - 30.5%*	
Hispanic	14.9%	*13.0% - 16.9%*	!
Pacific Islander	22.3%	*17.5% - 28.0%*	
White	18.5%	*17.6% - 19.4%*	
LOCAL HEALTH DISTRICT (Grades 8, 10, and 12, 2019)^			
Bear River	15.8%	*13.3% - 18.7%*	
Central Utah	25.8%	*22.4% - 29.5%*	✓
Davis County	16.9%	*15.1% - 18.9%*	
Salt Lake County	17.8%	*16.1% - 19.7%*	
San Juan	21.2%	*9.5% - 40.8%*	
Southeast Utah	22.4%	*19.5% - 25.5%*	✓
Southwest Utah	19.5%	*17.0% - 22.4%*	
Summit County	20.1%	*17.2% - 23.5%*	
Tooele County	20.5%	*16.9% - 24.7%*	
TriCounty	18.6%	*12.8% - 26.4%*	
Utah County	17.4%	*16.0% - 18.9%*	
Wasatch County	16.1%	*10.5% - 23.9%*	
Weber-Morgan	17.6%	*14.8% - 20.9%*	

^ Data by race/ethnicity and local health district are from the 2019 Prevention Needs Assessment

- Addressing social determinants of health and health equity through training and translation efforts
- Providing guidance on evaluating policies and programs aimed at impacting healthy eating and physical activity

Approved evidence-based interventions can be found at http://www.centertrt.org/?p=interventions_interventions_overview.

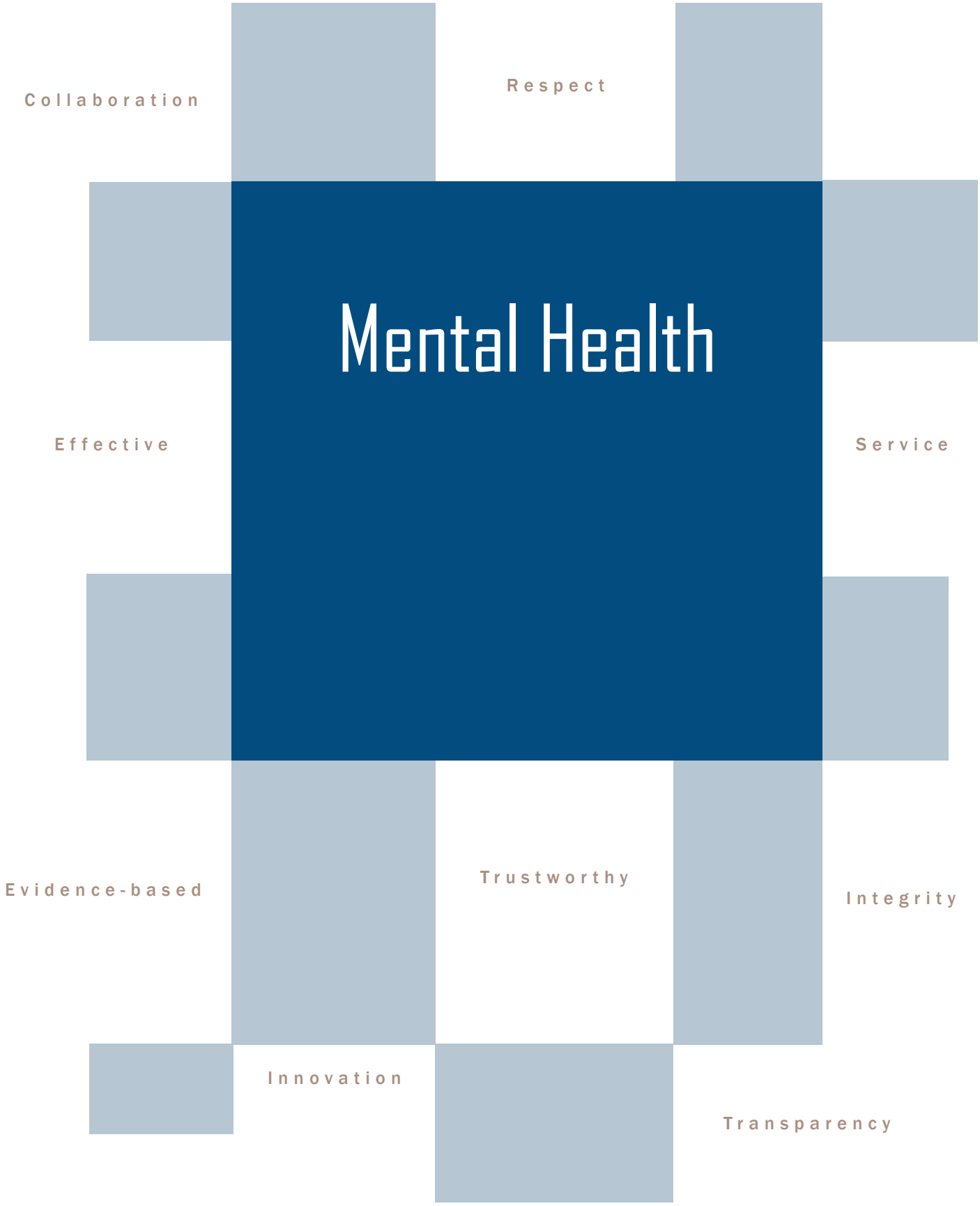
Available Services/Resources

Comprehensive School Physical Activity Programs: A Guide for Schools
http://www.cdc.gov/healthyyouth/physicalactivity/pdf/13_242620-A_CSPAP_SchoolPhysActivityPrograms_Final_508_12192013.pdf

School Health Guidelines to Promote Healthy Eating and Physical Activity
http://www.cdc.gov/healthyschools/npao/strategies.htm

Action for Healthy Kids Program—for more information, visit http://www.actionforhealthykids.org.

The UDOH obesity website
http://www.choosehealth.utah.gov


Collaboration
Respect
Mental Health
Effective
Service
Evidence-based
Trustworthy
Integrity
Innovation
Transparency

Mental Health Status

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who reported seven or more days when their mental health was not good in the past 30 days.

How Are We Doing?

In 2018, approximately 18.8% (crude rate) of Utah adults reported seven or more days when their mental health was not good in the past 30 days. Between 2009 and 2015 the rate hovered around 15.5%; in each year from 2016 to 2018, the rate increased by nearly a percentage point each year (Figure 70).

National Comparison

Looking at age-adjusted rates for 2018, fewer Utah adults reported seven or more days when their mental health was not good in the past 30 days (18.2%) when compared to adults in the U.S. as a whole (18.8%).

Disparities

In Utah, seven or more days when mental health was not good in the past 30 days was related to age, sex, income (Figure 69), and education. The percentage of people reporting at least seven mentally unhealthy days out of the past 30 decreased with increasing age, income, and education, and was higher for women than for men.

According to age-adjusted rates, Utahns who are Pacific Islander reported the highest percentage of seven or more days when their mental health was not good in the past 30 days (22.7%) while adults who are Asian reported the lowest percentage (14.2%).

- 18.8% of Utah adults report poor mental health
- Worse for adults with low income and lower education levels
- Worse for Utahns aged 18–34; better for Utahns aged 50+
- Females had poorer mental health than males
- Significantly lower rates of poor mental health for Southwest local health district

Risk Factors

Risk factors may include, but are not limited to, violence in the community, extreme economic deprivation, availability of drugs, family history of issues, trauma, certain personality traits, and genetic or physiological factors.

What Is Being Done?

Utah Department of Human Services Division of Substance Abuse and Mental Health coordinates coordinates state efforts for mental health and substance abuse prevention and intervention. You can learn more about their initiatives by visiting their website at www.dsamh.utah.gov.

Figure 69: Mental Health Status by Income (age-adjusted rates), Utah Adults, 2018

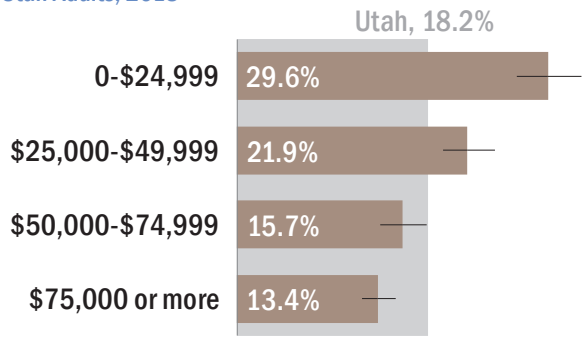
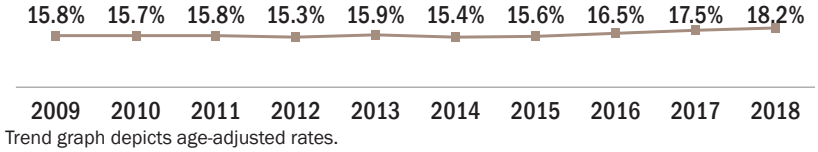


Figure 70: Percentage of Utahns Aged 18+ With Poor Mental Health by Year, 2009–2018



Trend graph depicts age-adjusted rates.

Available Services/ Resources

The DSAMH is the state agency responsible for ensuring that mental health services are available statewide. The Division also acts as a resource by providing general information, research results, and statistics to the public regarding substances of abuse and mental health services. The Division contracts with Community Mental Health Centers to provide these services and monitors these centers through site visits, a year-end review process, and a peer review process.

Address:
Department of Human Services
Division of Substance Abuse and Mental Health
195 North 1950 West
Salt Lake City, Utah 84116

Phone: 801-538-3939
Fax: 801-538-9892
https://dsamh.utah.gov

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA): http://www.samhsa.gov/

National Institute of Mental Health http://www.nimh.nih.gov/

"Mental Health: A Report of the Surgeon General" http://www.surgeongeneral.gov/library/mentalhealth/home.html

More information on the Behavioral Risk Factor Surveillance System may be found on the website of the Centers for Disease Control and Prevention—http://www.cdc.gov/brfss/

Map 24: Adult (18+) Mental Health Status by Local Health District, Utah, 2018

Map depicts age-adjusted rates.

Table 25: Mental Health Status State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2018 and by Race, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	18.3%	18.1% 18.6%	18.8%	18.5% - 19.1%	
UTAH (20th of 51)	18.8%	17.8% - 19.8%	18.2%	17.3% - 19.1%	
AGE IN YEARS (2018)					
18–34	26.7%	24.7% - 28.8%	–	– –	!
35–49	17.3%	15.6% - 19.0%	–	– –	
50–64	14.1%	12.5% - 15.9%	–	– –	✓
65+	9.9%	8.5% - 11.6%	–	– –	✓
GENDER (2018)					
Male	15.0%	13.8% - 16.3%	14.4%	13.3% - 15.6%	✓
Female	22.6%	21.1% - 24.2%	22.0%	20.6% - 23.4%	!
RACE (2016–2018)†					
American Indian/AK Native	21.2%	16.6% - 26.7%	20.8%	16.4% - 25.9%	
Asian	16.6%	12.3% - 22.1%	14.2%	10.3% - 19.1%	
Black	20.1%	14.7% - 26.8%	18.4%	13.5% - 24.7%	
Pacific Islander	27.9%	20.0% - 37.6%	22.7%	16.3% - 30.8%	
White	18.2%	17.6% - 18.8%	17.9%	17.3% - 18.5%	
ETHNICITY (2018)					
Hispanic	15.4%	12.9% - 18.3%	14.8%	12.2% - 17.9%	✓
Non-Hispanic	19.3%	18.2% - 20.4%	18.8%	17.8% - 19.9%	
INCOME (2018)					
0–$24,999	30.4%	27.5% - 33.6%	29.6%	26.6% - 32.8%	!
$25,000–$49,999	22.2%	19.8% - 24.7%	21.9%	19.6% - 24.5%	!
$50,000–$74,999	15.9%	13.8% - 18.3%	15.7%	13.6% - 18.0%	✓
$75,000 or more	13.3%	12.0% - 14.9%	13.4%	11.9% - 15.1%	✓
EDUCATION—Adults 25+ (2018)					
Below High School	18.1%	14.2% - 22.7%	17.8%	14.0% - 22.5%	
High School or GED	18.9%	16.9% - 21.0%	18.8%	16.8% - 20.9%	!
Some Post High School	19.0%	17.3% - 20.9%	18.9%	17.2% - 20.8%	!
College Graduate	11.7%	10.5% - 13.0%	11.5%	10.4% - 12.8%	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	19.2%	15.6% - 23.2%	18.4%	15.0% - 22.4%	
Central Utah	18.7%	14.5% - 23.8%	18.9%	14.6% - 24.2%	
Davis County	18.1%	15.1% - 21.4%	17.4%	14.7% - 20.6%	
Salt Lake County	19.0%	17.4% - 20.8%	18.8%	17.2% - 20.6%	
San Juan	16.0%	9.4% - 25.7%	14.1%	8.2% - 23.1%	
Southeast Utah	20.6%	15.4% - 27.0%	21.2%	15.7% - 28.0%	
Southwest Utah	12.8%	10.2% - 16.0%	13.5%	10.7% - 16.9%	✓
Summit County	24.7%	17.7% - 33.4%	23.4%	17.9% - 29.9%	
Tooele County	20.6%	15.7% - 26.6%	20.6%	15.8% - 26.5%	
TriCounty	17.8%	14.3% - 22.0%	17.9%	14.5% - 22.0%	
Utah County	20.6%	18.1% - 23.3%	18.0%	15.9% - 20.2%	
Wasatch County	13.4%	8.9% - 19.6%	15.2%	10.2% - 22.1%	
Weber-Morgan	20.2%	16.9% - 23.8%	19.7%	16.6% - 23.2%	

† Age-adjusted using 3 age groups.

Suicide

Utah Death Certificate Database

UHIP Highlights

One of the health priorities for the 2017–2020 Utah Health Improvement Plan (UHIP) is *Improving Mental Health and Reducing Suicide*. Improvement goals have focused on increasing the availability and access to quality physical and behavioral health care by increasing the number of providers that adopt the Zero Suicide framework; increasing social norms supportive of help-seeking and recovery through increasing the number of individuals in Utah who have completed evidence-based training (e.g., QPR, Mental Health First Aid and Working Minds); and by reducing access to lethal means of suicide. Much work has been done to partner with firearm retailers, instructors, and enthusiasts to increase education for gun owners on suicide prevention, safe storage, and reducing access.

- 21.0 suicides per 100,000 population
- Higher rates among Utahns aged 25–54
- Higher for males than females
- Significantly lower rates among people who are Asian, Black, and Hispanic
- Significantly higher among people who are non-Hispanic
- Significantly higher for Central Utah, Southwest, TriCounty, and Weber-Morgan LHDs
- Significantly lower for Utah County LHD

Description

The suicide rate is the number of resident deaths resulting from the intentional use of force against oneself per 100,000 population.

How Are We Doing?

The 2018 Utah age-adjusted suicide rate was 22.2 per 100,000 population. From 2016 to 2018, there were an average of 647 suicides per year.

In 2018, suicide was the leading cause of death for Utahns aged 10–17 and 18–24. It is the second leading cause of death for those aged 18–24 and 25–44 and the fifth-leading cause of death for Utahns aged 45–64. Overall, suicide is the eighth-leading cause of death for Utahns (age-adjusted rate).

National Comparison

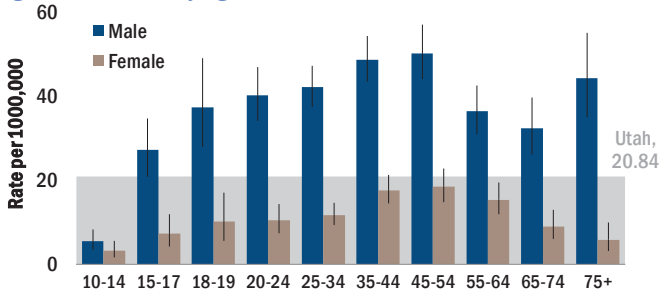
The Utah suicide rate has been consistently higher than the national rate. In 2018, the age-adjusted suicide rate for the U.S. was 14.2 per 100,000 population, while the Utah suicide rate was 22.2 per 100,000 population during the same year.

Disparities

In Utah from 2016 to 2018, males had significantly higher suicide rates than females in every age group (Figure 71). Males aged 45–54 had the highest suicide rates among males (50.1 per 100,000 population). Females aged 45–54 had the highest suicide rates among female age groups (18.5 per 100,000 population).

From 2016 to 2018, TriCounty, Central Utah, Southwest, and Weber-Morgan local health districts (LHDs) had significantly higher age-adjusted suicide rates compared with the state rate (Map 25).

Figure 71: Suicide by Age and Gender, Utah, 2016–2018

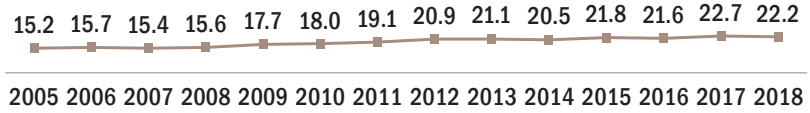


Risk Factors

Many conditions may be related to suicide including:[1]

- previous suicide attempt(s)
- history of depression or other mental illness
- alcohol or drug abuse
- family history of suicide or violence
- physical illness
- lack of connectedness
- social isolation

Figure 72: Suicides per 100,000 Population in Utah by Year, 2005–2018



Trend graph depicts age-adjusted rates.

1 Suicide: Risk and Protective Factors. Centers for Disease Control and Prevention. Accessed 11/4/2019 from http://www.cdc.gov/ViolencePrevention/suicide/riskprotectivefactors.html.

- access to lethal means
- lack of access to behavioral healthcare resources

The 2019 Prevention Needs Assessment (PNA) includes a section focused around social and emotional health. In 2019, four new questions were added to measure social isolation in the Utah student population. Mental Health indicator data from the Student Health and Risk Prevention (SHARP) Survey estimates that approximately 36.4% of Utah students are displaying moderate depressive symptoms. Additionally, 19.4% of students indicated feeling like "people are around me, but not with me." Family attachment and opportunities for prosocial involvement remain the strongest protective factors against substance abuse, mental health, and suicide.[1]

What Is Being Done?

The Utah Department of Health Violence and Injury Prevention Program (VIPP) is funded by the Centers for Disease Control and Prevention to implement the Utah Violent Death Reporting System (UTVDRS). The UTVDRS is

Map 25: Suicide by Local Health District, Utah, 2016–2018

Map depicts age-adjusted rates.

Table 26: Suicide State Comparison, by Age, and Gender, 2018 and by Race, Ethnicity, and Local Health District, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	14.8	*14.6 - 14.9*	14.2	*14.1 - 14.4*	
UTAH (47th of 51)	21.0	*19.5 - 22.7*	22.2	*20.6 - 24.0*	
AGE IN YEARS (2018)					
10–14	4.9	*2.6 - 8.3*	–	–	– ✓
15–17	17.6	*11.6 - 25.6*	–	–	–
18–19	27.3	*17.8 - 39.9*	–	–	–
20–24	25.7	*19.9 - 32.6*	–	–	–
25–34	27.3	*22.8 - 32.5*	–	–	– !
35–44	36.6	*31.1 - 42.7*	–	–	– !
45–54	32.3	*26.4 - 39.1*	–	–	– !
55–64	23.7	*18.5 - 29.8*	–	–	–
65–74	21.9	*16.1 - 29.2*	–	–	–
75+	17.8	*11.5 - 26.3*	–	–	–
GENDER (2018)					
Male	32.4	*29.6 - 35.3*	34.3	*31.4 - 37.5*	!
Female	9.5	*8.0 - 11.2*	10.0	*8.4 - 11.7*	✓
RACE (2016–2018)†					
American Indian/AK Native	24.5	*17.0 - 34.0*	22.4	*15.6 - 31.3*	
Asian	9.1	*5.7 - 13.8*	9.1	*5.7 - 13.9*	✓
Black	14.5	*8.7 - 22.7*	11.9	*7.2 - 18.6*	✓
Pacific Islander	14.5	*7.9 - 24.3*	13.7	*7.3 - 23.3*	
White	21.4	*20.4 - 22.4*	21.7	*20.7 - 22.7*	
ETHNICITY (2016–2018)					
Hispanic	11.9	*10.1 - 14.0*	12.5	*10.4 - 14.8*	✓
Non-Hispanic	22.3	*21.3 - 23.4*	23.6	*22.5 - 24.7*	!
LOCAL HEALTH DISTRICT (2016–2018)					
Bear River	17.1	*13.8 - 21.0*	18.5	*14.8 - 22.8*	
Central Utah	27.7	*21.4 - 35.2*	29.1	*22.4 - 37.3*	!
Davis County	19.0	*16.4 - 21.8*	19.9	*17.2 - 23.0*	
Salt Lake County	21.4	*19.9 - 23.0*	22.1	*20.5 - 23.8*	
San Juan	26.0	*13.5 - 45.5*	26.1	*13.4 - 45.9*	
Southeast Utah	30.0	*21.0 - 41.5*	30.7	*21.2 - 43.0*	
Southwest Utah	26.4	*22.8 - 30.5*	28.6	*24.5 - 33.2*	!
Summit County	15.4	*9.2 - 24.0*	14.7	*8.7 - 23.2*	
Tooele County	21.8	*15.8 - 29.3*	23.7	*17.0 - 32.0*	
TriCounty	33.5	*25.4 - 43.4*	36.0	*27.1 - 46.8*	!
Utah County	14.4	*12.7 - 16.2*	16.6	*14.5 - 18.8*	✓
Wasatch County	18.8	*11.2 - 29.7*	20.0	*11.8 - 31.6*	
Weber-Morgan	27.6	*24.0 - 31.5*	28.9	*25.1 - 33.0*	!

† Age-adjusted using 3 age groups.

1 2019 Student Health and Risk Prevention (SHARP) Statewide Survey Survey, Accessed 3/20/2020 at https://dsamh.utah.gov/reports/sharp-survey.

a data collection and monitoring system to instead help Utahns better understand the public health problem of violence by informing decision-makers about the magnitude, trends, and characteristics of violent deaths such as suicide, and to evaluate and continue to improve state-based violence prevention policies and programs. Data are collected from the Office of the Medical Examiner, Office of Vital Records and Statistics, and law enforcement agencies and are linked together to help identify risk factors, understand circumstances, and better characterize perpetrators of violent deaths.

The VIPP partners with multiple state and local agencies including the Utah Division of Substance Abuse and Mental Health, the Utah State Board of Education, the National Alliance on Mental Illness (NAMI) Utah, local health departments, and others to facilitate suicide prevention efforts across the state. The VIPP also participates in the Utah Suicide Prevention Coalition and its workgroups.

Available Services/Resources

All Counties, 24 Hours:
National Suicide Prevention Lifeline (800) 273-TALK (8255)

Mobile Crisis Outreach Team—for both Salt Lake County and statewide
801-587-3000

Man Therapy
http://www.mantherapy.org

Suicide prevention courses
http://www.qprinstitute.com/

National Alliance on Mental Illness (NAMI) Utah
http://www.namiut.org/
801-323-9900
Toll Free 877-230-6264

Permission to Grieve: For Survivors of a Loved One's Suicide
http://health.utah.gov/vipp/pdf/Suicide/grievebooklet_final0605.pdf

Depression

Behavioral Risk Factor Surveillance System

Description

This measure reports depression as the percentage of adults aged 18 and older who have ever been told by a doctor, nurse, or other health professional that they have a depressive disorder, including depression, major depression, dysthymia, or minor depression.

How Are We Doing?

National Comparison

Utah has consistently higher rates of self-reported lifetime depression than the U.S. rate (24.2% vs. 18.6% in 2018).

Disparities

The proportion of adults who reported ever being told they had a depressive disorder varies by a number of population characteristics including age, sex, race, income, and education.

Adults aged 18–34 had higher rates of depression than other age groups. Conversely, Utahns aged 65 and older had significantly lower rates of depression.

In Utah during 2018, adult women (31.3%) had significantly higher rates of doctor-diagnosed depression than men (17.3%).

Adults who are Asian (13.0%) and Hawaiian/Pacific islander (13.3%) reported lower lifetime depression than the state rate during 2016–2018.

Adults with a household income less than $25,000 (36.0%) had a significantly higher rate of lifetime doctor-diagnosed depression, while adults with household incomes greater than $75,000 (19.0%) had lower rates of lifetime depression during 2018 (Figure 73).

Depression also varied by education during 2018. Utah adults aged 25 and older with a college education (20.3%) had a lower rate of doctor-diagnosed depression than adult Utahns with less education.

Adults in Bear River (28.9%) and Tooele County (30.0%) local health districts (LHDs) reported higher rates of doctor-diagnosed depression than the state rate, while adults in San Juan (13.5%) LHD reported a lower rate of doctor-diagnosed depression during 2018 (Map 26).

- 24.3% of Utah adults (crude rate) have a depressive disorder
- Higher rates among Utahns aged 18–34; lower rates among those aged 65+
- Higher rates among females; lower rates among males
- Significantly lower among people who are Asian and Pacific Islander
- Lower rates among college graduates and higher income levels
- Significantly higher for Bear River and Tooele County LHDs
- Significantly lower for San Juan LHD

Risk Factors

Utah adults who reported chronic illnesses and/or poor health status in general, were also more likely to have reported having ever been told they had a depressive disorder. It is known that behavioral health problems often co-occur with chronic diseases and may exacerbate poor health outcomes.

What Is Being Done?

The Utah Department of Health Violence and Injury Prevention Program has partnered with the Utah Division of Substance Abuse and Mental Health (DSAMH) to facilitate the Suicide Prevention Coalition and Suicide Fatality Reviews. In addition, six LHDs (Bear River, Davis, Summit, Tooele, Utah, Weber-Morgan) have been funded to do suicide prevention activities such as promoting mental health resources and help-seeking behavior, distributing gun

Figure 73: Adult Depression by Income (age-adjusted rates), Utah, 2018

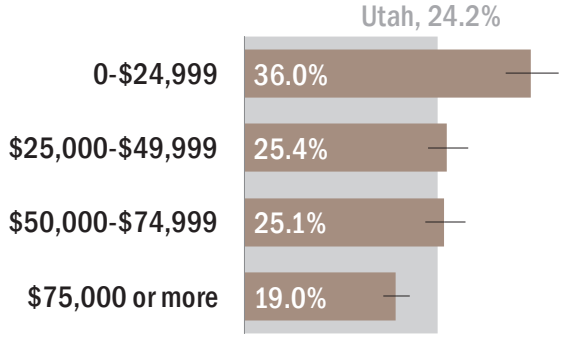
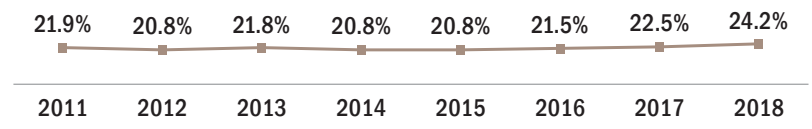


Figure 74: Percentage of Utahns Aged 18+ With Depression by Year, 2011–2018



Trend graph depicts age-adjusted rates.

locks to reduce access to lethal means, and training the community in suicide prevention using evidence-based/promising practice programs like Signs of Suicide; Question, Persuade, Refer (z); Working Minds; and SafeTALK. These trainings promote suicide first aid by teaching individuals to recognize the warning signs of suicide, how to offer hope, and how to refer to resources and save a life.

Evidence-based Practices

Evidence based practices for suicide prevention and media messaging can be found on http://health.utah.gov/vipp/topics/suicide/.

Data Interpretation Issues

The question asks about lifetime diagnosis and does not reflect current major depression.

Available Services/ Resources

The DSAMH is the state agency responsible for ensuring mental health services are available statewide. The Division also acts as a resource by providing general information, research results, and statistics to the public regarding substances of abuse and mental

Map 26: Adult Depression by Local Health District, 2018

Map depicts age-adjusted rates.

Table 27: Depression State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2018 and Race, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	18.3%	*18.1% - 18.6%*	18.6%	*18.4% - 18.9%*	
UTAH (46th of 51)	24.3%	*23.2% - 25.3%*	24.2%	*23.2% - 25.3%*	
AGE IN YEARS (2018)					
18–34	26.4%	*24.4% - 28.4%*	–	– –	!
35–49	23.6%	*21.7% - 25.6%*	–	– –	
50–64	25.0%	*23.0% - 27.2%*	–	– –	
65+	20.3%	*18.4% - 22.4%*	–	– –	✓
GENDER (2018)					
Male	17.4%	*16.2% - 18.7%*	17.3%	*16.0% - 18.6%*	✓
Female	31.2%	*29.6% - 32.9%*	31.3%	*29.7% - 32.9%*	!
RACE (2016–2018)†					
American Indian/AK Native	25.3%	*20.5% - 30.8%*	25.7%	*20.9% - 31.2%*	
Asian	14.7%	*10.4% - 20.4%*	13.0%	*9.1% - 18.2%*	✓
Black	20.7%	*15.3% - 27.3%*	20.0%	*14.6% - 26.8%*	
Pacific Islander	15.5%	*9.5% - 24.3%*	13.3%	*8.2% - 20.9%*	✓
White	23.7%	*23.0% - 24.4%*	23.7%	*23.1% - 24.4%*	!
ETHNICITY (2018)					
Hispanic	18.8%	*16.1% - 22.0%*	19.0%	*15.8% - 22.7%*	✓
Non-Hispanic	25.1%	*24.0% - 26.3%*	25.3%	*24.2% - 26.4%*	
INCOME (2018)					
0–$24,999	34.9%	*31.8% - 38.0%*	36.0%	*32.8% - 39.4%*	!
$25,000–$49,999	25.2%	*22.8% - 27.8%*	25.4%	*23.0% - 28.1%*	
$50,000–$74,999	25.6%	*23.1% - 28.3%*	25.1%	*22.7% - 27.7%*	
$75,000 or more	19.6%	*18.0% - 21.2%*	19.0%	*17.4% - 20.8%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	21.4%	*17.3% - 26.1%*	21.1%	*17.2% - 25.6%*	
High School or GED	25.5%	*23.3% - 27.8%*	25.5%	*23.3% - 27.8%*	
Some Post High School	27.5%	*25.5% - 29.6%*	27.6%	*25.6% - 29.6%*	!
College Graduate	20.4%	*18.9% - 22.0%*	20.3%	*18.9% - 21.9%*	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	28.9%	*24.6% - 33.5%*	28.9%	*24.8% - 33.4%*	!
Central Utah	23.0%	*18.8% - 27.8%*	22.2%	*18.2% - 26.8%*	
Davis County	24.1%	*20.9% - 27.5%*	23.9%	*20.9% - 27.2%*	
Salt Lake County	23.6%	*21.9% - 25.5%*	23.7%	*22.0% - 25.5%*	
San Juan	14.4%	*8.3% - 23.6%*	13.5%	*7.7% - 22.7%*	✓
Southeast Utah	27.6%	*21.6% - 34.6%*	27.4%	*21.2% - 34.6%*	
Southwest Utah	23.0%	*19.6% - 26.9%*	22.9%	*19.4% - 26.8%*	
Summit County	23.0%	*16.3% - 31.5%*	23.2%	*16.4% - 31.7%*	
Tooele County	29.9%	*24.3% - 36.1%*	30.0%	*24.6% - 35.9%*	!
TriCounty	22.8%	*18.9% - 27.3%*	22.5%	*18.7% - 26.8%*	
Utah County	23.8%	*21.3% - 26.6%*	23.0%	*20.7% - 25.4%*	
Wasatch County	20.2%	*14.5% - 27.5%*	20.9%	*15.0% - 28.5%*	
Weber-Morgan	27.7%	*24.1% - 31.7%*	27.5%	*23.9% - 31.4%*	

† Age-adjusted using 3 age groups.

health services. The Division contracts with Community Mental Health Centers to provide these services and monitors these centers through site visits, a year-end review process, and a peer review process.

Address:
Department of Human Services
Division of Substance Abuse and Mental Health
195 North 1950 West
Salt Lake City, Utah 84116
Phone: 801-538-3939
Fax: 801-538-9892
https://dsamh.utah.gov

Collaboration

Respect

Addictive Behaviors

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Pain Reliever Misuse/Overdose Deaths

National Survey on Drug Use and Health SAMHSA/CDC National Center for Health Statistics

UHIP Highlights

Reducing Prescription Drug Misuse, Abuse and Overdose is one of the health priorities for the 2017–2020 Utah Health Improvement Plan (UHIP). The Utah Department of Health (UDOH) and its partners have worked to decrease high risk prescribing through providing education, training, and tools to healthcare providers. One of these tools is the Prescriber Dashboard in the Utah Controlled Substance Database, which allow prescribers to compare their prescribing behavior with other professionals. Efforts to decrease overdoses include improving the timeliness of data, surveillance, and evaluation; as well as promoting public awareness of safe storage and disposal of opioids, signs of an overdose, harm reduction, and naloxone. Collaborative efforts have also focused on increasing access to naloxone and to substance abuse disorder treatment.

Misuse

- 3.8% of Utahns aged 12+ misused pain relievers
- Utah ranks 18th lowest in the nation
- Significantly higher rate among Utahns aged 18–25

Opioid Deaths

- 12.8 per 100,000 population (crude rate)
- Significantly higher rate among Utahns aged 25–64
- Significantly higher for Southeast Utah LHD

Description

Pain Reliever Misuse: This measure reports the percentage of persons aged 12 and older who reported pain reliever misuse in the past year. Misuse is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Does not include over-the-counter drugs.

Drug Overdose Deaths Involving Opioids: This measure reports the rate (per 100,000 population) of drug overdose deaths caused by acute poisonings that involve any opioid as a contributing cause of death, with unintentional or undetermined intent. Opioids include both prescription opioid pain relievers such as hydrocodone, oxycodone, and morphine, as well as heroin and opium.

How Are We Doing?

During 2017–2018, 3.8% of Utahns aged 12 and older reported misuse of pain relievers in the past year, down from 4.9% in 2015–2016. According to survey data from 2011–2014, 6.7% reported opioid use in the past year and 8.1 per 1,000 persons had opioid abuse or dependence in the past year.[1]

The rate of unintentional or undetermined deaths from drug overdoses involving opioids has more than doubled since 1999 in Utah, from 6.7 in 1999 to 13.6 in 2018 (Figure 76).

National Comparison

The Utah 2017–2018 pain reliever misuse rate of 3.8% was similar to the U.S. rate of 3.9% (Table 28).

In 2018, the Utah age-adjusted death rate from unintentional or undetermined drug overdose involving opioids (13.6) was similar to the U.S. rate of 14.1 per 100,000.

Pain Reliever Misuse

Figure 75: Percentage of Persons 12+ Reporting Pain Reliever Misuse in Utah by Year, 2015–2016 through 2017–2018

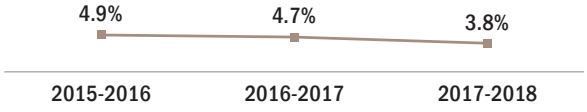


Table 28: Pain Reliever Misuse State Comparison and by Age, 2017–2018

	Crude (burden)		
STATE COMPARISON (2017–2018)	**Rate**	**95% CIs**	
U.S.	3.9%	*3.7% - 4.0%*	
UTAH (18th of 51)	3.8%	*3.2% - 4.5%*	
AGE IN YEARS (2017–2018)			
12–17	2.6%	*1.8% - 3.7%*	✓
18–25	6.5%	*5.1% - 8.1%*	!
26+	3.4%	*2.6% - 4.3%*	

Disparities

The highest rate of prescription drug misuse was for persons aged 18 to 25. However, the highest rates of drug overdose deaths involving opioids occurred in persons aged 25 through 64 (Figure 77).

Southeast Utah local health district (LHD) had a significantly higher death rate from unintentional or undetermined drug overdose involving opioids (30.3 per 100,000) compared with the overall state rate (13.6) during 2016–2017 (Map 27).

1 Supplemental NSDUH Opioid Tables. SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH),2003–2005, 2006–2008 (revised 3/12) and 2009–2010 (revised 3/12), 2011–2014. Accessed 12/3/19 from https://www.samhsa.gov/data/report/supplemental-nsduh-opioid-tables.

Risk Factors

Risk factors include the extent to which people believe the substances are harmful.

In Utah, the top five circumstances observed in prescription opioid deaths were physical health problem, substance abuse problem, current mental health problem, current mental health/substance abuse treatment, non-prescription drug involvement, alcohol dependence or problem, and history of suicide attempts.[1]

What Is Being Done?

The UDOH has received funding to address prescription drug abuse, misuse, and overdose deaths by continuing data collection efforts to help target interventions, develop provider materials, increase naloxone awareness, expand public awareness efforts, and develop provider tools and resources to address prescription drug abuse.

To address the opioid epidemic in Utah, the Violence and Injury Prevention Program oversees academic detailing; leads opioid dashboard development; manages Stop the Opidemic, a campaign that works to raise awareness on opioid abuse and misuse while reducing stigma; organizes naloxone dissemination and tracks overdose reversals; and provides funding to local health departments, 2-1-1, and other community partners who work alongside the UDOH in the opioid epidemic.

Evidence-based Practices

These are some relevant programs using evidence-based practices.

Strengthening Families Program
Evidence-based family skills training program
http://strengtheningfamiliesprogram.org

HALO: Healthy Alternatives for Little Ones
Health education and prevention program for children aged 3–6 years
http://haloforkids.org/

Programs of Prevention, PRIME for Life
Alcohol and drug prevention program for all ages
http://www.primeforlife.org

Available Services/Resources

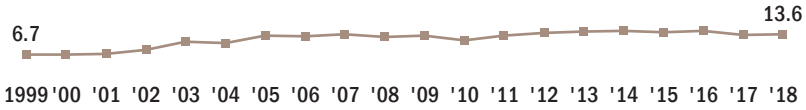
Use Only As Directed media campaign
http://www.useonlyasdirected.org

The University of Utah: Utah Poison Control Center
http://poisoncontrol.utah.edu

National Institutes of Health: National Institute on Drug Abuse
http://drugabuse.gov

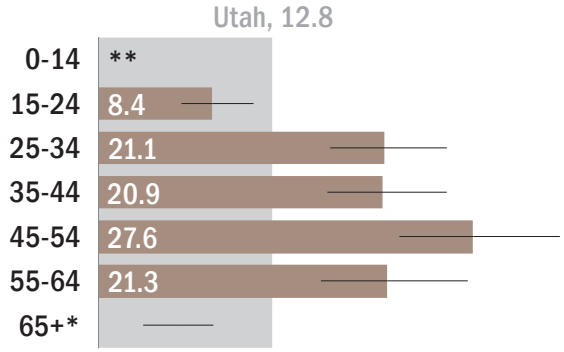
Overdose Deaths Involving Opioids

Figure 76: Overdose Deaths Involving Opioids (unintentional and undetermined intent) per 100,000 by Year, Utah, 1999–2018



Trend graph depicts age-adjusted rates.

Figure 77: Overdose Deaths Involving Opioids (unintentional or undetermined intent) per 100,000 by Age, Utah, 2018



* Death rates are flagged as unreliable when the rate is calculated with a numerator of 20 or less.
** Data are suppressed when the data meet the criteria for confidentiality constraints.

Map 27: Unintentional or Undetermined Opioid Overdose Deaths by Local Health District, 2017–2018

Map depicts age-adjusted rates.

1 Utah Department of Health Violence and Injury Prevention Program, Prescription Opioid Deaths in Utah, 2017 updated Fact Sheet Accessed 11/6/19 from http://health.utah.gov/vipp/pdf/RxDrugs/PDODeaths2015.pdf.

