2018
Davis4Health
Community Health Assessment

Acknowledgments

Prepared by Davis County Health Department

Brian Hatch, MPH, EHS
Health Officer

Dave Spence, MBA, EHS
Deputy Director

Isa Perry, MPH, CHES
Community Outreach Planner

Davis4Health Steering Committee

Brandon Rypien
Christine Ipsen
Christy Hutchinson
Debi Todd
Dennis Keith
Ivy Melton Sales
Commissioner Jim Smith
Jory Joyner
Karlene Kidman
Kristy Cottrell
Kristy Jones
LeeAnn Gossett
Lindsey Edwards
Loralee Omby
Lorna Koci
Mark Dewsnup
Merri Ann Crowther
Mayor Randy Lewis
Regina Klitgaard
Scott Hess
Scott Zigich
Shawn Beus
Shelly Nettesheim
Troy Wood
Wendy Garcia
Zuri Garcia

Davis County Health Department CHA Committee

Amy Mikkelsen
Anna Dillingham
Caitlin Pratt
Marcie Clark
Morganne Housley
Sara Hall
Sarah Willardson

Davis County Health Department, 22 South State Street, Clearfield, Utah 84015
For questions about this report, contact: Isa Perry, 801-525-5212, isa@daviscountyutah.gov
www.daviscountyutah.gov/health www.facebook.com/DavisCountyHealth

Table of Contents

LEGEND	SECTIONS
★	Designates 4 MAPP Assessments
Tan	Background & County Info
Gold	Community Themes
Red	Health Status Assessment
Green	Mortality/Death Rates
Purple	Morbidity/Disease Rates
Orange	Health Behaviors
Yellow	Clinical Care
Brown	Social & Economic Factors
Blue	Physical Environment
Grey	Health Disparities
Pink	Public Health System
Teal	Forces of Change
Maroon	Appendix

Table of Contents

Table of Contents

Executive Summary

The Davis County Health Department (DCHD) in conjunction with Davis4Health, the local community health improvement collaborative, conducted a comprehensive Community Health Assessment (CHA). In this second iteration of the CHA, new local data has been collected; priority health and human service issues have been explored; and the needs of special populations have been assessed. These efforts have provided a much deeper understanding of community health issues; contributing factors; awareness of existing resources and/or lack of resources; and has shed light on existing health inequities.

Understanding the health needs and resources of the community provides a foundation for efforts to improve the health of the population. This health assessment will be the basis for setting priorities and using resources. A community health assessment is one tool DCHD uses to improve public health services for the population.

The County Health Rankings and Roadmaps (CHR) model is used as a framework for assessing the health status of the population. The annual rankings provide a helpful snapshot of how health is influenced by where we live, learn, work, and play. The data is well organized, reported, and ranked, and roadmap tools are available for communities to use to make improvements.

Mobilizing for Action through Planning and Partnerships (MAPP) is another framework used for community-driven strategic planning processes for improving community health. Completing the four assessments outlined in the MAPP process provides a comprehensive view of current and future public health concerns. Four unique assessments are brought together in this report to drive the identification of strategic issues.

Data Sources

In addition to data from CHR, numerous health status reports and needs assessments were gathered from partner organizations at the national, state, and local levels and are referenced in this report. DCHD also collected qualitative data to give context to health indicators and provide understanding about the health culture in Davis County. The Davis4Health community survey and stakeholder meetings were conducted to gather informed opinions about the health needs and resources in the county.

Because health status reports and statistics are continually being released and updated, assessment efforts are ongoing. This report represents a snapshot in time and presents the most current data available. The indicators included are comprehensive and broad in scope. Some issues deemed important by Davis4Health partners are examined more in-depth than others. This report provides rates and measures for Davis County, some small areas and cities, and, on occasion, census tracts. The indicators are compared to Utah and the United States where possible.

Health Equity

Davis4Health is working to improve health outcomes for all residents and to close health gaps between those with the most and least opportunities for good health. Over the last five years, partners have worked together to examine health equity topics and health issues affecting special populations. Assessments specific to seniors, teens, refugees and immigrants, and LGBTQ populations are available. Additional assessments were conducted to dive deeper into issues such as mental health, access to healthcare, food environment, housing environment, transportation, and areas of deprivation which are all intertwined with health equity.

Community Themes & Strengths

Davis County is considered a healthy place to live by residents for two main reasons: the people and the environment. Although healthy overall, the community is concerned about some health issues that cross-cut most age groups: healthy eating, inactivity, obesity, affordable healthcare/access to healthcare/insurance issues, mental health, air quality, screen time, use of electronics, as well as drug use. Those considered most vulnerable in the county are residents with low income, those with mental health conditions, and seniors.

Community Health Status

The 2017 CHR rank Davis County as the 5th healthiest county in Utah out of 27 ranked counties. The CHR model includes county-level measures from national and state sources for health outcomes (mortality and morbidity) and health factors (health behaviors, clinical care, social/economic factors, and physical environment). The CHR show Davis County's strengths are in indicators measuring social/economic status and clinical care.

Social Determinants of Health

Social and economic factors, also known as the social determinants of health, may have more influence on health than other types of health factors. When looking at population health, communities with higher income and education are healthier, as is the case in Davis County. When compared to Utah and the United States, Davis County is more educated, has less unemployment, less poverty, more homeowners, more social support, and less violent crime.

National Benchmarks

The CHR provides a national benchmark (90th percentile) for each measure reported. Davis County is in the top 10% (best) of all counties in the U.S. for these measures: premature death, poor/fair health, frequent physical distress, adult smoking, excessive drinking, adult obesity, physical inactivity, access to exercise opportunities, preventable hospital stays (Medicare enrollees), some college, children in poverty, income inequality, children in single-parent households, and injury deaths.

Healthy People 2020, Leading Health Indicators

Healthy People 2020 provides a comprehensive set of 10-year national goals and objectives for improving the health of all Americans. With more than 1,200 goals and objectives included, 20 Leading Health Indicators (LHIs) are highlighted to communicate high-priority national health issues. Out of the 20 LHIs, Davis County is meeting the goal for 14 indicators. County data is lacking for three indicators. In addition, three LHI goals not being met in Davis County are persons with health insurance, persons with a usual primary care provider, and suicide.

Indicators to be Examined

CHR suggests Davis County explore three areas of concern: adult obesity, social associations, and air quality. For many health indicators Davis County measures are better than or equal to state rates. Areas of concern where Davis County is worse than the state or the nation include: sexually transmitted infections; primary care, dental and mental health provider ratios; air pollution; driving to work alone; long commute alone; daily servings of vegetables; coronary heart disease deaths; skin cancer incidence; and prostate cancer incidence. Other indicators trending in the wrong direction include: Alzheimer's, opioid overdose deaths, diabetes, immunization rates, affordable housing, and domestic violence.

Local Public Health System Assessment

The Local Public Health System (LPHS) in Davis County is high functioning and doing well to diagnose and investigate health problems and health hazards; develop policies and plans that support individual and community health efforts; and enforce laws and regulations that protect health and ensure safety.
The LPHS has successfully worked together doing community health improvement activities. Population-based public health services are evidence-based and quality personal healthcare services are being delivered according to guidelines. System improvements are needed to do a better job linking people to needed personal health services.

Forces of Change

Societal, environmental, technological, and demographic changes are occurring that will have an effect on community health and the public health system. Community stakeholders are concerned about worsening air and water quality. Federal, state, and local policy changes are affecting cost of healthcare, allocation of resources for vulnerable populations, the built environment, and affordable housing. There is much concern by members of the community over the increasing influence of technology. There will also be more need for affordable education and living wage jobs in the future. There is apprehension about significant population growth, running out of resources, busy lifestyles, and values of the next generation.

This report highlights some of the many reasons Davis County is a healthy place to live and shows we have room for improvement in some areas. Davis4Health partners are not satisfied with being ranked the 5th healthiest county in Utah. Davis4Health partners are engaged in a continuous action cycle. This assessment along with other planned assessments will guide Davis County's community health improvement efforts. The information in this report will be used to educate and mobilize Davis County residents, develop priorities, advocate for resources, and plan actions to improve the health of the county. Public health partners, local leaders, and citizens have a shared vision for a culture of health.

Community Health Assessment Background

A community health assessment is one of the core functions of public health and is a prerequisite for public health accreditation. DCHD became accredited in 2015. The Public Health Accreditation Board (PHAB) is the official national accrediting body for public health departments and seeks to advance quality and performance within public health departments. PHAB's definition of a community health assessment is:

> A systematic examination of the health status indicators for a given population that is used to identify key problems and assets in a community. The ultimate goal of a community health assessment is to develop strategies to address the community's health needs and identified issues. A variety of tools and processes may be used to conduct a community health assessment; the essential ingredients are community engagement and collaborative participation.

PHAB requirements for a CHA include documenting a collaborative process with evidence of membership; sharing of data; and a process for working together to make updates and revisions; demonstrating that data comes from a variety of sources and sectors; describing health issues for special populations and exploring health inequities; describing factors that contribute to health issues; inclusion of primary data sources; and recognizing community resources and assets that contribute to good health. An updated CHA should be produced every five years and needs to be publicly available.

The CHA provides value to the community by providing reliable data sources, baselines, and trends. It includes the story of our community, perceptions, priorities and context for data. It can be used to educate, mobilize community around health issues, contribute to grant applications, and lead to new collaborations. Information gathered informs the Community Health Improvement Plan (CHIP), and The Health Department Strategic Plan and Quality Improvement efforts. A community health assessment is one tool DCHD will use in an effort to improve public health services, value, and accountability to stakeholders.

The first comprehensive CHA for the county was released in 2013. Over the last five years new local data has been collected, priority health and human service issues have been identified, and the needs of special populations have been assessed. These efforts have provided a much deeper understanding of community health issues; contributing factors; awareness of existing resources and/or lack of resources; and health inequities.

Community Health Assessment Coordination

Other local and state entities and public health partners also conduct CHAs. Partnerships exist with non-profit hospitals who are federally required to conduct community health needs assessments (CHNA). DCHD staff and Davis4Health members are involved in these ongoing efforts to ensure tools, processes and outcomes are coordinated and synergistic. Over the last several years three key groups have been coordinating CHA efforts: Intermountain Healthcare Community Advisory Panel, the State Health Assessment (SHA) Workgroup, and the Utah Community Health Needs Assessment Planning Team (the newest group). The SHA Davis County Snapshot **(Appendix 1)** and McKay-Dee Hospital CHNA Summary **(Appendix 2)** are products of the collaborative assessment work.

Data Sources

Demographic Data Sources

Primary sources for demographics:

- U.S. Census Bureau
- Utah Department of Workforce Services
- University of Utah, Kem C. Gardner Policy Institute
- Sperling's Best Places

Health Indicator Data Sources

Primary sources for health indicators:

- County Health Rankings **(Appendix 3-4)**
- Division of Substance Abuse and Mental Health Annual Report **(Appendix 5)**
- Healthy People 2020 **(Appendix 6)**
- Community Snapshot (ibis.health.utah.gov)
- Community Commons (national platform)
- Prevention Needs Assessment Survey (PNAS)

Small Area Data

In order to facilitate reporting data at the community level, Utah has been divided into small areas. Areas are determined based on specific criteria, including population size, political boundaries of cities and towns, and economic similarity. The health measures reported by a small area are those with events occurring with sufficient frequency to be meaningful. Some indicators in the state surveillance system can be queried for 6 small areas in Davis County: Clearfield/Hill AFB, Layton, Syracuse/Kaysville, Farmington/Centerville, Woods Cross/North Salt Lake, and Bountiful. For small area boundaries and definitions in Davis County, see **Appendix 7**.

Age Adjustment

Because many diseases, such as cancer and heart disease, are less common among younger people, Davis County's population is healthier than the U.S. population. Health data is often age-adjusted in reports such as this one to remove "age effect." This allows Davis County to be compared to the entire U.S. population or to other states.

Qualitative Data

Qualitative data has also been collected that gives context to health indicators and provides understanding about the health culture in Davis County. Community surveys, service providers surveys, and stakeholder meetings have been conducted to gather informed opinions about the health needs and resources in the county. These assessments help identify areas for health improvement, determine factors that contribute to health issues, and identify assets and resources that can be mobilized to improve population health.

Engaging with the community to gather information contributes a community voice to assessment efforts. These efforts provide valuable information about community strengths, unique issues in the county, and perceptions and priorities of the population.

Process

The Take Action Cycle from County Health Rankings and Roadmaps provides the steps and a path to help communities move with data to action. The action cycle isn't always linear. Steps can be revisited when needed.

Assess Needs & Resources

Start by taking stock. Consider the challenges faced. Identify strengths, assets, and resources. Ask if there are some who face challenges that others do not.

Focus on What's Important

Decide which problem(s) to tackle. Without focus, all issues seem equally important. Taking time to set priorities will ensure that community resources are directed to the most important issues.

Choose Effective Policies & Programs

Selecting and implementing policies and programs that have been shown to work in real life and that are a good fit for the community will maximize chances of success.

Act on What's Important

Move to action. Since there are no "one size fits all" blueprints for success, communities build on strengths, leverage available resources, and respond to unique needs.

Evaluate Actions

Evaluating ongoing efforts helps health improvement partners know if what they are doing is working the way it is intended and achieving desired results.

Work Together

Working together is at the heart of making meaningful change. Every community is different, and as a result, efforts to improve health will vary. However, there is one constant: people working together with a shared vision and commitment to improve health, it can yield better results than working alone.

Communicate

Effective communication throughout each step is essential for health improvement efforts to be successful. What is said and how it is said can motivate the right people to take the right action at the right time. Determine how to get the most important messages to the people who influence the work.

Davis4Health

Davis4Health is the Davis County community health improvement collaborative which began in 2012.

Organizational Structure

Davis4Health is directed by community partners with significant involvement from a broad set of stakeholders and from a variety of community agencies. Partner contributions include: paid staff, facilitation and leadership, expertise, volunteers, guidance and decision-making, advocacy, data, additional community connections, in-kind donations (meeting space, food), etc. The DCHD currently serves as the backbone organization and provides ongoing support to maintain organizational infrastructure and sustain momentum for moving Davis4Health forward.

Davis4Health Steering Committee

The steering committee is made up of partners who participate in Davis4Health activities such as the CHA, Community Health Improvement Plan (CHIP), and other collaborations. Responsibilities of committee members include: provide guidance for CHA process and content, prioritize indicators, share data when possible, collect community feedback, advocate for resources to support process, etc. Committee members represent 20 different agencies and community groups. Biannual meetings started in 2016.

Davis4Health partners celebrate community health improvement successes each year in February. Annual progress reports can be found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments. Partners are proud of their accomplishments over the last four years as the community has strategically aligned to prevent and reduce suicide, prevent and reduce obesity, improve access to behavioral health services, and improve air quality. Collaboration is critical. All partners have a stake in creating a healthier community and no single agency can address the leading health challenges of the county alone.

DAVIS4HEALTH

Mission

Improve community health through the power of partnerships, collaboration, and strategic alignment around Davis County's top health priorities.

Vision

Shared commitment toward a culture of health

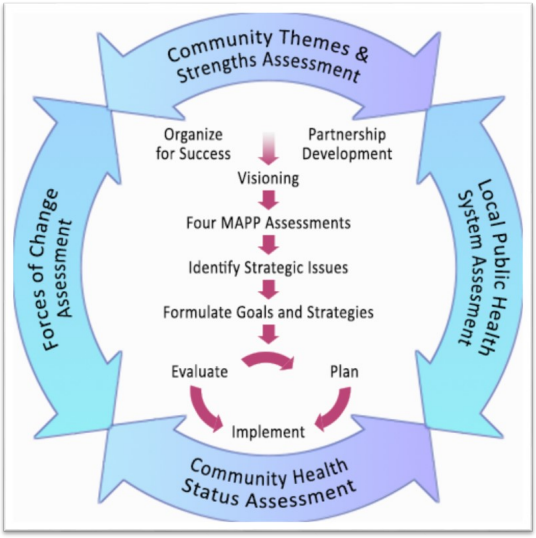
Guiding Principles

1.) Priorities and strategies are determined based upon the findings of the Davis4Health Community Health Assessment.

2.) The process is community driven with significant involvement from a broad set of stakeholders and partners from a variety of community agencies.

Mobilizing for Action through Planning and Partnerships (MAPP) is a community-driven strategic planning process for improving community health. The framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. MAPP is not an agency-focused assessment process; rather, it is an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems through six phases. MAPP was used as a resource throughout our community health improvement process.

MAPP brings four assessments together to drive the development of a community health improvement plan. Four unique and comprehensive assessments gather information to drive the identification of strategic issues. Each assessment yields important information for improving community health, the value of the four MAPP assessments is multiplied by considering the findings as a whole. Disregarding any of the assessments will leave participants with an incomplete understanding of the factors that affect the local public health system and, ultimately, the health of the community.



There was specific value seen in completing the four assessments outlined in the MAPP process. In the 2013 CHA two out of four assessments were represented. In this document, the 2018 CHA, the results of all four assessments are included.

- The **Community Themes and Strengths Assessment** identifies themes that interest and engage the community, perceptions about quality of life, and community assets. It provides understanding of the issues that residents feel are important by answering the questions: "What is important to our community?" "How is quality of life perceived in our community?" and "What assets do we have that can be used to improve community health?" (Pages 25-34.)
- The **Community Health Status Assessment** analyzes data about health status, quality of life, and risk factors in the community. Questions answered include: "How healthy are our residents?" and "What does the health status of our community look like?" This document contains a comprehensive description of county demographics and reviews health indicators and measures across many categories. Davis County health snapshots that come from other organizations are included or referenced here as well. (Pages 35-139.)
- The **Local Public Health System Assessment (LPHSA)** measures the capacity of the local public health system to conduct essential public health services. It focuses on all of the organizations and entities that contribute to the public's health. The LPHSA answers the questions: "What are the components, activities, competencies, and capacities of our local public health system?" and "How are the Essential Services being provided to our community?" (Pages 141-143.)
- The **Forces of Change Assessment** identifies forces that are occurring or will occur that will affect the community or the local public health system. This answers the questions: "What is occurring or might occur that affects the health of our community or the local public health system?" and "What specific threats or opportunities are generated by these occurrences?" (Pages 144-145.)

Davis4Health Assessments

This section provides a brief summary of Davis4Health assessments conducted since the 2013 CHA. Reports, assessments, and maps can be found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments. The results and findings from these assessments are woven throughout this report.

Davis County Mental, Emotional & Behavioral Health Provider Survey Report, 2014

A behavioral health provider survey helped to assess mental, emotional, and substance abuse services offered in Davis County and to better understand the factors affecting access to behavioral health services. Information from 79 providers was used to identify a network of Davis County behavioral health providers and assess services offered; develop a directory with a comprehensive listing of mental health and substance abuse service providers and resources; and identify factors, including gaps and barriers, which affect access to behavioral health services in the community.

Access to Healthcare Assessment, 2014

The DCHD and healthcare system partners convened in August 2014 to assess the capacity of the healthcare system and community members' access to healthcare services in Davis County. This report summarizes the findings of a community health assessment and healthcare system partners' experiences providing and connecting residents to healthcare services.

Local Public Health System Assessment, 2015

The DCHD and local public health system partners convened in October 2015 to conduct a local public health system assessment. This assessment helped enhance partners' understanding of the public health system; build relationships within the public health system; identify strengths and weaknesses of the public health system; and establish performance baselines for the system. The report summarizes the results and findings of the local public health system assessment and informs system partners about performance improvement opportunities.

CASPER, 2016

CASPER is an acronym for Community Assessment for Public Health Emergency Response. The CASPER is a rapid-needs assessment developed by the Centers for Disease Control and Prevention (CDC) that is used during or before an incident to quickly ascertain what needs and resources are necessary to respond and recover from disasters. The Davis County CASPER exercise included door to door interviews with a randomly selected, statistically representative sample of residents to ascertain the level of preparedness that exists in Davis County and assess community health improvement themes for the average resident.

City Health Profiles, 2016

Data has been compiled for 15 individual city health profiles. Statistics include: transportation (commute time, transit stops, bike lanes); recreation (trails, aquatic, parks, etc.); food environment (fast food, convenience stores, grocery, produce stands); alcohol and tobacco outlets; housing; and other health indicators. A summary of community assets and resources is included as well as strengths, challenges, and recommendations.

Area Deprivation Index (ADI) Map, 2016
The Davis County ADI Map shows the distribution of socio-economic disadvantage within the community. The ADI is a community composite measure of census data for income, education, employment and living conditions mapped at the U.S. Census block group level.

Housing SWOT, 2016
The Davis Local Homeless Coordinating Committee (LHCC) conducted a Strengths, Weaknesses, Opportunities and Threats Analysis of the system and resources to address homelessness in Davis County.

Senior Health Profile, 2017
Health indicator data has been compiled for those ages 65+. A summary of strengths and challenges are provided.

Immigrant and Refugee Service Provider Survey, 2017
The Immigrant and Refugee Service Provider Survey was designed collaboratively by members of the Davis County Health Department in conjunction with Davis4Health Steering Committee and the Local Homeless Coordinating Committee to gain insight into the demographics, needs, and barriers of immigrants and refugees living and accessing human services in Davis County.

Pedestrian and Bike Crash Analysis City Map Series, 2017
This map series shows the locations of crashes involving bicyclists and pedestrians in each Davis County city. Data is from 2011-2015. Additional interactive crash data can be found and mapped at crashmapping.utah.gov.