Utah Division of Substance Abuse and Mental Health
Utah Department of Human Services
http://www.dsamh.utah.gov

Partnership for a Drug-Free America
http://www.drugfree.org

Office of National Drug Control Policy
http://www.whitehouse.gov/ondcp

Utah Coalition on Opioid Overdose Prevention
https://ucoop.utah.gov/

Information on how to use and where to find naloxone, which is used to reverse opioid overdoses
https://naloxone.utah.gov/

UDOH Violence and Injury Prevention Program
http://www.health.utah.gov/vipp/topics/prescription-drug-overdoses/

Information on addiction resources and tools
https://www.drugrehab.com/addiction/prescriptions/

Table 29: Opioid Overdose (unintentional and undetermined intent) Death Rates per 100,000 State Comparison, by Age, Gender, and Ethnicity, 2018, Race, 2014–2018, and Local Health District, 2017–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	13.8	*13.7 - 13.9*	14.1	*13.9 - 14.2*	
UTAH (24th of 51)	12.8	*11.5 - 14.0*	13.6	*12.3 - 15.0*	
AGE IN YEARS (2018)					
0–14	**		–	– –	
15–24	8.4	*6.1 - 11.4*	–	– –	✓
25–34	21.1	*17.1 - 25.7*	–	– –	!
35–44	20.9	*16.9 - 25.7*	–	– –	!
45–54	27.6	*22.2 - 34.0*	–	– –	!
55–64	21.3	*16.4 - 27.2*	–	– –	!
65+*	*	*3.3 - 8.5*	–	– –	✓
GENDER (2018)					
Male	14.8	*12.9 - 16.7*	15.6	*13.6 - 17.6*	
Female	10.7	*9.1 - 12.3*	11.5	*9.8 - 13.3*	✓
RACE (2014–2018)					
American Indian/AK Native	12.8	*8.9 - 17.9*	14.3	*9.8 - 20.0*	
Asian/Pacific Islander	3.3	*2.0 - 5.1*	2.9	*1.7 - 4.5*	✓
Black*	*	*4.3 - 11.0*	*	*5.0 - 14.1*	✓
White	13.9	*13.3 - 14.5*	14.8	*14.2 - 15.5*	
ETHNICITY (2018)					
Hispanic	7.6	*5.2 - 10.6*	8.9	*6.1 - 12.5*	✓
Non-Hispanic	13.6	*12.3 - 15.0*	14.5	*13.0 - 16.0*	
LOCAL HEALTH DISTRICT (2017–2018)					
Bear River	9.3	*6.4 - 13.0*	11.4	*7.8 - 16.0*	
Central Utah	15.6	*10.1 - 23.0*	16.9	*10.8 - 25.2*	
Davis County	8.4	*6.4 - 10.9*	8.8	*6.7 - 11.4*	✓
Salt Lake County	14.5	*12.9 - 16.0*	14.3	*12.7 - 15.8*	
San Juan	**		**		
Southeast Utah	28.7	*18.2 - 43.1*	30.3	*19.0 - 45.9*	!
Southwest Utah	12.7	*9.7 - 16.3*	14.3	*10.8 - 18.4*	
Summit County	**		**		
Tooele County	16.7	*10.6 - 25.1*	17.7	*11.2 - 26.6*	
TriCounty	**		**		
Utah County	11.6	*9.7 - 13.5*	14.0	*11.7 - 16.4*	
Wasatch County	**		**		
Weber-Morgan	15.0	*11.9 - 18.7*	15.2	*12.0 - 18.9*	

* Death rates are flagged as unreliable when the rate is calculated with a numerator of 20 or less. More information: http://wonder.cdc.gov/wonder/help/mcd.html#Unreliable.
** Data are suppressed when the data meet the criteria for confidentiality constraints. More information: http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Cigarette Smoking—Adult

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who smoke cigarettes every day or some days.

How Are We Doing?

The Utah adult smoking rate has decreased since the Utah Department of Health (UDOH) Tobacco Prevention and Control Program (TPCP) started receiving Master Settlement Agreement funds in 2000.

National Comparison

In 2018, the Utah adult smoking rate was 9.2% compared to the national rate of 16.1% (age-adjusted rates).

Disparities

Adults with low household income and fewer years of formal education report higher rates of tobacco use than the general population.

According to age-adjusted rates from the 2018 Behavioral Risk Factor Surveillance System (BRFSS), LGB adults in Utah were significantly more likely to smoke than heterosexual individuals (13.4% vs. 8.9% respectively) (Figure 78).

Risk Factors

Smoking increases the risk for chronic lung disease, coronary heart disease, and stroke, as well as cancer of the lungs, larynx, esophagus, mouth, and bladder.

What Is Being Done?

The UDOH TPCP and its partners use comprehensive programs to prevent young people from starting to use tobacco, help tobacco users quit, promote tobacco-free environments, and reduce tobacco-related disparities. These programs include an extensive anti-tobacco marketing campaign, free and confidential tobacco cessation services, school- and community-based prevention programs, and efforts to improve tobacco policies. Tobacco-free policies support tobacco-free norms and protect nonsmokers from secondhand smoke. The marketing campaign uses television, radio, billboard, print, and on-line media to reach youth, adults, pregnant women, racial and ethnic minorities, and rural populations with anti-tobacco messages. The goals of the campaign are to counter tobacco industry promotions, inform Utahns about quitting services, and support local tobacco control efforts. Quitting services available to Utahns are accessible through the Utah tobacco cessation website, http://www.waytoquit.org, and include a toll-free Tobacco Quit Line (1-800-QUIT-NOW), individual services that allow tobacco users to choose from a combination of quit medications, e-mail or text messages, and print materials, and a web-based tobacco cessation program. The TPCP also partners with community health clinics to offer counseling services for uninsured or underinsured tobacco users. Local health departments hold group-based quitting classes for adults and youth in local communities. Efforts to protect nonsmokers from secondhand smoke focus on strengthening tobacco-free policies in apartment complexes, workplaces, schools, and outdoor venues frequented by children.

- 9.0% of Utah adults smoke (crude rate)
- Higher rate for Utahns aged 35–64
- Higher rate for males
- Disparities include people who are American Indian/Alaska (AK) Native and Hispanic
- Higher rate for low income and lower education levels
- Significantly higher for Salt Lake County, Southeast Utah, TriCounty, and Weber-Morgan local health districts

Figure 78: Adult (18+) Smoking by Sexual Orientation (age-adjusted rates), Utah, 2018

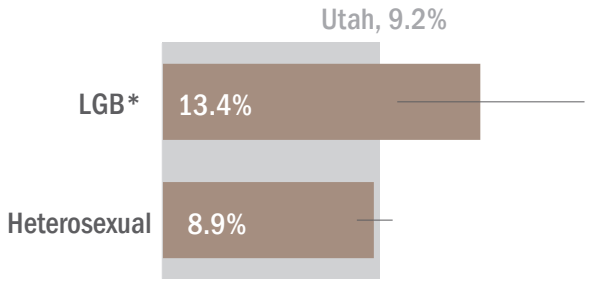
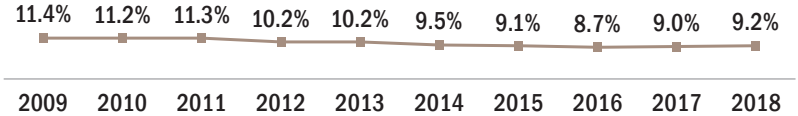


Figure 79: Percentage of Utahns Aged 18+ Who Smoke Cigarettes by Year, 2009–2018



Trend graph depicts age-adjusted rates.

Available Services/Resources

The Utah Tobacco Quit Line and Utah's online quitting program offer assistance in quitting tobacco use to Utah adults and teens. For services and information call the Utah Tobacco Quit Line at 1-800-QUIT-NOW or visit Utah's tobacco cessation website at http://www.waytoquit.org.

UDOH Tobacco Prevention and Control Program website: http://www.tobaccofreeutah.org

Tobacco Free Resource Line: 1-877-220-3466

More information on the BRFSS is available at the website of the Centers for Disease Control and Prevention—http://www.cdc.gov/brfss/

More information on changes to the BRFSS methodology can be found at http://health.utah.gov/opha/OPHA_BRFSS.htm.

Map 28: Adult (18+) Smoking by Local Health District, 2018

Map depicts age-adjusted rates.

Table 30: Adult Cigarette Smoking State Comparison, by Age, Gender, Income, Education, and Local Health District, 2018 and Race and Ethnicity, 2017–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	15.6%	*15.3% - 15.8%*	16.1%	*15.9% - 16.4%*	
UTAH (1st of 51)	9.0%	*8.3% - 9.7%*	9.2%	*8.5% - 9.9%*	
AGE IN YEARS (2018)					
18–34	8.6%	*7.4% - 9.9%*	–	–	–
35–49	10.7%	*9.2% - 12.3%*	–	–	– !
50–64	10.6%	*9.1% - 12.4%*	–	–	– !
65+	5.5%	*4.3% - 6.9%*	–	–	– ✓
GENDER (2018)					
Male	10.4%	*9.4% - 11.6%*	10.6%	*9.5% - 11.8%*	!
Female	7.5%	*6.6% - 8.5%*	7.6%	*6.7% - 8.6%*	✓
RACE (2017–2018)†					
American Indian/AK Native	21.9%	*16.1% - 29.1%*	21.3%	*15.2% - 29.1%*	!
Asian	5.8%	*3.2% - 10.1%*	4.5%	*2.3% - 8.7%*	✓
Black	12.9%	*8.0% - 20.1%*	12.7%	*8.0% - 19.6%*	
Pacific Islander	12.4%	*6.9% - 21.2%*	11.6%	*6.3% - 20.2%*	
White	8.5%	*8.0% - 9.0%*	8.7%	*8.2% - 9.2%*	
ETHNICITY (2017–2018)					
Hispanic	11.9%	*10.1% - 13.8%*	12.1%	*10.1% - 14.3%*	!
Non-Hispanic	8.5%	*8.0% - 9.0%*	8.7%	*8.1% - 9.2%*	
INCOME (2018)					
0–$24,999	19.1%	*16.5% - 21.9%*	21.3%	*18.4% - 24.4%*	!
$25,000–$49,999	11.9%	*10.2% - 13.8%*	13.3%	*11.4% - 15.5%*	!
$50,000–$74,999	8.5%	*6.9% - 10.4%*	8.2%	*6.7% - 10.1%*	
$75,000 or more	5.1%	*4.2% - 6.2%*	4.8%	*3.9% - 5.8%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	20.7%	*16.6% - 25.6%*	19.5%	*15.6% - 24.1%*	!
High School or GED	15.3%	*13.5% - 17.2%*	15.3%	*13.6% - 17.3%*	!
Some Post High School	9.8%	*8.5% - 11.4%*	9.9%	*8.6% - 11.5%*	
College Graduate	2.5%	*2.0% - 3.2%*	2.5%	*2.0% - 3.2%*	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	6.0%	*4.1% - 8.8%*	6.8%	*4.7% - 9.8%*	
Central Utah	7.8%	*5.6% - 10.8%*	8.7%	*6.2% - 12.1%*	
Davis County	6.0%	*4.4% - 8.1%*	6.1%	*4.5% - 8.2%*	✓
Salt Lake County	10.9%	*9.6% - 12.4%*	10.9%	*9.6% - 12.4%*	!
San Juan*	7.6%	*3.2% - 16.9%*	9.0%	*3.6% - 20.8%*	
Southeast Utah	20.9%	*14.0% - 30.0%*	23.2%	*16.1% - 32.2%*	!
Southwest Utah	8.7%	*6.5% - 11.4%*	9.5%	*7.1% - 12.6%*	
Summit County*	7.4%	*3.9% - 13.7%*	6.9%	*3.5% - 13.2%*	
Tooele County	13.3%	*9.0% - 19.1%*	13.0%	*9.0% - 18.5%*	
TriCounty	17.5%	*13.7% - 22.2%*	17.4%	*13.7% - 22.0%*	!
Utah County	3.8%	*2.8% - 5.2%*	4.1%	*3.1% - 5.5%*	✓
Wasatch County	7.6%	*4.2% - 13.3%*	7.8%	*4.4% - 13.3%*	
Weber-Morgan	12.3%	*9.6% - 15.5%*	12.2%	*9.6% - 15.4%*	!

† Age-adjusted using 3 age groups.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.

E-cigarettes—Adult

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who currently use electronic cigarettes every day or some days.

Electronic cigarettes or vape products are battery-powered devices that turn liquids into an aerosol. They are marketed under a variety of different names, but are most commonly referred to as electronic cigarettes, e-cigarettes, vape products, mods, or tanks. They may also be known as JUUL, Vuse, Suorin, MarkTen, and Blu. The liquids frequently contain nicotine and flavors.

- 6.1% of Utah adults use e-cigarettes or vape products (crude rate)
- Higher rate for Utahns aged 18–34
- Higher rates for males
- Disparity among people who are American Indian/ Alaska (AK) Natives
- Higher rate for low income levels
- Higher rate among high school graduates; lower rate among college graduates
- Significantly higher for Salt Lake County and Weber-Morgan LHDs

How Are We Doing?

From 2012 to 2018, the percentage of Utah adults reporting e-cigarette and other vape product use increased from 2.0% to 5.6% (age-adjusted rates).

National Comparison

In 2018, 5.6% of Utah adults reported they currently use e-cigarettes or vape products on most or some days. In comparison, the 2018 U.S. rate of current e-cigarette use was 6.0%.

Disparities

Rates of adult e-cigarette use were significantly higher among younger Utahns (11.4% for ages 18–34) in 2018 (Figure 80). For years 2017 and 2018 combined, Utahns who are American Indian/Alaska (AK) Natives had a significantly higher rate of e-cigarette use (12.6%). The highest rate of e-cigarette use in 2018 was reported in Weber-Morgan local health district (LHD) (8.8%) (Map 29).

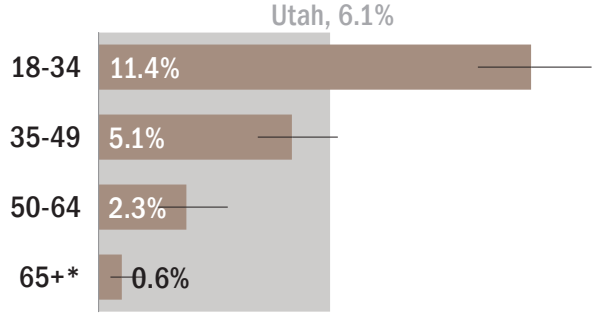
Risk Factors

E-cigarettes or vapes use a heating element to aerosolize a liquid that usually contains nicotine. This liquid is sold in thousands of flavors. Although the long-term health effects are unknown, there is evidence that vaping is not harmless and contains toxic chemicals. Research is inconclusive about whether e-cigarettes can help smokers quit traditional cigarettes. In individual cases, e-cigarettes may help smokers quit, but only if they completely quit traditional cigarettes and ultimately quit nicotine. E-cigarettes or vapes have not been approved by the Centers for Disease Control and Prevention as a cessation device.[1]

What Is Being Done?

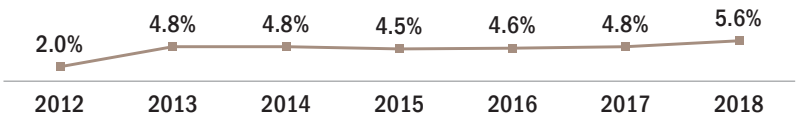
Utah has developed a number of policies that regulate the safety of vape products and limit youth access. Retailers are required to be licensed through the Utah Tax Commission to sell electronic cigarettes and other vape products. The sale of vape products to those younger than 19 years is prohibited. Since vape products are included in the Utah Indoor Clean Air Act, vaping in indoor public places is also prohibited. These measures are intended to reduce youth access and youth exposure to these products.

Figure 80: Adult E-cigarette Use by Age, Utah, 2018



* Use caution in interpreting, the estimate has a relative standard error greather than 30% and does not meet UDOH standards for reliability.

Figure 81: Percentage of Utahns Aged 18+ Using E-cigarettes by Year, Utah, 2012–2018



Trend graph depicts age-adjusted rates.

1 E-Cigarette and Vape Pen Health Effects. Way to Quit. Accessed 12/20/19 from https://waytoquit.org/tobacconicotine-products/e-cigarettes/.

Evidence-based Practices

Evidence-based practices for smoking cessation include individual, group, and telephone counseling and use of FDA-approved nicotine replacement therapies and medications.

Available Services/ Resources

For services and information on tobacco use and quitting, visit the Utah tobacco cessation website, waytoquit.org, or call the Utah Tobacco Quit Line at 1-800-QUIT-NOW.

Map 29: Adult E-cigarette Use by Local Health District, 2016–2018

Map depicts age-adjusted rates.

Table 31: Adult E-cigarette Use State Comparison, by Age, Gender, Ethnicity, Income, and Education, 2018, Race, 2017–2018, and Local Health District, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	5.4%	5.2% - 5.6%	6.0%	5.8% - 6.3%	
UTAH (12th of 32)	6.1%	5.5% - 6.7%	5.7%	5.1% - 6.3%	
AGE IN YEARS (2018)					
18–34	11.4%	10.0% - 13.0%	–	–	!
35–49	5.1%	4.2% - 6.3%	–	–	
50–64	2.3%	1.5% - 3.4%	–	–	✓
65+	0.6%	0.3% - 1.2%	–	–	✓
GENDER (2018)					
Male	7.0%	6.2% - 8.0%	6.5%	5.7% - 7.4%	!
Female	5.1%	4.3% - 6.0%	4.8%	4.0% - 5.7%	
RACE (2017–2018)†					
American Indian/AK Native	13.9%	8.8% - 21.2%	12.6%	7.4% - 20.6%	!
Asian*	4.8%	2.3% - 10.0%	3.6%	1.6% - 8.0%	
Black*	6.5%	3.5% - 11.8%	4.0%	2.1% - 7.4%	
Pacific Islander*	10.8%	5.5% - 20.0%	6.8%	3.3% - 13.5%	
White	5.4%	5.0% - 5.9%	5.3%	4.9% - 5.8%	
ETHNICITY (2018)					
Hispanic	5.3%	3.8% - 7.4%	4.4%	3.2% - 6.1%	
Non-Hispanic	6.1%	5.5% - 6.9%	5.8%	5.2% - 6.5%	
INCOME (2018)					
0–$24,999	9.0%	7.1% - 11.3%	8.6%	6.8% - 10.9%	!
$25,000–$49,999	8.0%	6.5% - 9.8%	7.8%	6.3% - 9.6%	!
$50,000–$74,999	5.6%	4.3% - 7.3%	5.0%	3.9% - 6.6%	
$75,000 or more	4.3%	3.5% - 5.4%	4.8%	3.8% - 6.0%	
EDUCATION—Adults 25+ (2018)					
Below High School	5.7%	3.5% - 9.2%	4.9%	3.1% - 7.9%	
High School or GED	7.4%	6.0% - 9.1%	7.1%	5.8% - 8.7%	!
Some Post High School	4.8%	3.8% - 5.9%	4.7%	3.8% - 5.9%	
College Graduate	1.6%	1.2% - 2.2%	1.6%	1.1% - 2.1%	✓
LOCAL HEALTH DISTRICT (2016–2018)					
Bear River	4.1%	3.1% - 5.5%	4.0%	3.0% - 5.4%	
Central Utah	4.2%	3.0% - 5.9%	4.1%	2.9% - 5.9%	
Davis County	5.3%	4.3% - 6.5%	5.0%	4.1% - 6.1%	
Salt Lake County	5.9%	5.3% - 6.6%	5.7%	5.1% - 6.3%	!
San Juan*	3.0%	1.4% - 6.6%	3.1%	1.4% - 6.5%	
Southeast Utah	4.8%	3.3% - 7.0%	5.2%	3.5% - 7.7%	
Southwest Utah	5.6%	4.4% - 7.0%	5.7%	4.5% - 7.2%	
Summit County*	2.3%	1.1% - 4.9%	2.2%	1.1% - 4.6%	✓
Tooele County	6.3%	4.5% - 8.7%	6.2%	4.5% - 8.5%	
TriCounty	4.1%	3.0% - 5.6%	4.1%	3.0% - 5.6%	
Utah County	3.7%	3.0% - 4.6%	2.8%	2.3% - 3.5%	✓
Wasatch County*	3.1%	1.5% - 6.5%	3.9%	1.9% - 8.0%	
Weber-Morgan	9.3%	7.9% - 10.9%	8.8%	7.5% - 10.3%	!

† Age-adjusted using 3 age groups.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.

Description

This measure reports the percentage of students in grades 8, 10, and 12 who have used electronic cigarettes in the past 30 days.

Electronic cigarettes or vape products are battery-powered devices that turn liquids into an aerosol. They are marketed under a variety of different names, but are most commonly referred to as electronic cigarettes, e-cigarettes, vape products, mods, or tanks. They may also be known as JUUL, Vuse, Suorin, MarkTen, and Blu. The liquids frequently contain nicotine and flavors.

- 12.4% of Utah students in grades 8, 10, and 12 use e-cigarettes or vape products
- Rates increase with grade level
- Higher rates for students who are Hispanic and mixed race
- Significantly higher for Salt Lake County, Southeast Utah, Summit County, Tooele County, and Weber-Morgan LHDs

How Are We Doing?

Utah students in grades 8, 10, and 12 are significantly more likely to use electronic cigarettes or vape products than any other tobacco product (Figure 82).

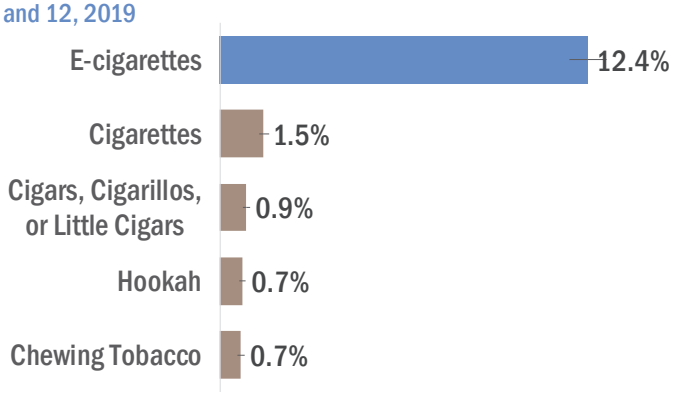
From 2011 to 2019, the Utah youth e-cigarette and other vape product use rate continued to increase to a high of 12.4% (Figure 84).

Since 2011, Utah has seen a sharp increase in e-cigarette experimentation and use among youth. Given the uncertain public health impact of e-cigarettes and the potential for increasing nicotine addiction among young people, monitoring the use of e-cigarette products and enforcing and strengthening policies that regulate youth access are public health priorities for Utah.

National Comparison

In 2017, 11.1% of Utah students in grades 8, 10 and 12 reported they had used e-cigarettes or vape products in the past 30 days (Utah 2017 Prevention Needs Assessment [PNA]). In comparison, the 2017 National Youth Tobacco Survey reported a rate of current e-cigarette use of 11.7% for U.S. high school students.

Figure 82: Tobacco Use by Product, Utah Students in Grades 8, 10, and 12, 2019



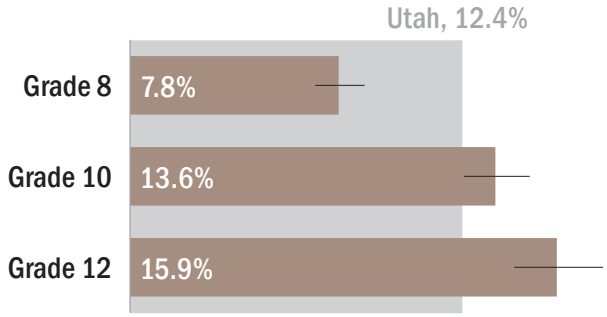
Disparities

Students in grades 10 and 12 were more likely to report current e-cigarette use than students in grade 8 (Figure 83).

Students who are Hispanic and mixed race (19.0% and 18.8%, respectively) had higher rates of e-cigarette use than the state as a whole (12.4%).

Students living in Southeast Utah (21.0%), Weber-Morgan (18.4%), Summit County (16.9%), Tooele County (16.2%), and Salt Lake County (15.3%) local health districts (LHDs) had significantly higher rates of current e-cigarette use than the state rate (12.4%) (Map 30).

Figure 83: Adolescent E-cigarette Use by Grade, Utah, 2019



Risk Factors

E-cigarettes or vapes use a heating element to aerosolize a liquid that usually contains nicotine. This liquid is sold in thousands of flavors. While the long-term health effects of vaping are unknown, there is evidence that nicotine can affect the developing brain, making it important to prevent youth use.[1]

The human brain is not fully developed until the age of 25, and some of the most critical developments happen during teenage years. Use of any addictive substance during this

1 E-Cigarette and Vape Pen Health Effects. Way to Quit. Accessed 12/20/19 from https://waytoquit.org/tobacconicotine-products/e-cigarettes/.

time can alter how the brain develops. Nicotine, found in traditional tobacco products such as cigarettes and e-cigarettes or vapes, affects teens more than it does adults. Using nicotine as a teenager can lead to:

- nicotine addiction
- use of other addictive substances
- reduced impulse control
- deficits in attention and cognition
- mood disorders

Figure 84: Percentage of Students Reporting E-cigarette Use by Year, 2013–2019

Because a teen's brain is still developing, nicotine can rewire pathways, essentially "hardwiring" the brain for addiction.[1]

Although the long-term health effects are unknown, there is evidence vaping is not harmless and contains toxic chemicals.[2]

What Is Being Done?

Utah has developed a number of policies that regulate the safety of vape products and limit youth access. Retailers are required to be licensed through the Utah Tax Commission to sell electronic cigarettes and other vape products. The sale of vape products to those younger than 19 years is prohibited. Since vape products are included in the Utah Indoor Clean Air Act, vaping in indoor public places is also prohibited. These measures are intended to reduce youth access and youth exposure to these products.

Map 30: Adolescent E-cigarette Use by Local Health District, 2019

Table 32: Adolescent E-cigarette Use Overall, by Grade, Gender, Race/Ethnicity, and Local Health District, 2019

	Crude (burden)		
OVERALL (2019)	**Rate**	**95% CIs**	
UTAH	12.4%	*11.8% - 13.0%*	
GRADE IN SCHOOL (2019)			
Grade 8	7.8%	*6.9% - 8.8%*	✓
Grade 10	13.6%	*12.4% - 14.9%*	!
Grade 12	15.9%	*14.3% - 17.7%*	!
GENDER (2019)			
Male	11.7%	*11.0% - 12.4%*	
Female	12.9%	*12.2% - 13.7%*	
RACE/ETHNICITY (2019)			
American Indian	14.3%	*11.5% - 17.7%*	
Asian	7.0%	*5.5% - 8.9%*	✓
Black	13.7%	*10.8% - 17.2%*	
Hispanic	19.0%	*17.8% - 20.3%*	!
Pacific Islander	15.4%	*11.9% - 19.6%*	
White	10.6%	*10.0% - 11.3%*	✓
Mixed Race	18.8%	*16.5% - 21.4%*	!
LOCAL HEALTH DISTRICT (2019)			
Bear River	8.8%	*6.9% - 11.3%*	✓
Central Utah	12.1%	*9.9% - 14.6%*	
Davis County	9.6%	*8.3% - 11.1%*	✓
Salt Lake County	15.3%	*14.2% - 16.4%*	!
San Juan	2.2%	*1.3% - 3.8%*	✓
Southeast Utah	21.0%	*16.5% - 26.3%*	!
Southwest Utah	11.7%	*10.1% - 13.7%*	
Summit County	16.9%	*13.1% - 21.6%*	!
Tooele County	16.2%	*14.1% - 18.5%*	!
TriCounty	13.2%	*10.2% - 16.9%*	
Utah County	7.6%	*6.7% - 8.5%*	✓
Wasatch County	8.5%	*4.9% - 14.4%*	
Weber-Morgan	18.4%	*15.6% - 21.6%*	!

1 E-Cigarette and Vape Pen Health Effects. Way to Quit. Accessed 12/20/19 from https://waytoquit.org/tobacconicotine-products/e-cigarettes/.
2 E-Cigarette and Vape Pen Health Effects. Way to Quit. Accessed 12/20/19 from https://waytoquit.org/tobacconicotine-products/e-cigarettes/.

Evidence-based Practices

Evidence-based practices for smoking cessation include individual, group, and telephone counseling and use of FDA-approved nicotine replacement therapies and medications.

Data Interpretation Issues

The PNA is conducted in odd years with Utah students in grades 6, 8, 10, and 12.

Available Services/Resources

For services and information on tobacco use and quitting, visit the Utah tobacco cessation website, waytoquit.org, or call the Utah Tobacco Quit Line at 1-800-QUIT-NOW.

Illicit Drug Use/Disorder

National Survey on Drug Use and Health SAMHSA

Description

Illicit Drug Use: This measure reports the percentage of persons aged 12 and older who reported illicit drug use in the past month. Illicit drug use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use with out a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Illicit Drug Use Disorder: This measure reports the percentage of persons aged 12 and older who reported illicit drug dependence or abuse in the past year. Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Use

- 7.6% of Utahns use illicit substances
- Lowest rate in the nation
- Higher among Utahns aged 18–25 years; lower among ages 26+

Disorder

- 2.5% of Utahns reported illicit drug use disorder
- 5th lowest rate in the nation
- Higher among Utahns aged 18–25 years

How Are We Doing?

Illicit drug use rates in Utah have remained fairly stable in recent years, from 7.4% in 2015–2016 to 8.1% in 2016–2017, and most recently 7.6% in 2017–2018 (Figure 85).

Rates of illicit drug use disorder have remained fairly stable at approximately three percent, reaching a low of 2.5% in 2017–2018 (Figure 87).

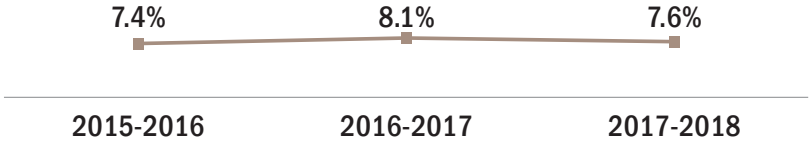
National Comparison

Utah had the lowest rate of past month illicit drug use in the nation with a rate of 7.6% in 2017–2018. The U.S. rate was 11.4% (Table 33). The reported use among Utah high school students for marijuana was the lowest in the nation in 2017, according to the Youth Risk Behavior Survey.

During 2017–2018, the rate for illicit drug use disorder was lower in Utah (2.5%) than the U.S. (2.9%) (Table 34). Utah had the fifth lowest rate in the nation.

Illicit Drug Use in Past Month

Figure 85: Percentage of Persons Aged 12+ Reporting Illicit Drug Use in Past Month by Year, Utah, 2015–2016 through 2017–2018



Disparities

Persons aged 18–25 years had a significantly higher rate of both illicit drug use (16.4%, Table 33) and illicit drug use disorder (5.7%, Table 34) than the overall state rates (7.6% and 2.5%, respectively).

Among youth in 2017, Salt Lake County (12.3%) local health district (LHD) had a significantly higher rate of current marijuana use than the state (8.2%) while Bear River (3.7%), Central Utah (5.1%), Davis County (5.2%), Utah County (5.5%), and Southwest (6.4%) LHDs had lower rates, according to the Prevention Needs Assessment Survey (Figure 86).

Table 33: Illicit Drug Use in Past Month State Comparison and by Age, 2017–2018

		Crude (burden)	
STATE COMPARISON (2017–2018)	**Rate**	**95% CIs**	
U.S.	11.4%	*11.1% - 11.7%*	
UTAH (1st of 51)	7.6%	*6.4% - 9.0%*	
AGE IN YEARS (2017–2018)			
12–17	6.0%	*4.7% - 7.7%*	
18–25	16.4%	*13.5% - 19.8%*	!
26+	5.9%	*4.6% - 7.5%*	✓

Risk Factors

According to the National Institute on Drug Abuse, risk factors for drug use by children and adolescents include early aggressive behavior, lack of parental supervision, substance abuse by peers, drug availability, and poverty.[1]

Other risk factors include family history of use or addiction, genetic predisposition to addiction, having another mental health disorder, use of highly addictive drugs, and having a social environment where drugs are used.

1 What are risk factors and protective factors?. National Institute on Drug Abuse. Accessed 12/5/2019 from https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-1-risk-factors-protective-factors/what-are-risk-factors.

What Is Being Done?

The Utah Division of Substance Abuse and Mental Health (DSAMH) is charged with providing drug and alcohol abuse prevention activities in Utah. Information on the DSAMH may be found on their website: http://www.dsamh.utah.gov/.

Available Services/Resources

More information on drug abuse dangers, treatment, and information sheets on abused drugs is available on the website of the National Institute of Drug Abuse: http://www.nida.nih.gov/NIDAHome.html.

NATIONAL:
The U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA) National Drug and Treatment Referral Routing Service provides a toll-free telephone number for alcohol and drug information/treatment referral assistance at 1-800-662-HELP (4357).

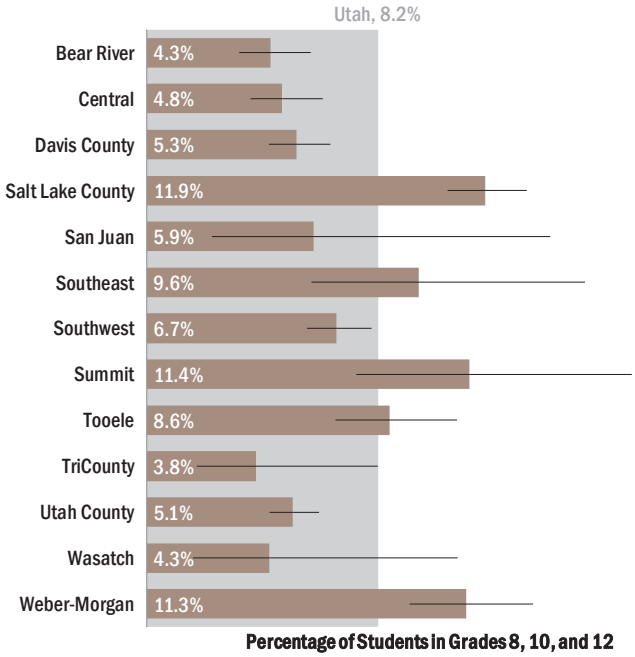
UTAH:
Edward G. Callister Foundation, Referral and Information Services: (801) 587-HOPE (4673) or toll free (866) 633-HOPE. The service is designed to provide referral and educational resources about substance abuse. Mental health and substance abuse services in Utah are also provided through Community Mental Health and Substance Abuse programs and the State Hospital. The mission of the Utah Department of Human Services (DHS) Division of Mental Health (DMH) is to assure that individuals with mental illness receive the treatment and services they need. The DMH is only one partner in the Utah Public Mental Health System and oversees the local community mental health centers and the Utah State Hospital in Provo.

For information about the Utah Public Mental Health System, call toll free: 877-585-1770.

Utah Division of Mental Health
120 North 200 West #415
Salt Lake City, Utah
Telephone: 801-538-9892

The DSAMH is charged with providing drug and alcohol abuse prevention activities in Utah. Information on the DSAMH may be found on their website: https://dsamh.utah.gov/. The DSAMH administrative office may be reached at (801) 538-3939.

Figure 86: Marijuana Use in Past Month, Utah Students in Grades 8, 10, and 12, 2019



Source: Utah Prevention Needs Assessment Survey

Illicit Drug Use Disorder in Past Year

Figure 87: Percentage of Persons Aged 12+ Reporting Illicit Drug Use Disorder in Utah by Year, 2009–2010 through 2016–2017

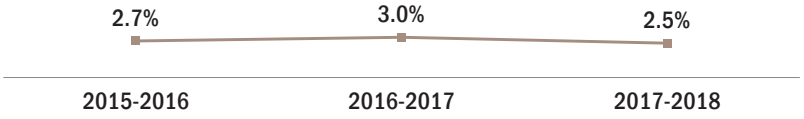
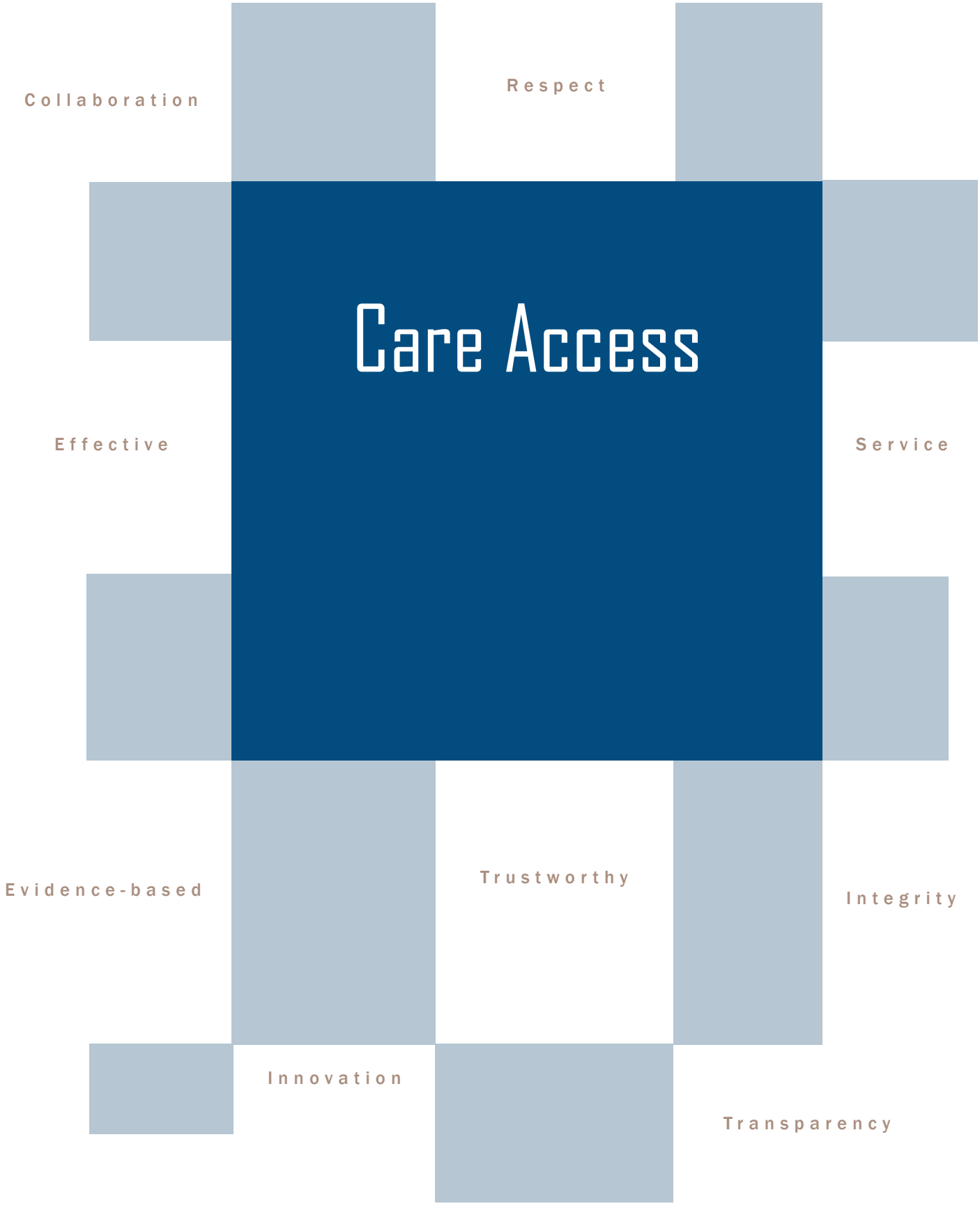


Table 34: Illicit Drug Use Disorder in Past Year State Comparison and by Age, 2017–2018

	Crude (burden)		
STATE COMPARISON (2017–2018)	**Rate**	**95% CIs**	
U.S.	2.9%	*2.7% - 3.0%*	
UTAH (5th of 51)	2.5%	*1.9% - 3.2%*	
AGE IN YEARS (2017–2018)			
12–17	2.3%	*1.6% - 3.2%*	
18–25	5.7%	*4.2% - 7.7%*	!
26+	1.8%	*1.3% - 2.5%*	


Collaboration
Respect
Care Access
Effective
Service
Evidence-based
Trustworthy
Integrity
Innovation
Transparency

No Health Insurance

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults without health insurance coverage. Health insurance is defined as including private coverage, Medicaid, Medicare, and other government programs.

- 12.8% of Utah adults have no health insurance
- Higher rates among males and Utahns aged 18–49
- Disparities include people who are Pacific Islander and Hispanic
- Higher rates among lower income and education levels
- Significantly higher rate for Southwest local health district

How Are We Doing?

In 2018, an estimated 12.8% of Utah adults were without health insurance coverage (crude rate).

National Comparison

Comparing age-adjusted rates, Utah (12.7%) has a lower rate of uninsured adults than the U.S. (13.0%).

Disparities

In Utah, persons aged 18–49 had higher uninsured rates than persons aged 50 and older . People who are Pacific Islander and Hispanic were less likely that people who are White or non-Hispanic to have insurance.. LGB adults were two and a half times more likely not to have health care coverage than heterosexual adults. Lower income and lower education levels were also associated with higher rates of no health insurance (Figure 88).

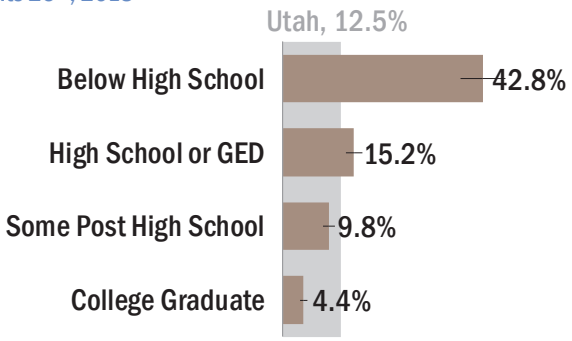
Risk Factors

There is an association between poverty and lack of insurance. In 2018, approximately 31.8% of people living below the federal poverty level were uninsured compared with on ly 4.7% uninsured among people living at 300% or more of the federal poverty level.[1]

What Is Being Done?

The Utah Department of Health administers programs to improve access to care, such as Medicaid, Children's Health Insurance Plan (CHIP), the Utah Primary Care Network (PCN), and Utah's Premium Partnership for Health Insurance (UPP). The Department also works to improve the "safety net" for persons who lack health insurance. This is done through primary care grants to rural areas and clinics for children with disabilities. Local health departments provide preventive services such as immunizations and screenings at low or no cost to eligible persons who cannot afford them.