Food Environment Assessment, 2017
The report provides an overview of the food environment in Davis County. Data was compiled from many sources and maps help identify vulnerable communities in Davis County. The report is divided into three sections: Food Environment; Food Insecurity; and Strengths, Weaknesses, Opportunity, and Threats Analysis. Also of note, included in the appendix is a compilation of all identified Healthy Food, Nutrition Education, & Breastfeeding Resources as well as Food Assistance Resources in Davis County.

Lesbian, Gay, Bisexual, Transgender and Questioning (LGBTQ) Assessment, 2017
Provides an overview of the health status of the LGBTQ community in Davis County and resources available to promote health and equity.

Davis4Health Community Survey, 2017
The Davis4Health community survey was conducted to learn community opinions about health needs and issues in the county. The focus areas included health concerns by age groups; social determinants of health and health equity; forces of change; and mental health. Nearly 400 residents participated.

Needs Assessments & Health Status Reports

Many other partner agencies were consulted to find already existing community needs assessments and other applicable health status reports relevant to Davis County. There were many available from a wide range of agencies, some for specific health topics and some for social determinants of health. They are listed below. If the report is publicly available online, the web link is included.

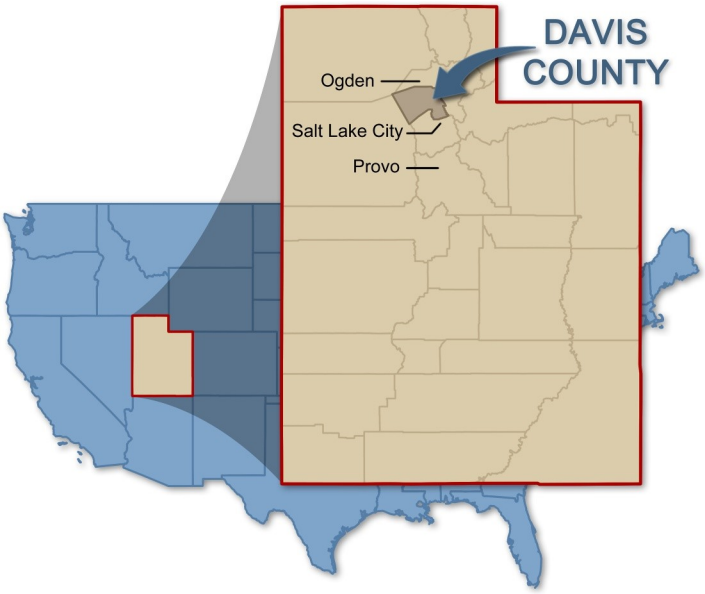
- A Snapshot of Autism Spectrum Disorder in Utah, 2016
  https://www.cdc.gov/ncbddd/autism/documents/Community_Report_Autism_Utah_WEB.pdf
- ADHD State Profile, 2016
  https://www.cdc.gov/ncbddd/adhd/state-data-hub.html
- Alzheimer's Statistics Utah, 2017
  https://www.alz.org/utah/documents/statesheet_utah.pdf
- America's Health Rankings, United Health Foundation, 2017
  https://www.americashealthrankings.org/explore/2017-annual-report/measure/Overall/state/UT
- Communicable Diseases, Davis County, 2016
  http://www.daviscountyutah.gov/docs/librariesprovider5/communicable-disease-and-epidemiology-division-documents/2016-annual-report_final_final5927354f13296568a4f7ff3c0015e574.pdf?sfvrsn=b80e5053_0
- Community Health Assessment, Weber-Morgan Health Department, 2015
  http://www.webermorganhealth.org/about/documents/WMHD_CHA.pdf
- Community Health Needs Assessment (CHNA), Intermountain Healthcare, 2016
  https://intermountainhealthcare.org/about/who-we-are/chna-reports/
- Community Health Status Indicators, Utah Department of Health
  https://ibis.health.utah.gov/community/snapshot/report/AllIndicators/GeoLHD/3.html?PageName=
- Community Action Partnership of Utah Annual Report on Poverty in Utah, 2015
  https://caputah.org/poverty-in-utah/poverty-reports/item/51-davis-county
- Comprehensive Report on Homelessness, State of Utah, 2017
  https://jobs.utah.gov/housing/scso/documents/homelessness2017.pdf
- County Health Rankings & Roadmaps, Davis County, Utah, 2017 http://www.countyhealthrankings.org/app/utah/2017/rankings/davis/county/outcomes/overall/snapshot
- Crime in the United States, Utah Offenses Known to Law Enforcement, 2016
  https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-8/table-8-state-cuts/utah.xls
- Division of Substance Abuse and Mental Health Annual Report, 2016
  https://dsamh.utah.gov/pdf/Annual%20Reports/2016%20Annual%20Report%20Web%20Final.pdf
- Department of Workforce Services, Davis County Snapshot
  https://jobs.utah.gov/wi/regions/county/davis.html
- Epi-Aid # 2017-019: Undetermined Risk Factors for Suicide among Youth Aged 10-17 years
  http://health.utah.gov/vipp/pdf/Suicide/CDCEpi-AidReport.pdf
- March of Dimes Premature Birth Report Card, 2017
  https://www.marchofdimes.org/peristats/tools/reportcard.aspx?frmodrc=1&reg=49
- Maternal & Child Health Performance Measures, 2017
  https://mchb.tvisdata.hrsa.gov/PrioritiesAndMeasures/NationalOutcomeMeasures

- National Survey of Children's Health, 2016
  http://www.childhealthdata.org/browse/survey
- National Violent Death Reporting System Special (NVDRS) Report on Suicide, 2013-2014
  http://health.utah.gov/vipp/pdf/UTVDRS/NVDRSSpecialReportOnSuicide.pdf
- Opioid Prescribing Practices in Utah, 2002-2015
  https://www.health.utah.gov/vipp/pdf/RxDrugs/PrescribingPracticeInUtah.pdf
- Oral Health Status of Utah's Children, 2015-2016
  https://health.utah.gov/oralhealth/resources/2015-2016%20Oral%20Health%20Survey.pdf
- Prescription Opioid Deaths, 2017
  http://health.utah.gov/vipp/pdf/RxDrugs/PDODeaths2015.pdf
- Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years- Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2012
  https://www.cdc.gov/mmwr/volumes/65/ss/ss6503a1.htm
- Ready or Not? Protecting the Public from Diseases, Disasters & Bioterrorism, Trust for America's Health, 2017
  http://healthyamericans.org/reports/readyornot2017/release.php?stateid=UT
- Safe Harbor Annual Report, FY 2015-2016
  http://www.safeharborhope.org/ar2016.pdf
- Salt Lake County Community Health Assessment , Healthy Salt Lake, 2017
  http://www.healthysaltlake.org/content/sites/saltlake/Documents/Community_Health_Assessment.pdf
- State and County Demographics and Population Estimates, 2017, Kem C. Gardner Policy Institute, University of Utah
  http://gardner.utah.edu/
- State of the Air, American Lung Association, 2017
  http://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/states/utah/
- State of Tobacco Control 2017, American Lung Association
  http://www.lung.org/our-initiatives/tobacco/reports-resources/sotc
- Student Health and Risk Prevention Statewide Survey (SHARP), 2017 Prevention Needs Assessment Results, Davis County
  https://dsamh.utah.gov/pdf/sharp/2017/Davis%20County%20LSAA%20Profile%20Report.pdf
- Tobacco Prevention and Control in Utah, 2017
  http://www.tobaccofreeutah.org/pdfs/TPCPFY%20Current%20report.pdf
- Trends in Poison Exposures in Utah (most common, e-cigarettes, marijuana, opioids), Utah Poison Control Center, 2016
  http://poisoncontrol.utah.edu/toxictrends.php
- Underage Drinking in Utah, 2016
  https://dsamh.utah.gov/pdf/Utah%20Underage%20Drinking%20Brief%202016R.PDF
- Utah Adolescent Health Report, 2013
  http://choosehealth.utah.gov/documents/pdfs/reports/2013_Utah_Adolescent_Health_Report.pdf
- Utah Chronic Disease Prevention and Health Promotion State Plan, 2014-2020
  http://choosehealth.utah.gov/documents/pdfs/statePlan.pdf

- Utah Crash Summary, 2016 https://highwaysafety.utah.gov/wp-content/uploads/sites/22/2015/02/UtahCrashSummary2016-2.pdf
- Utah Diabetes Prevention Strategic Plan, 2015 http://choosehealth.utah.gov/documents/pdfs/diabetes/Utah_DiabetesPrevention_Strategic_Plan.pdf
- Utah Division of Air Quality 2016 Annual Report https://documents.deq.utah.gov/air-quality/annual-reports/DAQ-2017-001541.pdf
- Utah Domestic Violence Coalition Facts, 2016 http://udvc.org/media/PDF/2017/UDVC-Facts-Dec-2016.pdf
- Utah Immunization Coverage Report, 2016 http://www.immunize-utah.org/pdf/2016ImmCovRpt/2016StateReports/2016CoverageReport.pdf
- Utah Health Status by Race and Ethnicity, 2015 http://www.health.utah.gov/disparities/data/race-ethnicity-report/2015HealthStatusbyRace&Ethnicity.pdf
- Utah Health Status Update: Effects of Adverse Childhood Experiences http://health.utah.gov/opha/publications/hsu/1507_ACE.pdf
- Utah Health Status Update: Environmental Determinants of Physical Health and Obesity, 2013 http://health.utah.gov/opha/publications/hsu/1304_EnviroHealth.pdf
- Utah State Health Assessment, 2016 https://ibis.health.utah.gov/pdf/opha/publication/SHAReport2016.pdf
- Utah's Opioid Crisis Consequence and Resource Assessment, July 2017 https://dsamh.utah.gov/pdf/Utah%20STR%20State%20Level%20Needs%20Assessment%20July%2031%202017.pdf
- Utah's Sixth Annual Report on Intergenerational Poverty, Welfare Dependency, and the use of Public Assistance, 2017 https://jobs.utah.gov/edo/intergenerational/igp17.pdf
- Youth Suicide Health Status Update, 2017 http://health.utah.gov/vipp/pdf/Suicide/HealthStatusUpdateCDCEpi-AidYouthSuicide.pdf

Geography

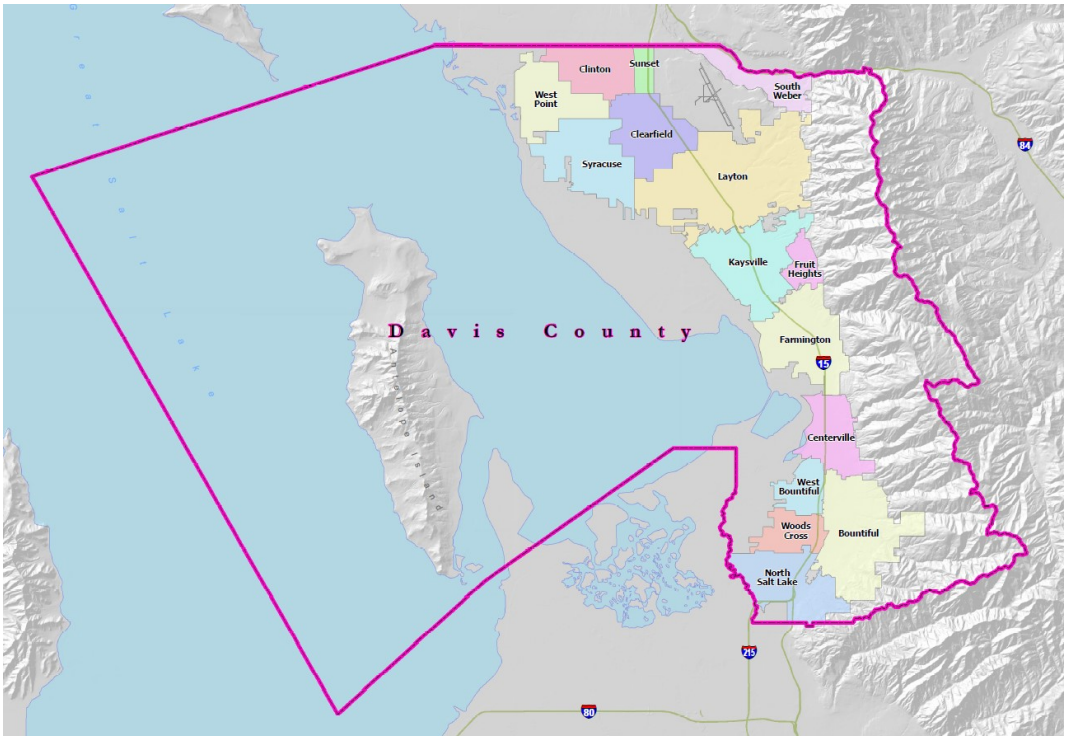
Davis County is a narrow strip of land along Utah's Wasatch Front. It is a suburban community just north of Salt Lake City and south of Weber County/Ogden. To the west is the Great Salt Lake and to the east is the Wasatch Mountain Range. By total land area, Davis County is the smallest county in Utah. It is 26.5 miles north to south and 37.5 miles east to west (including the Great Salt Lake). Out of the 635 square miles that make up the county, only 223 square miles are usable land. The remainder is part of the Great Salt Lake, including Antelope Island and the mountainside. Elevation is approximately 4,500 feet above sea level.



Davis County is considered a bedroom community because of the proportion of the population that commutes to work in surrounding counties. Davis County's central location provides excellent access to housing, transportation, education, employment, healthcare facilities, entertainment, and recreation.

Government

The county seat is Farmington. A 3-member board of commissioners is the county's governing body. They are responsible for all county services and operations. They approve, adopt, and amend the budget. They also serve as the legislative body and regulate business licensing in the county's unincorporated areas. Davis County is comprised of 15 incorporated cities.



County Description

Climate

Davis County is considered to be in a cold semi-arid climate, which means the climate can feature warm to hot summers and cold to very cold winters. Major temperature swings are common between day and night by as much as 55 degrees Fahrenheit.

On average, there are 226 sunny days per year in Davis County, Utah. The July high is around 91 degrees. The January low is 21. Sperling's comfort index for Davis County is a 73 out of 100, where a higher score indicates a more comfortable year-around climate. The US average for the comfort index is 54. Davis County gets 22 inches of rain per year and 73 inches of snowfall. The average number of days with any measurable precipitation is 55. (Source: bestplaces.net)

Due to Davis County's bordering relationship with the Great Salt Lake, an occurrence called lake-effect snow can produce above-average snowfalls. This effect is caused by cold winds from the west that move across the expanse of the Great Salt Lake which doesn't freeze because of the salinity. Water vapor from the lake freezes and is deposited onto the relatively narrow section of Davis County that is sandwiched between the Great Salt Lake and the Wasatch Mountains, sometimes resulting in multiple feet of snow from lake effect alone. Lake-enhanced snowstorms are often attributed to creating what is locally known as "The Greatest Snow on Earth."

Transportation

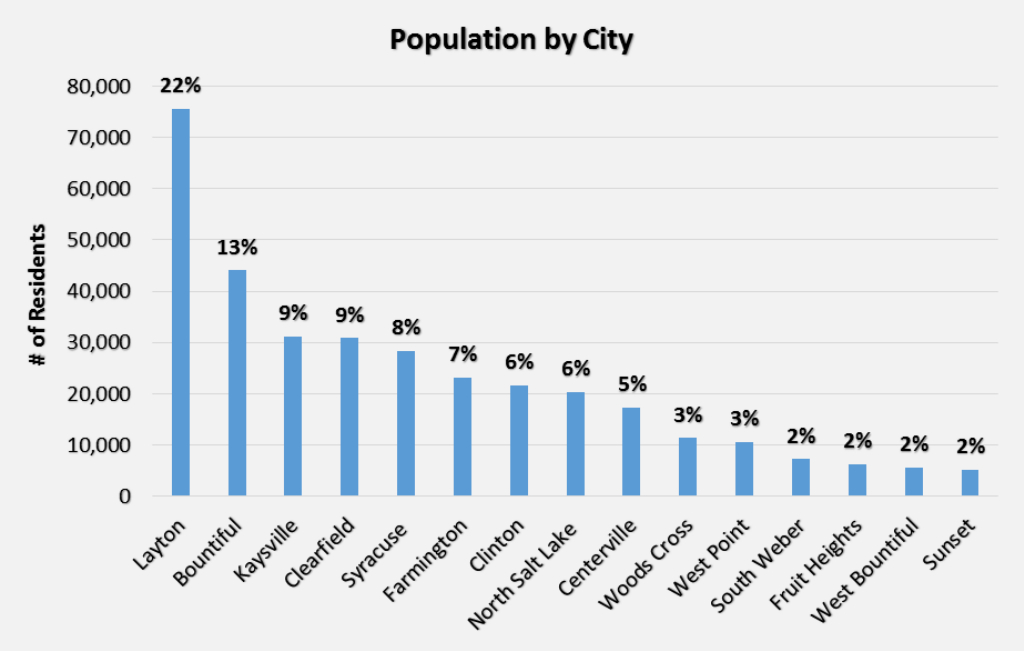
The most important road in the county is Interstate 15, which runs north-south through the center of the county. Congestion can be a significant problem in the county, as east-west transportation is restricted by the narrow urban corridor and many citizens commute south to Salt Lake County.

US-89 enters parallel to I-15 from Salt Lake County to the south and runs north through North Salt Lake and Bountiful as a city road before merging with I-15. It reemerges again in Farmington near the Lagoon Amusement Park, heading along the eastern benches on the slopes of the Wasatch Range, entering Weber County near South Weber. The Legacy Parkway runs from the US-89/I-15 interchange in Farmington southward to connect with I-215 near the border with Salt Lake County. An extensive trail system, wetland protection measures, and landscaping were implemented along the highway in response to environmentalists' concerns, in addition to a lower speed limit and a ban of semi-trailer trucks on the highway.

FrontRunner commuter rail serves the length of Davis County with stations in Woods Cross, Farmington, Layton, and Clearfield. Salt Lake International Airport is only 15–30 minutes south of Davis County.

Davis County's population was 306,479 in the 2010 Census, a 28.2% increase from 2000. The population estimate for 2016 is 342,281. Approximately 11% of Utah's population lives in Davis County. Davis County is projected to build out with a population of approximately 550,000 people by the year 2065.

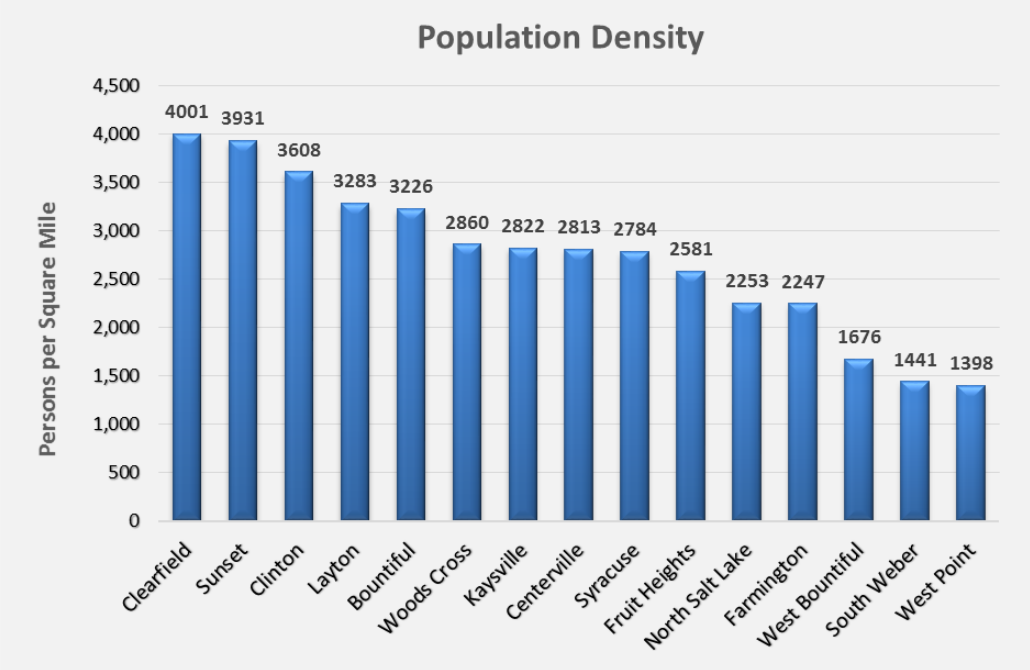
Layton is the largest city with 75,655 residents, or 22% of the population. Sunset is the smallest city with just over 5,200 residents. Cities experiencing the most significant growth over the last 10 years include Syracuse with a 159% increase and North Salt Lake with an 87% increase. Most of the growth is concentrated in the northwest, northeast, and southwest portions of the county. Less than 1% of the population of Davis County lives in unincorporated areas.