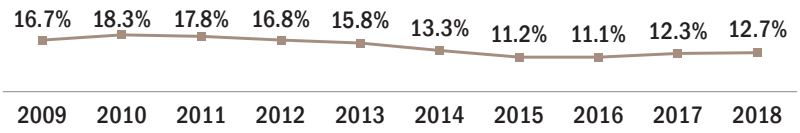
Figure 88: No Health Insurance by Education (age-adjusted rates), Utah Adults 25+, 2018



Data Interpretation Issues

Utah estimates of the uninsured in Utah are typically calculated using a set of state-added questions included on the Utah Behavioral Risk Factor Surveillance System (BRFSS). Data shown here are based on a single question of the core BRFSS in order to show comparisons to other states and to the nation overall. Therefore, rates shown here may reflect different rates of coverage than other reports that include multiple insurance questions.

Figure 89: Percentage of Utahns Aged 18+ With No Health Insurance by Year, 2009–2018



Trend graph depicts age-adjusted rates.

Compared with state surveys in Utah, the U.S. Current Population Survey has historically yielded higher estimates of the Utah population with no health insurance coverage. Reasons may include differences in question wording, data weighting, and data imputation for missing values. For a thorough discussion of why state health insurance estimates differ from those produced by the U.S. Census Bureau, please refer to the State Health Access

1 Health Insurance Coverage. Retrieved on 12/6/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Data Assistance Center publication 'Comparing Federal Government Surveys that Count the Uninsured: 2018' at http://www.shadac.org/publications/comparing-federal-government-surveys-count-uninsured-2018.

Available Services/ Resources

MEDICAID: In the Salt Lake City area, call (801) 538-6155.
In Utah, Idaho, Wyoming, Colorado, New Mexico, Arizona, and Nevada, call toll-free 1-800-662-9651.
In other states, call 1-801-538-6155.
Medicaid Customer Service staff are available to take inquiries

CHIP: Children's Health Insurance Program (for children 0–18)
Call 1-877-KIDS-NOW (543-7669) or visit the CHIP website at http://health.utah.gov/chip/

PCN: Utah Primary Care Network (for low-income adults)
1-888-222-2542 or http://health.utah.gov/pcn/

UPP: Utah's Premium Partnership for Health Insurance
1-888-222-2542 or visit http://www.health.utah.gov/upp

Map 31: No Health Insurance by Local Health District, Utahns Aged 18+, 2018

Map depicts age-adjusted rates.

Table 35: No Health Insurance State Comparison, by Age, Gender, Race, Ethnicity, Income, Education, and Local Health District, 2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	12.2%	*11.9% - 12.4%*	13.0%	*12.8% - 13.3%*	
UTAH (35th of 51)	12.8%	*12.0% - 13.7%*	12.7%	*11.9% - 13.6%*	
AGE IN YEARS (2018)					
18–34	16.8%	*15.2% - 18.5%*	–	– –	!
35–49	16.5%	*14.8% - 18.4%*	–	– –	!
50–64	9.9%	*8.5% - 11.5%*	–	– –	✓
65+	2.1%	*1.5% - 3.1%*	–	– –	✓
GENDER (2018)					
Male	14.3%	*13.1% - 15.6%*	14.0%	*12.8% - 15.2%*	!
Female	11.4%	*10.3% - 12.6%*	11.5%	*10.4% - 12.6%*	✓
RACE (2018)†					
American Indian/AK Native	19.8%	*13.5% - 28.0%*	17.5%	*11.9% - 25.1%*	
Asian*	6.8%	*3.1% - 14.2%*	7.5%	*3.6% - 15.2%*	
Black	19.4%	*12.4% - 28.9%*	19.2%	*12.1% - 29.1%*	
Pacific Islander	25.3%	*14.3% - 40.6%*	30.9%	*18.0% - 47.7%*	!
White	10.1%	*9.3% - 10.9%*	10.1%	*9.3% - 10.9%*	✓
ETHNICITY (2018)					
Hispanic	39.8%	*36.1% - 43.6%*	37.4%	*33.6% - 41.3%*	!
Non-Hispanic	8.8%	*8.1% - 9.6%*	8.8%	*8.1% - 9.5%*	✓
INCOME (2018)					
0–$24,999	28.4%	*25.5% - 31.6%*	31.8%	*28.6% - 35.1%*	!
$25,000–$49,999	15.7%	*13.6% - 17.9%*	18.1%	*15.9% - 20.6%*	!
$50,000–$74,999	7.1%	*5.6% - 8.9%*	7.0%	*5.5% - 8.7%*	✓
$75,000 or more	4.8%	*4.0% - 5.7%*	4.7%	*3.8% - 5.7%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	47.2%	*41.8% - 52.6%*	42.8%	*38.0% - 47.7%*	!
High School or GED	15.7%	*13.9% - 17.7%*	15.2%	*13.5% - 17.1%*	!
Some Post High School	9.6%	*8.3% - 11.0%*	9.8%	*8.5% - 11.2%*	✓
College Graduate	4.5%	*3.8% - 5.3%*	4.4%	*3.7% - 5.3%*	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	11.4%	*8.6% - 14.9%*	11.1%	*8.4% - 14.6%*	
Central Utah	13.3%	*9.9% - 17.5%*	14.4%	*10.8% - 19.0%*	
Davis County	8.9%	*6.9% - 11.5%*	8.7%	*6.7% - 11.3%*	✓
Salt Lake County	14.0%	*12.5% - 15.6%*	13.9%	*12.4% - 15.5%*	
San Juan*	9.7%	*5.0% - 18.1%*	8.8%	*4.8% - 15.6%*	
Southeast Utah	8.6%	*5.7% - 12.9%*	9.6%	*6.2% - 14.6%*	
Southwest Utah	16.1%	*13.0% - 19.9%*	18.8%	*15.3% - 22.8%*	!
Summit County	13.0%	*8.0% - 20.5%*	12.1%	*7.4% - 19.2%*	
Tooele County	11.2%	*7.5% - 16.2%*	10.9%	*7.4% - 15.7%*	
TriCounty	11.8%	*8.9% - 15.5%*	11.6%	*8.8% - 15.2%*	
Utah County	10.9%	*9.2% - 12.8%*	10.1%	*8.6% - 11.9%*	✓
Wasatch County	15.1%	*9.2% - 23.8%*	15.6%	*9.8% - 24.1%*	
Weber-Morgan	12.6%	*10.1% - 15.6%*	12.7%	*10.2% - 15.7%*	

† Age-adjusted using 3 age groups.

*Use caution in interpreting. The estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Cost as a Barrier to Care

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who reported they were unable to receive needed healthcare in the past year due to cost.

How Are We Doing?

The crude percentage of Utah adults who reported being unable to see a doctor in the past 12 months due to cost was 13.0% in 2018.

National Comparison

When comparing Utah with the U.S. as a whole, the age-adjusted percentage of adults who reported they were unable to get needed healthcare in the past year due to cost has been similar over the years. In 2018, this percentage was 13.5% in the U.S. compared with 12.9% in Utah.

Disparities

The percentage (crude rate) of adults unable to get care due to cost was highest for adults aged 25–34 (17.1%) and lowest for Utah adults aged 65 and older (4.1%). In 2018, Utah adults with low incomes had a higher age-adjusted rate (29.5%) of reporting cost as a barrier to health care than those with higher incomes (6.2%), as did those without health insurance (31.9%) versus the insured (9.8%) (Figure 90).

Risk Factors

Poverty and lack of health insurance are risk factors for not being able to afford medical care.

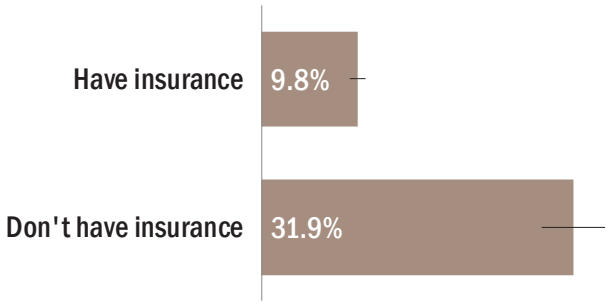
What Is Being Done?

The Utah Department of Health (UDOH) administers programs to improve access to care, such as Medicaid, Children's Health Insurance Plan (CHIP), the Utah Primary Care Network (PCN), Utah's Premium Partnership for Health Insurance (UPP), primary care grants, and clinics for children with disabilities. Local health departments provide preventive services such as immunizations and screenings at low or no cost to eligible persons who cannot afford them.

Members of the Association for Utah Community Health (AUCH), including Federally Qualified Health Centers (FQHCs) and other providers, strive to meet the needs of the medically underserved in Utah.

- 13.0% of Utah adults are unable to receive needed healthcare because of cost
- Higher for Utahns aged 18–34 and 45–54; lower for Utahns aged 55 and older
- Higher rates among females
- Disparities include people who are American Indian/Alaska (AK) Native, Black, Pacific Islander, and Hispanic
- Higher rates among lower income and education levels
- Significantly lower for Davis County and Tooele County local health districts

Figure 90: Cost as a Barrier to Care by Health Insurance Coverage (age-adjusted rates), Utahns Aged 18+, 2018



Available Services/Resources

Utah Medicaid Program
1-800-662-9651
http://www.health.utah.gov/medicaid/

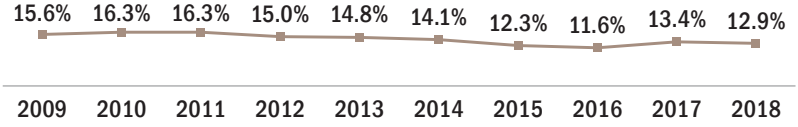
UDOH Primary Care Network (PCN)
1-888-222-2542
http://health.utah.gov/pcn/

Utah Children's Health Insurance Program (CHIP)
1-877-KIDS-NOW (1-877-543-7669)
or visit the CHIP website at
http://health.utah.gov/chip

UPP (Utah's Premium Partnership for Health Insurance)
1-888-222-2542 (M–F, 8 a.m.–5 p.m.)
http://www.health.utah.gov/upp

The AUCH is the primary care association for the state of Utah. AUCH members include

Figure 91: Percentage of Utahns 18+ With Cost as a Barrier to Care by Year, 2009–2018



Trend graph depicts age-adjusted rates.

FQHCs and other providers who strive to meet the needs of the medically underserved. The AUCH and its member organizations are part of a statewide and national movement to reduce barriers to healthcare by enhancing primary care service delivery through prevention, health promotion, and community participation.

Association for Utah Community Health
860 East 4500 South
Salt Lake City, UT 84107
(801) 974-5522
http://www.auch.org

More information on the Behavioral Risk Factor Surveillance System may be found on the website of the Centers for Disease Control and Prevention: http://www.cdc.gov/brfss/.

Map 32: Cost as a Barrier to Care by Local Health District, 2018

Map depicts age-adjusted rates.

Table 36: Cost as a Barrier to Care State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2018 and Race, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	13.0%	*12.7% - 13.2%*	13.5%	*13.2% - 13.7%*	
UTAH (27th of 51)	13.0%	*12.2% - 13.9%*	12.9%	*12.1% - 13.7%*	
AGE IN YEARS (2018)					
18–24	15.6%	*13.2% - 18.3%*	–	– –	!
25–34	17.1%	*15.1% - 19.3%*	–	– –	!
35–44	14.0%	*12.2% - 16.1%*	–	– –	
45–54	16.0%	*13.8% - 18.4%*	–	– –	!
55–64	10.4%	*8.8% - 12.3%*	–	– –	✓
65+	4.1%	*3.2% - 5.1%*	–	– –	✓
GENDER (2018)					
Male	11.2%	*10.1% - 12.3%*	11.1%	*10.1% - 12.2%*	✓
Female	14.9%	*13.7% - 16.2%*	14.6%	*13.5% - 15.9%*	!
RACE (2016–2018)†					
American Indian/AK Native	28.8%	*23.4% - 34.8%*	28.8%	*23.5% - 34.7%*	!
Asian	12.2%	*8.5% - 17.3%*	11.0%	*7.5% - 15.8%*	
Black	22.7%	*16.9% - 29.7%*	23.4%	*17.5% - 30.6%*	!
Pacific Islander	23.5%	*17.2% - 31.3%*	26.4%	*18.7% - 35.8%*	!
White	11.3%	*10.8% - 11.8%*	11.3%	*10.8% - 11.8%*	✓
ETHNICITY (2018)					
Hispanic	21.7%	*18.8% - 24.9%*	20.0%	*17.2% - 23.1%*	!
Non-Hispanic	11.7%	*10.9% - 12.6%*	11.7%	*10.9% - 12.6%*	✓
INCOME (2018)					
0–$24,999	26.9%	*24.1% - 29.9%*	29.5%	*26.5% - 32.8%*	!
$25,000–$49,999	17.2%	*15.1% - 19.5%*	18.2%	*16.0% - 20.7%*	!
$50,000–$74,999	9.8%	*8.2% - 11.7%*	9.7%	*8.1% - 11.5%*	✓
$75,000 or more	6.3%	*5.3% - 7.4%*	6.2%	*5.2% - 7.4%*	✓
EDUCATION—Adults 25+ (2018)					
Below High School	23.3%	*19.2% - 27.9%*	22.3%	*18.2% - 26.9%*	!
High School or GED	14.5%	*12.8% - 16.3%*	14.2%	*12.6% - 16.0%*	!
Some Post High School	13.7%	*12.2% - 15.4%*	13.8%	*12.3% - 15.5%*	
College Graduate	6.9%	*6.0% - 7.9%*	6.8%	*6.0% - 7.8%*	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	13.5%	*10.5% - 17.2%*	13.9%	*10.9% - 17.6%*	
Central Utah	13.3%	*9.9% - 17.7%*	14.4%	*10.7% - 19.0%*	
Davis County	9.7%	*7.7% - 12.2%*	9.5%	*7.5% - 11.9%*	✓
Salt Lake County	14.4%	*13.0% - 16.0%*	14.1%	*12.7% - 15.7%*	
San Juan	15.0%	*8.7% 24.8%*	16.8%	*9.9% 27.1%*	
Southeast Utah	16.1%	*11.2% - 22.7%*	16.0%	*11.2% - 22.2%*	
Southwest Utah	12.7%	*10.0% - 16.0%*	14.4%	*11.4% - 18.1%*	
Summit County	9.6%	*5.4% - 16.7%*	9.3%	*5.2% - 16.1%*	
Tooele County	8.2%	*5.6% - 12.0%*	8.2%	*5.6% - 11.8%*	✓
TriCounty	12.7%	*10.0% - 16.0%*	12.7%	*10.1% - 16.0%*	
Utah County	11.9%	*10.1% - 14.0%*	11.4%	*9.7% - 13.3%*	
Wasatch County	12.4%	*8.0% - 18.7%*	12.6%	*8.1% - 19.0%*	
Weber-Morgan	13.9%	*11.4% - 16.9%*	13.8%	*11.3% - 16.7%*	

† Age-adjusted using 3 age groups.

Regular Dental Care

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who reported a dental visit in the past year.

How Are We Doing?

In 2018, 72.0% of Utah adults reported visiting a dentist or dental clinic in the past year (age-adjusted rate). This is down one percentage point from 2016, but is 3.3 percentage points higher than six years ago (Figure 93).

National Comparison

Since 1999, the percentage of Utah adults who reported visiting a dentist or dental clinic in the past year has been slightly higher than reported by adults in the U.S. as a whole (72.0% vs. 66.2% in 2018).

Disparities

The percentage of adults reporting a visit gradually increased with age from 68.7% for those aged 18–34 years to 75.1% for those aged 65 and older. Males were also less likely to report having seen a dentist in the past year.

Adults who are American Indian/Alaska (AK) Native, Pacific Islander, and Hispanic were less likely to have regular dental care.

Utah adults with higher incomes (Figure 92) and more education were more likely to report a dental visit in the past year than those with lower incomes and less education.

Risk Factors

Infrequent use of dental services has been associated with poor oral health among adults. Risk factors that can necessitate more frequent dental visits include smoking and diabetes. In addition, those with periodontal disease may need more frequent visits.

"The American Dental Association encourages people to work closely with their dentists to identify any potential risk factors that would determine the need for and frequency of follow up visits to enhance the outcomes of preventive care."[1]

- 72.0% of Utah adults had a dental visit
- Males and Utahns aged 18–34 were less likely to report a dental visit
- Disparities include people who are American Indian/ Alaska (AK) Native, Pacific Islander, and Hispanic
- Higher incomes and more education were positively associated with a dental visit
- Significantly lower rates of dental visits in San Juan and TriCounty local health districts

What Is Being Done?

The Utah Department of Health Oral Health Program's current priorities include promoting fluoride and dental sealants, preventing tooth decay in young children, and encouraging annual dental visits for both children and adults.

Available Services/Resources

As of September 2019, Medicaid includes basic dental care for children, pregnant women, and blind and disabled adults. There is only emergency coverage for all other adults which includes a limited evaluation, x-rays, and tooth removal. For information call 801-538-6155 or 1-800-662-9651, or visit https://medicaid.utah.gov/.

The Children's Health Insurance Plan (CHIP) includes preventive and restorative services for children. For more in-formation call 1-877-KIDS-NOW or visit http://health.utah.gov/chip/.

Figure 92: Regular Dental Care by Income (age-adjusted rates), Utahns Aged 18+, 2018

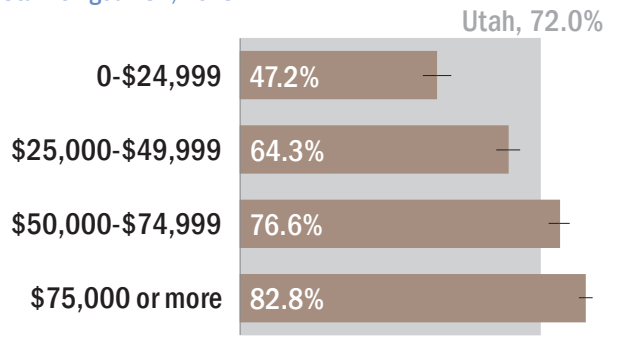
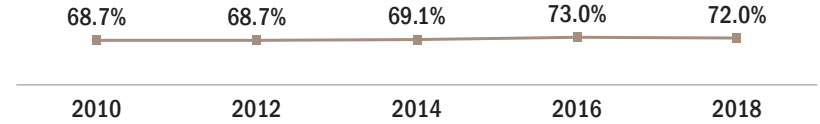


Figure 93: Percentage of Utahns Aged 18+ With Regular Dental Care by Year, 2010–2018



Trend graph depicts age-adjusted rates.

1 American Dental Association. American Dental Association Statement on Regular Dental Visits. June 10, 2013. Accessed 2/21/20 at https://www.ada.org/en/press-room/news-releases/2013-archive/june/american-dental-association-statement-on-regular-dental-visits.

Table 37: Regular Dental Care State Comparison, by Age, Gender, Race, Ethnicity, Income, Education, and Local Health District, 2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	66.5%	66.2% - 66.8%	66.2%	65.8% - 66.5%	
UTAH (7th of 51)	72.0%	70.9% - 73.1%	72.0%	70.9% - 73.1%	
AGE IN YEARS (2018)					
18–34	68.7%	66.5% - 70.7%	–	–	!
35–49	72.5%	70.3% - 74.6%	–	–	
50–64	74.1%	71.7% - 76.3%	–	–	
65+	75.1%	72.9% - 77.2%	–	–	✓
GENDER (2018)					
Male	69.3%	67.7% - 70.9%	69.3%	67.7% - 70.8%	!
Female	74.8%	73.2% - 76.3%	75.0%	73.4% - 76.5%	✓
RACE (2018)†					
American Indian/AK Native	57.6%	48.0% - 66.6%	56.9%	47.0% - 66.2%	!
Asian	66.8%	56.6% - 75.6%	67.2%	56.0% - 76.8%	
Black	65.5%	53.7% - 75.6%	66.0%	55.2% - 75.3%	
Pacific Islander	57.5%	42.3% - 71.5%	55.3%	39.6% - 70.1%	!
White	74.3%	73.2% - 75.4%	74.5%	73.3% - 75.6%	✓
ETHNICITY (2018)					
Hispanic	55.8%	51.9% - 59.6%	54.5%	50.3% - 58.8%	!
Non-Hispanic	74.4%	73.2% - 75.5%	74.4%	73.3% - 75.5%	✓
INCOME (2018)					
0–$24,999	50.6%	47.4% - 53.9%	47.2%	43.9% - 50.7%	!
$25,000–$49,999	65.6%	62.8% - 68.2%	64.3%	61.4% - 67.1%	!
$50,000–$74,999	76.3%	73.6% - 78.7%	76.6%	74.0% - 79.0%	✓
$75,000 or more	82.3%	80.6% - 83.8%	82.8%	81.1% - 84.4%	✓
EDUCATION—Adults 25+ (2018)					
Below High School	43.2%	37.8% - 48.6%	43.5%	38.3% - 49.0%	!
High School or GED	65.6%	63.1% - 68.0%	65.8%	63.4% - 68.2%	!
Some Post High School	71.9%	69.7% - 73.9%	72.0%	69.8% - 74.0%	
College Graduate	83.4%	81.9% - 84.7%	83.5%	82.1% - 84.9%	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	75.5%	71.1% - 79.4%	75.8%	71.6% - 79.6%	
Central Utah	69.0%	63.9% - 73.7%	70.0%	65.0% - 74.5%	
Davis County	77.0%	73.5% - 80.1%	77.0%	73.6% - 80.1%	✓
Salt Lake County	70.1%	68.1% - 72.1%	70.2%	68.2% - 72.1%	
San Juan	59.8%	47.7% - 70.8%	61.0%	49.9% - 71.0%	!
Southeast Utah	68.0%	61.1% - 74.2%	69.0%	62.2% - 75.1%	
Southwest Utah	68.6%	64.3% - 72.5%	68.0%	63.5% - 72.1%	
Summit County	75.2%	66.9% - 82.0%	75.3%	67.1% - 82.0%	
Tooele County	70.0%	64.1% - 75.3%	70.3%	64.6% - 75.4%	
TriCounty	67.0%	62.3% - 71.3%	66.6%	61.9% - 71.0%	!
Utah County	75.4%	72.7% - 77.9%	76.2%	73.7% - 78.5%	✓
Wasatch County	76.8%	69.1% - 83.1%	76.1%	67.9% - 82.8%	
Weber-Morgan	72.4%	68.5% - 76.0%	72.7%	68.8% - 76.3%	

† Age-adjusted using 3 age groups.

Map 33: Regular Dental Care by Local Health District, 2018

Map depicts age-adjusted rates.

Collaboration

Respect

Preventive Services

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Childhood Vaccination

National Immunization Survey

Description

This measure reports the percentage of children aged 24 months who received the recommended vaccines (4 DTaP, 3 Polio, 1 MMR, 3 HepB, 3 Hib full series, 1 Varicella, a nd 4 PCV). This recommendation is referred to in shorthand as "4:3:1:3:3:1:4."

- 72.0% of Utah children aged 24 months have recommended vaccinations
- Utah ranked 22 out of 50 states

How Are We Doing?

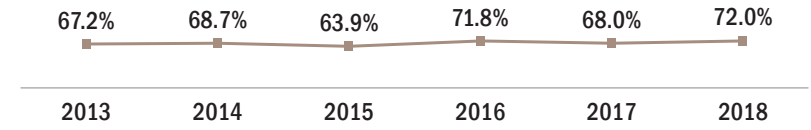
Coverage levels in Utah have increased in the past six years from 67.2% of 2-year-old children fully immunized in 2013 to 72.0% in 2018 (Figure 94).

These data typically fluctuate from year to year and it is useful to look at 5–10 year trends to gain a clear understanding of how well children are being immunized in Utah.

National Comparison

The Utah coverage rate for 4:3:1:3:3:1:4 immunization among 24-month-old children with the birth year 2016 was 72.0% while the United States coverage rate was 68.7%. Utah ranked 22 out of 50 states for this measure (Table 38).

Figure 94: Percentage of Children Fully Vaccinated in Utah by Year, 2013–2018



This data is from the National Immunization Survey (NIS). NIS reports these vaccine coverage estimates for 24-month-old children by birth year (i.e. 2018 survey data contains estimates for the 24 month old children from birth year 2016).

Table 38: Childhood Vaccination State Comparison, 2018

STATE COMPARISON (2018)	Crude (burden) Rate	95% CIs
U.S.	68.7%	*66.4% - 71.0%*
UTAH (22nd of 50)	72.0%	*62.9% - 80.4%*

This data is from the National Immunization Survey (NIS). NIS reports these vaccine coverage estimates for 24-month-old children by birth year (i.e. 2018 survey data contains estimates for the 24 month old children from birth year 2016).

Disparities

Nationally, disparities in children's immunization coverage for 4:3:1:3:3:1:4 were observed by insurance status, poverty level, urban vs. rural location, and racial/ethnic category.

Children who were uninsured or insured through Medicaid/ non-private insurance had lower immunization rates than privately insured children. Significantly lower immunization rates were observed in children living below the poverty threshold compared with children living at or above the poverty threshold. Similarly children in rural areas had significantly lower im-munization rates than those living in urban areas. Finally, when compared with children who are White, children who are Hispanic, Asian, and multiple race had similar of higher immunization rate while children who are Black and American Indian/Alaska Native (AI/AN) had lower rates.

What Is Being Done?

The Utah Department of Health (UDOH) Immunization Program conducts annual assessments of private and public healthcare providers' immunization records to obtain state immunization levels. During these site visits, Utah Immunization Program provider representatives also train clinic staff on appropriate vaccine storage, handling, and administration according to the Advisory Committee on Immunization Practices recommended practices. Utah also has immunization coalitions working to maintain or improve current levels of immunization and to increase public awareness of immunizations.

The Utah Statewide Immunization Information System (USIIS) provides a mechanism for healthcare providers to track patient immunizations and send reminder cards to Utah parents whose children are due for immunizations. USIIS also includes adult immunizations, such as pneumonia, tetanus, and influenza.

Due to the increased costs of vaccines, public health clinics are now able to provide publicly purchased vaccines only to those who meet eligibility criteria and don't have insurance coverage.

Data Interpretation Issues

The National Immunization Survey (NIS) is conducted by the Centers for Disease Control and Prevention and uses a random-digit-dialing sample of landline and cellular telephone numbers to find households throughout the U.S. with children who are or will be age 19–35 months within a few weeks of being selected to participate in the survey. Data are used to monitor vaccination coverage among 2-year-old children at the national, state, selected local levels, and in some in U.S. territories.

They ask parents or guardians to tell them the vaccines (with dates) that appear on the child's "shot card" kept in the home, and they also collect demographic and socioeconomic information. At the end of the interview, they request permission to contact the child's vaccination providers. Vaccine providers are then contacted by mail to verify each child's vaccinations.

The NIS uses a nationally representative sample and provides estimates of coverage that are weighted to represent the entire population, nationally, and by region, state, and selected large metro areas. The large sample size (approximately 15,000) allows them to stratify (i.e, subdivide) the data so they can examine vaccination rates among different groups, for instance by income level, race, education level of mothers, and other factors.

In previous years NIS Child data was reported for 19–35 month old children by survey year. However, in 2019, NIS began reporting immunization estimates based on the birth year of respondents. At the time of the change, the birth year esti-mates were made available back to birth year 2013 and are displayed in Figure 94.

Available Services/Resources

Vaccines for Children (VFC) Program: This program provides vaccines to participating providers for children birth through 18 years of age who meet at least one of the following criteria:

- Enrolled in Medicaid
- Enrolled in the Utah Children's Health Insurance Program
- Not insured—A child who has no health insurance coverage
- AI/AN—As defined by the Indian Health Care Improvement Act (25 U.S.C. 1603)
- Underinsured—A child who has commercial (private) health insurance but the coverage does not include vaccines, a child whose insurance covers only selected vaccines (VFC-eligible for non-covered vaccines only), or a child whose insurance caps vaccine coverage at a certain amount. Once that coverage amount is reached, the child is categorized as under-insured. Under-insured children are eligible to receive VFC vaccine only through a Federally-Qualified Health Center or Rural Health Clinic.

Information about VFC is available on our website at: https://immunize.utah.gov/vaccines-for-children-program/.

General information about immunizations for school-age children, adolescents, college students/missionaries, adults, and travel is available on the UDOH Immunization Program website: http://www.immunize-utah.org. For information on vaccine providers in your area, contact the Immunization Hotline at 1-800-275-0659.

Human Papillomavirus (HPV)

National Immunization Survey

Description

This measure reports the percentage of adolescents aged 13-17 years with up-to-date HPV vaccination as reported by the National Immunization Survey.

- 43.2% of Utah adolescents adequately immunized
- Utah ranks 42nd in the nation
- Nationally adolescents in rural areas are less likely to complete HPV vaccination

How Are We Doing?

The percentage of Utah adolescents with up-to-date HPV immunization has increased from 30.5% in 2016 to 43.2% in 2018 (Figure 96).

National Comparison

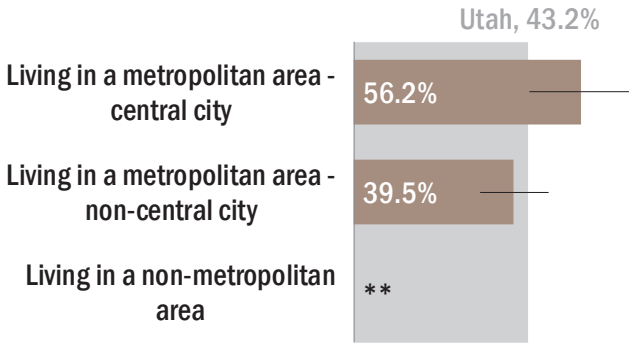
The percentage of Utah adolescents adequately immunized for HPV is lower than the national rate. The Utah rate is one of the lowest in the nation; Utah ranks 42 nationally for HPV immunization (Table 39).

Disparities

Although not statistically significant, it should be noted that the rate of male HPV vaccination falls behind female HPV vaccination each year. For Utah teens in 2016–2018, estimates for male up-to-date HPV vaccinations lagged behind female up-to-date HPV vaccination by an average of 13.5% per year.

Nationally it has been shown that children (males and females age 13–17) in rural areas have lower odds of completing HPV vaccination than children in urban areas.[1] In Utah, adolescents living in a central city had significantly higher HPV vaccination rates than the state average (Figure 95).

Figure 95: HPV Vaccination Up-to-date by Urbanicity, Utah, 2018

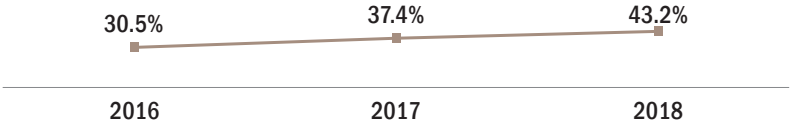


Note: Metropolitan Statistical Area (MSA) was constructed based on parent/guardian respondent-reported city, state, county, and zip code of residence using the February 2013 MSA definitions file.
** estimate not reported because data not collected or unweighted sample size for the denominator was 0.588.

Risk Factors

The primary risk factor for acquiring HPV infections is having multiple sexual partners or a sexual partner with multiple previous partners. For those with HPV infection, risk factors for HPV-related cancers include; HPV type (types 16 and 18 are most carcinogenic), weakened immune system, coinfection with other sexually transmitted diseases, and tobacco smoking.

Figure 96: Percentage of Adolescents Aged 13–17 With HPV Vaccination Up-to-date in Utah by Year, 2016–2018



What Is Being Done?

A large public media campaign to provide information about HPV vaccination and cancer prevention is ongoing in Utah. Information and media clips can be found at https://cancerutah.org/cancers/hpv.

The Intermountain West HPV Vaccination Coalition has members in 20 states and meets regularly to identify barriers to HPV vaccination, build partnerships, and discuss HPV-related policy priorities and research efforts. Information about this coalition can be found at https://healthcare.utah.edu/huntsmancancerinstitute/about-us/hpv-coalition.php.

Utah Department of Health Immunization Program participated in a statewide HPV workgroup along with Utah Area Health Education Centers, the American Cancer Society, and the Huntsman Cancer Institute with the primary goal of educating physicians on HPV vaccination and associated disease.

Data Interpretation Issues

Vaccination coverage estimates include only adolescents who had adequately provider-reported immunization records.

1 Swiecki-Sikora, A.L., Henry, K.A., & Kepka, D., (2019). HPV Vaccination Coverage Among US Teens Across the Rural-Urban Continuum. *J Rural Health 35*, 506–517.

Starting in 2016, HPV vaccination was reported for males and females combined and separately. An up-to-date HPV vaccination measure was added to assess completion of the HPV vaccine series two-doses separated by five months (minus four days) for immunocompetent adolescents initiating the HPV vaccine series before their 15th birthday and three doses for all others).

The Advisory Committee on Immunization Practices vaccine recommendations and guidelines may be found at: https://www.cdc.gov/vaccines/hcp/acip-rec/vacc-specific/hpv.html.

Available Services/Resources

HPV vaccine is often covered by medical insurance. For patients who need assistance paying for HPV vaccine, the Vaccines for Children (VFC) program may be able to help. Information on the VFC program can be found at https://immunize.utah.gov/vaccines-for-children-program/.

Table 39: HPV Vaccination State Comparison, by Gender, Race/ethnicity, Poverty, and Urbanicity, 2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	
U.S.	51.1%	*49.8% - 52.5%*	
UTAH (42nd of 51)	43.2%	*36.4% - 50.2%*	
GENDER (2018)			
Male	38.1%	*29.2% - 47.9%*	
Female	48.6%	*38.7% - 58.7%*	
RACE/ETHNICITY (2018)			
Hispanic^	57.9%	*40.1% - 73.8%*	
White, Non-Hispanic	37.3%	*30.1% - 45.0%*	
POVERTY (2018)			
Below Poverty	49.6%	*29.4% - 70.0%*	
At or Above Poverty	41.8%	*34.6% - 49.3%*	
URBANICITY (2018)†			
Living in a metropolitan area - central city	56.2%	*43.5% - 68.2%*	✓
Living in a metropolitan area - non-central city	39.5%	*31.3% - 48.3%*	
Living in a non-metropolitan area	**		

^ Adolescents of Hispanic ethnicity may be of any race.

† Metropolitan Statistical Area (MSA) was constructed based on parent/guardian respondent-reported city, state, county, and zip code of residence using the February 2013 MSA definitions file.

** estimate not reported because data not collected or unweighted sample size for the denominator was 0.588.

Patients who do not qualify for the VFC program may be able to get help through the Merck Helps program. Information on this program can be found at: https://www.merckhelps.com/gardasil%209.

Additional information about HPV vaccination and HPV infections can be found at: https://www.chop.edu/centers-programs/vaccine-education-center/vaccine-details/human-papillomavirus and

https://www.cdc.gov/hpv/parents/about-hpv.html.

Influenza Vaccination

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of adults aged 18 years and older who reported receiving an influenza vaccination in the past 12 months.

How Are We Doing?

Between 2011–2017 the age-adjusted rate fluctuated between 36.9% and 40.2% and then dropped in 2018 to 32.9%. The data can fluctuate year to year, and it will be useful to look at the data in the future to see which way the trend goes (Figure 98).

National Comparison

In Utah, 32.9% of adults surveyed on the Behavioral Risk Factor Surveillance System (BRFSS) in 2018 reported receiving a flu shot in the previous 12 months. Nationwide for the same age group, the rate was 31.8% (age-adjusted rates).

Disparities

Males and younger adults (aged 18–49) were less likely to report influenza vaccination than older adults (aged 50+) (Figure 97).

Utahns identifying as American Indian/Alaska (AK) Native were less likely to report influenza vaccination than the overall state.

Adults in households with annual incomes less than $50,000 reported lower rates of influenza vaccination than the overall state.

Several local health districts (LHDs) had lower rates of influenza immunization than the state (Map 34).

Risk Factors

Risk factors for serious complications of influenza include:[1]

- Children younger than age five, but especially younger than age two
- Adults 65 years of age and older
- Pregnant women (and women up to two weeks postpartum)
- Residents of nursing homes and other long-term health facilities
- People who are American Indian and Alaska Natives
- People who have chronic medical conditions including:
  - Asthma
  - Neurological and neurodevelopment conditions
  - Chronic lung disease
  - Heart disease
  - Blood disorders
  - Endocrine disorders
  - Liver disorders
  - Metabolic disorders
  - Weakened immune system due to disease or medication
  - People younger than 19 years of age who are taking aspirin or salicylate-containing medications
  - People with extreme obesity (body mass index of 40 or greater)

- Fewer than one third of Utah adults reported influenza immunization
- Significantly lower rates for ages 18–49
- Lower for males, who are American Indian/Alaska Native (AK), and those with household incomes less than $50,000
- Adults with high school as the highest level of educational attainment had a significantly lower ate; college graduates had the highest rate
- Significantly lower for Central, Southwest, TriCounty, and Wasatch LHDs

Figure 97: Influenza Vaccination by Age, Utah, 2018

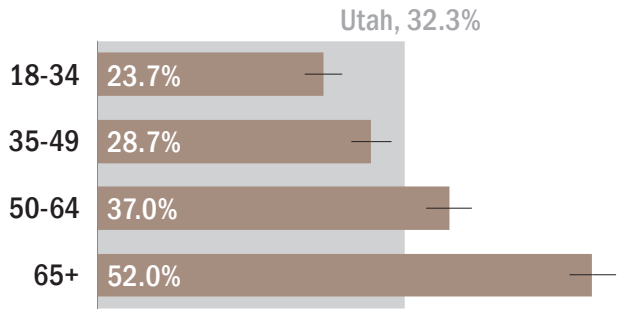
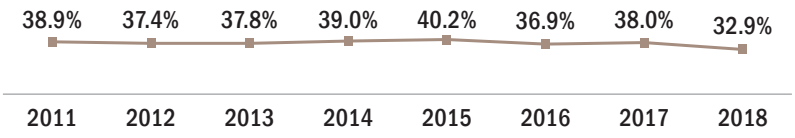


Figure 98: Percentage of Adults Receiving Influenza Vaccination in Past 12 Months in Utah by Year, 2011–2018



Trend graph depicts age-adjusted rates.

1 Centers for Disease Control and Prevention. Are you at High Risk for Serious Illness from Flu. Accessed 2/24/2020 from: https://www.cdc.gov/features/fluhighrisk/index.html.

What Is Being Done?

The Utah Department of health Immunization Program and Office of Epidemiology educate healthcare providers, clinic staff, and the public about prevention methods and support investigation of outbreaks.

Data Interpretation Issues

Adult data for Utah and U.S. is also available from the FluVaxView Influenza Vaccination Coverage web page, which is estimated annually by Centers for Disease Control and Prevention (CDC) utilizing data from several nationally representative surveys. These surveys include the National Health Interview Survey, the BRFSS, the National Immunization Survey, and in 2009–10, the National 2009 H1N1 Flu Survey. For the 2010–11 influenza season, additional assessment systems were developed to provide timely coverage estimates for selected populations. These include: rapid household telephone and cell phone surveys conducted nationally and in 20 selected local areas, internet panel surveys of pregnant women and health care workers, and use of third-party medical claims data.

Map 34: Influenza Vaccination by Local Health District, 2018

Map depicts age-adjusted rates.

Table 40: Adult Influenza Vaccination State Comparison, by Age, Gender, Race, Ethnicity, Income, Education, and Local Health District, 2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	33.3%	33.0% - 33.6%	31.8%	31.5% - 32.1%	
UTAH (28th of 51)	32.3%	31.2% - 33.5%	32.9%	31.8% - 34.0%	
AGE IN YEARS (2018)					
18–34	23.7%	21.8% - 25.7%	–	–	!
35–49	28.7%	26.7% - 30.9%	–	–	!
50–64	37.0%	34.6% - 39.4%	–	–	✓
65+	52.0%	49.6% - 54.5%	–	–	✓
GENDER (2018)					
Male	30.3%	28.8% - 31.9%	31.4%	29.9% - 32.9%	!
Female	34.3%	32.7% - 36.0%	34.5%	32.9% - 36.1%	
RACE (2018)†					
American Indian/AK Native	22.4%	15.8% - 30.6%	22.7%	16.9% - 29.8%	!
Asian	34.4%	25.4% - 44.6%	35.2%	26.2% - 45.3%	
Black	25.1%	16.4% - 36.3%	32.0%	22.3% - 43.5%	
Pacific Islander	24.6%	13.8% - 39.8%	28.5%	16.4% - 44.7%	
White	33.1%	31.9% - 34.3%	33.3%	32.1% - 34.5%	
ETHNICITY (2018)					
Hispanic	28.2%	24.8% - 31.9%	31.7%	27.8% - 35.9%	
Non-Hispanic	33.0%	31.8% - 34.2%	33.2%	32.0% - 34.4%	
INCOME (2018)					
0–$24,999	28.2%	25.3% - 31.2%	28.7%	25.6% - 31.9%	!
$25,000–$49,999	30.8%	28.3% - 33.4%	29.1%	26.6% - 31.6%	!
$50,000–$74,999	32.0%	29.3% - 34.8%	32.8%	30.2% - 35.5%	
$75,000 or more	36.6%	34.7% - 38.5%	37.2%	35.3% - 39.3%	✓
EDUCATION—Adults 25+ (2018)					
Below High School	28.2%	23.5% - 33.6%	30.9%	26.2% - 36.0%	
High School or GED	26.9%	24.7% - 29.3%	27.4%	25.2% - 29.7%	!
Some Post High School	32.5%	30.4% - 34.6%	32.3%	30.2% - 34.4%	✓
College Graduate	42.3%	40.5% - 44.2%	42.5%	40.7% - 44.3%	✓
LOCAL HEALTH DISTRICT (2018)					
Bear River	30.6%	26.5% - 35.0%	31.5%	27.6% - 35.7%	
Central Utah	28.8%	24.4% - 33.5%	27.6%	23.6% - 32.2%	!
Davis County	36.9%	33.3% - 40.6%	37.5%	34.0% - 41.1%	✓
Salt Lake County	34.6%	32.6% - 36.7%	35.2%	33.2% - 37.2%	✓
San Juan	26.1%	17.5% - 37.1%	28.0%	19.3% - 38.7%	
Southeast Utah	36.2%	29.5% - 43.4%	34.4%	28.2% - 41.1%	
Southwest Utah	26.3%	22.9% - 30.1%	23.8%	20.4% - 27.6%	!
Summit County	39.7%	31.8% - 48.2%	39.4%	31.6% - 47.7%	
Tooele County	28.6%	23.7% - 34.2%	30.0%	25.2% - 35.4%	
TriCounty	26.2%	22.1% - 30.7%	25.5%	21.6% - 29.9%	!
Utah County	30.1%	27.5% - 32.8%	32.0%	29.5% - 34.6%	
Wasatch County	27.0%	19.5% - 36.1%	24.4%	17.7% - 32.5%	!
Weber-Morgan	33.3%	29.5% - 37.3%	33.6%	30.0% - 37.5%	

† Age-adjusted using 3 age groups.