Source: U.S. Census Bureau, 2016 Estimates

Population Density

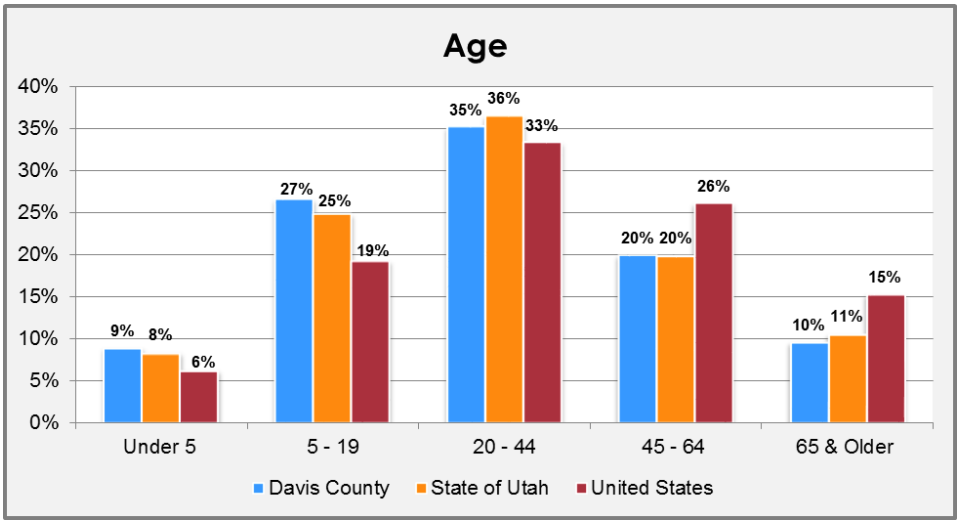
Davis County is the third largest county by population and smallest in size. The county's large population in a small area results in high population density. Clearfield has a population density over 4,000 persons per square mile (ppsm), making it one of the top ten most densely populated cities in the state and similar to Dallas, Texas.



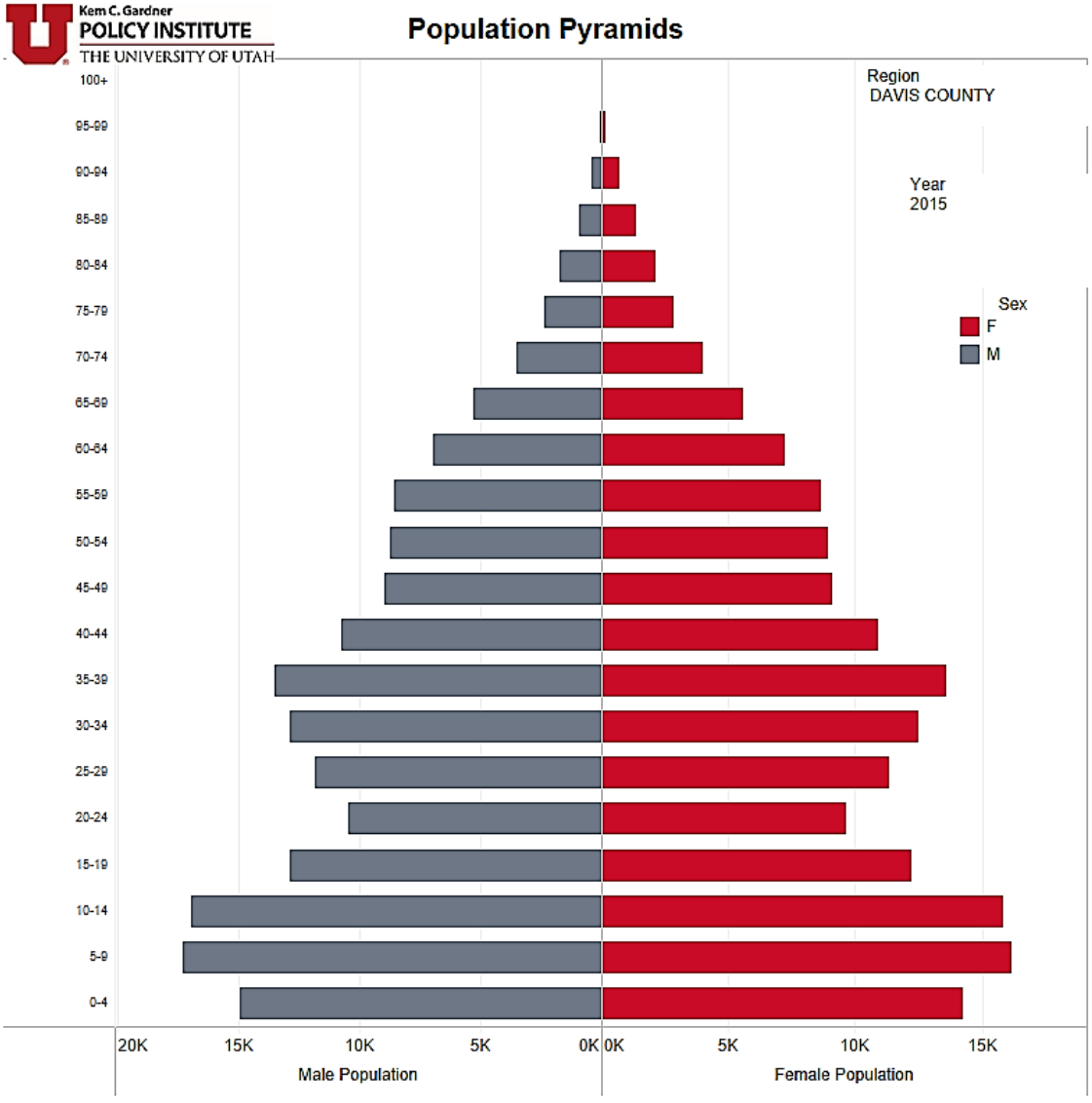
Source: U.S. Census Bureau, 2016 Estimates

Age

Davis County has a young population. The median age is 30.4 years, which is similar to the median age of the state. Davis County's median age has been increasing each year. Utah ranks as the youngest state in the U.S with a median age of 30.4 years versus 37.7 nationally. Populations in each age category are: 9% under the age of 5, 27% aged 5-19, 35% aged 20-44, 20% aged 45-64 and 10% age 65 or older.

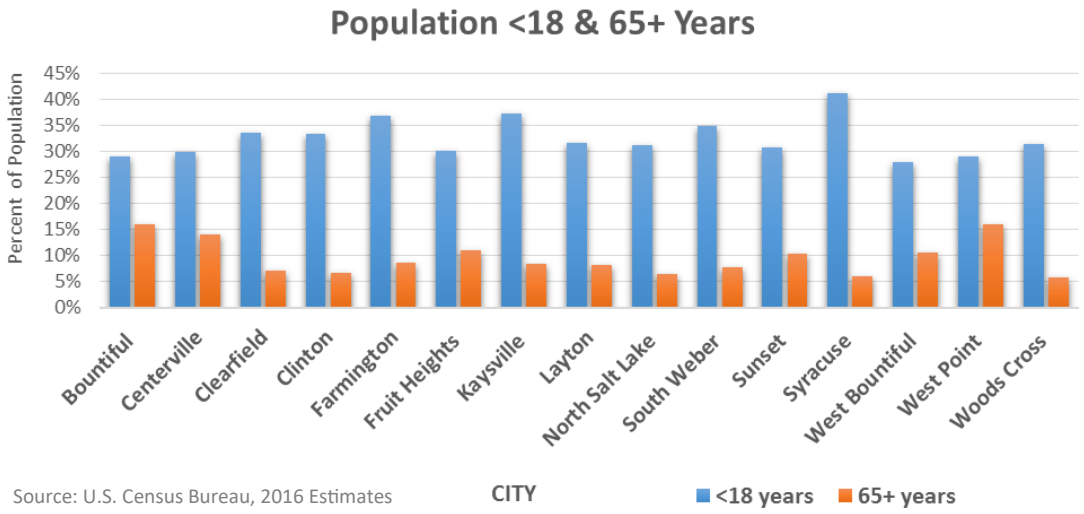


Source: U.S. Census Bureau, 2016 Estimates



Source: KEM C. GARDNER POLICY INSTITUTE, University of Utah

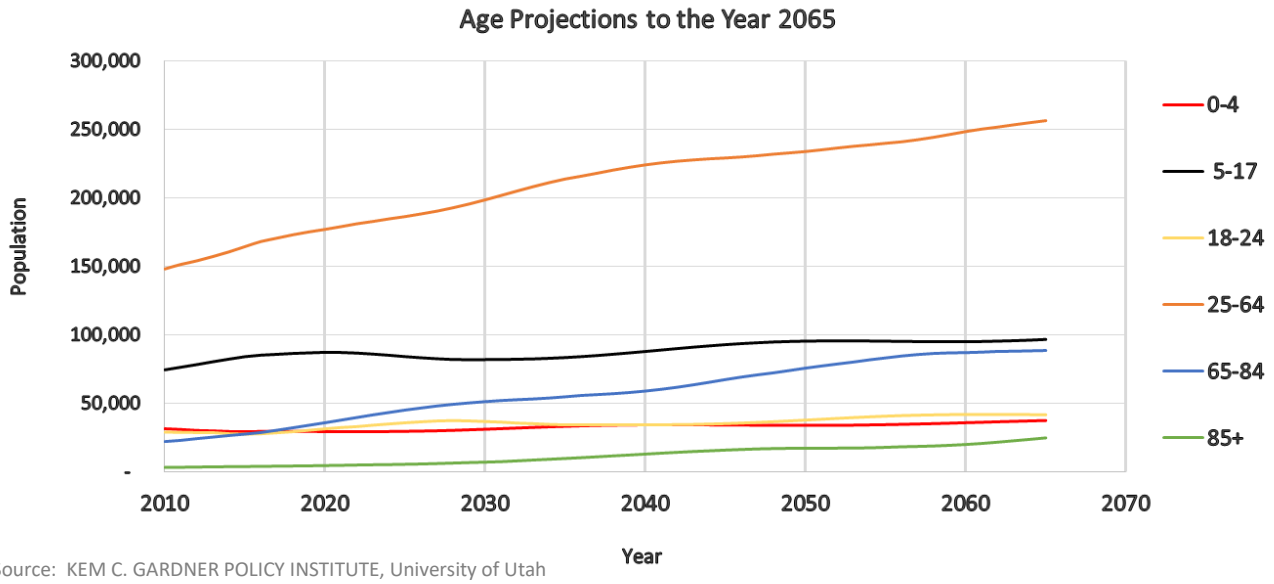
Age demographics vary city by city and even by neighborhood. Two age groups with particular health needs include those aged younger than 18 and those aged 65 and older. Persons under the age of 18 account for 33% of the population in Davis County. Syracuse has the youngest population of all cities with 41% of residents under the age of 18 and Kaysville is second youngest with 37% under the age of 18. Persons 65 years and over account for 10% of the county population as compared to 10% for the state's population and 15% of the nation. Bountiful and West Point are the oldest cities in the county with 15% of residents age 65+ and are the only cities that exceed the U.S average in this age group.



Source: U.S. Census Bureau, 2016 Estimates

Age Projections

While currently a young and healthy county, major changes among the age distribution will occur over the next 20-30 years. Davis County currently has a median age of 30.4. It is projected that by 2065 the median age of Davis County will be nearly 40. That is almost a 75% increase in median age. A mixture of increased life expectancy and baby boomers getting older will contribute to this increase. The population that will be 65 years and older is expected to have a 451% increase over the next 50 years, going from 25,086 in 2015 to 113,176 in 2065. It is projected that more than 20% of the population in Davis County will be 65 years or older in 2065. There were 33 centenarians (people at least 100 years old) in 2015. That number will be 21 times greater by 2065, reaching 693 centenarians.



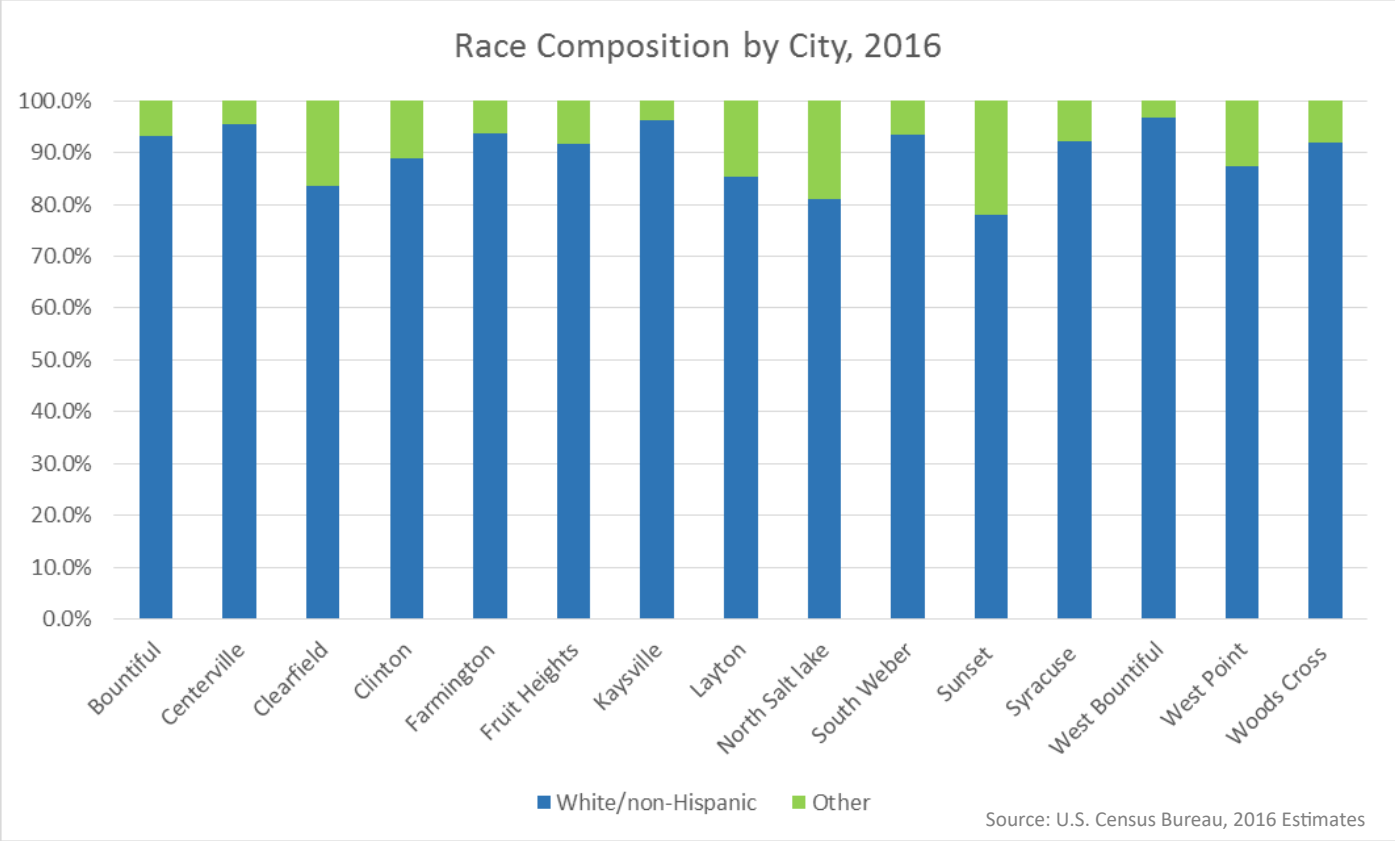
Source: KEM C. GARDNER POLICY INSTITUTE, University of Utah

Race/Ethnicity

The racial makeup of the county is 92.5% White, 1.4% Black or African American, 2.0% Asian, 0.7% American Indian/ Alaska Native, 0.8% Pacific Islander, and 3.2% from other races. Those reporting two or more races represent 3.0% of the population. Hispanic/Latinos are 9.1% of the population. Foreign-born residents account for 4.7% of the population, much less compared to 8.3% of Utahns and 13.2% of Americans. Of those foreign born in the county, 45% are U.S. citizens and 55% are not U.S. citizens.

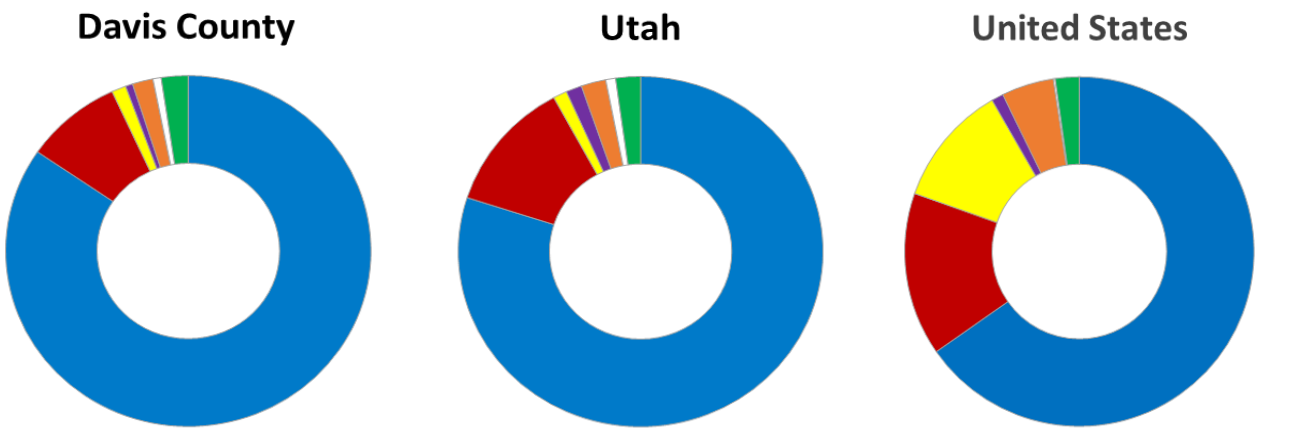
The white/non-Hispanic population continues to be the largest in Davis County. However, the minority black, Asian, Pacific Islander, and Hispanic/Latino populations in Davis County are growing at faster rates than the county population as a whole.

Race distribution ranges from city to city varying from 78.0%–96.8% White/non-Hispanic. Cities surrounding Hill Air Force Base are the most diverse, including Sunset,78.0% White/non-Hispanic and Clearfield, 83.5% White/non-Hispanic. The cities with the highest percentage of White/non-Hispanic are West Bountiful (96.8%) followed by Kaysville (96.3%).



When compared to Utah, Davis County has a larger percentage of White alone, 92.5% versus 91.1%; the same percentage is black, 1.4%; a smaller percentage is Hispanic/Latino, 9.4% versus 13%, American Indian/Alaska Native, 0.7% versus 1.6%; Asian, 2.0% versus 2.5%; and Native Hawaiian/Pacific Islander, 0.8% versus 1.0%.

When compared to the U.S., Davis County has a larger percentage of White alone, 92.5% versus 76.9%; and Native Hawaiian/Pacific Islander, 0.8% versus 0.2%; and a smaller percentage is Hispanic/Latino, 9.4% versus 17.8%; black, 1.4% versus 13.3%; American Indian/Alaska Native, 0.7% versus 1.3%; and Asian, 2.0% versus 5.7%.

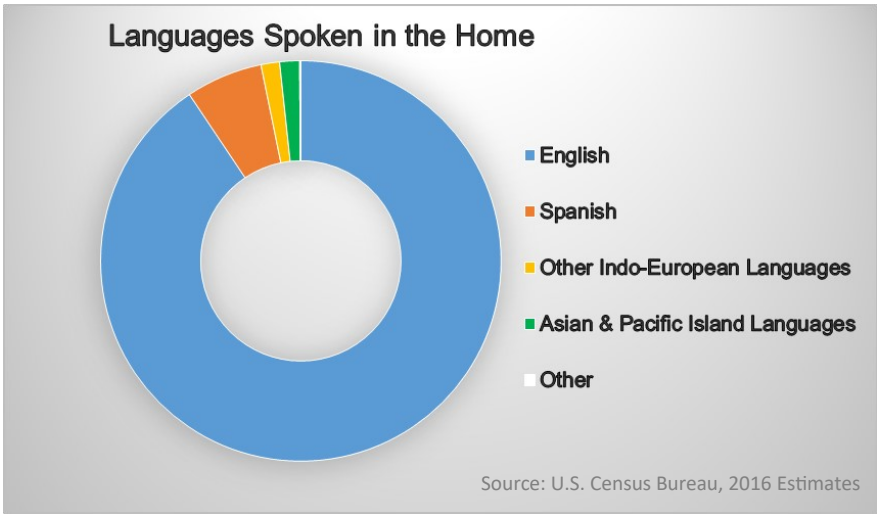


Source: U.S. Census Bureau, 2016 Estimates

The proportion of non-white race groups in Davis County is still relatively small making comparisons across racial and ethnic groups problematic due to insufficient sample size. State data can be used to learn about the health disparities that exist among these groups and how they affect the overall health status of the county.

Language

In Davis County, 9.3% of the population does not speak English in the home compared with 14.7% of the population in Utah and 21.1% in the U.S. Of the 9.3%, 6.2% speak Spanish, 1.5% speak another Indo-European Language, 1.6% speak Asian/Pacific Island, and 0.1% speak another language.



Religion

Many Davis County residents are religious, 86% of the people affiliate with a religion compared to 82% in Utah and 49% in the U.S. Nearly 78% of residents are LDS (The Church of Jesus Christ of Latter-day Saints, also known as Mormons) compared to 71% in Utah and 2% in the U.S.

Davis County has more than 608 religious congregations. Of those, 566 (93%) are LDS congregations. Forty-two other congregations exist in the county, including Assembly of God, Baha'i Faith, Baptist, Bible, Buddhist, Catholic, Church of Christ, Church of God, Community of Christ, Episcopal, Lutheran, Nazarene, Presbyterian, United Church of Christ and other Non-Denominational churches.