Available Services/Resources

Available services for influenza include:

- All influenza and pneumococcal vaccinations are covered for seniors with Medicare Part B
- Low-income and/or homeless adults can be immunized for a reduced fee based on income level at many Community Health Clinics
- Adults who are not U.S. citizens may also receive lower cost immunizations based on their income level at many Community Health Clinics
- Drive-through clinics are offered by some providers throughout the state for persons with limited physical mobility
- Immunizations can also be given to the home-bound through many private providers and county services

Call the Immunization Hotline at 1-800-275-0659 for a list of Community Health Clinics, Local Health Departments, Aging Services, and other providers who can assist you. Additionally, information about influenza and pneumococcal vaccinations can be found on the Utah Immunization Program website at: http://www.immunize-utah.org.

More information on the BRFSS may be found on CDC's website —http://www.cdc.gov/brfss/.

To find clinics that provide flu vaccine in your community, please utilize the HealthMap Vaccine Finder at: https://vaccinefinder.org/.

HIV Testing

Behavioral Risk Factor Surveillance System

Description

This measure reports the percentage of Utah's adult population who have been tested for HIV.

How Are We Doing?

The percentage of adults in Utah who have been tested for HIV has trended down over the past decade. In 2009, 29.7% of adults were tested, but in 2018 only 22.9% were tested (Figure 100).

National Comparison

Only 22.9% of adults in Utah have been tested for HIV, compared to 42.1% nationally (age-adjusted rates). Of 51 states/territories, Utah is 51 in HIV testing.

Disparities

Differences in race are where we see the largest disparities. Adults who are Asian (15.1%) had the lowest rate of being tested. Adults who are Black (45.4%) and American Indian/Alaska (AK) Native (39.2%) were much more likely were much more likely to be tested (Figure 99). Income, education, gen-der, and poverty did not have widely different rates of testing.

Risk Factors

Males who are White have the highest rates of HIV in Utah compared with other races and genders, but adult White males are not getting tested more regularly than the rest of the population.

What Is Being Done?

There are several low cost testing sites located throughout the state. Because Utah is 51 (out of 51) in the country, more needs to be done in this area.

Available Services/Resources

Bureau of Epidemiology:
Prevention, Treatment & Care Program Program, counseling and testing, drug assistance, health insurance, and supportive services
288 North 1460 West, SLC, UT 84114-2104
Phone: (801) 538-6191
Fax: (801) 538-9913
http://www.health.utah.gov/epi

Bureau of Epidemiology, HIV/AIDS
http://health.utah.gov/epi/diseases/hivaids/

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
http://www.cdc.gov/nchhstp/

AIDSinfo - Information on AIDS Treatment, Prevention and Research
http://www.aidsinfo.nih.gov

Find HIV Testing Locations Near You
https://gettested.cdc.gov/

amfAR - The Foundation for AIDS Research
http://www.amfar.org

- The rate of people being tested for HIV is declining; Utah has the lowest rate of testing in the nation
- Adults aged 65+ less likely to report being tested for HIV
- People who are Asian significantly less likely to report HIV testing Significantly lower rates in Bear River, Central Utah, and Utah County local health districts

Figure 99: HIV Testing by Race (age-adjusted rates), Utah, 2017–2018

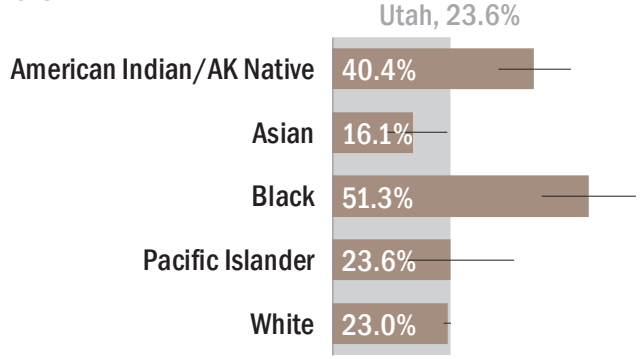
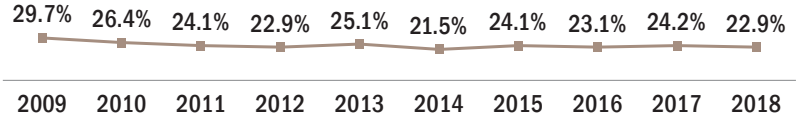


Figure 100: Percentage of Adults Reporting Ever Being Tested for HIV in Utah by Year, 2009–2018



Trend graph depicts age-adjusted rates.

The Complete HIV/AIDS Resource - TheBody.com
http://www.thebody.com

Planned Parenthood
http://www.plannedparenthood.org

Utah AIDS Foundation
http://www.utahaids.org

Table 41: Adult HIV Testing State Comparison, by Age, Gender, Ethnicity, Income, Education, and Local Health District, 2018 and by Race, 2017–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	40.0%	*39.7% - 40.4%*	42.1%	*41.7% - 42.4%*	
UTAH (51st of 51)	22.5%	*21.4% - 23.5%*	22.9%	*21.8% - 23.9%*	
AGE IN YEARS (2018)					
18–34	22.7%	*20.9% - 24.7%*	–	–	–
35–49	31.0%	*28.9% - 33.3%*	–	–	– ✓
50–64	20.9%	*18.9% - 23.1%*	–	–	–
65+	10.2%	*8.7% - 11.9%*	–	–	– !
GENDER (2018)					
Male	22.6%	*21.1% - 24.1%*	22.8%	*21.4% - 24.3%*	
Female	22.4%	*20.9% - 23.9%*	23.0%	*21.6% - 24.5%*	
RACE (2017–2018)†					
American Indian/AK Native	39.2%	*32.2% - 46.8%*	40.4%	*33.3% - 47.8%*	✓
Asian	15.1%	*10.4% - 21.5%*	16.1%	*10.9% - 23.0%*	!
Black	45.4%	*36.2% - 55.0%*	51.3%	*41.9% - 60.7%*	✓
Pacific Islander	24.0%	*15.0% - 36.1%*	23.6%	*14.3% - 36.3%*	
White	22.5%	*21.7% - 23.3%*	23.0%	*22.2% - 23.8%*	
ETHNICITY (2018)					
Hispanic	25.4%	*22.2% - 28.9%*	23.5%	*20.3% - 27.1%*	
Non-Hispanic	22.0%	*20.9% - 23.1%*	22.7%	*21.7% - 23.9%*	
INCOME (2018)					
0–$24,999	25.1%	*22.3% - 28.2%*	27.3%	*24.3% - 30.6%*	✓
$25,000–$49,999	23.2%	*20.8% - 25.8%*	24.5%	*21.9% - 27.2%*	
$50,000–$74,999	25.1%	*22.5% - 27.9%*	24.7%	*22.2% - 27.3%*	
$75,000 or more	23.2%	*21.5% - 25.0%*	21.9%	*20.3% - 23.7%*	
EDUCATION—Adults 25+ (2018)					
Below High School	22.5%	*18.2% - 27.6%*	20.0%	*16.2% - 24.4%*	
High School or GED	23.2%	*20.9% - 25.5%*	23.1%	*20.9% - 25.5%*	
Some Post High School	26.2%	*24.1% - 28.4%*	26.7%	*24.6% - 28.9%*	✓
College Graduate	23.3%	*21.7% - 25.0%*	23.2%	*21.6% - 24.9%*	
LOCAL HEALTH DISTRICT (2018)					
Bear River	16.0%	*12.7% - 19.9%*	16.9%	*13.6% - 20.9%*	!
Central Utah	16.5%	*12.9% - 20.8%*	17.6%	*13.8% - 22.2%*	!
Davis County	21.8%	*18.8% - 25.2%*	21.8%	*18.9% - 25.1%*	
Salt Lake County	26.8%	*24.9% - 28.8%*	26.5%	*24.7% - 28.5%*	✓
San Juan	29.2%	*19.1% - 41.8%*	32.0%	*24.2% - 40.9%*	✓
Southeast Utah	26.4%	*19.5% - 34.7%*	28.4%	*21.9% - 35.9%*	!
Southwest Utah	19.4%	*16.2% - 23.1%*	21.9%	*18.4% - 25.9%*	
Summit County	22.8%	*16.2% - 31.1%*	23.4%	*17.0% - 31.2%*	
Tooele County	20.6%	*16.1% - 25.9%*	20.2%	*15.9% - 25.3%*	
TriCounty	26.1%	*22.0% - 30.7%*	27.1%	*22.9% - 31.8%*	
Utah County	15.8%	*13.7% - 18.0%*	15.9%	*14.0% - 18.1%*	!
Wasatch County	25.8%	*17.7% - 36.0%*	25.6%	*17.9% - 35.1%*	
Weber-Morgan	25.4%	*21.8% - 29.4%*	25.1%	*21.6% - 29.0%*	

† Age-adjusted using 3 age groups.

Map 35: HIV Testing by Local Health District, 2018

Map depicts age-adjusted rates.

Collaboration

Respect

Maternal and Child Health

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Adolescent Births

Utah Birth Certificate Database

Description

The adolescent birth rate is reported as the number of live births per 1,000 adolescent females aged 15–19.

- 13.1 births per 1,000 adolescent females
- Significantly higher rates for girls who are American Indian/Alaska (AK) Native, Black and Hispanic
- Higher rates in Salt Lake County, Southwest, TriCounty, and Weber-Morgan LHDs

How Are We Doing?

The teen birth rates per 1,000 females aged 15–19 in Utah for the past five years (Figure 103) were:
2014: 19.6
2015: 17.9
2016: 15.7
2017: 15.1
2018: 13.1

According to the 2016 Pregnancy Risk Assessment Monitoring Survey data, 45% of Utah teen mothers (aged 15–19) reported their pregnancies as mistimed or unwanted. Another 25% reported they were unsure whether or not they wanted to be pregnant.

National Comparison

The adolescent birth rate in Utah has been lower than the U.S. overall rate over the past decade, but is higher than several other states. Utah and U.S. adolescent birth rates per 1,000 females aged 15–19 for the past five years were:
2014: Utah 19.6/U.S. 24.2
2015: Utah 17.9/U.S. 22.3
2016: Utah 15.7/U.S. 20.3
2017: Utah 15.1/U.S. 18.8
2018: Utah 13.1/U.S. 17.4

Disparities

The adolescent birth rate was higher among girls who were American Indian/Alaska (AK) Native (22.8) or Black (24.6) in Utah (Figure 101). Girls who were Hispanic also had a significantly higher rate of adolescent births (32.6, Figure 102).

Among local health districts (LHDs) in Utah, adolescent birth rates were higher in Salt Lake County, Southwest, TriCounty, and Weber-Morgan during 2018 (Map 36).

Risk Factors

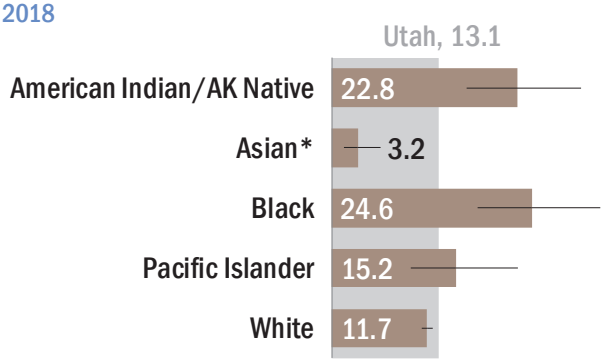
Experiencing birth during adolescence can increase a teen's risk of acquiring a sexually-transmitted infection as well as seriously hinder future financial stability due to limited educational attainment.

What Is Being Done?

Teen Pregnancy Prevention Programs:

The Utah Department of Health (UDOH) receives federal funding from the U.S. Department of Health and Human Services Administration for Children and Families, Family & Youth Services Bureau to provide two programs addressing teen pregnancy prevention in Utah.

Figure 101: Adolescent Births per 1,000 Females by Race, Utah, 2018



*Use caution in interpreting; the estimates have a relative standard error greater than 30% and do not meet UDOH standards for reliability.

Figure 102: Adolescent Births per 10,000 Females by Ethnicity, Utah, 2018

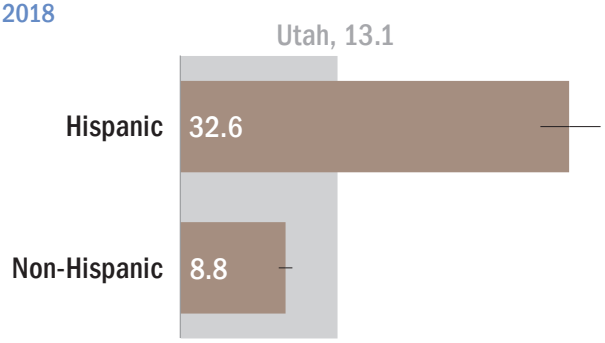
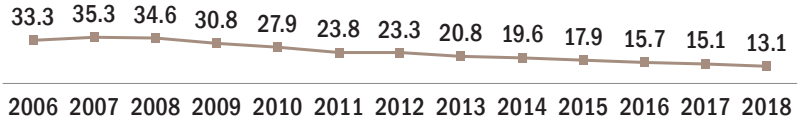


Figure 103: Adolescent Births per 1,000 Females by Year, Utah, 2006–2018



The first program is Sexual Risk Avoidance Education (SRAE). Funds for this program must be used to implement evidence-based programs that teach participants to voluntarily refrain from sexual activity; normalize the optimal health behavior of avoiding non-marital sexual activity; and address the social, psychological, and health gains to be realized by refraining from sexual activity and engaging in healthy relationships.

SRAE targets youth ages 10–19 and/or their parents, with a specific focus on youth in the Utah juvenile justice and foster care systems; youth who are Hispanic, Black/African American, Pacific Islander, or American Indian; and youth residing in rural areas or other disadvantaged geographical areas with teen birth rates higher than the Utah average.

The second program is the Personal Responsibility Education Program (PREP). These funds must be used for evidence-based interventions designed to educate adolescents on both abstinence and contraception to prevent pregnancy and sexually transmitted infections, including HIV/AIDS, and at least three adulthood preparation subjects (healthy relationships, education and career success, healthy life skills, adolescent development, financial literacy, and parent-child communication).

The target population for PREP in Utah is youth ages 14–19, and their parents, with a specific focus on youth in the Utah juvenile justice and foster care systems; pregnant and parenting teens; youth who are Hispanic, Black/African American, Pacific Islander, or American Indian origin; and youth residing in rural areas or other disadvantaged geographical areas with teen birth rates higher than the Utah average.

The Utah Department of Health sub-contracts these federal funds to local health departments, community agencies, and tribal entities or governments.

For more information or questions regarding the two programs mentioned above, contact Elizabeth Gerke at 801-273-2870 or egerke@utah.gov.

Map 36: Adolescent Births per 1,000 Females by Local Health District, 2018

Note: Local health district represents district of mother's residence.

Table 42: Adolescent Births per 1,000 Females State Comparison, by Age, Race, Ethnicity, Poverty Level, Education, and Local Health District, 2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	
U.S.	17.4		
UTAH (12th of 51)	13.1	*12.5 - 13.8*	
AGE IN YEARS (2018)			
10–14*	0.1	*0.0 - 0.1*	✓
15–17	4.9	*4.4 - 5.4*	✓
18–19	26.2	*24.7 - 27.7*	!
RACE (2018)			
American Indian/AK Native	22.8	*16.6 - 30.7*	!
Asian*	3.2	*1.5 - 6.0*	✓
Black	24.6	*17.9 - 33.0*	!
Pacific Islander	15.2	*9.7 - 22.9*	
White	11.7	*11.1 - 12.4*	✓
ETHNICITY (2018)			
Hispanic	32.6	*30.2 - 35.1*	!
Non-Hispanic	8.8	*8.2 - 9.4*	✓
LOCAL HEALTH DISTRICT (2018)^			
Bear River	8.2	*6.4 - 10.4*	✓
Central	13.8	*10.2 - 18.2*	
Davis County	10.3	*8.6 - 12.2*	✓
Salt Lake County	16.2	*15.0 - 17.5*	!
San Juan	21.4	*11.7 - 35.9*	
Southeast	12.2	*7.1 - 19.6*	
Southwest	16.5	*14.0 - 19.4*	!
Summit*	4.9	*2.0 - 10.0*	✓
Tooele	16.1	*11.8 - 21.6*	
TriCounty	30.0	*23.0 - 38.5*	!
Utah County	7.8	*6.9 - 8.9*	✓
Wasatch	13.6	*7.9 - 21.7*	
Weber-Morgan	17.9	*15.3 - 20.8*	!

*Use caution in interpreting; the estimates have a relative standard error greater than 30% and do not meet UDOH standards for reliability.
^ Local health district represents district of mother's residence.

Evidence-based Practices

The Utah teen pregnancy prevention programs utilize the following evidence-based interventions:

- All4You
- Be Proud, Be Responsible
- Choosing the Best
- Families Talking Together
- Get Real
- Love Notes
- Making A Difference
- Making Proud Choices
- Teen Outreach Program

Data Interpretation Issues

The adolescent birth rate does not include abortions or miscarriages, and is an underestimate of the adolescent pregnancy rate.

Available Services/Resources

Youth development programs, support groups for teen parents, resources for health teachers, and/or classes for youth and parents are available in local areas across the state.

For more information, contact Elizabeth Gerke at egerke@utah.gov or 801-273-2870.

UDOH Maternal and Infant Health Program
http://health.utah.gov/mihp/

Power to Decide: The Campaign to Prevent Unplanned Pregnancy
https://powertodecide.org/news/we-are-power-decide

Center for Disease Control and Prevention, Division of Adolescent and School Health
http://www.cdc.gov/healthyyouth/

U.S. Department of Health & Human Services, Administration for Children & Families, Family and Youth Services Bureau
https://www.acf.hhs.gov/fysb

Developmental Screening

National Survey of Children's Health

Description

This measure reports the percentage of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year.

The American Academy of Pediatrics (AAP) recommends all children should be screened for developmental delays during their regular well-check visits at 9, 18, and 2 4 or 30 months.

- Utah ranks 32nd in the nation with a rate of 32.6% children receiving a developmental screening
- No statistical significant disparities were noted in the data by gender, education, or poverty

How Are We Doing?

Approximately one third of Utah children aged 9 through 35 months received a developmental screening during 2016–2017.

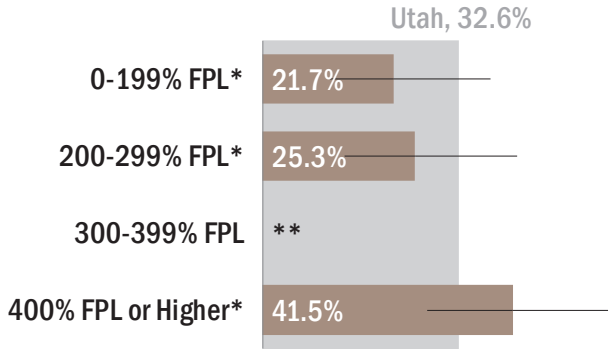
National Comparison

Utah ranks 32 in the nation on this measure with a rate of 32.6% of children aged 9–35 months receiving a developmental screening during 2016–2017.

Disparities

No statistical significant disparities were noted in the data by gender, education, or poverty. However, the percentage of children screened seemed to increase as poverty level decreased (Figure 104).

Figure 104: Developmental Screening by Poverty, Utah, 2016–2017



* Please interpret with caution: estimate has a 95% confidence interval width exceeding 20 percentage points or 1.2 times the estimate and may not be reliable.
** The total number of respondents to this measure (unweighted denominator) is fewer than 30, which does not meet MCHB data display criteria.
Note: The estimates were calculated using the first implicate from the six that were calculated by Census. The estimates and confidence intervals based on single imputation will differ from those calculated using multiple imputations.

Risk Factors

Pediatricians do not always complete developmental screenings because of lack of time, limitations of insurance reimbursement, limited knowledge with screening tools, screenings not compatible with existing electronic medical record systems, and cost to patients.

What Is Being Done?

The Utah Department of Health (UDOH) Developmental Screening Tool Survey was developed by the Bureau of Children with Special Health Care Needs and the Data Resources Program within the Bureau of Maternal and Child Health in 2013. The survey was given to pediatricians in Utah belonging to the AAP to improve usage of standardized screening tools and address barriers for pediatricians not using them.

Figure 105: Percentage of Children With Developmental Screening in Utah by Year, 2016–2017 through 2017–2018

* Please interpret with caution: estimate has a 95% confidence interval width exceeding 20 percentage points or 1.2 times the estimate and may not be reliable.
Note: The 2016 National Survey of Children's Health (NSCH) data cannot be compared to prior NSCH data due to significant changes in the survey design and operation.

The UDOH Early Childhood Utah program focuses on improving childhood development by building early detection programs that establish periodic developmental and behavioral screenings for all children. Screening efforts have improved using the Ages andStages Questionnaire (ASQ). ASQ screening focuses on child care, home visiting, community involvement, targeted case manager providers, and availability of web-based screening. Screening completed and scored before a healthcare visit improves parent-clinician communication. All children should be evaluated for developmental milestones to better prepare for school and identify potential concerns earlier, saving time and resources, helping children reach their learning and development potential.

Data Interpretation Issues

This measure uses age-appropriate questions to verify whether young children received standardized developmental, behavioral and social screening using a parent-reported, standardized screening tool or instrument. Parent respondents for all children between 9 months and 5 years old were asked the following question: "During the past 12 months, did a doctor or other health care provider have you or another caregiver fill out a questionnaire about specific concerns or observations you may have about this child's development, communication, or social behaviors?" (K6Q12). If the response to K6Q12 was "Yes", parents were asked if the questionnaire covered language or social development (K6Q13 and K6Q13A, respectively, for ages 9–23 months, and K6Q14A and K6Q14B for ages 2–5 years). The measure is considered missing if both types of contents are missing.

Due to changes in the administration and sampling for the National Survey of Children's Health, results from surveys prior to 2016 are not directly comparable and should not be used to conduct trend analyses.

Available Services/Resources

Baby Watch Early Intervention
http://www.utahbabywatch.org/

Table 43: Developmental Screening State Comparison, by Gender, Poverty, and Education, 2016–2017

	Crude (burden)	
STATE COMPARISON (2016–2017)	**Rate**	**95% CIs**
U.S.	31.1%	*28.9% - 33.4%*
UTAH (26th of 51)	32.6%	*24.7% - 41.7%*
GENDER (2016–2017)^		
Male*	29.7%	*19.6% - 42.2%*
Female*	35.5%	*24.0% - 48.9%*
POVERTY (2016–2017)^^		
0–199% FPL*	21.7%	*11.2% - 37.9%*
200–299% FPL*	25.3%	*13.6% - 42.2%*
300–399% FPL	**	
400% FPL or Higher*	41.5%	*27.3% - 57.3%*
HIGHEST EDUCATION OF ADULT IN HOUSEHOLD (2016–2017)		
Less than High School	**	
High School Graduate or GED	**	
Some College or Tech School*	19.2%	*8.5% - 37.7%*
College Degree or Higher*	40.5%	*30.0% - 52.0%*

* Please interpret with caution: estimate has a 95% confidence interval width exceeding 20 percentage points or 1.2 times the estimate and may not be reliable.

** The total number of respondents to this measure (unweighted denominator) is less than 30, which does not meet MCHB data display criteria.

^ Missing values were imputed separately in each individual year. The estimates were calculated using a single imputation.

^^ The estimates were calculated using the first implicate from the six that were calculated by Census. The estimates and confidence intervals based on single imputation will differ from those calculated using multiple imputations.

The majority of measures have missing values less than 2% (unweighted). This measure has >=2% of missing cases.

Percentages and population estimates are weighted to represent child population in U.S.

Low Birth Weight

Utah Birth Certificate Database

Description

The number of live births under 2,500 grams (5 pounds, 8 ounces) divided by the total number of live births over the same time period.

- 7.2% of infants were low birth weight
- Utah has the 12th lowest rate in the nation
- Disparities include women who were Black, Asian, or Hispanic and women with a high school education or less
- Significantly higher rates for Salt Lake County, Southeast Utah, Summit County, and TriCounty local health districts

How Are We Doing?

The Utah low birth weight percentage has increased over the last decade from 6.7% in 2007 to 7.2% in 2018 (Figure X). The Utah 2018 rate is below the Healthy People 2020 Objective target (7.8%) and has been consistent at 7.2% from 2016 to 2018.

National Comparison

Nationally, the percentage of low birth weight births has remained essentially unchanged at around 8.2% since 2007. The Utah low birth weight rate is lower than the national rate.

Disparities

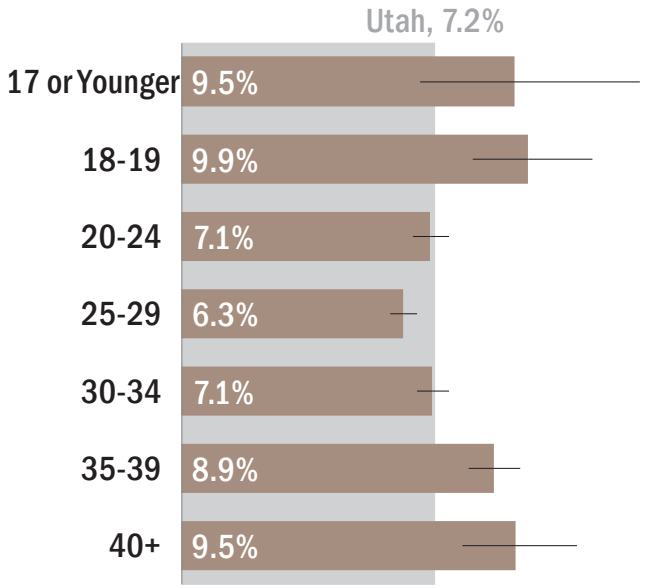
Women 19 years and younger and women 35 years and older had the highest rates of low birth weight babies (Figure 106). Women who are Hispanic were more likely to have low birth weight babies than women who are non-Hispanic. Women who are Black and Asian has significantly higher rates of low birth weight babies than the state rate. Women with a high school degree or less were also more likely to have low birth weight babies than women who had at least some college or other post-high school degrees (Table 44).

Risk Factors

Data show the following risk factors contribute to having a low birth weight infant:

- Preterm births
- Multiple gestation (e.g., twins)
- A pre-pregnancy body mass index of underweight or obese
- Inadequate weight gain during pregnancy
- Tobacco use during pregnancy

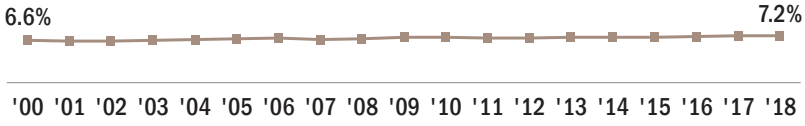
Figure 106: Low Birth Weight by Mother's Age, Utah, 2018



What Is Being Done?

In an effort to reduce the low birth weight rate, emphasis has been placed on promoting preconception health to encourage women to be at optimal health at the time of conception as chronic health conditions, physical, emotional, and behavioral health issues can have a strong impact on the developing fetus. Chronic maternal disease such as hypertension and diabetes should be diagnosed and optimally managed prior to conception. In addition, work is ongoing to promote optimal weight in women of reproductive age prior to pregnancy as both maternal underweight and obesity are associated with low birth weight infants. Efforts are also underway to promote optimal pregnancy spacing as short interpregnancy intervals (<18 months) associated with low birth weight infants. Programs to reduce tobacco use during pregnancy have been developed and are being implemented in many local health departments. The Utah Department of Health has implemented the "Power Your Life" campaign to educate women of reproductive age about the importance of

Figure 107: Low Birth Weight Rate in Utah by Year, 2000–2018



being healthy prior to pregnancy to improve outcomes. The centerpiece of the campaign is the Power Your Life website at https://mihp.utah.gov/power-your-life.

Women are also encouraged to seek early and continuous care throughout their pregnancies and to achieve an adequate weight gain during pregnancy. All women should receive a thorough formal risk assessment at their initial prenatal visit, with updates throughout pregnancy to identify risk factors for low birth weight and develop appropriate interventions, if needed. Additionally, all women should be educated regarding the danger signs of pregnancy and the importance of fetal kick counts to facilitate early recognition of problems to permit earlier intervention, thereby improving pregnancy outcomes. Standards for assisted reproductive technology should be adhered to in order to reduce the frequency of higher order multiple pregnancies and to assure optimal outcomes. Women should be at optimal health and be low risk before undergoing infertility treatment. Pregnant women also need appropriate referrals to services such as Women, Infants, and Children (WIC) and nutritional and psychosocial counseling for at risk women.

Available Services/Resources

Power Your Life: http://www.poweryourlife.org
Public education about how to be at optimal health prior to pregnancy.

Map 37: Low Birth Weight by Local Health District, 2016–2018

Note: Local health district represents district of mother's residence.

Table 44: Low Birth Weight State Comparison, by Mother's Age, Mother's Race, Mother's Hispanic Origin, and Mother's Education, 2018 and Local Health District, 2016–2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	
U.S.	8.3%		
UTAH (12th of 50)	7.2%	7.0% - 7.5%	
MOTHER'S AGE (2018)			
17 or Under	9.5%	6.8% - 13.0%	
18-19	9.9%	8.3% - 11.7%	!
20-24	7.1%	6.6% - 7.6%	
25-29	6.3%	5.9% - 6.7%	✓
30-34	7.1%	6.7% - 7.6%	
35-39	8.9%	8.2% - 9.6%	!
40+	9.5%	8.0% 11.2%	!
MOTHER'S RACE (2018)			
American Indian/AK Native	8.5%	6.3% - 11.2%	
Asian	9.6%	8.0% - 11.5%	!
Black	11.1%	9.0% - 13.5%	!
Pacific Islander	7.8%	5.6% - 10.8%	
White	7.0%	6.8% - 7.3%	
MOTHER'S HISPANIC ORIGIN (2018)			
Hispanic	8.6%	8.0% - 9.2%	!
Non-Hispanic	6.8%	6.6% - 7.1%	✓
MOTHER'S EDUCATION (2018)			
8th Grade or Less	9.3%	7.2% - 11.9%	
9th–12th Grade, No Diploma	10.2%	9.2% - 11.4%	!
High School or GED	8.7%	8.1% - 9.3%	!
Some College	6.9%	6.5% - 7.4%	
Associate Degree	6.3%	5.7% - 7.0%	✓
Bachelor's Degree	5.9%	5.5% - 6.3%	✓
Master's Degree	6.3%	5.4% - 7.3%	
Doctorate/Professional Degree	7.5%	5.6% - 9.9%	
LOCAL HEALTH DISTRICT (2016–2018)^			
Bear River	6.7%	6.2% - 7.2%	
Central	7.5%	6.6% - 8.4%	
Davis County	7.0%	6.7% - 7.4%	
Salt Lake County	7.7%	7.4% - 7.9%	!
San Juan	8.1%	6.1% - 10.6%	
Southeast	9.6%	8.1% - 11.3%	!
Southwest	6.8%	6.3% - 7.4%	
Summit	8.8%	7.3% - 10.5%	!
Tooele	7.6%	6.6% - 8.6%	
TriCounty	8.5%	7.5% - 9.6%	!
Utah County	6.4%	6.2% - 6.7%	✓
Wasatch	6.9%	5.7% - 8.5%	
Weber-Morgan	7.6%	7.1% - 8.1%	

^ Local health district represents district of mother's residence.

Social media for Power Your Life include:
- Facebook: http://www.facebook.com/poweryourlifeutah
- Twitter: @Poweryourlife2
- Pinterest: http://www.pinterest.com/poweryourlifeut

Utah Tobacco Quit Line: 1-800-784-8669
En espanol: Llame 1-877-629-1585
Free professional coaching to guide you through the quitting process.

Baby Your Baby: 1-800-826-9662
http://www.babyyourbaby.org
A resource to answer pregnancy related questions and and locate services for the public.

MotherToBaby:
Phone - 1-800-822-2229
Text - 1-855-999-3525
Email - expertinfo@mothertobaby.org
A service to answer questions about what's safe during pregnancy and breastfeeding.

Social media for MotherToBaby include:
- Facebook: http://www.facebook.com/MotherToBaby
- Twitter: @MotherToBaby
- Pinterest: http://www.pinterest.com/MotherToBaby

Baby Watch Early Intervention Hotline:
1-801-273-2998 (Main)
1-800-961-4226 (Toll free)
Utah network of services for children, birth to three years of age, with developmental delays or disabilities.

University of Utah Health Care Parent-to-Parent Support Group: 1-801-581-2098
Support program for families of high risk/critically ill newborns.

Child Health fact sheet on low birth weight by the Health Resources and Services Administration Maternal and Child Health Bureau
https://mchb.hrsa.gov/chusa11/hstat/hsi/pages/201lbw.html

Centers for Disease Control and Prevention National Public Health Tracking Network fact sheet on low birth weight
http://ephtracking.cdc.gov/showRbLBWGrowthRetardationEnv.action

March of Dimes website professional information on low birth weight
http://www.marchofdimes.com/baby/low-birthweight.aspx

Collaboration

Respect

Violence and Injury Prevention

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Intimate Partner Violence

Behavioral Risk Factor Surveillance System

Description

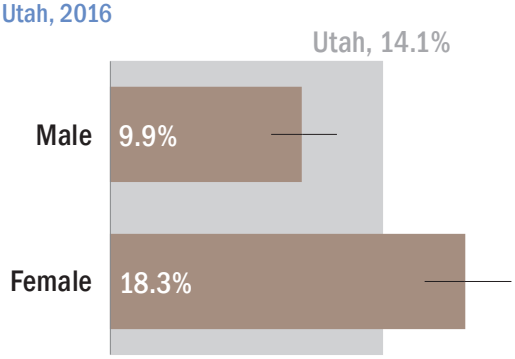
According to the Centers for Disease Control and Prevention (CDC), intimate partner violence (IPV), often referred to as domestic violence, is violence that occurs between two people in a close relationship.[1] IPV includes physical violence, sexual violence, stalking, emtional abuse, and mental abuse by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner). Some forms of IPV include mental and emotional aubse, stalking, and sexual violence which can be done electronically through mobile devices and social media sites, as well as in person. IPV happens in all types of intimate relationships, including heterosexual relationships and relationships among sexual minority populations. For this report, IPV is reported as the percentage of Utah adults who reported an intimate partner had ever hit, slapped, pushed, kicked, or hurt them in any way.

- 14.0% of adults had ever experienced IPV
- Higher for females, ages 35–49, and those with annual household incomes <$50,000
- Higher for residents of Southeast, Southwest, and Weber-Morgan LHDs

How Are We Doing?

Two in 11 Utah adult females will experience IPV at some point in their life. One in 10 Utah adult males will experience IPV as some point in their life (Figure 108). Among those who have ever experienced IPV, 26.1% of adults aged 18–34 years old experienced IPV in the past 12 months, compared with 10.1%of adults aged 35–49 and 3.9% of adults aged 50 and older.

Figure 108: Intimate Partner Violence by Gender (age-adjusted rates), Utah, 2016

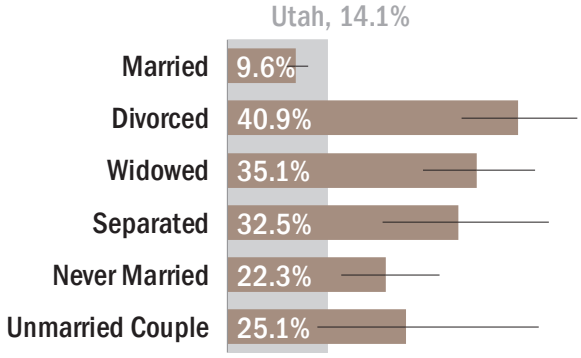


Disparities

Although anyone can experience IPV, the lifetime prevalence of IPV was statistically higher among females (18.3%), those aged 35 to 49 (18.3%), among persons whose annual household income was less than $50,000 (23.1% for less than $25,000; 17.4% for $25,000–$49,999), persons who were divorced (40.9%), widowed (35.1%), separated (32.5%), never married (22.3%, Figure 109), persons who were unemployed (28.7%), bisexual persons (30.6%), and adults with any disability (27.9%).[2]

Geographically, residents of Southeast (22.3%), Southwest (20.7%), and Weber-Morgan (19.3%) local health districts (LHDs) had significantly higher rates of IPV than the state rate (14.1%) (Map 38).

Figure 109: Intimate Partner Violence by Marital Status (age-adjusted rates), Utah, 2016



Risk Factors[3]

A combination of individual, relational, community, and societal-level factors contribute to the risk of becoming an IPV perpetrator or victim. Protective factors are attributes or conditions that may reduce the risk of experiencing IPV. Additionally, individuals with certain risk factors are more likely to become perpetrators or victims of IPV. Examples of risk and protective factors of IPV include:

- Lack of non-violent social problem solving skills (individual risk factor)
- Association with delinquent peers (relationship risk factor)
- Community support and connectedness (community protective factor)
- Passive acceptance of IPV by the community (community risk factor)
- Harmful norms around masculinity and femininity (societal risk factor)

1 Niolon, P. H., Kearns, M., Dills, J., Rambo, K., Irving, S., Armstead, T., & Gilbert, L. (2017). Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

2 Utah Department of Health, Office of Public Health Assessment. Behavioral Risk Factor Surveillance System (BRFSS).

3 Centers for Disease Control and Prevention. Intimate Partner Violence: Risk and Protective Factors. Accessed 2/26/2020 from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/riskprotectivefactors.html.

What Is Being Done?

IPV is linked to several negative health outcomes, either as a direct result of the physical violence, or as a result of the impact of IPV (conditions affecting the heart, digestive, reproductive, and nervous systems; conditions affecting muscle and bones; and mental health problems).[1]

The Utah Department of Health Violence and Injury Prevention Program (VIPP) aims to reduce the occurrence of IPV among all Utahns. The VIPP focuses on primary prevention to reduce violence and injury in Utah.

Many populations that experience a greater burden of IPV also experience an insufficient amount of resources. The VIPP works with community partners to improve access and cultural adaptability of programs and resources.

Health care providers are required by law to report child abuse, elderly/vulnerable person abuse (including persons with disabilities); contact the Utah Division of Aging and Adult Services Adult Protection Reporting at 1-800-371-7897; or online at daas.utah.gov/adult-protectiveservices/aps-form/. They must also report any assault that occurs when one person inflicts and injury on another person, even if that person is a loved one (Utah Statute 26-23a-2).

Map 38: Intimate Partner Violence by Local Health District, 2016

Map depicts age-adjusted rates.

Table 45: Intimate Partner Violence Overall, by Age, Gender, Race/Ethnicity, Income, Education, and Local Health District, 2016

	Crude (burden)		Age-adjusted (comparison)		
OVERALL (2016)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
UTAH	14.0%	*12.6% - 15.5%*	14.1%	*12.8% - 15.6%*	
AGE IN YEARS (2016)					
18–34	13.5%	*10.9% - 16.5%*	–	–	–
35–49	18.3%	*15.5% - 21.5%*	–	–	– !
50–64	12.9%	*10.5% - 15.7%*	–	–	–
65+	9.3%	*7.2% - 11.8%*	–	–	– ✓
GENDER (2016)					
Male	10.0%	*8.3% - 11.9%*	9.9%	*8.3% - 11.7%*	✓
Female	18.1%	*16.0% - 20.5%*	18.3%	*16.2% - 20.7%*	!
RACE/ETHNICITY (2016)					
White, Non-Hispanic	13.9%	*12.5% - 15.5%*	14.2%	*12.7% - 15.7%*	
Hispanic	10.7%	*6.9% - 16.2%*	9.8%	*6.3% - 14.8%*	
Other	20.5%	*13.2% - 30.6%*	21.1%	*13.9% - 30.6%*	
INCOME (2016)					
0–$24,999	21.7%	*17.4% - 26.7%*	23.1%	*18.5% - 28.3%*	!
$25,000–$49,999	16.6%	*13.4% - 20.4%*	17.4%	*14.2% - 21.2%*	!
$50,000–$74,999	15.4%	*12.0% - 19.6%*	15.3%	*12.0% - 19.3%*	
$75,000 or more	10.4%	*8.6% - 12.6%*	9.9%	*8.0% - 12.3%*	✓
EDUCATION—Adults 25+ (2016)					
Below High School	20.6%	*13.8% - 29.6%*	19.9%	*13.6% - 28.3%*	
High School Graduate	15.7%	*12.8% - 19.0%*	16.2%	*13.5% - 19.3%*	
Some College	14.0%	*11.9% - 16.5%*	14.6%	*12.5% - 17.1%*	
College Graduate	10.4%	*8.7% - 12.5%*	9.6%	*7.8% - 11.6%*	✓
LOCAL HEALTH DISTRICT (2016)					
Bear River	10.3%	*6.9% - 15.1%*	11.6%	*8.0% - 16.6%*	
Central*	11.9%	*5.4% - 24.3%*	11.2%	*5.8% - 20.5%*	
Davis County	12.4%	*9.1% - 16.6%*	12.5%	*9.3% - 16.5%*	
Salt Lake County	14.2%	*11.7% - 17.1%*	14.1%	*11.7% - 16.9%*	
San Juan*	6.1%	*2.4% - 14.6%*	6.3%	*2.8% - 13.6%*	✓
Southeast	19.0%	*12.2% - 28.4%*	22.3%	*14.6% - 32.5%*	!
Southwest	19.8%	*14.0% - 27.2%*	20.7%	*14.7% - 28.3%*	!
Summit	14.9%	*8.3% - 25.2%*	14.7%	*8.9% - 23.3%*	
Tooele	18.7%	*12.2% - 27.6%*	19.0%	*12.8% - 27.4%*	
TriCounty	13.8%	*9.0% - 20.6%*	14.9%	*9.6% - 22.5%*	
Utah County	9.8%	*7.1% - 13.2%*	10.0%	*7.3% - 13.6%*	✓
Wasatch*	17.4%	*8.8% - 31.5%*	21.8%	*13.6% - 33.1%*	
Weber-Morgan	19.8%	*15.0% - 25.6%*	19.3%	*14.8% - 24.7%*	!

1 Centers for Disease Control and Prevention. Intimate Partner Violence: Fast Facts. Accessed 2/26/2020 from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html.

Any person who believes they are a victim of stalking, regardless of the relationship with the stalker, may file a petition for a stalking injunction at the district court. You can get a stalking injunction against anyone who is stalking you regardless of your relationship to that person. Unlike a protective order, it does not limit the individuals you can file an order against. (Utah Statute 77-3a-101(2)).

Strangulation, or impeding the breathing or blood circulation of another person by the use of unlawful force, is a second degree felony. Additionally, the act of impeding the breathing or circulation of blood of a child by applying pressure to the neck or throat, or by obstructing the nose, mouth, or airway, in a manner that is likely to cause unconsciousness is child abuse and must be reported to the Utah Division of Child and Family Services (Utah Statute 76-5-103).

Data Interpretation Issues

To estimate the lifetime prevalence of IPV in Utah, individuals aged 18 years and older were asked questions from the Utah Behavioral Risk Factor Surveillance System (BRFSS) about their experience with physical abuse by an intimate partner. The BRFSS is a phone survey taken from a representative sample of the Utah population. The facts and figures on IPV come from the results of this survey.

Available Services/Resources

Help-Seeking Behaviors

Of those who have ever experienced IPV in Utah, fewer than 15% of individuals received help. For women, almost one in three received help after experiencing IPV. For men, fewer than 1% received help after experiencing IPV. The most commonly reported reasons for not seeking help include believing the abuse will stop; believing the person who physically hurt them will find out about the report; not wanting help; or believing their children would be taken away from them.[1]

Safety Tips

- Call 9-1-1 if you are in immediate danger.
- Get help. If you are being abused, you are not alone. There are resources available to you.
- Talk with people you trust—a family member, friend, coworker, medical provider, or spiritual leader.
- Make a safety plan in case you have to leave. Set aside some money and find a place to go. Put important papers and items in a place where you can get them quickly.[2]
- Recognize early warning signs for violence such as a partner's extreme jealousy, controlling behavior, threats, or history of abuse.
- Know how to help someone who tells you they are experiencing IPV—be a good listener, be supportive, and ask how you can help. Visit startbybelieving.org for more information.

Anonymous and Confidential Help 24/7

Anyone can be a victim of IPV, and everyone can help prevent IPV. If you or someone you know has experienced IPV, there are resources available—call the Utah Domestic Violence Link line at 1-800-897-LINK (5465). Additionally, the Division of Child and Family Services provides a list of contracted domestic violence therapeutic organizations at hslic.utah.gov/db-search/.

- Utah Domestic Violence Link Line 1-800-897-LINK (5465)
- Utah Rape and Sexual Assault Crisis Line 1-888-421-1100
- The National Domestic Violence Hotline www.thehotline.org, 1-800-799-SAFE (7233), 1-800-787-3224 (TTY)

Additional Resources

- CDC Violence Prevention: www.cdc.gov/ViolencePrevention/index.html
- Utah Division of Child and Family Services Reporting Line: 1-855-323-DCFS (3237)
- Utah Domestic Violence Coalition: https://www.udvc.org/ or 801-521-5544
- Utah Coalition Against Sexual Assault: www.ucasa.org
- Start By Believing: startbybelieving.org

1 Utah Department of Health, Office of Public Health Assessment. Behavioral Risk Factor Surveillance System (BRFSS).
2 Utah Domestic Violence Coalition. Prevention: Safety Planning. Accessed 2/26/2020 from https://www.udvc.org/resources/prevention/safety-planning.html.

Adverse Childhood Experiences

Behavioral Risk Factor Surveillance System

Description

Adverse childhood experiences (ACEs) are stressful or traumatic events that occur during childhood.[1] ACEs include sexual abuse, physical abuse and neglect, emotional abuse and neglect, interpersonal violence in the home, substance misuse in the household, family member with a mental illness, parental separation or divorce, and having an incarcerated household member.

Each type of trauma a person experiences before the age of 18 counts as one ACE; there are eight possible ACEs. As the individual's ACEs score increases, so does their risk of disease and social or emotional problems later in life.

- 60.5% of adults reported at least one ACE
- 16.0% reported four or more ACEs
- 4+ ACEs were most common among young people who are American Indian/Alaska (AK) Natives, those with low incomes, and with some college education
- Significantly higher percentage of 4+ ACEs for Tooele County LHD

How Are We Doing?

During 2018, approximately 60% of Utah adults reported having one or more ACE (Figure 112). The most common ACE reported was emotional abuse (37.6%, Figure 110).

National Comparison

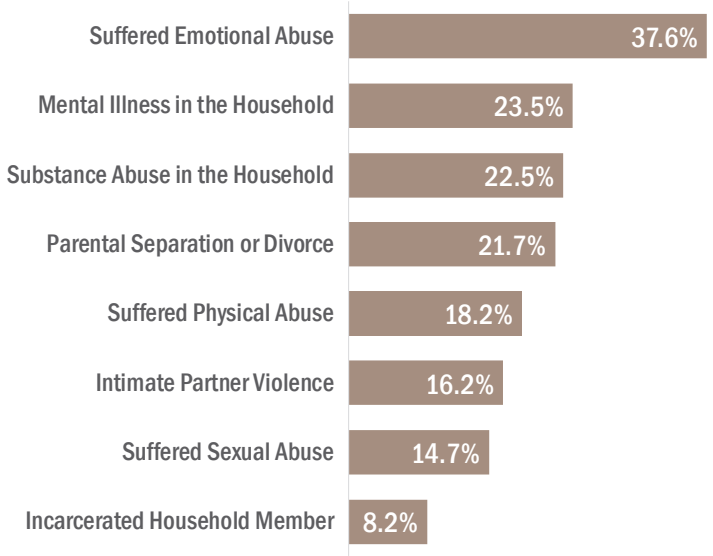
Since the ACE module is optional as part of the Behavioral Risk Factor Surveillance System (BRFSS), not all states ask or report data back to the Centers for Disease Control and Prevention (CDC). However, prevalence estimates from 23 states that included the module on the 2011–2014 BRFSS indicate 15.8% of adults reported four or more ACEs. The most common reported ACE from these states was emotional abuse (34.4%).[2]

Disparities

Populations with significantly higher rates of four or more ACEs were young adults (aged 18–34), females, people who are American Indian/Alaska (AK) Natives, persons with low household incomes (<$25,000), and individuals with some college education (Table 46).

The largest percentage of adults reporting four or more ACEs lived in Tooele County local health district (LHD) (Map 39).

Figure 110: Percentage of Adults Reporting Each Type of ACE, Utah, 2018



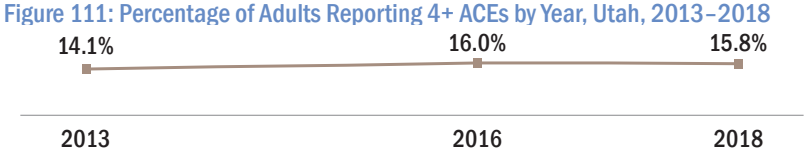
Risk Factors

ACEs have been linked to risky health behaviors, chronic health conditions, limited life opportunity, and poor mental health. As the number of ACEs increases, so does the risk for these outcomes.[3]

What Is Being Done?

The CDC has developed a resource, Preventing Adverse Childhood Experiences (ACEs): Leveraging the Best Available Evidence to help states and communities leverage the best available evidence to prevent ACEs from happening in the first place as well as lessen harms when ACEs do occur. It features six strategies drawn from the CDC Technical Packages to Prevent Violence.[4]

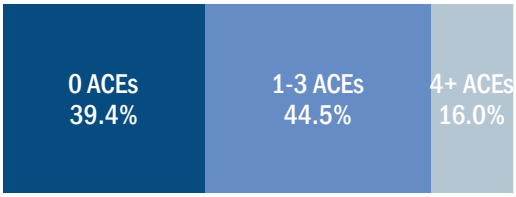
Figure 111: Percentage of Adults Reporting 4+ ACEs by Year, Utah, 2013–2018



Trend graph depicts age-adjusted rates.

1 Adverse Childhood Experiences (ACEs). Centers for Disease Control and Prevention (CDC). Accessed 2/28/2020 from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/index.html.
2 Behavioral Risk Factor Surveillance System (BRFSS) ACE Data. Violence Prevention. CDC. Accessd 12/20/19 from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/ace-brfss.html.
3 BRFSS ACE Data. CDC. Accessed 2/28/2020 from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/ace-brfss.html.
4 Preventing Adverse Childhood Experiences. CDC. Accessed 2/28/2020 from https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html.

Figure 112: Percentage of Utah Adults by ACE Score, 2018



The CDC promotes lifelong health and well-being through Essentials for Childhood. *Essentials for Childhood* offers strategies to assure safe, stable, nurturing relationships and environments for all children.[1]

Data Interpretation Issues

All ACE questions refer to the respondent's first 18 years of life.[2]

- **Emotional abuse:** A parent or other adult in your home ever swore at you, insulted you, or put you down.
- **Physical abuse:** A parent or other adult in your home ever hit, beat, kicked, or physically hurt you.

Map 39: 4+ACES by Local Health District, 2016 and 2018

Map depicts age-adjusted rates.

Table 46: Four or More ACEs Overall, by Age, Gender, Ethnicity, Income, and Education, 2018 and Race and Local Health District, 2016 and 2018

	Crude (burden)		Age-adjusted (comparison)		
OVERALL (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
UTAH	16.0%	*14.7% - 17.5%*	15.8%	*14.4% - 17.2%*	
AGE IN YEARS (2018)					
18–34	20.8%	*18.1% - 23.8%*	–	–	!
35–49	17.0%	*14.5% - 19.9%*	–	–	
50–64	13.2%	*10.9% - 16.0%*	–	–	
65+	7.1%	*5.5% - 9.2%*	–	–	✓
GENDER (2018)					
Male	13.9%	*12.1% - 15.8%*	13.7%	*12.0% - 15.5%*	✓
Female	18.3%	*16.2% - 20.5%*	18.0%	*16.0% - 20.1%*	!
RACE (2016 and 2018)†					
American Indian/AK Native	34.5%	*24.3% - 46.3%*	34.1%	*24.9% - 44.7%*	!
Asian*	14.2%	*5.8% - 30.5%*	13.6%	*5.8% - 28.6%*	
Black	24.3%	*14.6% - 37.5%*	24.5%	*13.4% - 40.6%*	
Pacific Islander	26.8%	*14.6% - 43.8%*	22.4%	*11.6% - 38.9%*	
White	15.5%	*14.4% - 16.6%*	15.4%	*14.4% - 16.5%*	
ETHNICITY (2018)					
Hispanic	19.1%	*14.9% - 24.2%*	17.8%	*13.6% - 22.9%*	
Non-Hispanic	15.7%	*14.2% - 17.2%*	15.6%	*14.2% - 17.1%*	
INCOME (2018)					
0–$24,999	24.4%	*20.1% - 29.3%*	22.6%	18.7% - 27.0%	!
$25,000–$49,999	16.3%	*13.3% - 19.7%*	17.1%	14.0% - 20.8%	
$50,000–$74,999	16.3%	*13.1% - 20.1%*	15.5%	12.5% - 19.0%	
$75,000 or more	14.9%	*12.8% - 17.3%*	14.6%	12.4% - 17.0%	
EDUCATION - Adults 25+ (2018)					
Below High School	18.4%	*12.6% - 26.1%*	17.4%	12.0% - 24.5%	
High School or GED	16.6%	*13.8% - 19.8%*	16.2%	13.5% - 19.3%	
Some Post High School	18.4%	*15.8% - 21.3%*	18.4%	15.8% - 21.2%	!
College Graduate	11.0%	*9.3% - 12.9%*	11.0%	9.3% - 12.9%	✓
LOCAL HEALTH DISTRICT (2016 and 2018)					
Bear River	13.0%	*9.9% - 17.0%*	12.6%	*9.7% - 16.3%*	
Central	13.1%	*8.5% - 19.6%*	13.4%	*9.0% - 19.5%*	
Davis County	14.8%	*12.1% - 18.0%*	14.7%	*12.1% - 17.8%*	
Salt Lake County	17.9%	*15.9% - 20.1%*	17.2%	*15.4% - 19.2%*	!
San Juan*	8.1%	*4.2% - 14.8%*	8.9%	*4.5% - 16.8%*	
Southeast	16.4%	*12.1% - 21.8%*	17.1%	*12.4% - 23.1%*	
Southwest	16.6%	*13.1% - 20.8%*	17.2%	*13.5% - 21.6%*	
Summit	7.7%	*4.7% - 12.5%*	7.2%	*4.3% - 11.7%*	✓
Tooele	23.5%	*17.7% - 30.5%*	23.6%	*17.9% - 30.4%*	!
TriCounty	16.2%	*12.3% - 21.1%*	16.2%	*12.5% - 20.7%*	
Utah County	13.8%	*11.6% - 16.3%*	13.4%	*11.2% - 15.8%*	
Wasatch	10.6%	*6.3% - 17.5%*	12.3%	*7.2% - 20.1%*	
Weber-Morgan	18.8%	*15.6% - 22.6%*	18.4%	*15.3% - 22.0%*	!

† Age-adjusted using 3 age groups.
*Use caution in interpreting. The estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

1 Essentials for Childhood Framework. Centers for Disease Control and Prevention (CDC). Accessed 2/28/2020 from https://www.cdc.gov/violenceprevention/childabuseandneglect/essentials.html.
2 Behavioral Risk Factor Surveillance System ACE Data. Violence Prevention. CDC. Accessd 12/20/19 from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/ace-brfss.html.

- **Sexual abuse**—An adult or person at least 5 years older ever touched you in a sexual way, or tried to make you touch their body in a sexual way, or attempted to have sex with you.
- **Intimate partner violence**—Parents or adults in the home ever slapped, hit, kicked, punched or beat each other up.
- **Substance abuse in the household**—A household member was a problem drinker or alcoholic or used street drugs or abused prescription medications.
- **Mental illness in the household**—A household member was depressed or mentally ill or a household member attempted suicide.
- **Parental separation or divorce**—Parents were ever separated or divorced.
- **Incarcerated household member**—A household member went to prison.

Available Services/Resources

Utah Division of Substance Abuse and Mental Health
https://dsamh.utah.gov/

Utah Office of Recovery Services
https://ors.utah.gov/index.html

Care About Childcare (Workforce Services)
https://careaboutchildcare.utah.gov/

Crisis Nurseries
https://dcfs.utah.gov/wp-content/uploads/2017/11/CrisisNurseries.pdf

Office on Victims of Crimes
https://justice.utah.gov/Crime/

United Way 2-1-1
211utah.org

Head Start
https://www.utahca.org/head-start/

Firearm Deaths

Utah Death Certificate Database

Description

This measure reports the number of deaths related to firearms as a rate per 100,000 population.

- 13.2 per 100,000 firearm-related deaths in 2018
- 84% of deaths during 2016–2018 were suicides
- Higher for ages 25–54
- Significantly higher for males
- Higher in San Juan, Southeast, Southwest, TriCounty, and Weber-Morgan LHDs

How Are We Doing?

From 2014–2018, there were 1,861 firearm deaths in Utah. Of these 84% were suicides; 11% were homicides; 3% were due to legal intervention, meaning an individual was killed by a law enforcement officer; 1% were accidental; and 1% were undetermined (Figure 113).

National Comparison

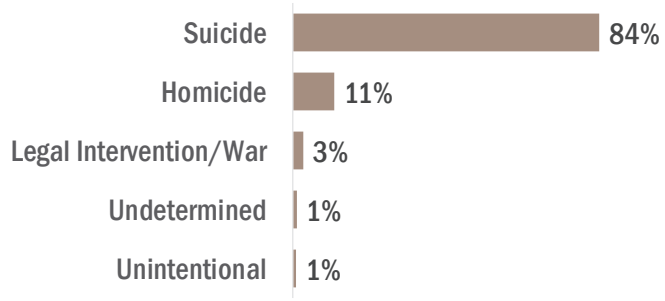
In 2018, the rate of firearm-related death in Utah (13.2 per 100,000) was higher than the rate in the U.S. (11.9).

Disparities

Utahns aged 25–54 had significantly higher rates of firearm-related death than the state rate. Males had a much higher rate than females (21.5 vs. 3.4, respectively) in 2018 (Table 47).

During 2016–2018, firearm-related deaths varied by local health district (LHD). Summit County had the lowest rate (9.5 per 100,000). Rates were significantly higher in San Juan (29.5), TriCounty (26.2), Southeast (21.5), Weber-Morgan (17.3), and Southwest (16.7) LHDs (age-adjusted rates, Map 40).

Figure 113: Percentage of Firearm Deaths by Intent, Utah, 2014–2018

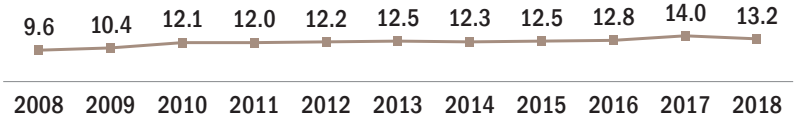


Risk Factors

Owning a gun is a right. Protecting children is a responsibility. Prevent suicide and accidental injury by storing guns and ammunition safely. Talk to your children and their caregivers about gun safety.[1]

Multiple studies show individuals who died by suicide compared to those who did not were more likely to live in homes with guns. Firearm access is a risk factor for suicide for both older (>15 years) and younger adolescents and for both males and females.[2]

Figure 114: Firearm Deaths per 100,000 in Utah by Year, 2008–2018



Trend graph depicts age-adjusted rates.

What Is Being Done?[3]

According to the Utah Department of Public Safety:

- Concealed Firearm Permit (CFP) classes provide some familiarization with firearms and explanations and discussions of applicable state and federal laws.
- The CFP application includes ongoing background checks in order to obtain and keep the permit whereas buying a gun only requires passing a background check at the time of purchase.
- Without the CFP application process, concealed gun carriers may not know if they are legally qualified to lawfully conceal a weapon. Applicant must be 21 years of age and show "proof of good character." Proof of good character is defined whereas the applicant:
  - has not been convicted of a felony;
  - has not been convicted of any crime of violence;
  - has not been convicted of any offense involving the use of alcohol;
  - has not been convicted of any offenses involving the unlawful use of narcotics or other controlled substances;

1 Preventing Violent Deaths. Utah Violence and Injury Prevention Program (VIPP). Accessed 12/9/19 from http://health.utah.gov/vipp/topics/nvdrs/prevention.html.
2 Firearm Deaths in Utah. Utah Department of Health (UDOH) VIPP. Accessed 12/9/19 from http://health.utah.gov/vipp/pdf/FactSheets/2013FirearmDeaths.pdf.
3 Firearm Deaths in Utah. UDOH VIPP. Accessed 12/9/19 from http://health.utah.gov/vipp/pdf/FactSheets/2013FirearmDeaths.pdf.

- has not been convicted of any offenses involving moral turpitude;
- has not been convicted of any offense involving domestic violence;
- has not been adjudicated by a court of a state or of the United States as mentally incompetent, unless the adjudication has been withdrawn or reversed.

Available Services/ Resources

Firearm Safety: What We All Need to Know
http://health.utah.gov/vipp/pdf/UTVDRS/gun-safety.pdf

Gun Safety Tips from Safe Kids Worldwide
https://www.safekids.org/tip/gun-safety-tips

Bulletproof Kids
http://bulletproofkidsutah.org/

Map 40: Firearm Deaths by Local Health District, 2016–2018

Map depicts age-adjusted rates.

Table 47: Firearm Deaths State Comparison, by Age, Gender, and Ethnicity, 2018 and Race and Local Health District, 2016–2018

	Crude (burden)		Age-adjusted (comparison)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	**Rate**	**95% CIs**	
U.S.	12.1	*12.0 - 12.3*	11.9	*11.8 - 12.0*	
UTAH (27th of 51)	12.6	*11.4 - 13.9*	13.2	*11.9 - 14.6*	
AGE IN YEARS (2018)					
<1	**		–	–	–
1–4	**		–	–	–
5–14*	0.8	*0.2 - 2.0*	–	–	– ✓
15–24	15.5	*12.3 - 19.3*	–	–	–
25–34	17.9	*14.2 - 22.1*	–	–	– !
35–44	19.8	*15.8 - 24.4*	–	–	– !
45–54	18.0	*13.7 - 23.3*	–	–	– !
55–64	11.7	*8.1 - 16.2*	–	–	–
65–74	15.7	*10.8 - 22.1*	–	–	–
75–84	16.5	*9.6 - 26.5*	–	–	–
85+	**		–	–	–
GENDER (2018)					
Male	21.5	*19.3 - 24.0*	22.6	*20.2 - 25.2*	!
Female	3.4	*2.6 - 4.5*	3.7	*2.8 - 4.9*	✓
RACE (2016–2018)†					
American Indian/AK Native	16.8	*10.7 - 25.0*	15.4	*9.8 - 22.9*	
Asian	5.4	*2.9 - 9.2*	5.1	*2.7 - 8.8*	✓
Black	9.9	*5.3 - 17.0*	8.6	*4.5 - 14.7*	
Pacific Islander*	6.2	*2.3 - 13.5*	5.7	*2.0 - 12.6*	✓
White	12.9	*12.1 - 13.7*	13.1	*12.3 - 13.9*	
ETHNICITY (2018)					
Hispanic	8.0	*5.6 - 11.1*	7.8	*5.2 - 11.3*	✓
Non-Hispanic	13.3	*12.0 - 14.8*	13.9	*12.5 - 15.5*	
LOCAL HEALTH DISTRICT (2016–2018)					
Bear River	9.0	*6.7 - 11.9*	9.7	*7.1 - 13.0*	✓
Central Utah	16.4	*11.6 - 22.4*	17.1	*12.1 - 23.5*	
Davis County	10.0	*8.2 - 12.1*	10.5	*8.6 - 12.7*	✓
Salt Lake County	12.8	*11.6 - 14.1*	13.3	*12.1 - 14.7*	
San Juan	28.2	*15.0 - 48.2*	29.5	*15.6 - 50.7*	!
Southeast Utah	21.7	*14.2 - 31.7*	21.5	*13.8 - 32.0*	!
Southwest Utah	16.0	*13.2 - 19.2*	16.7	*13.7 - 20.3*	!
Summit County	9.7	*5.0 - 16.9*	9.5	*4.8 - 16.9*	
Tooele County	13.4	*8.8 - 19.5*	15.4	*10.0 - 22.7*	
TriCounty	24.7	*17.8 - 33.4*	26.2	*18.7 - 35.5*	!
Utah County	8.7	*7.4 - 10.2*	10.0	*8.4 - 11.8*	✓
Wasatch County	16.7	*9.6 - 27.2*	17.9	*10.2 - 29.1*	
Weber-Morgan	17.0	*14.2 - 20.1*	17.3	*14.5 - 20.5*	!

† Age-adjusted using 3 age groups.

*Use caution in interpreting. The estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.


Collaboration
Respect
Infectious Diseases
Effective
Service
Evidence-based
Trustworthy
Integrity
Innovation
Transparency

Description

This measure reports the rate of newly reported cases of HIV by date of diagnosis per 100,000 population.

- 122 newly newly diagnosed HIV cases (3.8 per 100,000) in Utah during 2018
- HIV affects males significantly more than females
- Male-to-male sexual contact is the most common means of HIV exposure
- Significantly higher rates among people who are Black and Hispanic

How Are We Doing?

As of December 31, 2017, a total of 3,082 individuals diagnosed with HIV (regardless of AIDS diagnosis) were known to be living in Utah.

AIDS-related deaths have been decreasing, primarily because of improved efficacy of combination anti-retroviral therapies. This trend has led to an increased number of people living with HIV infections in Utah, thus impacting healthcare systems and increasing the need for HIV Prevention and HIV Treatment and Care programs.

Of those HIV-positive individuals known to be living in Utah as of December 31, 2017, 29% are between the ages of 50–59 and an additional 25% are aged 40–49. Persons who are 60 or older make up 17% of this population. Children and adolescents (19 years old or younger) comprise less than 2% of persons living with HIV.

HIV disproportionately affects males (Figure 115); currently 85% of persons living with diagnosed HIV in Utah are male and only 15% are female.

Male-to-male sexual contact (MSM) (73.2%) was the most common means of HIV exposure among new HIV diagnoses in 2018 reported among men followed by male-to-male sexual contact and injection drug-use (MSM+IDU) at 10.7% (Figure 116).

National Comparison

The 2018 Utah rate of 3.8 new diagnoses per 100,000 was significantly lower than the national rate of 11.4 per 100,000.

Disparities

Men are more affected by HIV than women. People who are Black and Hispanic had higher rates of newly diagnosed HIV than the state rate (Table 48).

Risk Factors

- Multiple sex partners, particularly among men who have sex with men
- Intravenous drug use
- Prior history of sexually transmitted infections
- Having unprotected sex

What Is Being Done?

Community-based prevention efforts include:

- HIV testing as a part of routine medical care
- Targeting high-risk populations to get tested
- Encouraging safer sexual practices
- Encouraging drug users to get treatment and increase harm reduction practices
- Encouraging pregnant women or women considering pregnancy to be tested for HIV

Figure 115: New HIV Diagnoses per 100,000 by Sex at Birth, Utah, 2018

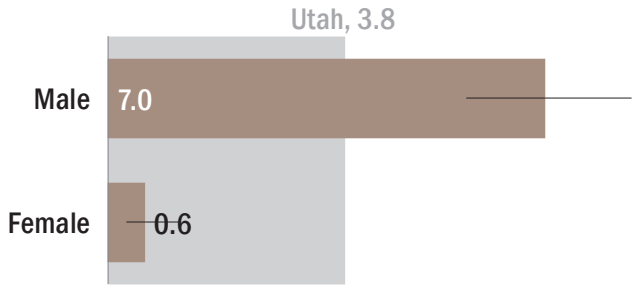
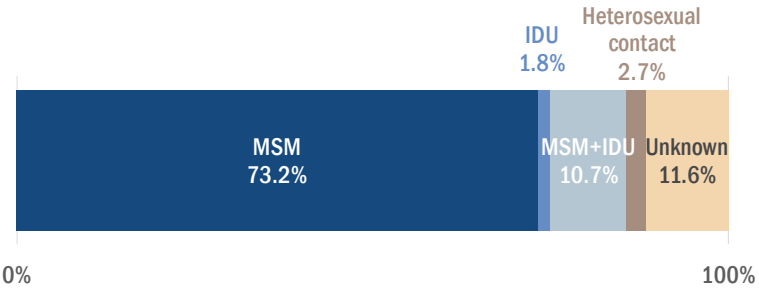
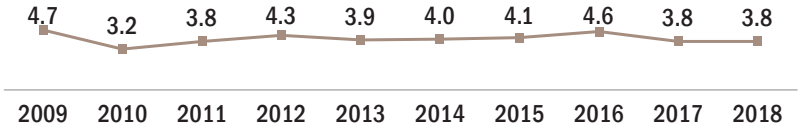


Figure 116: Percentage of New HIV Diagnoses Among Males by Transmission Category, Utah, 2018



MSM: male-to-male sexual contact
IDU: injection drug-use

Figure 117: New HIV Diagnoses per 100,000 in Utah by Year, 2009–2018



Available Services/Resources

Bureau of Epidemiology: Prevention, Treatment & Care Program Program - counseling and testing, drug assistance, health insurance, and supportive services
288 North 1460 West, SLC, UT 84114-2104
Phone: (801) 538-6191
Fax: (801) 538-9913
http://www.health.utah.gov/epi

Bureau of Epidemiology - HIV/AIDS
http://health.utah.gov/epi/diseases/hivaids/

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
http://www.cdc.gov/nchhstp/

AIDSinfo - Information on AIDS Treatment, Prevention and Research
http://www.aidsinfo.nih.gov

Find HIV Testing Locations Near You
https://gettested.cdc.gov/

amfAR - The Foundation for AIDS Research
http://www.amfar.org

The Complete HIV/AIDS Resource - TheBody.com
http://www.thebody.com

Planned Parenthood
http://www.plannedparenthood.org

Utah AIDS Foundation
http://www.utahaids.org

Map 41: New HIV Diagnoses per 100,000 by Local Health District, 2014–2018

Table 48: New HIV Diagnoses per 100,000 State Comparison, by Age, Gender, and Race/ethnicity, 2018 and Local Health District, 2014–2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	
U.S.^	11.4		
UTAH (11th of 51)	3.8	*3.2 - 4.6*	
AGE IN YEARS (2018)			
<13	**		
13-24	4.4	*2.9 - 6.4*	
25-34	10.5	*7.8 - 13.9*	!
35-44	4.6	*2.8 - 7.1*	
45-54	5.0	*2.8 - 8.1*	
55-64	2.3	*0.9 - 4.8*	
65+	**		
SEX AT BIRTH (2018)			
Male	7.0	*5.7 - 8.4*	!
Female	0.6	*0.3 - 1.2*	✓
RACE/ETHNICITY (2018)			
American Indian/AK Native	**		
Asian	8.6	*3.5 - 17.7*	
Black	22.0	*9.5 - 43.4*	!
Pacific Islander	**		
Hispanic†	6.4	*4.3 - 9.3*	!
White	2.9	*2.3 - 3.6*	✓
Two or More Races	**		
LOCAL HEALTH DISTRICT (2014–2018)			
Bear River*	1.0	*0.5 - 1.9*	✓
Central*	1.8	*0.7 - 3.7*	✓
Davis County	2.3	*1.6 - 3.1*	✓
Salt Lake County	7.7	*7.0 - 8.5*	!
San Juan	**		
Southeast*	3.5	*1.4 - 7.2*	
Southwest	2.8	*1.9 - 3.9*	✓
Summit*	2.5	*0.8 - 5.8*	
Tooele*	1.5	*0.5 - 3.6*	✓
TriCounty*	1.7	*0.6 - 4.1*	✓
Utah County	1.8	*1.3 - 2.4*	✓
Wasatch	0.0		
Weber-Morgan	1.9	*1.2 - 2.8*	✓

^ National data from HIV Surveillance Report, 2018 (Preliminary) Volume 30.
† Includes persons of Hispanic ethnicity regardless of race.
*Use caution in interpreting. The estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.

Chlamydia

UDOH Bureau of Epidemiology

Description

This measure reports the rate of newly reported cases of chlamydia by date of diagnosis per 100,000 population.

- In 2018, the Utah chlamydia rate ranked 5th lowest in the nation with a rate of 333.5 per 100,000 population
- Higher rates among Utahns aged 15–34
- The rate for females was almost twice the rate of males
- Disparities include people who are American Indian/ Alaska (AK) Native, Black, Hispanic, and Pacific Islander
- Significantly higher rates in Salt Lake County and Weber-Morgan LHDs

How Are We Doing?

Infections caused by the bacterium *Chlamydia trachomatis* are the most frequently reported notifiable disease in Utah, with 10,541 cases reported in 2018. More than 60% of the reported cases were among persons between 15 and 24 years of age.

Chlamydia rates in Utah have increased from 2000 to 2018, except for a slight decrease in 2004 (2.7%) and 2013 (2.9%) (Figure 119). The overall rate increase can be attributed to increased screening efforts, use of increasingly sensitive diagnostic testing, efforts to increase reporting by providers and laboratories, and improved information systems for reporting. Such increased rates can be interpreted as an advancement in disease control as more infections are identified and treated, providing opportunity to intervene in the spread of infection.

National Comparison

Chlamydial infections are the most frequently reported notifiable disease in the U.S., with 1,758,668 cases reported in 2018. Of these reported chlamydia infections, 61.7% were among those aged 15 to 24. The overall rate for chlamydia in the U.S. in 2018 was 539.9 cases per 100,000 persons. The chlamydia rate in Utah is significantly lower than the U.S. rate. In 2018, the chlamydia rate in Utah ranked 5th lowest in the nation.[1]

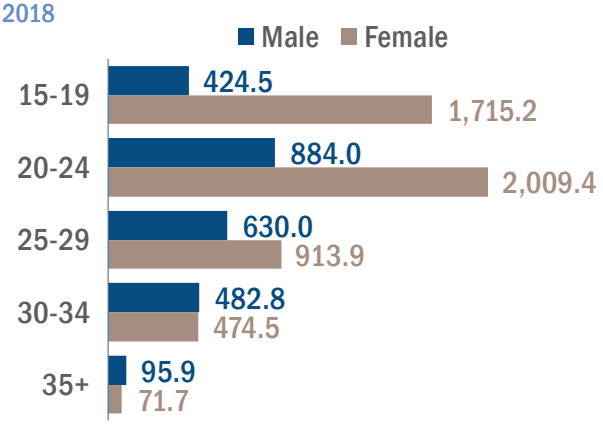
Disparities

Chlamydial infections in both men and women are commonly asymptomatic, yet screenings occur more often among females, resulting in higher rates of reported infections among females. However, with the increased availability of urine testing, men are increasingly being tested for chlamydial infection. Over the past 10 years in Utah, the chlamydia rate in men increased by 50.8% as compared with a 46.3% increase in women over this period.

In Utah in 2018, persons aged 20 to 24 years reported the highest rates of chlamydia in both males and females (Figure 118). The rate for females in this age group in Utah in 2018 was 2,009.4 cases per 100,000 persons compared with 4,064.6 cases per 100,000 persons in the U.S. The rate for males aged 20 to 24 years in Utah in 2018 was 884.0 per 100,000 population compared with 1,784.5 cases per 100,000 persons in the U.S. in 2018.[2]

Geographically, residents of Salt Lake County (458.6) and Weber-Morgan (387.8) local health districts (LHDs) had significantly higher rates of newly diagnosed HIV cases than the state rate (335.3) (Map 42).

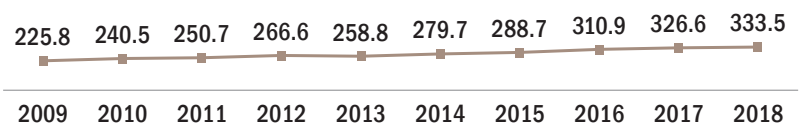
Figure 118: Chlamydia Rates per 100,000 by Age and Sex, Utah, 2018



Risk Factors

Females with chlamydia are at risk for developing pelvic inflammatory disease, and both men and women may become infertile as a result of untreated chlamydia. Untreated chlamydia infections can damage the reproductive system

Figure 119: Chlamydia Cases per 100,000 in Utah by Year, 2009–2018



1 Centers for Disease Control and Prevention (CDC). Sexually Transmitted Disease Surveillance, 2018.
2 CDC. Sexually Transmitted Disease Surveillance, 2018.

of both males and females. Susceptibility to more serious infections such as HIV also increases when an individual is infected with chlamydia. In addition, pregnant women with chlamydia can pass the infection to their infant during delivery, potentially resulting in pneumonia or neonatal ophthalmia.

Risk factors for sexually transmitted diseases (STDs) include:

- Sexual activity among young adults aged 25 and younger
- Multiple sex partners
- Prior history of STDs
- Unprotected sex
- Illicit drug use

Those who fall within one or more of these categories should be tested for STDs in regular intervals. Sites of infection may include pharynx, rectum, vagina, cervix, andurethra. Due to anatomical and biochemical differences, women are also at increased risk for acquiring chlamydia than men.

What Is Being Done?

Persons who test positive for chlamydia are confidentially interviewed by a disease intervention specialist from their LHD to educate the patient, ensure proper treatment, and to obtain sexual partner information for follow up. This process helps prevent diagnosed individuals from spreading the infection and the patient from becoming reinfected.

Map 42: Chlamydia Rates per 100,000 by Local Health District, 2018

Table 49: Chlamydia Rates per 100,000 State Comparison, by Age, Sex at Birth, Race/ethnicity, and Local Health District, 2018

	Crude (burden)		
STATE COMPARISON (2018)	**Rate**	**95% CIs**	
U.S.	539.9		
UTAH (5th of 50)	333.5	*327.1 - 339.9*	
AGE IN YEARS (2018)			
<1	**		
1–9	**		
10–14	19.9	*14.9 - 26.0*	✓
15–19	1,057.1	*1017.1 - 1098.3*	!
20–24	1,431.2	*1385.6 - 1477.8*	!
25–29	768.1	*734.0 - 803.5*	!
30–34	478.7	*450.1 - 508.7*	!
35–39	245.9	*226.1 - 267.0*	✓
40–44	138.2	*122.6 - 155.4*	✓
45–49	90.9	*77.3 - 106.3*	✓
50–54	56.9	*45.4 - 70.3*	✓
55–59	34.1	*25.6 - 44.6*	✓
60–64	15.2	*9.5 - 23.0*	✓
65+*	2.9	*1.4 - 5.3*	✓
SEX AT BIRTH (2018)			
Male	234.3	*226.8 - 241.9*	✓
Female	434.1	*423.9 - 444.5*	!
RACE/ETHNICITY (2018)			
American Indian/AK Native	578.4	*495.4 - 671.3*	!
Asian	255.7	*222.1 - 292.9*	✓
Black	1,390.9	*1272.2 - 1517.7*	!
Pacific Islander	567.7	*545.9 - 590.2*	!
Hispanic^	882.4	*780.7 - 993.8*	!
White	236.8	*232.6 - 244.9*	✓
Two or More Races	75.2	*55.8 - 99.2*	✓
LOCAL HEALTH DISTRICT (2018)			
Bear River	211.9	*191.5 - 234.0*	✓
Central Utah	152.1	*126.4 - 181.5*	✓
Davis County	325.0	*306.4 - 344.4*	
Salt Lake County	458.6	*446.3 - 471.1*	!
San Juan	271.9	*195.9 - 367.5*	
Southeast Utah	247.2	*200.9 - 301.0*	✓
Southwest Utah	267.4	*247.3 - 288.7*	✓
Summit County	276.6	*228.6 - 331.8*	✓
Tooele County	266.1	*229.2 - 307.2*	✓
TriCounty	257.2	*217.0 - 302.6*	✓
Utah County	203.9	*192.9 - 215.5*	✓
Wasatch County	138.4	*101.3 - 184.6*	✓
Weber-Morgan	387.8	*364.6 - 412.1*	!

^ Includes persons of Hispanic ethnicity regardless of race.
*Use caution in interpreting. The estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
** The estimate has been suppressed because 1) the relative standard error is greater than 50% or cannot be determined, 2) the observed number of events is very small and not appropriate for publication.

The Utah Department of Health (UDOH) Communicable Disease Prevention Program, along with LHDs, currently provide STD presentations upon request to a variety of organizations, agencies, and facilities.

Data Interpretation Issues

Reported chlamydia rates are calculated by dividing the number of cases within the population of interest by the total number of persons within the population, then multiplying by 100,000. It should be noted that rates within small populations are volatile; a small change in the number of cases can noticeably change the rate. This change may look significant, but, statistically, it may not be. Caution is strongly recommended when interpreting small case numbers and rates.