Religion	Davis County	Utah	United States
Percent Religious	85.7%	82.3%	49.4%
Catholic	4.3%	6.2%	19.7%
LDS	77.7%	71.8%	2.1%
Baptist	1.0%	0.6%	8.2%
Episcopalian	0.1%	0.2%	0.6%
Pentecostal	1.2%	0.9%	1.9%
Lutheran	0.2%	0.4%	2.4%
Methodist	0.1%	0.3%	4%
Presbyterian	0.1%	0.3%	1.7%
Jewish	0%	0.1%	0.7%
Eastern	0.5%	0.4%	0.5%
Islam	0%	0.2%	0.9%

Source: www.bestplaces.net, 2016

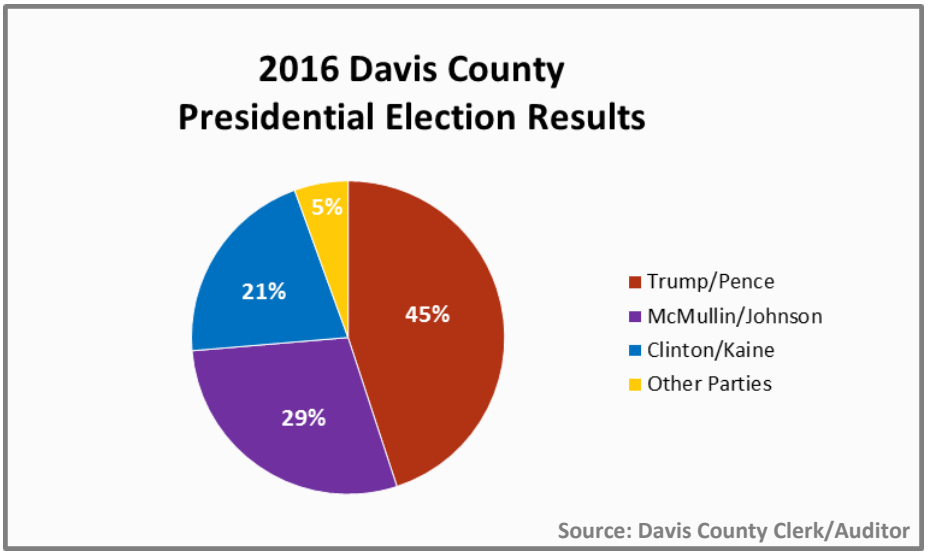
Bountiful Utah Temple
The Church of Jesus Christ of Latter-day Saints

The Watdhammagunaram Thai Buddhist Temple, Layton

Davis County currently has 159,814 registered voters. Approximately 88% of those registered participated in the 2016 presidential election. Voters are 80% registered Republicans and 18% are registered Democrats.

Voter affiliation:

- 84,427 Republican
- 55,044 Unaffiliated
- 13,329 Democrat
- 2,263 Independent American
- 1205 Libertarian
- 460 Constitution



Republicans dominate politics in Davis County. Elected officials typically have very conservative ideologies. Political views that resonate with residents are a belief in a Divine Providence and recognition of the need for moral and spiritual foundations. There is much support for the freedoms expressed in the Declaration of Independence and protected in the Constitution of the United States of America. There is support for the free market and a belief that the market is right. The community is passionate about states' rights and less government regulation. There is a lot of concern about state and federal mandates, including federal healthcare laws and an unwillingness to expand Medicaid. Community values shaping politics are personal responsibility and individual choice, the idea that you get what you work for. Thrift is a common value, the idea of getting the most bang for the buck. There is strong defense for property rights and individual rights. While there is not support for the government providing handouts to individuals and groups, the community takes pride in taking care of each other through community service, volunteering, and charitable donations. The culture places emphasis on self reliance and personal responsibility. Residents value and enjoy freedoms. They take pleasure in being productive citizens who have a high quality of life.

Special Populations

Military

Hill Air Force Base (HAFB) is a unique feature of Davis County. Residents on base total 3,354. The average age is 22 years old, and 56% are male and 44% are female. HAFB is the most diverse of all zip codes in the county with 73% of residents who are white. There are 998 housing units on base. Additional active-duty personnel live off base. In general, the military population is more transient than the rest of the community. They do not consider Davis County to be home and don't usually identify as Utahns or even Davis County residents. As typical for military communities, there are more multi-unit housing structures and fewer home owners in the cities surrounding the base. HAFB is bordered by Weber County to the north and several Davis County cities to the west, south, and east.

Veterans

Davis County is home to 18,070 veterans, representing 13% of the adult population. The largest number of male and female veterans in Davis County are 35-54 years old. We have a higher percentage of veterans than Utah (6.4%) and the U.S (8.0%) due to having an air force base in the community.

Persons with Disabilities

It is estimated that 28,939 people in Davis County have a disability. This represents 9% of the population. Those 65 years and over are most disparately affected by disabilities. In this age group, 73% have a disability. Disabilities include vision, independent living, ambulatory, hearing, cognitive, and self-care. View the complete Davis County Disability Profile at: https://jobs.utah.gov/wi/data/laborforce/disabledworkers.html.

Incarcerated

The Davis County Jail is located in Farmington. It houses an average daily population of 800 inmates. About 15% of inmates are female. In 2016 the jail booked 9,524 inmates.

Job Corps

There are two Job Corps Centers operated by the U.S. Department of Labor in Davis County. Students ages 16–24 live on center in dorms and are provided career training. Job Corps provides academic training, including basic reading and math. Courses in independent living, employability skills, and social skills are offered to help students transition into the workplace. Students come from all over the country. Fifty percent of students are ethnic minorities. Although many students are not from Utah, they spend 1–3 years living in the county and assimilating into the community. Clearfield Job Corps houses about 1,100 students and Weber Basin Job Corps (located in South Weber City) houses about 210 students.

Community Themes & Strengths

The **Community Themes and Strengths Assessment** identifies themes that interest and engage the community, perceptions about quality of life, and community assets. It provides an overview of the issues that residents feel are important by answering the questions:

1) "What is important to our community?"
2) "How is quality of life perceived in our community?"
3) "What assets do we have that can be used to improve community health?"

This section outlines themes and strengths that were identified by residents of Davis County.

Quality of Life

Residents enjoy a high quality of life in a beautiful setting and good climate. Neighborhoods are safe and comfortable. There is a strong community feel. There are communities where you can live and work, where families can thrive and where businesses can develop. Excellent educational and healthcare facilities are located in the county. The Wasatch Mountains provide not only an excellent view but also a source of almost limitless recreation. The social, economic, educational, and cultural advantages offered in Davis County make it a fantastic place to live, play and do business.






Davis County is considered to be a healthy place to live by residents for two main reasons: the people and the environment.

Healthy Choices.	Healthy People. Healthy Communities.
Outdoor Activities	Low Tobacco & Alcohol Use
Access to Medical Care	Health Conscious
Walking Trails	Friendly
Small Town Feel	Well Educated
Recreation Opportunities	Good Neighborhoods
Mountains	Healthy Lifestyles
Biking	Community Pride
Easy to Exercise	Caring People
Hiking	Clean
Open Spaces	Family Oriented
Access to Healthy Food	Religious

Source: Davis County Key Informant Survey, 2012

Davis4Health.org — Connecting You to Your Community

The Davis4Health Resource Locator is a directory of health resources located in Davis County. Categories include active living, healthy eating, health services, community programs, and green solutions. There is no cost to be listed as a resource. All listings provided are for informational purposes and do not imply endorsement of any service or organization. Administration is provided by Davis County Health Department.

Davis County Staycation Guide

The guide lists free and low cost physical activity opportunities in Davis County. Activities include disc golf courses, nature preserves, pickle ball courts, splash pads, and much more. A printed copy is available by contacting 801-525-5070. The guide can be accessed electronically at: https://go.usa.gov/xnvZ8.

PlayinDavis.com

An online directory that lists places to eat, stay, and play in Davis County. The website includes golf courses, outdoor activities, shopping, family entertainment, arts and culture, camping, hotels, transportation, dining and much more.

Davis County Trails

On the Davis County Trails website you can find information and maps for over 500 miles of trails in Davis County. Trails offer a wide variety of outdoor experiences: everything from a casual stroll to a strenuous wilderness trek. Visit http://www.daviscountyutah.gov/trails# or call 801-451-3279 for more information. A folded Davis County Trails and Bikeways Map is available at the Davis County Administration Building, 61 South Main Street, Suite 304, Farmington, Utah.

Davis County Behavioral Health Directory

This directory lists Davis County providers for mental, emotional and behavioral health services. It includes details about services, contact info, website, hours, cost, payment types accepted, other languages spoken, etc. You will see information about crisis lines, medical services, mental health services, substance abuse services, support groups, classes and trainings. The directory is available on the Davis County Health Department website and in the Davis4Health Resource Locator at this link: https://go.usa.gov/xnvmH.

Davis HELPS Youth Services Directory

The Davis HELPS Youth Services Directory includes mental, emotional and behavioral health services. It's a go-to list for community resources that promote mental wellness including medical treatment providers, counselors, self-care, support groups, training and classes. It includes details about services, contact info, websites, hours, cost, payment types accepted, other languages spoken, etc. The directory is available on the Davis County Health Department website and in the Davis4Health Resource Locator at this link: https://go.usa.gov/xn4FK.

211

2-1-1 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. Also available online at 211utah.org. Operated by United Way of Utah.

Davis Links

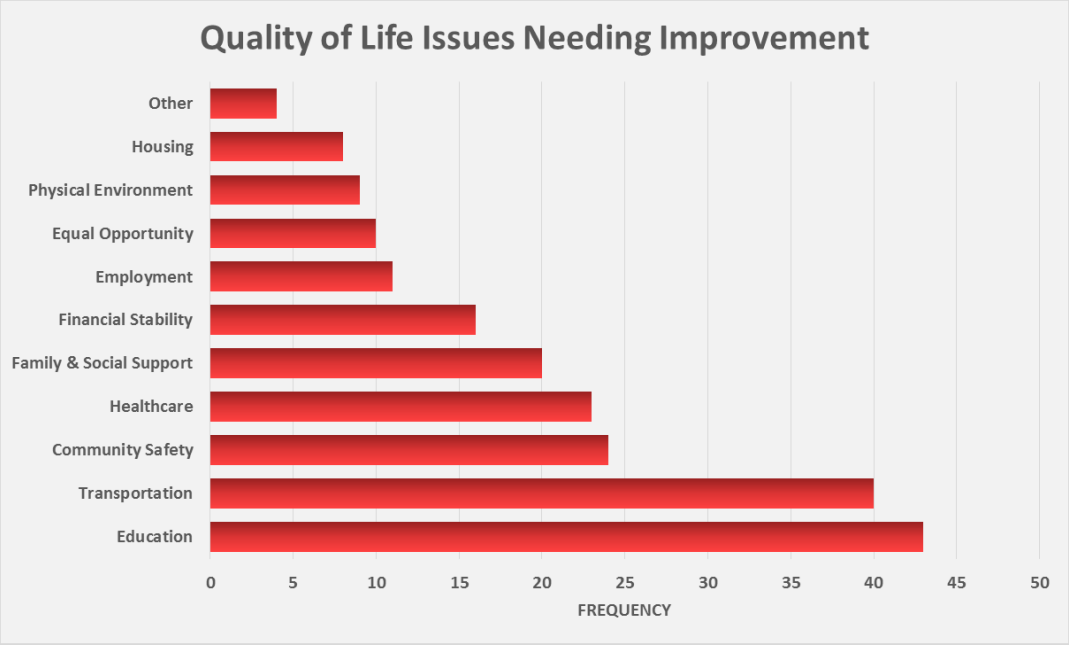
The Davis Links resource forum is a human service provider networking event. The group meets monthly from 8:30-10:00 am on the last Tuesday of the month. The Davis Links Planning Committee is made of a dozen partners from health and human service agencies. For questions regarding Davis Links, please contact Tina Peek at katrinap@esgw.org, Debbie Comstock at 619-871-6947, or Kali Iverson at kalii@unitedwayuc.org.