Available Services/Resources

STD clinics are located at local health departments where individuals can be tested and treated for STDs at minimal or no cost. Planned Parenthood has locations throughout Utah that also provide STD services at minimal cost. Condoms are available at these locations.

STD presentations are available through the UDOH upon request. The UDOH also has educational pamphlets available.

The Utah Minor's Consent Law allows adolescents between the ages of 14 and 17 years to be tested and treated for an STD without the consent of a parent.

Fact sheets for communicable diseases may be found on the UDOH Bureau of Epidemiology website at http://health.utah.gov/epi/diseases/chlamydia/factsheet.pdf.

Other STD resources are available on the Bureau of Epidemiology website at http://health.utah.gov/epi/prevention/.

Screening Guidelines
http://www.cdc.gov/std/tg2015/screening-recommendations.htm

Centers for Disease Control and Prevention (CDC) Division of STD Prevention
http://www.cdc.gov/std

CDC. *Sexually Transmitted Disease Surveillance, 2018*. Atlanta: U.S. Department of Health and Human Services; 2018.
http://www.cdc.gov/std/stats18/

CDC. 2015 Sexually Transmitted Disease Treatment Guidelines
http://www.cdc.gov/std/treatment

Collaboration

Respect

Local Health District Profiles

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

The Utah population is varied and evolving. Utahns live in urban, rural, and frontier areas. The state has enjoyed a thriving economy while at the same time grappling with a growing homeless population. Utah is home to several universities and yet there are areas where many adults do not have the equivalent of a high school diploma. Because of this diversity within the population, it is important to look at smaller subsections of the state. There are thirteen local health districts (LHDs) in Utah. In this section we examine a number of health indicators by LHD. It provides a realistic look at how different areas of the state are thriving. Many factors influence the health outcomes of individuals and populations—personal, social, economic, and environmental—which are commonly referred to as social determinants of health (SDOH). Looking at smaller subsections of the state allows us to not only see health outcomes of the areas, but also to examine contributing factors, such as the SDOH.[1]

To further explore differences at the community level, Utah is divided into 99 Small Areas. Looking at data at the Small Area level can help illustrate areas experiencing health disparities. For example, the Avenues and South Salt Lake are just five miles (a 16-minute drive) apart. But in those five miles the life expectancy drops more than 12 years. Such stark contrasts are happening within one LHD. Given the reality of these health disparities, it is essential to understand where they are occurring to allow for better targeting of the most at-risk populations. For more information about Utah Small Areas, see https://ibis.health.utah.gov/ibisph-view/pdf/resource/UtahSmallAreaInfo.pdf.

To equitably compare Small Areas, and to help identify communities with a higher need for improvement in SDOH, the UDOH established the Utah Health Improvement Index (HII) using methods by Singh for the Area Deprivation Index.[2] The HII is a composite measure of SDOH using nine indicators that describe important socio-economic and demographic factors. Each Utah Small Area is assigned an HII score. The HII scores range from 72 to 160. They are broken into categories: very high, high, average, low, and very low. The categories of average, low, and very low are determined not to have health disparities (meaning adverse health outcomes are not a result environmental disadvantages) . The high and very high categories are health disparity areas.[3]

This section includes health indicators and SDOH indicators for LHDs and Utah Small Areas. The LHD indicators are listed below.

- Social Determinants of Health: persons living in poverty, child poverty, food insecurity, high school graduate, or higher, housing cost burden
- Environmental Health: air quality, substandard housing, low food access, drove alone to work
- Respiratory Conditions: uncontrolled asthma
- Cardiovascular Conditions: high blood pressure, high cholesterol
- Diabetes Conditions: diabetes prevalence
- Obesity/Physical Activity: obesity—adult, obesity—minor, physical activity—adult, physical activity—minor
- Mental Health: mental health status, suicide, depression
- Addictive Behaviors: misuse of pain relievers, unintentional drug overdose involving opioids, cigarette smoking—adult, current e-cigarette use—adult, current e-cigarette use—minor, illicit drug use, illicit drug use disorder
- Care Access: no health insurance, cost as a barrier to care, regular dental care
- Preventive Services: childhood vaccination, human papillomavirus vaccination, influenza vaccination, HIV testing
- Maternal and Child Health: adolescent births, developmental screening, low birth weight
- Violence and Injury Prevention: intimate partner violence, adverse childhood experiences (ACEs), firearm deaths
- Infectious Diseases: HIV, chlamydia

The Small Area indicators are listed below.

- Utah Health Improvement Index (HII) score
- population estimate
- percentage racial/ethnic minority
- infant mortality rate
- life expectancy at birth
- percentage of adults reporting fair/poor health

1 Utah Department of Health (2018). The Utah Health Improvement Index. https://health.utah.gov/disparities/data/ohd/UtahHII.pdf.
2 Singh, GK. Area deprivation and widening inequalities in US mortality, 1969–1998. American Journal of Public Health. 2003; 93(7); 1137–1143
3 Utah Department of Health (2018). The Utah Health Improvement Index. https://health.utah.gov/disparities/data/ohd/UtahHII.pdf.

Table 50: Bear River Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Bear River LHD	N/A	184,482	15.5%	4.8	80.6	11.4%
SMALL AREAS						
1 Brigham City	96.5	25,517	14.2%	6.4	77.4	10.3%
2.1 Box Elder County (Other) V2	91.7	12,313	6.2%	**	78.9	13.9%
2.2 Tremonton	93.4	17,510	15.0%	4.7*	79.8	12.6%
3.1 Logan V2	119.1	58,015	19.2%	6.0	80.6	10.4%
3.2 North Logan	120.0	23,442	20.9%	1.7*	83.1	8.5%
4.1 Cache County (Other)/Rich County (All) V2	92.3	25,445	9.5%	5.1*	81.6	8.9%
4.2 Hyrum	106.8	8,971	19.8%	5.4*	81.2	10.4%
4.3 Smithfield	92.6	13,671	8.1%	3.2*	80.5	14.5%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 51: Bear River State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	11.1%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	10.9%	--	≈	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	13.8%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	93.2%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	25.9%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	26.7%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	31.3%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	75.6%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	13.8	14.3	✓	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	26.1%	28.7%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	21.3%	24.5%	≈	23.7%	27.3%

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	6.7%	7.7%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	28.3%	29.7%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	9.9%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity)	102	57.5%	58.6%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	15.8%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	19.2%	18.4%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	17.1	18.5	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	28.9%	28.9%	!	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	9.3	11.4	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	6.0%	6.8%	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	4.1%	4.0%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	8.8%	--	✓	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	11.4%	11.1%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	13.5%	13.9%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	75.5%	75.8%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%

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		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	30.6%	31.5%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	16.0%	16.9%	!	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	8.2	--	✓	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	6.7%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	10.3%	11.6%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	13.0%	12.6%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	9.0	9.7	✓	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.0*	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	211.9	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 52: Central Utah Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	40.0%	5.3	79.8	13.7%
Central Utah LHD	N/A	80,858	11.6%	3.8	79.2	15.0%
SMALL AREAS						
54.1 Nephi/Mona	109.1	9,700	6.6%	4.9*	79.8	14.3%
54.2 Delta/Fillmore	127.6	10,111	18.3%	5.3*	80.9	16.1%
54.3 Sanpete Valley	118.7	22,058	13.8%	3.7*	80.3	13.6%
54.4 Central (Other)	110.9	24,001	11.0%	3.3*	77.5	14.9%
55.1 Richfield/Monroe/Salina	101.6	15,021	7.8%	**	78.0	13.5%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 53: Central Utah State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
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! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	12.5%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	15.1%	--	!	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	13.9%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	89.8%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	20.0%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	22.4%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	24.4%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	74.9%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	17.3	17.6	≈	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	30.3%	29.0%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	27.1%	26.3%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	9.1%	8.3%	≈	8.2%	10.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	34.3%	35.0%	!	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	10.2%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity)	102	48.9%	49.3%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	25.8%	--	✓	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	18.7%	18.9%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	27.7	29.1	!	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	23.0%	22.2%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	15.6	16.9	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	7.8%	8.7%	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	4.2%	4.1%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	12.1%	--	≈	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	13.3%	14.4%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	13.3%	14.4%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	69.0%	70.0%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in past 12 months)	146	28.8%	27.6%	!	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	16.5%	17.6%	!	22.9%	42.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differ-ences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	13.8	--	≈	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.5%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	11.9%*	11.2%*	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	13.1%	13.4%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	16.4	17.1	≈	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.8*	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	152.1	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 54: Davis County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	40.0%	5.3	79.8	13.7%
Davis County LHD	N/A	351,713	15.8%	4.8	80.5	11.2%
SMALL AREAS						
11 Clearfield Area/Hooper	94.7	72,116	22.8%	6.1	77.0	10.9%
12 Layton/South Weber	86.8	84,433	20.3%	4.5	79.9	14.2%
13.1 Kaysville/Fruit Heights	78.6	39,085	5.9%	4.5	82.3	10.9%
13.2 Syracuse	76.2	29,404	12.7%	5.6*	79.6	7.5%
14.1 Centerville	76.7	17,544	9.0%	**	84.0	8.5%
14.2 Farmington	72.3	24,313	8.2%	3.4*	81.6	6.0%
15.1 North Salt Lake	93.5	21,021	23.7%	2.9*	82.3	13.9%
15.2 Woods Cross/West Bountiful	85.9	15,977	15.7%	7.4*	79.4	16.2%
16 Bountiful	95.6	47,850	11.5%	3.8	81.3	9.4%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 55: Davis County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	5.7%	--	✓	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	6.4%	--	✓	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	10.8%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	95.5%	--	✓	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	21.8%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	0.3%	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	22.2%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	37.2%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	79.8%	--	!	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	15.3	15.0	✓	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	24.6%	25.5%	≈	25.7%	30.3%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	25.0%	26.0%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	8.1%	8.2%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	25.9%	26.3%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	8.5%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	57.8%	58.5%	✓	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	16.9%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	18.1%	17.4%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	19.0	19.9	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	24.1%	23.9%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	8.4	8.8	✓	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	6.0%	6.1%	✓	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	5.3%	5.0%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	9.6%	--	✓	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	8.9%	8.7%	✓	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	9.7%	9.5%	✓	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	77.0%	77.0%	✓	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	36.9%	37.5%	✓	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	21.8%	21.8%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	10.3	--	✓	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.0%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	12.4%	12.5%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	14.8%	14.7%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	10.0	10.5	✓	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	2.3	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	325.0	--	≈	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 56: Salt Lake County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Salt Lake County LHD	N/A	1,152,633	28.5%	5.7	79.5	14.7%
SMALL AREAS						
17 Salt Lake City (Rose Park)	130.7	36,796	63.6%	6.3	77.3	18.9%
18 Salt Lake City (Avenues)	87.2	24,309	16.4%	3.6*	85.8	6.0%
19.1 Salt lake City (Foothill/East Bench)	83.5	21,380	16.2%	5.2*	85.2	7.6%
20 Magna	119.0	28,760	38.9%	7.7	75.5	16.8%
21.1 Salt Lake City (Glendale) V2	150.7	24,957	68.4%	9.2	75.5	23.3%
22.1 West Valley (Center)	128.7	52,741	52.0%	6.3	78.1	19.7%
22.2 West Valley (West) V2	95.8	32,032	49.0%	5.1	76.9	17.0%
23.1 West Valley (East) V2	142.8	53,675	54.3%	5.6	77.4	26.0%
24.1 Salt Lake City (Downtown) V2	117.9	38,650	28.4%	8.9	75.3	18.3%
24.2 Salt Lake City (Southeast Liberty)	90.0	22,756	14.6%	3.7*	81.0	7.2%
25 South Salt Lake	137.6	27,881	42.6%	7.8	73.7	24.6%
26.1 Salt Lake City (Sugar House)	101.6	34,414	19.1%	4.1*	79.2	13.9%
26.2 Millcreek (South)	79.1	21,893	14.0%	**	83.7	6.1%
26.3 Millcreek (East)	75.0	24,685	12.5%	6.0*	82.0	5.3%
27.1 Holladay V2	83.3	25,418	13.7%	2.5*	80.7	14.7%
28 Cottonwood	80.3	43,027	13.2%	7.6	82.2	13.3%
29.1 Kearns V2	124.9	40,856	43.1%	9.5	74.3	20.1%
30 Taylorsville (East)/Murray (West)	114.5	38,074	31.6%	6.1	77.8	19.5%
30.1 Taylorsville (West)	101.3	39,779	N/A	4.2	79.6	16.4%
31 Murray	105.9	35,498	23.9%	5.9	78.1	19.0%
32 Midvale	120.1	32,079	35.7%	5.7	77.2	20.1%
33.2 West Jordan (Northeast) V2	97.4	31,455	31.1%	5.4	79.0	11.8%
34.1 West Jordan (Southeast)	101.4	38,233	28.8%	8.3	78.5	16.7%
34.2 West Jordan (West)/Copperton	86.8	50,175	26.3%	3.2	79.6	9.8%
35.1 South Jordan V2	77.7	39,087	13.6%	4.7	80.4	8.4%
35.2 Daybreak	71.9	34,508	N/A	5.9*	79.0	7.5%
36.1 Sandy (West)	113.5	31,139	21.8%	5.9	78.6	21.4%
36.2 Sandy (Center) V2	78.8	29,696	16.0%	4.5*	82.2	9.8%
37 Sandy (Northeast)	72.5	23,709	10.2%	**	81.4	5.0%
38 Sandy (Southeast)	74.2	30,527	11.1%	7.8*	82.3	6.8%
39.1 Draper	77.9	47,039	14.9%	4.1	80.4	8.4%
39.2 Riverton/Bluffdale	76.8	44,687	9.9%	5.0	81.0	13.5%
39.3 Herriman	80.1	52,791	16.2%	4.9	80.1	12.1%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 57: Salt Lake County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
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! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	9.0%	--	≈	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	10.4%	--	≈	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	11.8%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	90.4%	--	!	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	27.8%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	1.6%	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	28.8%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	12.9%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	74.9%	--	✓	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	22.6	22.4	!	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	25.4%	26.6%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	23.1%	24.0%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	7.8%	8.1%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	28.0%	28.4%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	11.1%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity)	102	53.3%	53.5%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	17.8%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	19.0%	18.8%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	21.4	22.1	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	23.6%	23.7%	≈	24.2%	18.6%

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! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	14.5	14.3	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	10.9%	10.9%	!	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	5.9%	5.7%	!	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	15.3%	--	!	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	14.0%	13.9%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	14.4%	14.1%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	70.1%	70.2%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	34.6%	35.2%	✓	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	26.8%	26.5%	✓	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	16.2	--	!	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.7%	--	!	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	14.2%	14.1%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	17.9%	17.2%	!	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	12.8	13.3	≈	13.3	11.9

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	7.7	--	!	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	458.6	--	!	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.

Table 58: San Juan Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
San Juan LHD	N/A	15,449	56.4%	3.7*	77.9	21.0%
SMALL AREAS						
57.3 Blanding/Monticello	113.0	8,069	26.4%	**	80.9	15.1%
57.4 San Juan County (Other)	160.9	7,359	86.4%	**	78.1	31.6%

**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 59: San Juan State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	22.6%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	26.8%	--	!	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	19.4%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	83.8%	--	!	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	18.2%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	0.0%	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	28.0%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	51.2%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	77.1%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	20.7	19.2	≈	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	25.2%	24.8%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	19.4%	19.2%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	8.5%	8.6%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	38.1%	37.0%	≈	28.4%	31.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	9.7%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	52.6%	51.6%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	21.2%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	16.0%	14.1%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	26.0	26.1	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	14.4%	13.5%	✓	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	^^	^^	--	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	7.6%*	9.0%*	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	3.0%*	3.1%*	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	2.2%	--	✓	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	9.7%*	8.8%*	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	15.0%	16.8%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	59.8%	61.0%	!	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in past 12 months)	146	26.1%	28.0%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	29.2%	32.0%	✓	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	21.4	--	≈	13.1	17.4

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	8.1%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	6.1%	6.3%	✓	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	8.1%	8.9%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	28.2	29.5	!	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	**	--	--	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	271.9	--	≈	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.
^^ Data are suppressed when the data meet the criteria for confidentiality constraints. More information: http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Table 60: Southeast Utah Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Southeast Utah LHD	N/A	40,047	14.9%	4.9	76.3	19.2%
SMALL AREAS						
56.1 Carbon County	109.6	20,264	16.9%	4.0*	75.1	20.2%
56.2 Emery County	96.6	10,010	8.8%	7.9*	75.8	17.9%
57.1 Grand County	132.5	9,757	16.6%	**	78.3	20.3%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 61: Southeast Utah State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	13.2%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	16.7%	--	!	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	14.7%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	91.6%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	22.0%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	25.5%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	17.7%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	78.8%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	22.5	24.1	!	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	30.0%	24.9%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	25.1%	20.9%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	12.1%	10.1%	≈	8.2%	10.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	37.5%	36.9%	!	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	8.1%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity)	102	51.4%	51.0%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	22.4%	--	✓	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	20.6%	21.2%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	30.0	30.7	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	27.6%	27.4%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	28.7	30.3	!	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	20.9%	23.2%	!	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	4.8%	5.2%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	21.0%	--	!	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	8.6%	9.6%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	16.1%	16.0%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	68.0%	69.0%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in past 12 months)	146	36.2%	34.4%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	26.4%	28.4%	≈	22.9%	42.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	12.2	–	≈	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	–	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	9.6%	–	!	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	19.0%	22.3%	!	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	16.4%	17.1%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	21.7	21.5	!	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	3.5*	–	≈	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	247.2	–	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 62: Southwest Utah Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Southwest Utah LHD	N/A	243,844	14.7%	5.1	80.9	11.0%
SMALL AREAS						
58 St. George	99.6	91,607	19.1%	4.4	81.0	11.3%
59.1 Washington County (Other) V2	132.7	10,821	4.6%	**	80.1	7.9%
59.2 Washington City	101.5	26,067	11.3%	2.8*	82.5	12.8%
59.3 Hurricane/La Verkin	108.1	26,804	15.2%	6.7*	81.1	15.8%
59.4 Ivins/Santa Clara	82.0	16,410	10.1%	**	80.3	12.1%
60 Cedar City	121.3^	46,715	14.4%	6.3	78.5	16.0%
61 Southwest Local Health District (Other)	104.1	25,419	10.5%	7.1*	77.8	10.9%

^Some small areas might have a high HII because of their high and transient college student population.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 63: Southwest Utah State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	10.8%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	13.1%	--	!	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	14.6%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	92.5%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	28.6%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	30.7%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	44.8%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	77.2%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	13.4	14.1	✓	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	28.1%	25.2%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	27.1%	24.7%	≈	23.7%	27.3%

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	8.9%	7.9%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	25.1%	26.0%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	9.7%	--	≈	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	56.7%	55.9%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	19.5%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	12.8%	13.5%	✓	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	26.4	28.6	!	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	23.0%	22.9%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	12.7	14.3	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	8.7%	9.5%	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	5.6%	5.7%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	11.7%	--	≈	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	16.1%	18.8%	!	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	12.7%	14.4%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	68.6%	68.0%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	26.3%	23.8%	!	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	19.4%	21.9%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	16.5	--	!	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	6.8%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	19.8%	20.7%	!	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	16.6%	17.2%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	16.0	16.7	!	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	2.8	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	267.4	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.

Table 64: Summit County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Summit County LHD	N/A	41,933	15.5%	4.7*	83.4	9.5%
SMALL AREAS						
51.1 Park City	91.3	30,157	15.6%	**	85.2	10.8%
51.2 Summit County (East)	88.7	11,784	17.9%	7.8*	78.3	8.4%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 65: Summit County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	6.2%	--	✓	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	5.8%	--	✓	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	10.5%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	94.9%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	26.4%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	26.3%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	40.8%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	71.5%	--	✓	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	11.7	12.1	✓	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	19.6%	18.1%	✓	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	20.6%	18.6%	✓	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	5.6%	5.5%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	13.1%	13.4%	✓	28.4%	31.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	4.7%	--	✓	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	63.7%	63.5%	✓	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	20.1%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	24.7%	23.4%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	15.4	14.7	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	23.0%	23.2%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	^^	^^	--	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	7.4%*	6.9%*	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	2.3%*	2.2%*	✓	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	16.9%	--	!	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	13.0%	12.1%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	9.6%	9.3%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	75.2%	75.3%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	39.7%	39.4%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	22.8%	23.4%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	4.9*	--	✓	13.1	17.4

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	8.8%	--	!	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	14.9%	14.7%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	7.7%	7.2%	✓	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	9.7	9.5	≈	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	2.5*	--	≈	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	276.6	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
^^ Data are suppressed when the data meet the criteria for confidentiality constraints. More information: http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Table 66: Tooele County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Tooele County LHD	N/A	69,907	16.6%	4.5	78.2	15.7%
SMALL AREAS						
40.1 Tooele County (Other)	116.2	16,794	18.2%	7.3*	78.8	18.8%
40.2 Tooele Valley	97.6	53,108	16.3%	3.7	78.1	14.6%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 67: Tooele County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	6.8%	--	✓	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	7.4%	--	✓	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	10.9%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	91.0%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	23.8%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	1.1%	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	24.4%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	31.1%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	74.9%	--	≈	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	26.3	25.3	!	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	29.4%	30.1%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	27.6%	28.3%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	12.1%	12.7%	!	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	43.5%	43.0%	!	28.4%	31.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	12.2%	--	!	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	48.9%	49.1%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	20.5%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	20.6%	20.6%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	21.8	23.7	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	29.9%	30.0%	!	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	16.7	17.7	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	13.3%	13.0%	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	6.3%	6.2%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	16.2%	--	!	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	11.2%	10.9%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	8.2%	8.2%	✓	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	70.0%	70.3%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	28.6%	30.0%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	20.6%	20.2%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	16.1	--	≈	13.1	17.4

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.6%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	18.7%	19.0%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	23.5%	23.6%	!	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	13.4	15.4	≈	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.5*	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	266.1	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 68: TriCounty Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
TriCounty LHD	N/A	56,382	16.9%	5.1	77.0	16.5%
SMALL AREAS						
53.1 Daggett and Uintah County	101.5	36,458	17.5%	5.3	77.0	15.1%
53.2 Duchesne County	96.1	19,959	15.9%	4.6*	76.3	18.4%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 69: TriCounty State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	11.5%	--	!	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	13.5%	--	!	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	14.2%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	86.9%	--	!	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	21.7%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	24.2%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	30.6%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	79.1%	--	!	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	26.8	27.7	!	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	34.2%	34.6%	!	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	21.8%	23.1%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	10.8%	11.1%	!	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	33.0%	33.5%	!	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	4.7%	--	✓	9.8%	N/A

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	56.9%	57.1%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	18.6%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	17.8%	17.9%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	33.5	36.0	!	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	22.8%	22.5%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	^^	^^	--	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	17.5%	17.4%	!	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	4.1%	4.1%	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	13.2%	--	≈	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	11.8%	11.6%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	12.7%	12.7%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	67.0%	66.6%	!	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had in past 12 months	146	26.2%	25.5%	!	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	26.1%	27.1%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	30.0	--	!	13.1	17.4

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	8.5%	--	!	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	13.8%	14.9%	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	16.2%	16.2%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	24.7	26.2	!	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.7*	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	257.2	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
^^ Data are suppressed when the data meet the criteria for confidentiality constraints. More information:
http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Table 70: Utah County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Utah County LHD	N/A	622,213	17.3%	5.3	80.4	11.8%
SMALL AREAS						
41.1 Eagle Mountain/Cedar Valley	85.1	35,109	14.7%	5.7	80.5	11.7%
41.2 Lehi	78.2	70,577	13.0%	4.9	81.2	10.7%
41.3 Saratoga Springs	72.1	29,718	11.2%	4.4	82.3	8.9%
42.1 American Fork	83.9	48,926	11.5%	5.8	78.4	13.2%
42.2 Alpine	76.7	10,812	5.5%	**	82.4	10.8%
43 Pleasant Grove/Lindon	88.0	60,120	13.0%	4.2	80.7	10.9%
44 Orem (North)	114.9	39,749	28.6%	6.9	77.1	11.6%
45 Orem (West)	117.3	41,394	24.8%	6.3	81.1	15.6%
46 Orem (East)	92.9	23,882	14.4%	3.0*	81.9	11.2%
47 Provo/BYU	125.1^	52,556	16.2%	4.5	83.1	11.3%
48.1 Provo (West City Center)	121.5	34,577	37.5%	7.1	77.9	14.4%
48.2 Provo (East City Center)	148.8	34,707	23.3%	5.1	80.5	13.7%
49.1 Salem City	77.8	9,900	7.4%	6.5*	82.4	9.3%
49.2 Spanish Fork	91.2	43,227	14.7%	6.7	78.6	12.8%
49.3 Springville	96.4	35,181	19.5%	3.9	79.9	15.7%
49.4 Mapleton	75.0	10,011	10.0%	9.4*	80.2	8.0%
50.1 Utah County (South) V2	107.8	14,449	16.0%	4.4*	77.3	10.7%
50.2 Payson	106.9	27,058	12.7%	3.4*	78.3	13.4%

^Some small areas might have a high HII because of their high and transient college student population.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
**The estimate has been suppressed because 1) the relative standard error is greater than 50% or 2) the observed number of events is very small and not appropriate for publication.

Table 71: Utah County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	9.4%	--	≈	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	7.5%	--	✓	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	12.8%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	94.2%	--	✓	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	28.1%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	4.4%	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	29.9%	--	N/A	27.7%	32.5%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Low Food Access, 2015 (Percentage of population)	70	35.4%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	73.4%	--	✓	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	12.1	12.5	✓	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	17.1%	21.2%	✓	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	18.4%	23.1%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	5.8%	7.4%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	25.9%	28.5%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	8.6%	--	✓	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity)	102	52.7%	53.6%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	17.4%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	20.6%	18.0%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	14.4	16.6	✓	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	23.8%	23.0%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	11.6	14.0	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	3.8%	4.1%	✓	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	3.7%	2.8%	✓	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	7.6%	--	✓	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	10.9%	10.1%	✓	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	11.9%	11.4%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	75.4%	76.2%	✓	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	30.1%	32.0%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	15.8%	15.9%	!	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	7.8	--	✓	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	6.4%	--	✓	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	9.8%	10.0%	✓	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	13.8%	13.4%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	8.7	10.0	✓	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.8	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	203.9	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.

Table 72: Wasatch County Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Wasatch County LHD	N/A	33,240	16.4%	4.9*	81.4	12.1%
SMALL AREAS						
52 Wasatch County	90.7	33,240	16.4%	4.9*	81.4	12.1%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 73: Wasatch County State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	5.3%	--	✓	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	6.4%	--	✓	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	11.2%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	95.1%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	29.1%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	30.8%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	43.0%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	80.2%	--	!	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	14.4	14.9	≈	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	22.4%	21.8%	≈	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	19.3%	19.0%	≈	23.7%	27.3%
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	5.0%	4.7%	✓	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	29.6%	25.2%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	7.6%	--	≈	9.8%	N/A

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	59.1%	58.7%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	16.1%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	13.4%	15.2%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	18.8	20.0	≈	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	20.2%	20.9%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	^^	^^	--	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	7.6%	7.8%	≈	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	3.1%*	3.9%*	≈	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	8.5%	--	≈	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	15.1%	15.6%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	12.4%	12.6%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	76.8%	76.1%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	27.0%	24.4%	!	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	25.8%	25.6%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	13.6	--	≈	13.1	17.4

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		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	6.9%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	17.4%*	21.8%*	≈	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	10.6%	12.3%	≈	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	16.7	17.9	≈	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	0.0	--	--	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	138.4	--	✓	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.
*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.
^^ Data are suppressed when the data meet the criteria for confidentiality constraints. More information:
http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Table 74: Weber-Morgan Health Improvement Index Table

Geography	Health Improvement Index (HII) Score	Population (2018)	% Racial/ Ethnic Minority (2014–2018)	Infant Mortality Rate per 1,000 (2014–2018)	Life Expectancy at Birth (2014–2018)	% Adults Reporting Fair/ Poor Health (2016–2018)
State of Utah	N/A	3,161,105	21.4%	5.3	79.8	13.7%
Weber-Morgan LHD	N/A	268,404	22.8%	6.1	78.2	15.0%
SMALL AREAS						
5 Ben Lomond	106.8	63,329	29.5%	8.0	77.1	16.8%
6.1 Weber County (East)	75.0	36,470	8.9%	4.0*	81.6	6.2%
6.2 Morgan County	75.4	12,031	4.9%	5.3*	81.2	6.2%
7 Ogden (Downtown)	123.1	41,114	30.6%	8.2	75.0	17.0%
8 South Ogden	106.2	38,116	26.9%	2.8	79.5	17.3%
9 Roy/Hooper	89.1	48,970	22.3%	5.0	78.6	16.2%
10 Riverdale	100.9	28,363	15.7%	9.3	77.9	15.7%

*Use caution in interpreting; the estimate has a coefficient of variation >30% and is therefore deemed unreliable by Utah Department of Health standards.

Table 75: Weber-Morgan State Health Assessment Health Indicator Summary

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
SOCIAL DETERMINANTS OF HEALTH						
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	9.2%	--	≈	9.1%	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	10.9%	--	≈	9.7%	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	12.1%	--	N/A	12.1%	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	90.6%	--	≈	92.0%	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	24.3%	--	N/A	26.3%	31.6%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	N/A	--	N/A	0.9%	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	26.0%	--	N/A	27.7%	32.5%
Low Food Access, 2015 (Percentage of population)	70	26.2%	--	N/A	26.3%	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	80.8%	--	!	76.0%	76.4%
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	22.7	22.8	!	18.0	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	29.6%	29.5%	!	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	21.4%	21.7%	≈	23.7%	27.3%

✓ The community is performing BETTER than the state, and the difference is statistically significant.
≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant.
! The community is performing WORSE than the state, and the difference is statistically significant.

	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
DIABETES CONDITIONS						
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	8.9%	9.1%	≈	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	30.4%	30.3%	≈	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	12.1%	--	!	9.8%	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	57.1%	57.0%	≈	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	17.6%	--	≈	17.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	20.2%	19.7%	≈	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	27.6	28.9	!	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	27.7%	27.5%	≈	24.2%	18.6%
ADDICTIVE BEHAVIORS						
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	N/A	--	N/A	3.8%	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	15.0	15.2	≈	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	12.3%	12.2%	!	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	9.3%	8.8%	!	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	18.4%	--	!	12.4%	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	N/A	--	N/A	7.6%	11.4%
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	N/A	--	N/A	2.5%	2.9%
CARE ACCESS						
No Health Insurance, 2018 (Percentage of adults)	134	12.6%	12.7%	≈	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	13.9%	13.8%	≈	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	72.4%	72.7%	≈	72.0%	66.2%
PREVENTIVE SERVICES						
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	N/A	--	N/A	72.0%	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	N/A	--	N/A	43.2%	51.1%

✓ The community is performing BETTER than the state, and the difference is statistically significant. ≈ The community value is the same or ABOUT THE SAME as the state. Differences are not statistically significant. ! The community is performing WORSE than the state, and the difference is statistically significant.	Page	Community Data			Comparison Values	
		Crude (burden) Rate	Age-adjusted (comparison) Rate	Compare	Utah	U.S.
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	33.3%	33.6%	≈	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	25.4%	25.1%	≈	22.9%	42.1%
MATERNAL AND CHILD HEALTH						
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	17.9	--	!	13.1	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	N/A	--	N/A	32.6%	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.6%	--	≈	7.2%	N/A
VIOLENCE AND INJURY PREVENTION						
Intimate Partner Violence, 2016 (Percentage of adults)	164	19.8%	19.3%	!	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	18.8%	18.4%	!	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	17.0	17.3	!	13.3	11.9
INFECTIOUS DISEASES						
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	1.9	--	✓	4.1	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	387.8	--	!	333.5	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2019 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data are from CDC WONDER.
† Local health district represents district of mother's residence.
‡‡ All Utah data in this row are from the Utah Department of Health Bureau of Epidemiology; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Accessed 12/20/2019 from https://www.cdc.gov/std/stats18/tables/2.htm.

Table 76: State of Utah State Health Assessment Health Indicator Summary

	Page	State Data		U.S.
		Crude (burden) Rate	Age-adjusted (comparison) Rate	
SOCIAL DETERMINANTS OF HEALTH				
Persons Living in Poverty, 2018‡ (Percentage of persons)	50	9.1%	--	13.1%
Child Poverty, 2018‡ (Percentage of children)	53	9.7%	--	18.0%
Food Insecurity, 2017 (Percentage of individuals)	56	12.1%	--	12.5%
High School Graduate or Higher, 2014–2018 (Percentage of adults aged 25+)	58	92.0%	--	87.7%
Housing Cost Burden, 2014–2018 (Percentage of households)	60	26.3%	--	31.6%
ENVIRONMENTAL HEALTH				
Air Quality ($PM_{2.5}$), 2018 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	66	0.9%	--	N/A
Substandard Housing, 2014–2018 (Percentage of occupied housing units with 1+ substandard conditions)	69	27.7%	--	32.5%

	Page	State Data		U.S.
		Crude (burden) Rate	Age-adjusted (comparison) Rate	
Low Food Access, 2015 (Percentage of population)	70	26.3%	--	22.4%
Drove Alone to Work, 2014–2018 (Percentage of workers aged 16 years and older)	73	76.0%	--	76.4%
RESPIRATORY CONDITIONS				
Uncontrolled Asthma, 2018 (Number of ED Visits due to asthma per 10,000)	78	18.3	18.0	N/A
CARDIOVASCULAR CONDITIONS				
High Blood Pressure, 2017 (Percentage of adults with doctor-diagnosed hypertension)	82	24.5.%	25.7%	30.3%
High Cholesterol, 2017 (Percentage of adults with doctor-diagnosed high cholesterol)	85	22.2%	23.7%	27.3%
DIABETES CONDITIONS				
Diabetes Prevalence, 2017–2018 (Percentage of adults)	90	7.7%	8.2%	10.1%
OBESITY/PHYSICAL ACTIVITY				
Obesity—Adult, 2018 (Percentage of adults with a body mass index of 30 or more)	96	27.8%	28.4%	31.1%
Obesity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	99	9.8%	--	N/A
Physical Activity—Adult, 2017 (Percentage of adults who meet recommendation for aerobic physical activity	102	54.0%	54.3%	50.2%
Physical Activity—Minor, 2019§ (Percentage of students in grades 8, 10, and 12 physically active for a total of at least 60 minutes per day on 7 of the past seven days)	105	17.9%	--	N/A
MENTAL HEALTH				
Mental Health Status, 2018 (Percentage of adults with 7+ days poor mental health in past 30 days)	110	18.8%	18.2%	18.8%
Suicide, 2016–2018# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	112	20.8	22.2	13.9
Depression, 2018 (Percentage of adults ever told by a doctor they had a depressive disorder)	115	24.3%	24.2%	18.6%
ADDICTIVE BEHAVIORS				
Misuse of Pain Relievers, 2017–2018 (Percentage of persons aged 12+ reporting misuse of pain relievers in the past year)	119	3.8%	--	3.9%
Drug Overdose Involving Opioids (Unintentional), 2017–2018 (Rate per 100,000 [ICD-10 codes X40–X44 and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	121	12.8	13.6	14.2
Cigarette Smoking—Adult, 2018 (Percentage of adults reporting current cigarette smoking)	123	9.0%	9.2%	16.1%
Current E-cigarette Use—Adult, 2016–2018 (Percentage of adults)	125	5.4%	5.0%	5.0%
Current E-cigarette Use—Minor, 2019§ (Percentage of students in grades 8, 10, and 12)	127	12.4%	--	N/A
Illicit Drug Use, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	129	7.6%	--	11.4%

	Page	State Data		U.S.
		Crude (burden) Rate	Age-adjusted (comparison) Rate	
Illicit Drug Use Disorder, 2017–2018 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	130	2.5%	--	2.9%
CARE ACCESS				
No Health Insurance, 2018 (Percentage of adults)	134	12.8%	12.7%	13.0%
Cost as a Barrier to Care, 2018 (Percentage of adults unable to get needed care due to cost)	136	13.0%	12.9%	13.5%
Regular Dental Care, 2018 (Percentage of adults who reported a dental visit in the past year)	138	72.0%	72.0%	66.2%
PREVENTIVE SERVICES				
Childhood Vaccination, 2018 (Percentage of children aged 24 months with combined vaccination series)	141	72.0%	--	68.7%
Human Papillomavirus Vaccination, 2018 (Percentage of adolescents aged 13–17 years up-to-date)	144	43.2%	--	51.1%
Influenza Vaccination, 2018 (Percentage of adults who had a vaccine in the past 12 months)	146	32.3%	32.9%	31.8%
HIV Testing, 2018 (Percentage of adults)	149	22.5%	22.9%	42.1%
MATERNAL AND CHILD HEALTH				
Adolescent Births, 2018† (Live births per 1,000 adolescent females aged 15–19)	154	13.1	--	17.4
Developmental Screening, 2016–2017 (Percentage of children aged 9–35 months receiving developmental screening using a parent-completed screening tool in the past year)	157	32.6%	--	31.1%
Low Birth Weight, 2016–2018† (Percentage of live births under 2,500 grams)	159	7.2%	--	N/A
VIOLENCE AND INJURY PREVENTION				
Intimate Partner Violence, 2016 (Percentage of adults)	164	14.0%	14.1%	N/A
Adverse Childhood Experiences (ACEs), 2016 & 2018 (Percentage of adults reporting 4+ ACEs)	167	16.1%	13.7%	N/A
Firearm Deaths, 2016–2018# (Rate per 100,000 population)	170	12.6	13.3	11.9
INFECTIOUS DISEASES				
HIV, 2014–2018‡‡ (New diagnoses per 100,000 population)	174	4.1	--	N/A
Chlamydia, 2018‡‡ (Cases per 100,000 population)	177	333.5	--	539.9

‡ All data in this row based on the 2018 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
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Collaboration

Respect

Appendices

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

A: List of Acronyms

2-1-1—211 provides people with ways to get help and give help. By simply dialing 2-1-1, callers can connect to health and human resources they need as well as find meaningful volunteer opportunities.

4:3:1:3:3:1:4—refers to four doses of diphtheria, tetanus and acellular pertussis (DTaP), 3 doses of polio, 1 dose of measles-mumps-rubella (MMR), 3 doses of Hepatitis B (HepB), full series of *Haemophilus influenzae* type B (Hib) (3 or 4 doses depending on product type received), 1 dose of Varicella (Var), and 4 doses of pneumococcal vaccine (PCV)

AAP—American Academy of Pediatrics

ABCS—appropriate aspirin prescription, blood pressure control, cholesterol control, and smoking cessation

ACEs—adverse childhood experiences

ACS—American Community Survey

AI/AN—American Indian and Alaska Native

AIDS—acquired immune deficiency syndrome

AK Native—Alaska Native

ASQ—Ages and Stages Questionnaire

ASTHO—Association of State and Territorial Health Officials

AUCH—Association for Utah Community Health

BMI—body mass index

BRFSS—Behavioral Risk Factor Surveillance System

BYU—Brigham Young University

CAHMI—Child and Adolescent Health Measurement Initiative

CAP—Community Advisory Panel

CARES—Center for Applied Research and Engagement Systems at the University of Missouri

CDC—Centers for Disease Control and Prevention

Center TRT—Center for Training and Research Translation

CFP—Concealed Firearm Permit

CHDI—Center for Health Data and Informatics

CHIP—Children's Health Insurance Plan

CHNA—community health needs assessment

CLEHA—Conference of Local Environmental Health Administrators

COPD—chronic obstructive pulmonary disease

CPI-U—Consumer Price Index for All Urban Consumers

DEQ —Utah Department of Environmental Quality

DHS—Utah Department of Human Services

DIS—disease investigation specialist

DMH—Utah Department of Human Services, Division of Mental Health

DPP—Diabetes Primary Prevention Study

DSAMH—Utah Division of Substance Abuse and Mental Health

DSL—digital subscriber line

DSM-IV—4th edition of the Diagnostic and Statistical Manual of Mental Disorders

DTaP—diphtheria, tetanus toxoids, and acellular pertussis vaccine (includes children who might have been vaccinated with diphtheria and tetanus toxoids vaccine, or diphtheria, tetanus toxoids, and pertussis vaccine)

DWS—Utah Department of Workforce Services

ED—emergency department

EPA—U.S. Environmental Protection Agency

EPICC—Healthy Living through Environment, Policy, and Improved Clinical Care program

ERC—Emergency Response Coordinator

ESRI—Environmental Systems Research Institute

EXHALE—technical package representing a group of strategies, which, based on the best available evidence, can improve asthma control and reduce health care costs

FAQ—frequently asked questions

FARA—Food Access Research Atlas

FDA—U.S. Food and Drug Administration

FPL—federal poverty level

FQHC—Federally Qualified Health Center

GED—General Education Development/General Education Diploma

GIS—geographic information system

HALO—Healthy Alternatives for Little Ones

HCD—Utah Division of Housing and Community Development

HepB—hepatitis B vaccine

Hib—Haemophilus Influenzae type B vaccine

HII—Utah Health Improvement Index

HIV—human immunodeficiency virus

HIV/AIDS—human immunodeficiency virus infection and acquired immune deficiency syndrome

HMOs—health maintenance organizations

HPSA—Health Professional Shortage Area

HPV—human papillomavirus

HRSA—U.S. Health Resources and Services Administration

HUD—U.S. Department of Housing and Urban Development

IBIS/IBIS-PH—Indicator-based Information System for Public Health

ICD—International Classification of Diseases

ICD-9—International Classification of Diseases, Ninth Revision

ICD-10—International Classification of Diseases, Tenth Revision

IDU—intravenous drug users/injection drug use

IGP—intergenerational poverty

IHS—Indian Health Service

IOM—Institute of Medicine

IPV—intimate partner violence

LDL—low-density lipoprotein

LDS—Latter-day Saints/Mormon

LGB*—lesbian, gay, or bisexual— other

LGBT—lesbian, gay, bisexual, or transgender

LHD —local health department/district

LP gas—liquefied petroleum gas or liquid petroleum gas

LTBI—latent tuberculosis infection

MCH—Maternal and Child Health

MCHB—Maternal and Child Health Bureau

MHCA—mental health catchment area

MMR—measles-mumps-rubella

MMWR—Morbidity and Mortality Weekly Report

MSA—Metropolitan Statistical Area

MSM—men who have sex with men/male-to-male sexual contact

MSM+IDU—male-to-male sexual contact and injection drug-use

N/A—not available

NAAQS—National Ambient Air Quality Standard

NAEPP EPR-3—National Asthma Education and Prevention Program Expert Panel Report 3

NAMI—National Alliance on Mental Illness

NCHS—National Center for Health Statistics

NIS—National Immunization Survey

NIS-Teen—National Immunization Survey-Teen

NSCH—National Survey of Children's Health

NSDUH—National Survey on Drug Use and Health

OMB—U.S. Office of Management and Budget

OPCRH—Office of Primary Care and Rural Health

OVRS—Utah Office of Vital Records and Statistics

PCN—Utah Primary Care Network

PCV—pneumococcal conjugate vaccine

PHAB—Public Health Accreditation Board

PIO—public information officer

PIT Count—Point-in-Time Count

PM—particulate matter

$PM_{2.5}$—refers to particulate matter that is 2.5 micrometers long

PNA—Prevention Needs Assessment

PREP—Personal Responsibility Education Program

QPR—Question, Persuade, Refer

RV—recreational vehicle

SAIPE—Small Area Income and Poverty Estimates

SAMHSA—Substance Abuse and Mental Health Services Administration

SHARP—Student Health and Risk Prevention

SNAP—Supplemental Nutrition Assistance Program

SRAE—Sexual Risk Avoidance Education

SSI—supplemental security income

STARS—Store Tracking and Redemption System

STD—sexually transmitted disease

SWOT—strengths, weaknesses, opportunities, threats

TANF—Temporary Assistance for Needy Families

TB—tuberculosis

TDLinx—database containing information on individual store characteristics for supermarkets, supercenters, superettes, convenience stores, and grocery kiosks

TECs—tribal epidemiology centers

TOP Star—Targeting Obesity in Preschools and Child Care Settings

TPCP—Utah Tobacco Prevention and Control Program

TTY—text telephone

UAP—Utah Asthma Program

UAWA—Utah Association of WIC Administrators

UDOH—Utah Department of Health

UDOT—Utah Department of Transportation

UHIP—Utah Health Improvement Plan

UIHAB—Utah Indian Health Advisory Board

UNHCR—United Nations Refugee Agency

UNIS—Utah Notification and Information System

UPP—Utah's Premium Partnership for Health Insurance

USBE—Utah State Board of Education

USDA—United States Department of Agriculture

USIIS—Utah Statewide Immunization Information System

UTA—Utah Transit Authority

UTL—Utah Tribal Leadership

UTVDRS—Utah Violent Death Reporting System

VA—Veterans Affairs

VFC—Vaccines for Children

VIPP—Violence and Injury Prevention Program

WIC—Women, Infants, and Children

WONDER—Wide-ranging Online Data for Epidemiologic Research

YRBS—Youth Risk Behavior Survey

B: Health Indicator List

Social Determinants of Health
- Poverty
- Child Poverty
- Food Insecurity
- Housing Cost Burden
- Income
- Education
- Households Headed by Single Female
- Homelessness

Environmental Health
- Air Quality
- Water Quality
- Low Food Access/Food Deserts
- Modified Food Retail Environment Index
- Substandard Housing
- Recreation and Fitness Facility Access
- Safety/Crime Rates
- Transportation Use
- Occupational Fatalities

Respiratory Conditions
- Uncontrolled Asthma
- Chronic Obstructive Pulmonary Disease (COPD)

Cancers
- All Cancer Deaths
- Breast Cancer
- Colon Cancer
- Lung Cancer
- Skin Cancer

Cardiovascular Conditions
- High Blood Pressure
- High Cholesterol
- Coronary Heart Disease
- Heart Failure
- Stroke

Diabetes Conditions
- Diabetes
- Pre-Diabetes

Overweight and Obesity
- Overweight—Adults and Youth
- Obesity—Adults and Youth
- Recommended Physical Activity—Adults and Youth
- Vegetable Consumption—Adults and Youth
- Fruit Consumption—Adults and Youth

Other Chronic Conditions
- Arthritis
- Kidney Disease
- Alzheimer's Disease

Vaccine Preventable Disease
- Pertussis
- Influenza-associated Hospitalization
- Hepatitis B, Chronic
- Hepatitis B, Acute
- Hepatitis A
- Tetanus
- Diphtheria
- Varicella (Chickenpox)

Other Infectious Diseases
- Chlamydia
- Gonorrhea
- HIV
- Syphilis, Primary and Secondary
- Hepatitis C, Chronic
- Hepatitis C, Acute
- West Nile Virus, Humans
- Tuberculosis, Active
- Campylobacter
- Shiga Toxin-producing E. coli
- Salmonellosis
- Giardiasis
- Cryptosporidiosis
- Healthcare Associated Infections
- Rabies, Animal

Mental Health
- Mental Health Status
- Suicide
- Attempted Suicide—Youth
- Anxiety
- Depression

Addictive Behaviors
- Prescription Drug Misuse
- Opioid (Prescription) Deaths
- Cigarette Smoking—Adults and Youth
- Vaping—Adults and Youth
- Binge Drinking—Adults and Youth
- Heavy Drinking
- Illicit Substance Abuse

Care Access
- No Health Insurance—Adults and Children
- Cost as a Barrier to Care
- At Least One Primary Provider
- Non-emergent Emergency Department Use
- Last Dental Visit

Preventive Services
- Mammogram
- Cholesterol Check
- Colon Cancer Screening
- Influenza Vaccination
- Pneumococcal Vaccination
- Childhood Vaccination (4:3:1:3:3:1:4)
- HPV Immunization
- Sun Safety
- HIV Testing

Maternal and Child Health
- Infant Mortality
- Fetal Deaths
- No Prenatal Care until 3rd Trimester
- Multivitamin Use Before Pregnancy
- Preterm Births
- Low Birth Weight
- Gestational Diabetes
- Obese BMI Prior to Pregnancy
- Excessive Gestational Weight Gain
- Alcohol Use During Pregnancy
- Smoking During Pregnancy
- Breastfeeding
- Births from Unintended Pregnancy
- Duration between Pregnancies
- Births to Women Under 18
- Developmental Screening
- Adverse Childhood Experiences (ACEs)
- Autism

Violence and Injury Prevention
- Seatbelt Use
- Helmet Use—Youth
- Unintentional Injury Deaths
- Falls
- Motor Vehicle Traffic Crashes
- Firearm
- Drowning
- Poisoning
- Fire Deaths
- Sexual Assault
- Interpersonal Violence
- Homicide
- Violent Crimes

C: 2018-2019 Utah Community Input Meetings

Nineteen community input meetings were held around the state to gather input on current health priorities and other emerging health needs. These meetings were a collaboration between Intermountain Healthcare, the Utah Department of Health, and 10 participating local health departments. The meetings were held in the fall of 2018 through the spring of 2019.

Bear River
- Logan
- Tremonton

Central Utah
- Delta
- Mt. Pleasant
- Richfield

Davis County
- Farmington

Salt Lake County
- Murray
- Riverton
- Salt Lake City (two meetings)
- Sandy

San Juan County
- Blanding

Southeast Utah
- Moab
- Price

Southwest Utah
- Garfield County
- St. George

Summit County
- Park City

Wasatch County
- Heber

Weber-Morgan
- Ogden

Collaboration

Respect

Data Sources

Effective

Service

Evidence-based

Trustworthy

Integrity

Innovation

Transparency

Description of State

Geography

County Classifications: Utah Department of Health Office of Primary Care and Rural Health. Accessed 5/13/2020 from https://ruralhealth.health.utah.gov/portal/county-classifications-map/.

Urban counties have a population density of >100 people per sq. mile; rural counties have a population density of <99 and >6 people per sq. mile and frontier counties have <6 people per sq. mile.

Indian Tribal Lands: Utah Department of Health Office of Indian Health. Accessed 3/27/2020 from http://health.utah.gov/indianh/history.html.

Three Major Provinces: Physiographic Regions of Utah. Utah Geological Survey. Accessed 5/29/2020 from https://geology.utah.gov/popular/general-geology/utah-landforms/physiographic-provinces/.

Transportation

Percentage of Workers Aged 16 Years and Older Commuting by Mode in Utah: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah.

Commuting to Work. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49

Occupation and Industry

Percentage of Civilian Employed Population Aged 16 Years and Older by Industry in Utah: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah.

Industries. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49

Politics

Voters by Party and Status: Current Voter Registration Statistics. Vote.Utah.gov. Downloaded 5/13/2020 from https://voteinfo.utah.gov/current-voter-registration-statistics/.

An inactive voter is a registered voter who has not voted in two regular general elections and has failed to respond to a notice sent to them by the county clerk.

Health Professional Shortage Areas

Utah Primary Care, Dental Health, and Mental Health HPSA Maps: Shortage Designations. Utah Department of Health Office of Primary Care and Rural Health.

Health professional shortage areas (HPSA) are service areas or population groups that have been designated as having too few primary medical care, dental, or mental health providers to meet the needs of the population. These shortages may be geographic-, population-, or facility-based.

For detailed information about HPSAs, see the HPSA Fact Sheet at https://ruralhealth.health.utah.gov/wp-content/uploads/2018/11/HPSA-Fact-Sheet.pdf.

For detailed information about HPSA Designation Methodology, see the HPSA Designation Methodology Fact Sheet at https://ruralhealth.health.utah.gov/wp-content/uploads/2018/10/2-26-18-HPSA-Designation-Methodology-hc-1.pdf.

Demographics

Birth Rates

Birth Rates, Utah and U.S.: Birth Rates. Retrieved on 12/26/19 from Utah Department of Health,

Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/indicator/view/BrthRat.UT_US.html.

Distribution by Age

Age Distribution of People in Utah: Population Estimates. Retrieved on 12/26/19 from Utah

Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/query/result/pop/PopMain/Count.html.

All population estimates apply to July 1 of the selected year.

Population estimates provided by the National Center for Health Statistics through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.

The data were updated in September 2019 based on the U.S. Census Vintage 2018 intercensal estimates.

Race and Ethnicity

Percentage of the Population 5 Years and Older Who Speak a Language Other Than English: U.S. Census Bureau, American Community Survey 2014–2018

5-Year Narrative Profile: Utah. Language. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Education

Educational Attainment of Adults Aged 25+ in Utah: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile:

Utah. Education. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Income

Median Earnings for Full-time Year-round Workers by Sex and Proportion of Households by Income Sources: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative

Profile: Utah. Income. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Households and Types

Types of Housing Units in Utah (percentage distribution): U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah. Housing Inventory Characteristics. Accessed 2/13/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

House Heating Fuel Used (percentage distribution): U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah. Occupied Housing Characteristics. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Types of Households in Utah: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah. Households and Families. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Computer and Internet Use

Types of Computers and Types of Internet Subscriptions: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative

Profile: Utah. Computer and Internet Use. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Religion

Religious Affiliation of Utah Adults Aged 18+: Utah Behavioral Risk Factor Surveillance System (BRFSS). Utah Department of Health Office of Public Health Assessment.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers.

Nativity and Foreign Born

Region of Birth for the Foreign-born Population in Utah: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah. Nativity and Foreign Born. Accessed 12/26/2019 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Special Populations

Tribes/American Indian

Age-adjusted Smoking Rates by Race: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/17/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Current cigarette smoking is defined as adults who have smoked at least 100 cigarettes in their lifetime and who now report smoking cigarettes every day or some days. Question text: "Do you now smoke cigarettes every day, some days, or not at all?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Age-adjusted Depression Rates by Race: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

The question asks about lifetime diagnosis and does not reflect current major depression. Question text: "Has a doctor, nurse, or other health professional EVER told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know', and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Age-adjusted Suicide Rates per 100,000 by Race: Utah Death Certificate Database. Retrieved on 12/19/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/. Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, U.S. Bureau of the Census, IBIS Version 2018.

Suicides are determined using ICD-10 codes X60–X84, Y87.0, *U03, which is consistent with the External Cause of Injury Mortality Matrix for ICD-10 found on the National Center for Health Statistics (NCHS) website at http://www.cdc.gov/nchs/data/ice/icd10_transcode.pdf.

Age-adjusted rates for race were age-adjusted using three age groups.

ICD stands for the International Classification of Diseases. It is a coding system maintained by the World Health Organization and the NCHS used to classify causes of death on death certificates and diagnoses, injury causes, and medical procedures for hospital and emergency department visits. These codes are updated every decade or so to account for advances in medical technology. The U.S. is currently using the 10th revision (ICD-10) to code causes of death.

Death certificates in Utah are required to be filed by funeral directors. Funeral directors obtain demographic information from an informant; a close family member of the decedent. The cause of death is certified by the decedent's physician or the physician attended the death. Accidental and suspicious deaths are certified by the Medical Examiner. Death certificate data go through extensive edits for completeness and consistency. The Office of Vital Records and Statistics (OVRS) does annual trainings for funeral directors and local registrars.

When death certificates are received, the cause of death literals are keyed into software locally by the OVRS, then shipped to the NCHS where they are machine coded into ICD-10 codes. The NCHS returns the ICD-10 codes to the OVRS where the death records are updated.

For rates where the count is zero, a numerator of "3" was used to calculate the confidence interval (per Lillienfeld and Stolley, Foundations of Epidemiology, 1994).

Age-adjusted Binge Drinking Rates by Race: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/2/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Binge drinking is defined as five or more drinks for men and four or more drinks for women on one occasion. Question text: "Considering all types of alcoholic beverages, how many times during the past 30 days did you have five or more drinks for men or four or more drinks for women on an occasion?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know', and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

LGBT

Age-adjusted Percentage of Adults Reporting Each Condition by Sexual Orientation: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/1/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

General health question text: "Would you say that in general your health is excellent, very good, good, fair, or poor?"

Current cigarette smoking is defined as adults who have smoked at least 100 cigarettes in their lifetime and who now report smoking cigarettes every day or some days. Question text: "Do you now smoke cigarettes every day, some days, or not at all?"

Binge drinking is defined as five or more drinks for men and four or more drinks for women on one occasion. Question text: "Considering all types of alcoholic beverages, how many times during the past 30 days did you have five or more drinks for men or four or more drinks for women on an occasion?"

Percentage of adults with recommended aerobic physical activity is defined as "150+ min/week of at least moderate intensity, or 75+ min/week of vigorous intensity, or an equivalent combination of aerobic physical activity."

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

New HIV Infections Among Utah Males: Table 5. Case Counts and Percentages of New HIV Diagnoses Among Males by Transmission Category, 2009–2018. Utah Department of Health Bureau of Epidemiology Prevention, Treatment, and Care Program. 2018: Annual HIV Surveillance Report. Accessed 3/1/2020 at http://health.utah.gov/epi/diseases/hivaids/surveillance/2018_HIV_Surveillance_Report.pdf.

When a new diagnosis of HIV is identified, a disease investigation specialist (DIS) at the local health department investigates. During this investigation, the DIS collects information on demographics and transmission risk information. The “transmission category” presented in this report is the most likely way that person acquired HIV. The Centers for Disease Control and Prevention defined transmission categories include male-to-male sexual contact (MSM), injection drug use (IDU), male-to-male sexual contact and injection drug use (MSM+IDU), and heterosexual contact (with a person known to have or to be at high risk for HIV infection).

Age-adjusted Percentage of Adults With No Health Care Coverage and No Personal Doctor by Sexual Orientation: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/1/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Health insurance is defined as including private coverage, Medicaid, Medicare, and other government programs. Question text: “Do you have any kind of healthcare coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?”

Utah estimates of the uninsured in Utah are typically calculated using a set of state-added questions included on the Utah BRFSS. Data shown here are based on a single question of the core BRFSS. Therefore, rates shown here may reflect different rates of coverage than other reports that include multiple insurance questions.

Primary provider question text: "Do you have one person you think of as your personal doctor or health care provider?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing', 'don’t know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Mental Health/suicidal Ideation by Sexual Orientation in Youth, Mental Health/suicidal Ideation by Gender in Youth, and Social Isolation by Sexual Orientation in Youth: 2019 Student Health and Risk Prevention (SHARP) Survey: Youth Suicide Prevention Collaborative Data Overview Presentation. October 28, 2019.

Age-adjusted Percentage of Adults Reporting Poor Mental Health and Depression by Sexual Orientation: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/1/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Poor mental health question text: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?”

Depression question text: “Has a doctor, nurse, or other health professional EVER told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?” The question asks about lifetime diagnosis and does not reflect current major depression.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing', 'don’t know,' and 'refused' answers. If the query was limited

to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Homeless

Point-in-Time Count Subpopulations: State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.

On January 23, 2019, each of Utah's Continuum of Care carried out the HUD-mandated Point-in-Time Count (PIT). The PIT is a massive effort to count everyone who meets the U.S. Department of Housing and Urban Development (HUD) definition of literal homelessness in a community on a specific night. As a result, the PIT captures people who spent the night in an emergency shelter, transitional housing, or in a place not meant for human habitation. While many factors, from the weather to the way the count is organized and performed, influence the results of any given PIT count, the PIT is a useful tool in calculating the community's need for homeless services on any given night. It is also one of the only tools available for measuring the number of homeless individuals who are not enrolled in homeless service programs. For more information on the PIT, please see "Utah's Approach to Homelessness."

Challenges of Homeless IGP Parents: State of Utah Annual Report on Homelessness 2019. Workforce Services Housing & Community Development. Accessed 12/27/19 at https://jobs.utah.gov/housing/scso/documents/homelessness2019.pdf.

Veterans

Age-adjusted Percentage of Adults Reporting Each Condition by Veteran Status: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/31/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Depression question text: "Has a doctor, nurse, or other health professional EVER told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?" The question asks about lifetime diagnosis and does not reflect current major depression.

Poor mental health question text: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?"

Cost as a barrier to health care question text: "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"

Disability status is self-reported and not confirmed by a health-care provider; however, such self-reports have been shown to be acceptable for surveillance purposes. For purposes of this report, "disability" is defined as someone who said "yes" to one or more of the following questions: 1) Are you blind or do you have serious difficulty seeing, even when wearing glasses? 2) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? 3) Do you have serious difficulty walking or climbing stairs? 4) Do you have difficulty dressing or bathing? 5) Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? 6) Are you deaf or do you have serious difficulty hearing?

Current cigarette smoking is defined as adults who have smoked at least 100 cigarettes in their lifetime and who now report smoking cigarettes every day or some days. Question text: "Do you now smoke cigarettes every day, some days, or not at all?"

Binge drinking is defined as five or more drinks for men and four or more drinks for women on one occasion. Question text: "Considering all types of alcoholic beverages, how many times during the past 30 days did you have five or more drinks for men or four or more drinks for women on an occasion?"

General health question text: "Would you say that in general your health is excellent, very good, good, fair or poor?"

Diabetes is based on the answer to the question: "Have you ever been told by a doctor that you have diabetes?" Those with diabetes only during pregnancy or those who reported they had "borderline" or prediabetes are excluded from the numerator.

COPD question text: "Have you ever been told by a doctor, nurse, or other health professional you have chronic obstructive pulmonary disease or COPD, emphysema or chronic bronchitis?"

High blood pressure is based on the answer to the question: “Have you ever been told by a doctor, nurse, or other health professional you have high blood pressure?” Response options are “Yes,” “No,” “Yes but female told only during pregnancy”, and “Told borderline high or pre-hypertensive.” Women who report having hypertension only during pregnancy and individuals who are told they are borderline high are considered as having answered “No.”

Cancers (other than skin) question text: "Have you ever been told by a doctor, nurse, or other health professional you had any other type of cancer?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Utah Veterans as a Percentage of the County Population: U.S. Census Bureau, 2014–2018 American Community Survey (ACS) 5-Year Estimates Table S2101: VETERAN STATUS. Percent Veterans—Civilian Population 18 Years And Over—Estimate.

Although the ACS produces population, demographic, and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and dis seminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Individuals With Disabilities

Percentage of Adults With Disabilities and Percentage of Adults Living With Disabilities by Age Group: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 10/8/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Disability status is self-reported and not confirmed by a health-care provider; however, such self-reports have been shown to be acceptable for surveillance purposes. For purposes of this report, "disability" is defined as someone who said "yes" to one or more of the following questions: 1) Are you blind or do you have serious difficulty seeing, even when wearing glasses? 2) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? 3) Do you have serious difficulty walking or climbing stairs? 4) Do you have difficulty dressing or bathing? 5) Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? 6) Are you deaf or do you have serious difficulty hearing?

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

The confidence bounds are asymmetric.

Age-adjusted Disease Burden Comparison and Age-adjusted Mental Health Burden Comparison: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 10/1/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Disability status is self-reported and not confirmed by a health-care provider; however, such self-reports have been shown to be acceptable for surveillance purposes. For purposes of this report, "disability" is defined as someone who said "yes" to one or more of the following questions: 1) Are you blind or do you have serious difficulty seeing, even when wearing glasses? 2) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? 3) Do you have serious difficulty walking or climbing stairs? 4) Do you have difficulty dressing or bathing? 5) Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? 6) Are you deaf or do you have serious difficulty hearing?

Heart attack question text: “Has a doctor or other health professional ever told you that you had a heart attack, also called a myocardial infarction?”

Coronary heart disease question text: “Has a doctor or other health professional ever told you that you had angina or coronary heart disease?”

Stroke question text: “Has a doctor or other health professional ever told you that you had a stroke?”

Kidney disease question text: “Has a doctor or other health professional ever told you that you have kidney disease?”

COPD question text: "Have you ever been told by a doctor, nurse, or other health professional you have chronic obstructive pulmunary disease or COPD, emphysema or chronic bronchitis?"

Cancers (other than skin) question text: "Have you ever been told by a doctor, nurse, or other health professional you had any other type of cancer?"

Arthritis question text: "Have you ever been told by a doctor you have arthritis?"

Asthma question text: "Have you ever been told by a doctor, nurse, or other health professional you had asthma? Do you still have asthma?"

Diabetes is based on the answer to the question: “Have you ever been told by a doctor you have diabetes?” Those with diabetes only during pregnancy or those who reported they had "borderline" or prediabetes are exclud-ed from the numerator.

Poor mental health question text: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?”

Depression question text: “Has a doctor, nurse, or other health professional EVER told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?” The question asks about lifetime diagnosis and does not reflect current major depression.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a par-ticular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Refugees/Immigrants

Number of Refugee Arrivals: Refugee Arrivals. Retrieved on 11/11/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/indicator/view/RefArr.Year.html.

Arrival numbers include all populations supported by the Office of Refugee Resettlement.

Reportable Conditions of Domestic Refugee Screenings: Utah Department of Health Bureau of Epidemiology, Refugee Health Program, November 2019.

Social Determinants of Health

Persons Living in Poverty

State Comparison, Age, Gender, Race, Ethnicity, and Education Estimates: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table S1701: POVERTY STATUS IN THE PAST 12 MONTHS.

Trend Estimates: U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates Table S1701: POVERTY STATUS IN THE PAST 12 MONTHS for years 2008–2018.

Although the ACS produces population, demographic, and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and dis seminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Local Health District Estimates (and Utah and U.S. Comparison Values in Local Health District Profiles): Small Area Income and Poverty Estimates (SAIPE). United States Bureau of the Census. County 1-year estimates, downloaded from https://www.census.gov/programs-surveys/saipe.html.

The poverty universe is made up of persons for whom the Census Bureau can determine poverty status (either "in poverty" or "not in poverty"). The definition of poverty universe for SAIPE estimates is the same for 2006 and beyond and conceptually matches the poverty universe of the American Community Survey (ACS). The poverty universe estimates are not the same as the population estimates from the Census Bureau's Population Estimates Program. For more information please go to https://www.census.gov/programs-surveys/saipe/technical-documentation/methodology.html.

The SAIPE program produces single-year estimates of poverty for states and all counties. Since SAIPE estimates combine ACS data with administrative and other data, SAIPE estimates generally have lower variance than ACS estimates but are released later because they incorporate ACS data in the models. For counties, particularly those with populations below 65,000, the SAIPE program provides the most accurate subnational estimates of poverty.

Child Poverty

State Comparison Estimates: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table S1701: POVERTY STATUS IN THE PAST 12 MONTHS.

Estimates for Age and Gender: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table B17001: POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE.

Trend Estimates: U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates Table S1701: POVERTY STATUS IN THE PAST 12 MONTHS for years 2008–2018.

Although the ACS produces population, demographic, and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and dis seminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found

on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Estimates for Race/ethnicity: National KIDS COUNT. Children in Poverty by Race and Ethnicity. Downloaded 11/18/2019 from https://datacenter.kidscount.org/data#UT/2/0/char/0.

Definitions: The share of children younger than age 18 who live in families with incomes below the federal poverty level, as defined by the U.S. Office of Management and Budget, by race and ethnicity

The federal poverty definition consists of a series of thresholds based on family size and composition. In calendar year 2018, a family of two adults and two children fell in the "poverty" category if their annual income fell below $25,465. Poverty status is not determined for people in military barracks, institutional quarters, or for unrelated individuals younger than age 15 (such as foster children). The data are based on income received in the 12 months prior to the survey.

Data Source: Population Reference Bureau, analysis of data from the U.S. Census Bureau, Census 2000 Supplementary Survey, 2001 Supplementary Survey, 2002 through 2018 American Community Survey (ACS).

These were derived from ACS table C17001 (B,C,D,E,H,I).

The data for this measure come from the 2000 and 2001 Supplementary Survey and the 2002 through 2018 ACS. The 2000 through 2004 ACS surveyed approximately 700,000 households monthly during each calendar year. In general, but particularly for these years, use caution when interpreting estimates for less populous states or indicators representing small sub populations, where the sample size is relatively small. Beginning in January 2005, the U.S. Census Bureau expanded the ACS sample to 3 million households (full implementation and in January 2006 the ACS included group quarters. The ACS, fully implemented, is designed to provide annually updated social, economic, and housing data for states and communities. (Such local-area data have traditionally been collected once every ten years in the long form of the decennial census.) Race/ethnic groups represented in this table are not mutually exclusive. The category of White includes only non-Hispanic White. The categories Black or African American, American Indian, Asian and Pacific Islander, and Two or More Races include both Hispanic and non- Hispanic. Those in the Hispanic or Latino category include those identified as being in one of the non-White race groups.

Local Health District Estimates (and Utah and U.S. Comparison Values in Local Health District Profiles): Small Area Income and Poverty Estimates (SAIPE). United States Bureau of the Census. County 1-year estimates, downloaded from https://www.census.gov/programs-surveys/saipe.html.

The poverty universe is made up of persons for whom the Census Bureau can determine poverty status (either "in poverty" or "not in poverty"). The definition of poverty universe for SAIPE estimates is the same for 2006 and beyond and conceptually matches the poverty universe of the American Community Survey (ACS). The poverty universe estimates are not the same as the population estimates from the Census Bureau's Population Estimates Program. For more information please go to https://www.census.gov/programs-surveys/saipe/technical-documentation/methodology.html.

The SAIPE program produces single-year estimates of poverty for states and all counties. Since SAIPE estimates combine ACS data with administrative and other data, SAIPE estimates generally have lower variance than ACS estimates but are released later because they incorporate ACS data in the models. For counties, particularly those with populations below 65,000, the SAIPE program provides the most accurate subnational estimates of poverty.

Food Insecurity

National and Trend Estimates: Map the Meal Gap: Food Insecurity in Utah. Accessed 11/26/2019 at http://map.feedingamerica.org.

State Comparison and Local Health District Estimates and Overall Food Insecurity Statistics: Map the Meal Gap 2019: Overall Food Insecurity in Utah by County in 2017. Accessed 11/26/2019 at https://public.tableau.com/profile/feeding.america.research#!/vizhome/2017StateWorkbook-Public_15568266651950/CountyDetailDataPublic.

Gundersen, C. A. Dewey, M. Kato, A. Crumbaugh & M. Strayer. *Map the Meal Gap 2019: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2017*. Feeding America, 2019. This research is generously supported by The Howard G. Buffett Foundation and Nielsen.

Map the Meal Gap's food insecurity rates are determined using data from the 2001–2017 Current Population Survey on individuals in food insecure households; data from the 2017 American Community Survey on median household incomes, poverty rates, homeownership,

and race and ethnic demographics; and 2017 data from the Bureau of Labor Statistics on unemployment rates.

Population and food insecurity data in the state totals row do not reflect the sum of all counties in that state. The state totals are aggregated from the congressional districts data in that state. All data in the state totals row pertaining to the cost of food or the "Meal Gap" reflect state-level data and are not aggregations of either counties or congressional districts.

Education

State Comparison, Age, Gender, Race, and Ethnicity Estimates: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table S1501: EDUCATIONAL ATTAINMENT.

Local Health District Estimates (and Utah and U.S. Comparison Values in Local Health District Profiles): U.S. Census Bureau, 2014–2018 American Community Survey 5-Year Estimates Table S1501: EDUCATIONAL ATTAINMENT.

Trend Estimates: U.S. Census Bureau, American Community Survey 1-Year Estimates Table S1501: EDUCA-TIONAL ATTAINMENT for years 2010–2018.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Housing Cost Burden

State Comparison, Local Health District, and County Estimates: Health Indicators Report for Utah: Physical Environment: Housing–Housing Cost Burden (30%). CARES Engagement Network. Accessed 4/6/2020 at https://engagementnetwork.org/.

Counts of total households and households by monthly housing cost are acquired from the U.S. Census Bureau's American Community Survey (ACS). Data represent estimates for the 5 year period 2014–2018. Mapped data are summarized to 2010 census tract boundaries. The data for monthly housing costs as a percentage of household income are developed from a distribution of "Selected Monthly Owner Costs as a Percentage of Household Income" for owner-occupied and "Gross Rent as a Percentage of Household Income" for renter-occupied units. The owner-occupied categories are further separated into those with a mortgage and those without a mortgage. Indicator statistics are measured as a percentage total households using the following formula:

[Households with Costs Exceeding 30% of Income] / [Total Households] * 100

For more information on the data reported in the ACS, please see the complete ACS 2018 Subject Definitions.

The ACS is a nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data every year. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. The Census Bureau combines five consecutive years of ACS data to produce estimates for geographic areas with fewer than 65,000 residents. These 5-year estimates represent data collected over a period of 60 months. Because the ACS is based on a sample, rather than all housing units and people, ACS estimates have a degree of uncertainty associated with them, called sampling error. In general, the larger the sample, the smaller the level of sampling error. Data users should be careful in drawing conclusions about small differences

between two ACS estimates because they may not be statistically different.

Citation: U.S. Census Bureau: UNDERSTANDING AND USING AMERICAN COMMUNITY SURVEY DATA: WHAT ALL DATA USERS NEED TO KNOW (2018).

For more information about this source, including data collection methodology and definitions, refer to the ACS data users website.

Occupants With a Housing Cost Burden Estimates: U.S. Census Bureau, American Community Survey 2014–2018 5-Year Narrative Profile: Utah. Financial Characteristics and Housing Costs. Accessed 1/24/2020 from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=state&state=49.

Environmental Health

Air Quality

State Comparison and Trend Estimates: Environmental Protection Agency. Air Quality System Monitoring Data. PM2.5—Days Above Regulatory Standard (Monitor only). Accessed From Environmental Public Health Tracking Network: https://ephtracking.cdc.gov/DataExplorer. Accessed on 11/21/2019.

Data reported were the mean of all counties that reported data for that year.

Data provided by U.S. Environmental Protection Agency (EPA). Most data are submitted to EPA by state air programs, as required under the Clean Air Act.

Data completeness for each monitor was based on the availability of samples for a certain number of days during each calendar quarter. Data are only provided for counties with monitors that pass the completeness criterion.

The daily $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) is 35.0 micrograms per cubic meter.

Data presented on the Centers for Disease Control and Prevention Tracking Network may differ from data that are presented on state or city tracking networks, state or city health department websites, and other source websites for the same measures. The differences may occur for many reasons, such as use of different population estimates, differences in processes and timing for updating data, or differences in how a measure is defined for environmental public health tracking purposes.

For more information, refer to the documentation available through the Indicator and Data Link.

For more information about the data sources, read these descriptions about the data; Air quality data from EPA ambient air monitors.

Limitations: Air-monitoring data provides information regarding concentrations around the specific location of each monitor. For PM2.5 this can be a rather large area, except when unusual local emissions (agricultural fires) occur. Within-county variation in concentrations will likely exist but will not be captured in this measure.

Many PM2.5 monitors operate once-every-third day (some once-every-sixth day); a few monitors operate every day.

County Estimates (and Utah Comparison Value in Local Health District Profiles): Air Quality: Particulate Matter (PM2.5). Retrieved on 11/27/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/indicator/complete_profile/AirQuaPM.html.

Percent reflects the percentage of days sampled in the county during the year, not total days of the year.

Data on PM2.5 levels are only available where air monitors exist. The Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality have scientifically determined where in Utah PM2.5 is likely to exceed the standard. Geographies reported will vary based on measurement type.

Data for this report represent ambient air, or outside air quality. The relationship between ambient concentrations and personal exposure can vary significantly depending upon the pollutant, activity patterns, and micro-environments.

Data for this report came from the EPA; therefore, it may differ slightly from data to other sources. One reason for a possible difference is that this data includes exceptional events, which includes air pollution generated from fireworks, construction, fires, and other sources.

Emissions by Source Sector: Particulate Matter (PM). Utah Department of Health Bureau of Epidemiology. Accessed 11/27/2019 from http://www.health.utah.gov/utahair/pollutants/PM/index.html#Sources.

Substandard Housing

State Comparison, Local Health District, Number of Conditions, and County Estimates: Health Indicators Report for Utah: Physical Environment: Housing - Substandard Housing. CARES Engagement Network. Accessed 4/7/2020 at https://engagementnetwork.org/.

Estimates for Type of Condition: U.S. Census Bureau, American Community Survey (ACS) 2018 1-Year Estimates Table S2504: PHYSICAL HOUSING CHARACTER-ISTICS FOR OCCUPIED HOUSING UNITS, Table S2501: OCCUPANCY CHARACTERISTICS, and Table S2503: FINANCIAL CHARACTERISTICS.

The ACS is a nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data every year. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. The Census Bureau combines five consecutive years of ACS data to produce estimates for geographic areas with fewer than 65,000 residents. These 5-year estimates represent data collected over a period of 60 months. Because the ACS is based on a sample, rather than all housing units and people, ACS estimates have a degree of uncertainty associated with them, called sampling error. In general, the larger the sample, the smaller the level of sampling error. Data users should be careful in drawing conclusions about small differences between two ACS estimates because they may not be statistically different.

Citation: U.S. Census Bureau: UNDERSTANDING AND USING AMERICAN COMMUNITY SURVEY DATA: WHAT ALL DATA USERS NEED TO KNOW (2018).

For more information about this source, including data collection methodology and definitions, refer to the ACS data users website.

Counts of housing units by age and condition are acquired from the U.S. Census Bureau's ACS. Data represent estimates for the five year period 2014–2018. Mapped data are summarized to 2010 census tract boundaries. Area estimates are developed at the U.S. Census Bureau, and given as a value for each geographic area. Raw counts are not provided, inhibiting the ability to produce median ages for report areas.

For more information on the data reported in the ACS, please see the complete ACS 2016 Code Lists, Definitions, and Accuracy.

Low Food Access

State Comparison, Local Health District, and Census Tract Estimates: Health Indicators Report for Utah: Physical Environment: Food Environment - Low Food Access. CARES Engagement Network. Accessed 12/6/2019 at https://engagementnetwork.org/.

The Food Access Research Atlas (FARA) presents a spatial overview of food access indicators for populations using different measures of supermarket accessibility. The FARA is a compliment to the USDA's Food Environment Atlas, which houses county-level food related data. The FARA provides census-tract level detail of the food access measures, including food desert census tracts. Estimates in the latest version of the FARA draw from various sources, including the 2015 STARS list of supermarkets, the Supplemental Nutrition Assistance Program (SNAP) Retailer Directory, the 2010 Decennial Census, and the 2010–14 American Community Survey (ACS).

For more information about this source, including the methodology and data definitions please visit the FARA web page.

Methodology: This indicator displays the percentage of population without access to a supermarket or large grocery store. Census tract-level data was acquired from the USDA FARA and aggregated to generate county and state-level estimates.

The FARA provides data which is derived from the analysis of multiple datasets. First, a directory of supermarkets and large grocery stores within the United States, including Alaska and Hawaii, was created by merging the 2015 STARS directory of stores authorized to accept SNAP benefits and the 2015 Trade Dimensions TDLinx directory of stores. Stores met the definition of a super-market or large grocery store if they reported at least $2 million in annual sales and contained all the major food departments found in a traditional supermarket, including fresh meat and poultry, dairy, dry and pack-aged foods, and frozen foods. The combined list of supermarkets and large grocery stores was converted into a GIS-usable format by geocoding the street address into store-point locations. Population data are obtained at the block level from the 2010 Census of Population and Housing, while data on income are drawn at the block group-level from the 2010–14 ACS. Distance to nearest supermarket was determined for population blocks. These numbers and shares are then similarly aerially allocated down to the ½-kilometer-square grid level. For each ½-kilometer-square grid cell, the distance

was calculated from its geographic center to the center of the grid cell with the nearest supermarket. Then, the number of households and population living more than one, 10, and 20 miles from a supermarket or large grocery store was aggregated to the tract level and divided by the underlying population.

Rural or urban status is determined using population size. A census tract is considered rural if the population-weighted centroid of that tract is located in an area with a population of fewer than 2,500; all other tracts are considered urban tracts. Low-income is defined as annual family income of less than or equal to 200 percent of the federal poverty threshold given family size.

For more information, please refer to the FARA Documentation.

Transportation Use

State Comparison and Gender Estimates: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table B08006: SEX OF WORKERS BY MEANS OF TRANSPORTATION TO WORK.

Estimates for Age: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates Table B08101: MEANS OF TRANSPORTATION TO WORK BY AGE.

Local Health District Estimates (and Utah and U.S. Comparison Values in Local Health District Profiles): U.S. Census Bureau, 2014–2018 American Community Survey 5-Year Estimates Table B08006: SEX OF WORKERS BY MEANS OF TRANSPORTATION TO WORK.

Trend Estimates: U.S. Census Bureau, American Community Survey 1-Year Estimates Table S0802: MEANS OF TRANSPORTATION TO WORK BY SELECTED CHARACTERISTICS for years 2010–2018.

Mean Travel Time to Work: U.S. Census Bureau, 2018 American Community Survey (ACS) 1-Year Estimates Table S0802: MEANS OF TRANSPORTATION TO WORK BY SELECTED CHARACTERISTICS.

Although the ACS produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Respiratory Conditions

Uncontrolled Asthma

Estimates for Overall State, Age, Gender, Local Health District, Age and Sex, and Trend: Utah Emergency Department (ED) Encounter Database. Retrieved on 12/6/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/. Population estimates are provided by the National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.

Asthma was identified using the the NCHS 113 selected causes asthma definition. All ED encounters are included in the presented data, which includes those that were treat and release visits, as well as those that resulted in hospital admission.

As of October 1, 2015, the U.S. is currently using the 10th revision of the International Classification of Diseases (ICD-10) to code hospitalizations and ED visits. Prior to the change, asthma hospitalizations and ED visits were defined as having an ICD-9 primary diagnosis code of 493. In the ICD-10 classification asthma is defined using the J45 code. Comparison of data prior to the code change may not be appropriate.

ICD Stands for International Classification of Diseases. It is a coding system maintained by the World Health Organization and the U.S. NCHS used to classify

caues of death on death certificates and diagnoses, injury causes, and medical procedures for hospital and ED visits. These codes are updated every decade or so to account for advances in medical technology. The U.S. is currently using the 10th revision (ICD-10) to code causes of death. The 9th revision (ICD-9) has been used for hospital and ED visits until third quarter of 2015. The ICD-10 was used from the fourth quarter of 2015.

The ED Encounter Database contains the consolidated information on complete billing, medical codes, personal characteristics describing a patient, services received, and charges billed for each patient ED encounter. The Bureau of Emergency Medical Services/Office of Health Care Statistics receives quarterly ED data from hospitals in various formats and media. The data are converted into a standardized format. The data are validated through a process of automated editing and report verification. Each record is subjected to a series of edits that check for accuracy, consistency, completeness, and conformity with the definitions specified in the Utah Hospital Emergency Patient Encounter Data Submittal Manual. Records failing the edit check are returned to the data supplier for corrections of comment.

Coverage and Validity of Diagnosis Codes: Since the data come from the billing forms, all visits or encounters have a diagnosis code reporting coverage. There is some difference of opinion regarding whether some providers may emphasize diagnosis codes that yield higher reimbursements. The hospital and ED data are considered "Administrative Data" because they were created for use in billing and remittance of payment. As such, they were not constructed for public health surveillance purposes primarily, and are weak in some areas, such as external cause of injury and race or ethnicity. But, in general, they are extremely valuable and reasonably complete and valid.

Cardiovascular Conditions

High Blood Pressure

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/12/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Doctor-diagnosed hypertension is based on the answer to the question: "Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?" Response options are "Yes," "No," "Yes but female told only during pregnancy", and "Told borderline high or pre-hypertensive." Women who report having hypertension only during pregnancy and individuals who are told they are borderline high are considered as having answered "No."

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know', and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

High Cholesterol

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/12/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Doctor-diagnosed hypercholesterolemia is based on the answer to the question: "Have you ever been

told by a doctor, nurse, or other health professional you have high blood cholesterol?" This question is asked on the BRFSS in odd-numbered years.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Diabetes Conditions

Diabetes Prevalence

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/21/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Diabetes prevalence is based on the answer to the question: "Have you ever been told by a doctor that you have diabetes?" Those with diabetes only during pregnancy or those who reported they had "borderline" or prediabetes are excluded from the numerator.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know', and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Obesity/Physical Activity

Obesity—Adult

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/29/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Obesity is defined as a body mass index (BMI) of 30 or more. BMI is calculated by dividing weight in kilograms by the square of height in meters. Calculations are done based on the answers to the following questions: "About how much do you weigh without shoes? About how tall are you without shoes?"

Data are self-reported and subject to recall bias. Data are from a sample survey and subject to selection bias.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Obesity—Minor

National and State Rank Estimates: Youth Online: High School YRBS - 2017 Results. Had Obesity.

Estimates for Overall State, Grade, Gender, and Trend: Utah Youth Risk Behavior Survey (YRBS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

The YRBS is performed in odd-numbered years.

YRBS body mass index (BMI) data should be used with caution since individual height and weight are self-reported.

Data are self-reported and subject to recall bias. Data are from a sample survey and subject to selection bias. Comparisons of annual rates must be interpreted cautiously as methods used to collect YRBS data may vary from year to year. With the introduction of active parental consent for Utah school surveys between 1997 and 1999, the student response rate for the YRBS decreased significantly.

Estimates for Race/ethnicity and Local Health District (and Utah Comparison Value in Local Health District Profiles): 2019 Prevention Needs Assessment (PNA) Survey.

Based on the PNA Survey, Form B.

The PNA is conducted in odd years with Utah students in grades 6, 8, 10, and 12. Data in this report are only for students in grades 8, 10, and 12.

The PNA Survey is a state-sponsored survey. The survey is administered by the School Health and Risk Prevention (SHARP) project and are conducted at the state level every odd-numbered year. Students complete a paper-and-pencil questionnaire during a class period. Student responses are anonymous.

Childhood obesity is determined by calculating BMI using the height, weight, age, and sex of the child. The child is considered to be obese if the resulting BMI is greater than or equal to the 95th percentile for age and sex based on the CDC Growth Charts (2 to 20 years: Boys Body Mass index-for-age percentiles and 2 to 20 years: Girls Body Mass index-for-age percentiles).

Physical Activity—Adult

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, Sexual Orientation, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 11/29/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Percentage of adults with recommended aerobic physical activity as defined as "150+ min/week of at least moderate intensity, or 75+ min/week of vigorous intensity, or an equivalent combination of aerobic physical activity."

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Physical Activity—Minor

National and State Rank Estimates: Youth Online: High School YRBS - 2017 Results. Daily Physical Activity.

Estimates for Overall State, Grade, Gender, and Trend: Utah Youth Risk Behavior Survey (YRBS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

The YRBS is performed in odd-numbered years.

Data are self-reported and subject to recall bias. Data are from a sample survey and subject to selection bias. Comparisons of annual rates must be interpreted cautiously as methods used to collect YRBS data may vary from year to year. With the introduction of active parental consent for Utah school surveys between 1997 and 1999, the student response rate for the YRBS decreased significantly.

Estimates for Race/Ethnicity and Local Health District (and Utah Comparison Value in Local Health District Profiles): 2019 Prevention Needs Assessment (PNA) Survey.

The PNA is conducted in odd years with Utah students in grades 6, 8, 10, and 12. Data in this report are only for students in grades 8, 10, and 12.

The PNA Survey is a state-sponsored survey. The survey is administered by the School Health and Risk Prevention (SHARP) project and are conducted at the state level every odd-numbered year. Students complete a paper-and-pencil questionnaire during a class period. Student responses are anonymous.

Youth physical activity is defined as students who were physically active for a total of at least 60 minutes per day on seven of the past seven days.

Mental Health

Mental Health Status

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 10/22/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Question text: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?”

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know', and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Suicide

National and State Rank Estimates: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Underlying Cause of Death 1999–2018 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999–2018, as compiled from data

provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Apr 10, 2020.

Suicide deaths were determined by selecting "Suicide" under Injury Intent.

The populations used to calculate standard age-adjusted rates are documented at http://wonder.cdc.gov/wonder/help/ucd.html#2000 Standard Population.

The method used to calculate age-adjusted rates is documented at http://wonder.cdc.gov/wonder/help/ucd.html#Age-Adjusted Rates.

Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

The method used to calculate 95% confidence intervals is documented at http://wonder.cdc.gov/wonder/help/ucd.html#Confidence-Intervals.

The population figures for year 2018 are bridged-race estimates of the July 1 resident population, from the Vintage 2018 postcensal series released by NCHS on June 25, 2019.

Estimates for Overall State, Age, Gender, Local Health District, Age and Gender, and Trend: Utah Death Certificate Database. Retrieved on 12/19/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/. Population estimates are provided by the National Center for Health Statistics through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.

Estimates for Race and Ethnicity: Utah Death Certificate Database. Retrieved on 12/19/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/. Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, U.S. Bureau of the Census, IBIS Version 2018.

Suicides are determined using ICD-10 codes X60–X84, Y87.0, *U03, which is consistent with the External Cause of Injury Mortality Matrix for ICD-10 found on the National Center for Health Statistics (NCHS) website at http://www.cdc.gov/nchs/data/ice/icd10_transcode.pdf.

Age-adjusted rates for gender, local health district, and trend were age-adjusted to the U.S. 2000 standard population using 11 age groups. Age-adjusted rates for race were age-adjusted using three age groups. Age-adjusted rates for ethnicity were age-adjusted using 10 age groups.

ICD stands for the International Classification of Diseases. It is a coding system maintained by the World Health Organization and the NCHS used to classify causes of death on death certificates and diagnoses, injury causes, and medical procedures for hospital and emergency department visits. These codes are updated every decade or so to account for advances in medical technology. The U.S. is currently using the 10th revision (ICD-10) to code causes of death.

Death certificates in Utah are required to be filed by funeral directors. Funeral directors obtain demographic information from an informant, a close family member of the decedent. The cause of death is certified by the decedent's physician or the physician attended the death. Accidental and suspicious deaths are certified by the Medical Examiner. Death certificate data go through extensive edits for completeness and consistency. The Office of Vital Records and Statistics (OVRS) does annual trainings for funeral directors and local registrars.

When death certificates are received, the cause of death literals are keyed into software locally by the OVRS, then shipped to the NCHS where they are machine coded into ICD-10 codes. The NCHS returns the ICD-10 codes to the OVRS where the death records are updated.

For rates where the count is zero, a numerator of "3" was used to calculate the confidence interval (per Lillienfeld and Stolley, Foundations of Epidemiology, 1994).

Depression

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

The question asks about lifetime diagnosis and does not reflect current major depression. Question text: "Has a doctor, nurse, or other health professional EVER told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Addictive Behaviors

Pain Reliever Misuse

State Comparison, Age, and 2017–2018 Trend Estimates: Pain Reliever Misuse in the Past Year, by Age Group and State: Percentages, Annual Averages Based on 2017 and 2018 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2017 and 2018. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/2017-2018-nsduh-state-prevalence-estimates.

2015–2016 and 2016–2017 Trend Estimates: Pain Reliever Misuse in the Past Year, by Age Group and State: Percentages, Annual Averages, and P Values from Tests of Differences between Percentages, 2015–2016 and 2016–2017 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2015, 2016, and 2017. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/comparison-2015-2016-and-2016-2017-nsduh-population-percentages-50-states-and-district.

Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Prescription psychotherapeutic subtypes were revised in 2016; one effect was the comparability of codeine products between 2015 and 2016.

State estimates, along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. For the U.S. estimate, design-based (direct) estimates and corresponding 95 percent confidence intervals are given.

Drug Overdose Deaths Involving Opioids

State Comparison, Age, Gender, Race, Ethnicity, Local Health District, and Trend Estimates: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Multiple Cause of Death 1999–2018 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999–2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/mcd-icd10.html on Feb 27, 2020.

Drug overdose deaths involving opioids with unintentional or undetermined intent in this report follow the definition in the Prevention for States Indicator Support Toolkit—Guidance for Required Indicators, which is deaths with any of the following ICD-10 codes as the underlying cause of death:

- X40–X44: Accidental poisonings by drugs
- Y10–Y14: Drug poisoning of undetermined intent

with any of the following ICD-10 multiple cause-of-death codes:

- T40.0: Opium
- T40.1: Heroin
- T40.2: Other opioids
- T40.3: Methadone
- T40.4: Other synthetic narcatics
- T40.6: Other and unspecified narcotics

Data are suppressed when the data meet the criteria for confidentiality constraints. More information at http://wonder.cdc.gov/wonder/help/mcd.html#Assurance of Confidentiality.

Death rates are flagged as unreliable when the rate is calculated with a numerator of 20 or less. More information at http://wonder.cdc.gov/wonder/help/mcd.html#Unreliable.

The populations used to calculate standard age-adjusted rates are documented at http://wonder.cdc.gov/wonder/help/mcd.html#2000 Standard Population.

The method used to calculate age-adjusted rates is documented at http://wonder.cdc.gov/wonder/help/mcd.html#Age-Adjusted Rates.

Deaths for persons of unknown age are included in crude rates, but are not distributed among age groups, so are not included in age-specific rates or any age-adjusted rates.

Deaths of persons with Hispanic origin "Not Stated" are included in total rates, but are not distributed among Hispanic origin groups, so are not included in the Hispanic origin specific rates. More information at http://wonder.cdc.gov/wonder/help/mcd.html#Not Stated.

Information included on the death certificate about the race and Hispanic ethnicity of the decedent is reported by the funeral director as provided by an informant, often the surviving next of kin, or, in the absence of an informant, on the basis of observation. Race and ethnicity information from the census is by self-report. To the extent that race and Hispanic origin are inconsistent between these two data sources, death rates will be biased. More information at http://wonder.cdc.gov/wonder/help/mcd.html#Racial Differences.

The method used to calculate 95% confidence intervals is documented at http://wonder.cdc.gov/wonder/help/mcd.html#Confidence-Intervals.

The population figures for year 2018 are bridged-race estimates of the July 1 resident population, from the Vintage 2018 postcensal series released by NCHS on June 25, 2019. The population figures for year 2017 are bridged-race estimates of the July 1 resident population, from the Vintage 2017 postcensal series released by NCHS on June 27, 2018. The population figures for year 2016 are bridged-race estimates of the July 1 resident population, from the Vintage 2016 postcensal series released by NCHS on June 26, 2017. The population figures for year 2015 are bridged-race estimates of the July 1 resident population, from the Vintage 2015 postcensal series released by NCHS on June 28, 2016. The population figures for year 2014 are bridged-race estimates of the July 1 resident population, from the Vintage 2014 postcensal series released by NCHS on June 30, 2015.

Changes to cause of death classification affect reporting trends. For more information visit http://wonder.cdc.gov/wonder/help/mcd.html#ICD-10 Changes.

Cigarette Smoking—Adult

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, Sexual Orientation, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/17/2019 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Current cigarette smoking is defined as adults who have smoked at least 100 cigarettes in their lifetime and who now report smoking cigarettes every day or some days. Question text: “Do you now smoke cigarettes every day, some days, or not at all?”

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

E-cigarettes—Adult

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/17/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Current e-cigarette smoking is defined as adults who currently use electronic cigarettes every day or some days. Question text: "Do you currently use electronic cigarettes or e-cigarettes every day, some days, or not at all?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

E-cigarettes—Minor

Estimates for State, Grade, Gender, Race/ethnicity, Local Health District, Type of Product, and Trend: 2019 Prevention Needs Assessment (PNA) Survey.

The PNA is conducted in odd years with Utah students in grades 6, 8, 10, and 12. Data in this report are only for students in grades 8, 10, and 12.

The PNA Survey is a state-sponsored survey. The survey is administered by the School Health and Risk Prevention (SHARP) project and are conducted at the state level every odd-numbered year. Students complete a paper-and-pencil questionnaire during a class period. Student responses are anonymous.

Current use of electronic cigarettes among youth is defined as students who have used electronic cigarettes in the past 30 days.

Illicit Drug Use

State Comparison, Age, and 2017–2018 Trend Estimates: Illicit Drug Use in the Past Month, by Age Group and State: Percentages, Annual Averages Based on 2017 and 2018 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2017 and 2018. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/2017-2018-nsduh-state-prevalence-estimates.

2015–2016 and 2016–2017 Trend Estimates: Illicit Drug Use in the Past Month, by Age Group and State: Percentages, Annual Averages, and P Values from Tests of Differences between Percentages, 2015–2016 and 2016–2017 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2015, 2016, and 2017. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/comparison-2015-2016-and-2016-2017-nsduh-population-percentages-50-states-and-district.

Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

State estimates, along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. For the U.S. estimate, design-based (direct) estimates

and corresponding 95 percent confidence intervals are given.

Marijuana Use Among Utah Students: 2019 Prevention Needs Assessment (PNA) Survey.

Current use of marijuana among youth is defined as students who have used marijuana in the past 30 days. Question text: "On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil) during the past 30 days?"

The PNA is conducted in odd years with Utah students in grades 6, 8, 10, and 12. Data in this report are only for students in grades 8, 10, and 12.

The PNA Survey is a state-sponsored survey. The survey is administered by the School Health and Risk Prevention (SHARP) project and are conducted at the state level every odd-numbered year. Students complete a paper-and-pencil questionnaire during a class period. Student responses are anonymous.

Illicit Drug Use Disorder

State Comparison, Age, and 2017–2018 Trend Estimates: Illicit Drug Use Disorder in the Past Year, by Age Group and State: Percentages, Annual Averages Based on 2017 and 2018 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2017 and 2018. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/2017-2018-nsduh-state-prevalence-estimates.

2015–2016 and 2016–2017 Trend Estimates: Illicit Drug Use Disorder in the Past Year, by Age Group and State: Percentages, Annual Averages, and P Values from Tests of Differences between Percentages, 2015–2016 and 2016–2017 NSDUHs. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2015, 2016, and 2017. Accessed 4/16/2020 from https://www.samhsa.gov/data/report/comparison-2015-2016-and-2016-2017-nsduh-population-percentages-50-states-and-district.

Illicit Drug Use Disorder is defined as meeting criteria for illicit drug dependence or abuse. Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

State estimates, along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. For the U.S. estimate, design-based (direct) estimates and corresponding 95 percent confidence intervals are given.

Care Access

No Health Insurance

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Health insurance is defined as including private coverage, Medicaid, Medicare, and other government programs. Question text: "Do you have any kind of healthcare coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?"

Utah estimates of the uninsured in Utah are typically calculated using a set of state-added questions included on the Utah BRFSS. Data shown here are based on a single question of the core BRFSS in order to show comparisons to other states and to the nation overall. Therefore, rates shown here may reflect different rates of coverage than other reports that include multiple insurance questions.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology.

For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Cost as a Barrier to Care

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, Insurance Status, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/10/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Question text: "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Regular Dental Care

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/6/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Question text: "How long has it been since you last visited a dentist or a dental clinic for any reason?" Interviewer instruction: Include visits to dental specialists, such as orthodontists.

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Preventive Services

Childhood Vaccination

State Comparison and Trend Estimates: Immunizations - Recommended Immunizations by Age 24 Months. Retrieved on 2/21/2020 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/indicator/view/Imm4313314.UT_USNew.html.

This data is from the National Immunization Survey (NIS). The NIS reports these vaccine coverage estimates for 24-month-old children by birth year (i.e., 2018 survey data contains estimates for the 24 month old children from birth year 2016).

The NIS is conducted by the Centers for Disease Control and Prevention and uses a random-digit-dialing sample of landline and cellular telephone numbers to find households throughout the U.S. with children who are or will be 19–35 months within a few weeks of being selected to participate in the survey. Data are used to monitor vaccination coverage among 2-year-old children at the national, state, selected local levels, and some in U.S. territories.

They ask parents or guardians to tell them the vaccines (with dates) that appear on the child's "shot card" kept in the home, and they also collect demographic and socioeconomic information. At the end of the interview, they ask for permission to contact the child's vaccination providers. Vaccine providers are then contacted by mail to verify each child's vaccinations.

The NIS uses a nationally representative sample, and provides estimates of coverage that are weighted to represent the entire population, nationally, and by region, state, and selected large metro areas. The large sample size (approximately 15,000) allows them to stratify (that is, subdivide) the data so that they can examine vac-cination rates among different groups, for instance by income level, race, education level of mothers, and other factors.

In previous years NIS Child data was reported for 19–35 month old children by survey year. However, in 2019 the NIS began reporting immunization estimates based on the birth year of respondents. At the time of the change, the birth year estimates were made available back to birth year 2013.

Human Papillomavirus (HPV)

State Comparison, Sex, Race/ethnicity, Poverty, and Urbanicity Estimates: Human Papillomavirus (HPV) Vaccination Coverage Among Adolescents 13–17 Years. National Immunization Survey-Teen (NIS-Teen), 2018. Accessed 2/24/2020 from https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/hpv/dashboard/2018.html.

Trend Estimates: Human Papillomavirus (HPV) Vaccination Coverage Among Adolescents 13–17 Years. National Immunization Survey-Teen (NIS-Teen), 2008 through 2018. Accessed 2/24/2020 from https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/hpv/trend/index.html.

Vaccination coverage estimates include only adoles-cents who had adequately provider-reported immuniza-tion records.

The range of birth dates of adolescents included in the NIS-Teen varied by survey period.

Race/ethnicity was reported by parent/guardian respon-dent. Adolescents of Hispanic ethnicity may be of any race.

Poverty status for each survey year was based on the U.S. Census poverty thresholds for the year immediately before the survey.

Metropolitan Statistical Area (MSA) was constructed based on parent/guardian respondent-reported city, state, county, and zip code of residence using the February 2013 MSA definitions file.

Starting in 2016, HPV vaccination was reported for males and females combined and separately. An up-to-date HPV vaccination measure was added to assess completion of the HPV vaccine series (two-doses separated by five months (minus four days) for immunocompetent adolescents initiating the HPV vaccine series before their 15th birthday and three doses for all others).

The National Immunization Survey (NIS) is conducted by the Centers for Disease Control and Prevention and uses a random-digit-dialing sample of landline and cellular telephone numbers to find households throughout the U.S. with teens ages 13–17 to participate in the survey. The NIS provides current, population-based, state, and local area estimates of vaccination coverage among children and teens using a standard survey methodology. The survey collects data through telephone interviews with parents or guardians in all 50 states, the District of Columbia, and some U.S. territories. The parents and guardians of eligible children are asked during the interview for the names of their children's vaccination providers and permission to contact them. With this permission, a questionnaire is mailed to each

child's vaccination provider(s) to collect the information on the types of vaccinations, number of doses, dates of administration, and other administrative data about the health care facility.

The NIS uses a nationally representative sample, and provides estimates of coverage that are weighted to represent the entire population, nationally, and by region, state, and selected large metro areas. The large sample size (approximately 18,700) allows them to stratify (that is, subdivide) the data so that they can examine vaccination rates among different groups, for instance by income level, race, and urbanicity.

Influenza Vaccination

National and State Rank Estimates: Behavioral Risk Factor Surveillance System (BRFSS), Division of Behavioral Surveillance, Centers for Disease Control and Prevention (CDC) Office of Surveillance, Epidemiology, and Laboratory Services.

Adult data for Utah and U.S. is also available from the FluVaxView Influenza Vaccination Coverage web page, which is estimated annually by the CDC utilizing data from several nationally representative surveys. These surveys include the National Health Interview Survey, the BRFSS, and the National Immunization Survey.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/20/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

The survey question for this measure changed in 2011 to "During the past 12 months, have you had either a seasonal flu shot or a flu vaccine that was sprayed into your nose." In previous years the question was "A flu shot is an influenza vaccine injected in your arm. During the past 12 months, have you had a seasonal flu shot?".

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

HIV Testing

National and State Rank Estimates: Behavioral Risk Factor Surveillance System, Division of Behavioral Surveillance, Centers for Disease Control and Prevention Office of Surveillance, Epidemiology, and Laboratory Services.

Estimates for Overall State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 12/19/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Question text: "As far as you know, have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation."

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don't know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Maternal and Child Health

Adolescent Births

National and State Rank Estimates: Birth Rates, by Age of Mother: United States, each state and territory, 2018. Martin JA, Hamilton BE, Osterman MJK, Driscoll AK. Births: Final data for 2018. National Vital Statistics Reports; vol 68, no 13. Hyattsville, MD: National Center for Health Statistics. 2019. Accessed 12/19/2019 from https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_13-508.pdf.

By place of residence. Births per 1,000 women in specified age group estimated in each area. Populations estimated as of July 1. Population data for computing birth rates were provided by the U.S. Census Bureau. Rates by state may differ from rates computed on the basis of other population estimates.

U.S. rate excludes data for the territories.

Estimates for Overall State, Age, Local Health Dis-trict, and Trend: Utah Birth Certificate Database. Retrieved on 12/20/2019 from Utah Department of Health Center for Health Data and Informatics Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/. Population estimates are provided by the National Center for Health Statistics through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.

Estimates for Race and Ethnicity: Utah Birth Certificate Database. Retrieved on 12/20/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/. Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, U.S. Bureau of the Census, IBIS Version 2018.

The adolescent birth rate does not include abortions or miscarriages, and is an underestimate of the adolescent pregnancy rate.

Birth certificates are filed electronically by hospital birth certificate clerks. The information comes from a variety of sources including a worksheet the mother fills out, the mother's prenatal record, and the delivery record. The Office of Vital Records and Statistics has a Quality Control program where every hospital is audited annually. Births are randomly selected and hospital records are checked to verify the accuracy of the reported informa-tion.

Developmental Screening

State Comparison, Gender, Poverty, Education, and Trend Estimates: Child and Adolescent Health Measurement Initiative (CAHMI). 2016–2017 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 2/26/2020 from https://www.childhealthdata.org/.

National Performance Measure 6: Developmental screening, age 9–35 months.

Due to changes in the administration and sampling for the NSCH, results from surveys prior to 2016 are not directly comparable and should not be used to conduct trend analyses. In the 2011/12 NSCH, developmental screening questions were asked among children 10 months to 71 months (five years) who received one or more types of services: medical, dental, mental health care or received/needed a specialist care. In the 2016 and 2017 NSCH, these questions were asked among children 9–71 months. However, the denominator of this measure changed to all children 9–35 months to align with the American Academy of Pediatrics (AAP)/Bright Futures screening recommendations. For more information on content changes in 2016, visit https://www.childhealthdata.org/docs/default-source/nsch-docs/2016-nsch-content-changes_08-30-17.pdf.

The AAP recommends all children should be screened for developmental delays during their regular well-check visits at 9, 18, and 24 or 30 months. This measure uses age-appropriate questions to verify whether young children received standardized developmental, behavioral, and social screening using a parent- reported, standardized screening tool or instrument. Parent respondents for all children between nine months and five years old were asked the following question: "During the past 12 months, did a doctor or other health care provider have you or another caregiver fill out a questionnaire about specific concerns or observations you may have about this child's development,

communication, or social behaviors?" (K6Q12). If the response to K6Q12 was "Yes," parents were asked if the questionnaire covered language or social development (K6Q13 and K6Q13A, respectively, for ages 9–23 months, and K6Q14A and K6Q14B for ages two–five years). The measure is considered missing if both types of con-tents are missing.

This three-item measure to assess whether screening occurred was developed by the CAHMI, with funding from the Commonwealth Fund and in conjunction with the MCHB. Further information may be obtained on the CAHMI website (https://www.cahmi.org/) or by contacting CAHMI at info@cahmi.org.

Missing values due to non-response or a "don't know" response are not included in the denominator when calculating prevalence estimates and weighted population counts displayed in the data query results table. In the majority of cases, the proportion of missing values is less than 2%. Exceptions are noted at the bottom of the table. The exclusion of these values does not change the prevalence estimates and only marginally affects the weighted population counts.

Overview of the Title V Block Grant: The Title V Maternal and Child Health (MCH) Services Block Grant Program operates as a federal-state partnership in 59 states and jurisdictions to improve the health and well-being of MCH populations through the development of public health systems of care which are family-centered, community-based, and culturally appropriate. To improve accountability and to more clearly demonstrate the impact of the Title V Block Grant Program, an updated national performance measure framework was introduced in 2015. This three-tiered framework includes National Outcome Measures, National Performance Measures, and state-initiated Evidence-Based or –Informed Strategy Measures. Updates to the Application/Annual Report Guidance released by HRSA in December 2017 retained the performance measure framework, but allowed greater flexibility for states in selecting national and state performance measures that align with their individual MCH priority needs. More information about the block grant can be obtained at the MCHB website.

About NSCH: The HRSA MCHB funds and directs the NSCH, and develops survey content in collaboration with the U.S. Census Bureau and a Technical Expert Panel. The Technical Expert Panel consists of experts in survey methodology and children's health, federal and state stakeholders, clinicians, and researchers. The U.S. Census Bureau conducts the survey, oversees the sampling, and produces a final data set of survey results. Respondents' cognitive understanding of the survey questions was assessed during the pretest phase of the survey redesign and reassessed after the 2016 survey; subsequent revisions were made. Previously validated questions and scales are used when available. The manuscript "The Design and Implementation of the 2016 National Survey of Children's Health" provides detailed information about the redesign of the NSCH, administration of the first redesigned survey (2016), and the sampling and administration changes for the 2017 NSCH. Prior to 2016, the NSCH and the National Survey of Children with Special Health Care Needs were each conducted three times as interviewer-assisted telephone surveys using random digit dial sampling. In 2016, the two surveys were combined into a single annual self-administered questionnaire. Due to decline in the number of households with landline telephones, the NSCH now utilizes an address-based sampling method to select participating households, thus all invitations are sent by mail. Participants may choose to complete the survey either online using a secure website or a mailed paper version of the survey. All final data components are ver-ified by the Census Bureau, HRSA/MCHB and CAHMI/Data Resource Center staff prior to public release. More information about the survey can be found at: https://www.childhealthdata.org/learn-about-the-nsch/NSCH.

Low Birth Weight

National and State Rank Estimates: Percentage of Babies Born Low Birthweight by State. Stats of the States. CDC/National Center for Health Statistics. Accessed 4/23/2020 from https://www.cdc.gov/nchs/pressroom/sosmap/lbw_births/lbw.htm.

Differences by state do not take into account other state specific population characteristics that may affect the level of the birth characteristic. When the number of events is small, differences by state may be unreliable due to instability in rates.

Estimates for Overall State, Mother's Age, Infant's Gender, Mother's Race, Mother's Hispanic Origin, Mother's Education, Local Health District, and Trend: Utah Birth Certificate Database. Retrieved on 11/14/2019 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

Low birth weight is defined as less than 2,500 grams (5 pounds, 8 ounces).

Local health district represents district of mother's residence.

Birth certificates are filed electronically by hospital birth certificate clerks. The information comes from a variety of sources including a worksheet the mother fills out, the mother's prenatal record, and the delivery record.

The Office of Vital Records and Statistics has a Quality Control program where every hospital is audited annually. Births are randomly selected and hospital records are checked to verify the accuracy of the reported informa-tion.

Violence and Injury Prevention

Intimate Partner Violence

Estimates for State, Age, Gender, Race/ethnicity, Income, Education, Local Health District, and Marital Status: Utah Behavioral Risk Factor Surveillance System (BRFSS). Office of Public Health Assessment, Utah Department of Health.

Question text: “Has an intimate partner EVER hit, slapped, pushed, kicked, or hurt you in any way?”

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a par-ticular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Adverse Childhood Experiences (ACEs)

Estimates for State, Age, Gender, Race, Ethnicity, Income, Education, Local Health District, Type of ACE, ACE Score, and Trend: Utah Behavioral Risk Factor Surveillance System (BRFSS). Retrieved on 2/28/2020 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/.

All ACE questions refer to the respondent’s first 18 years of life.

The question text for each ACE are as follows:

- Emotional abuse: "How often did a parent or adult in your home ever swear at you, insult you, or put you down?"
- Physical abuse: "Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking."
- Sexual abuse: " How often did anyone at least five years older than you or an adult ever touch you sexually? How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually? How often did anyone at lest 5 years or older than you or an adult, force you to have sex?"
- Intimate partner violence: "How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?"
- Substance abuse in the household: "Did you live with anyone who was a problem drinker or alcoholic? Did you live with anyone who used illegal street drugs or who abused prescription medication?"
- Mental illness in the household: “Did you live with anyone who was depressed, mentally ill, or suicidal?"
- Parental separation or divorce: "Were your parents separated or divorced?"
- Incarcerated household member: "Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?"

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on BRFSS data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/ pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a par-ticular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+ except for estimates by race. Age-adjusted rates for race estimates are based on three age groups: 18–34, 35–49, and 50+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.

Firearm Deaths

National and State Rank Estimates: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Underlying Cause of Death 1999–2018 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999–2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Feb 27, 2020.

Firearm deaths were determined by selecting "Firearm" under Injury Mechanism.

The populations used to calculate standard age-adjusted rates are documented at http://wonder.cdc.gov/wonder/help/ucd.html#2000 Standard Population.

The method used to calculate age-adjusted rates is documented at http://wonder.cdc.gov/wonder/help/ucd.html#Age-Adjusted Rates.

Deaths for persons of unknown age are included in counts and crude rates, but are not included in age-adjusted rates.

The method used to calculate 95% confidence intervals is documented at http://wonder.cdc.gov/wonder/help/ucd.html#Confidence-Intervals.

The population figures for year 2018 are bridged-race estimates of the July 1 resident population, from the Vintage 2018 postcensal series released by the NCHS on June 25, 2019.

Estimates for Overall State, Age, Gender, Local Health District, and Trend: Utah Death Certificate Database. Retrieved on 2/28/2020 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/. Population estimates are provided by the National Center for Health Statistics through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2018.

Estimates for Race and Ethnicity: Utah Death Certificate Database. Retrieved on 2/28/20 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/. Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, U.S. Bureau of the Census, IBIS Version 2018.

Estimates for Intent: Utah Death Certificate Database. Retrieved on 2/28/2020 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/.

Firearm deaths are determined using ICD-10 codes W32–W34, X72–X74, X93–X95, Y22–Y24, Y35.0, *U01.4, which is consistent with the External Cause of Injury Mortality Matrix for ICD-10 found on the National Center for Health Statistics (NCHS) website at http://www.cdc.gov/nchs/data/ice/icd10_transcode.pdf.

Age-adjusted rates for gender, local health district, and trend were age-adjusted to the U.S. 2000 standard population using 11 age groups. Age-adjusted rates for race were age-adjusted using three age groups. Age-adjust-ed rates for ethnicity were age-adjusted using 10 age groups.

ICD stands for the International Classification of Diseases. It is a coding system maintained by the World Health Organization and the NCHS used to classify causes of death on death certificates and diagnoses, injury causes, and medical procedures for hospital and emergency department visits. These codes are updated every decade or so to account for advances in medical technology. The U.S. is currently using the 10th revision (ICD-10) to code causes of death.

Death certificates in Utah are required to be filed by funeral directors. Funeral directors obtain demographic information from an informant, a close family member of the decedent. The cause of death is certified by the decedent's physician or the physician who attended the death. Accidental and suspicious deaths are certified by the Medical Examiner. Death certificate data go through extensive edits for completeness and consistency. The Office of Vital Records and Statistics (OVRS) does annual trainings for funeral directors and local registrars.

When death certificates are received, the cause of death literals are keyed into software locally by the OVRS, then shipped to the NCHS where they are machine coded into ICD-10 codes. The NCHS returns the ICD-10 codes to the OVRS where the death records are updated.

For rates where the count is zero, a numerator of "3" was used to calculate the confidence interval (per Lillienfeld and Stolley, Foundations of Epidemiology, 1994).

Infectious Diseases

HIV

National and State Rank Estimates: Table 26. Diagnoses of HIV infection, by area of residence, 2017 and 2018—United States and six dependent areas. Centers for Disease Control and Prevention. *HIV Surveillance Report, 2018 (Preliminary)*; vol. 30. Published November 2019. Accessed 2/28/2020 at https://www.cdc.gov/hiv/pdf/library/reports/hiv-surveillance/vol-31/index.html.

Data are based on address of residence at the end of the specified year (i.e., most recent known address). Data for the year 2018 are considered preliminary because they are based on a six-month reporting delay.

Estimates for Overall State, Age, Sex at Birth, Race/ethnicity, Local Health District, and Trend: Utah Department of Health Bureau of Epidemiology Prevention, Treatment, and Care Program. December 2019.

For the purposes of HIV surveillance, racial/ethnic categories are divided into major racial categories and one ethnic category. Accordingly, references to persons who are Hispanic are shown as "Hispanic" regardless of whether they also have other racial identities. Other racial categories refer only to persons who are non-Hispanic.

Estimates for Transmission Category: Table 5. Case Counts and Percentages of New HIV Diagnoses Among Males by Transmission Category, 2009–2018. Utah Department of Health Bureau of Epidemiology Prevention, Treatment, and Care Program. 2018: Annual HIV Surveillance Report. Accessed 3/1/2020 at http://health.utah.gov/epi/diseases/hivaids/surveillance/2018_HIV_Surveillance_Report.pdf.

When a new diagnosis of HIV is identified, a disease investigation specialist (DIS) at the local health department investigates. During this investigation, the DIS collects information on demographics and transmission risk information. The "transmission category" presented in this report is the most likely way that person acquired HIV. The Centers for Disease Control and Prevention defined transmission categories include male-to-male sexual contact (MSM), injection drug use (IDU), male-to-male sexual contact and injection drug use (MSM+IDU), and heterosexual contact (with a person known to have or to be at high risk for HIV infection).

Chlamydia

National and State Rank Estimates: Table 2. Chlamydia—Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2018. 2018 Sexually Transmitted Disease Surveillance. Centers for Disease Control and Prevention. Accessed 3/1/2020 at https://www.cdc.gov/std/stats18/tables/2.htm.

States were ranked by rate, then by case count, then in alphabetical order, with rates shown rounded to the nearest tenth.

U.S. includes cases reported by the District of Columbia with 9,014 cases and a rate of 1,298.9 cases per 100,000 population, but excludes territories.

Estimates for Overall Utah, Age, Sex at Birth, Race/ethnicity, and Local Health District: Utah Department of Health Bureau of Epidemiology Prevention, Treatment, and Care Program. February 2020.

Estimates for Age and Sex and Trend: Chlamydia Cases. Retrieved on 3/30/2020 from Utah Department of Health (UDOH), Center for Health Data and Informatics (CHDI), Indicator-Based Information System for Public Health (IBIS-PH) website: https://ibis.health.utah.gov/ibisph-view/indicator/complete_profile/ChlamCas.html.

Rates were calculated using the date of diagnosis.

Reported chlamydia rates are calculated by dividing the number of cases within the population of interest by the total number of persons within that population, then multiplying by 100,000. It should be noted that rates within small populations are volatile; a small change in the number of cases can noticeably change the rate. This change may look significant, but, statistically, it may not be. Caution is strongly recommended when interpreting small case numbers and rates.

The cases in this report are classified by the Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report (MMWR) year.

Population data used to calculate rates were obtained from the Population Estimates Query Module from the UDOH CHDI IBIS-PH website. Population estimates are provided by the National Center for Health Statistics through a collaborative agreement with the U.S. Census Bureau.

In this report, missing and unknown age group, sex, and race/ethnicity data were not redistributed; therefore, incidence rates may be underestimated, particularly rates by race/ethnicity.

Local Health District Profiles

Small Area Indicators

Health Improvement Index (HII) Score: The Utah Health improvement Index. Utah Department of Health. Accessed 4/8/2020 from http://health.utah.gov/disparities/data/ohd/UtahHII.pdf.

Population Estimates: Population Estimates. Retrieved on 1/2/2020 from Utah Department of Health (UDOH), Center for Health Data and Informatics (CHDI), Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/.

Population estimates apply to July 1 of the selected year.

The population estimates were produced by staff in the UDOH CHDI. Linear interpolation of U.S. Census Bureau and ESRI ZIP Code data provided annual population estimates for ZIP Code areas by sex and age groups, IBIS Version 2018.

Percentage Racial/ethnic Minority: U.S. Census Bureau, American Community Survey (ACS) 2018 5-Year Estimates Table DP05: ACS DEMOGRAPHIC AND HOUSING ESTIMATES.

Although the ACS produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

For more information on understanding race and Hispanic origin data, please see the Census 2010 Brief entitled, Overview of Race and Hispanic Origin: 2010, issued March 2011.

While the 2014–2018 ACS data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the ACS website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the ACS website in the Methodology section.

Infant Mortality Rate: Infant Mortality (death data only). Retrieved on 1/2/2020 from Utah Department of Health Center for Health Data and Informatics, Indicator-Based Information System for Public Health website https://ibis.health.utah.gov/.

Death certificates in Utah are required to be filed by funeral directors. Funeral directors obtain demographic information from an informant, a close family member of the decedent. The cause of death is certified by the decedent's physician or the physician who attended the death. Accidental and suspicious deaths are certified by the Medical Examiner. Death certificate data go through extensive edits for completeness and consistency. The Office of Vital Records and Statistics (OVRS) does annual trainings for funeral directors and local registrars.

When death certificates are received the cause of death literals are keyed into software locally by the OVRS, then shipped to the National Center for Health Statistics (NCHS) where they are machine coded into ICD-10 codes. The NCHS returns the ICD-10 codes to the OVRS where the death records are updated.

For rates where the count is zero, a numerator of "3" was used to calculate the confidence interval (per Lillienfeld and Stolley, Foundations of Epidemiology, 1994).

Life Expectancy at Birth: Life Expectancy at Birth. Retrieved on 1/2/2020 from Utah Department of Health (UDOH), Center for Health Data and Informatics (CHDI) Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/indicator/view/LifeExpect.SA.html.

Life expectancy by Utah Small Area was calculated using death counts over a span of five years (2014–2018).

The method developed by C.L. Chiang was used to compute life expectancy.

Population estimates produced by the UDOH CHDI. Linear interpolation of U.S. Census Bureau and ESRI ZIP Code data provided annual population estimates for ZIP Code areas by sex and age groups, IBIS Version 2018.

Life expectancy at birth is strongly influenced by infant and child mortality; life expectancy later in life reflects death rates at or above a given age and is independent of mortality at younger ages.

Percentage of Adults Reporting Fair/Poor Health: Fair/Poor Health. Retrieved on 1/2/2020 from Utah Department of Health, Center for Health Data and Informatics, Indicator-Based Information System for Public Health website: https://ibis.health.utah.gov/ibisph-view/indicator/view/FPHlth.SA.html.

Age-adjusted to U.S. 2000 standard population.

Question text: “Would you say that in general your health is excellent, very good, good, fair or poor?”

Data are self-reported and subject to respondent's recall and accuracy of reporting.

This output is based on Behavioral Risk Factor Surveillance System data collected through both landline and cellular phones and utilizes an improved weighting methodology. For more information about this methodology visit https://ibis.health.utah.gov/_pdf/opha/resource/brfss/RakingImpact2011.pdf.

Denominator includes all survey respondents aged 18 years and older except those with 'missing,' 'don’t know,' and 'refused' answers. If the query was limited to a particular sub-population-group, only those respondents are included in the denominator.

Age-adjusted rates are based on five age groups: 18–24, 25–34, 35–44, 45–64, and 65+.

When there are no observations for one or more of the age categories used for age adjustment, the response categories may not sum to 100%.

The confidence bounds are asymmetric.