Community of Promise

Davis County Community of Promise is a coalition of government and community agencies, businesses, charitable organizations, and services that collaborate to improve the quality of life for Davis County citizens. Monthly meetings are held the first Tuesday of the month at 11:30 am. For more info visit www.daviscop.org or commofpromise@gmail.com.

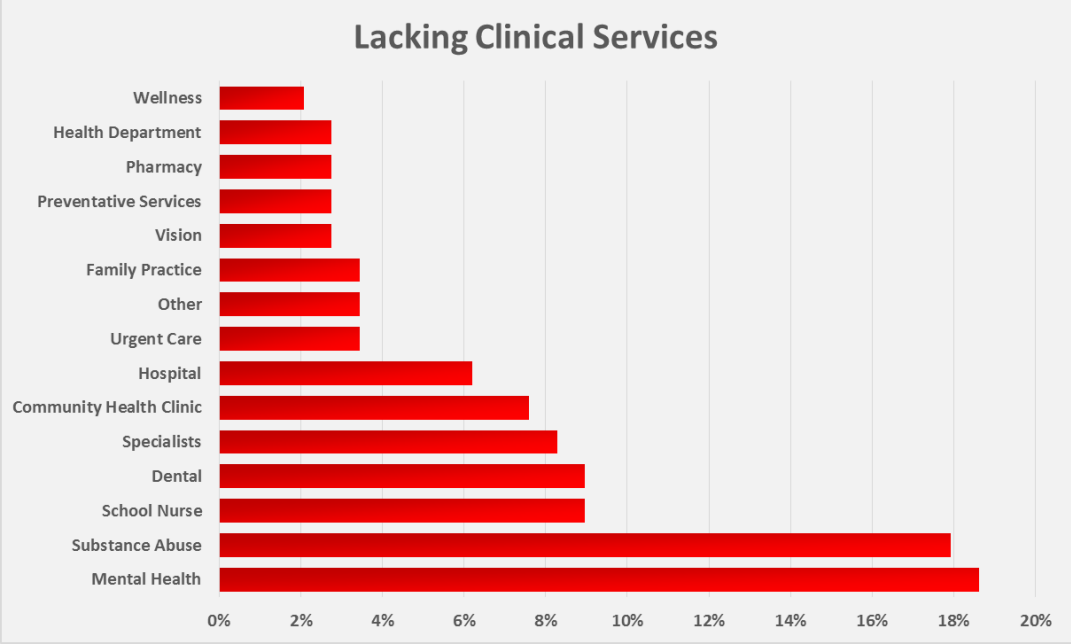
CASPER

CASPER is an acronym for Community Assessment for Public Health Emergency Response. The CASPER is a rapid-needs assessment developed by the Centers for Disease Control (CDC) that is used during or before an incident to quickly ascertain what needs and resources are necessary to respond and recover from disasters. During the Davis County CASPER exercise, door-to-door interviews were conducted within 30 randomly selected census blocks. A statistically representative sample of 210 household were visited to ascertain the level of preparedness that exists for the average resident in Davis County. Several questions were included to assess quality of life, access to clinical care, and community health improvement themes.

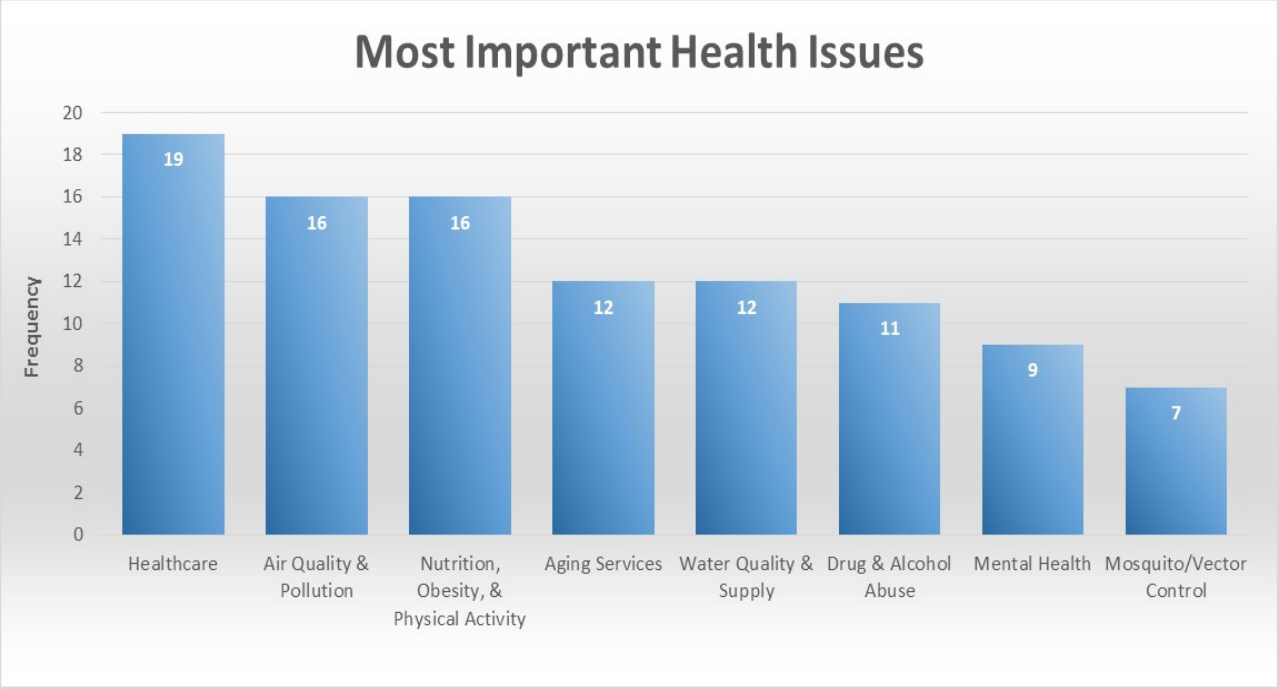


Answered by 176 respondents. The question offered 10 quality of life issues, as well as an "other" option. 24 respondents did not know what services were most lacking in the community or felt that there were no service deficiencies. The most reported issue selected as needing improvement was education with 21% of respondents choosing this issue.

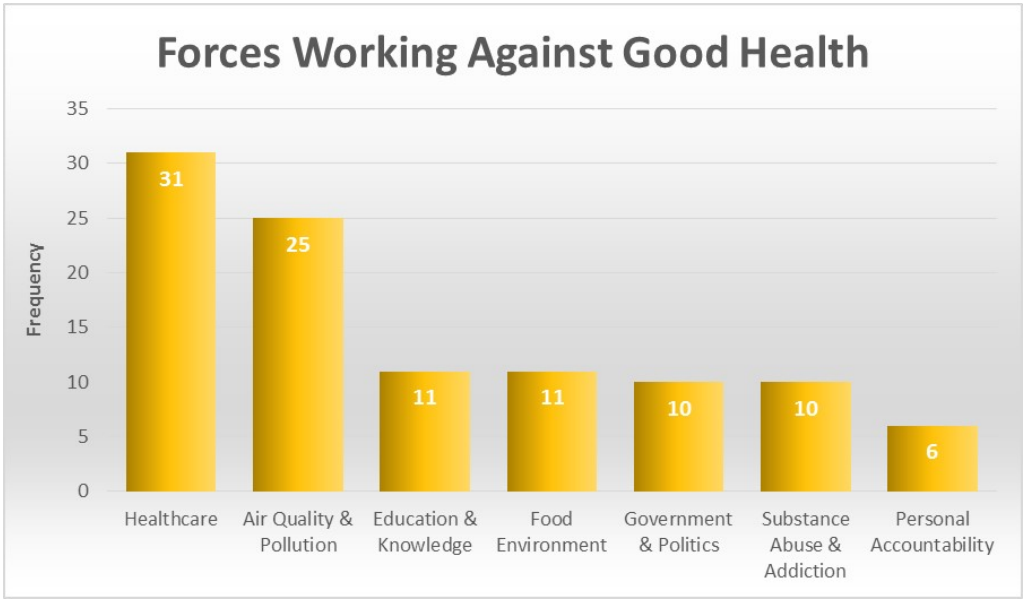
Answered by 169 respondents. The question had a menu of 15 options, as well as an "other" option. 62 respondents did not know what services were most lacking or felt that there were no service deficiencies. The service selected most commonly was mental health with 18% of respondents. This validates other community surveys with the same finding. Substance abuse was second with 17%.



This graph shows the top eight most important health issue themes reported in an open-ended question: healthcare; air quality and pollution; nutrition obesity and physical activity; aging services; water quality and supply; drug and alcohol abuse (including prescription drugs); mental health; and mosquito/vector control. Healthcare issues were a major theme. Topics mentioned include: access to care, healthcare quality, comprehensive coverage, and cost of care. Other responses of note are education, flu, vaccinations, cancer, safety, communicable disease, emergency preparedness, and preventative care.

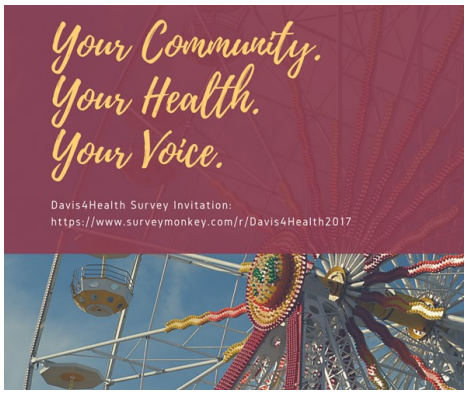


This graph shows the top seven themes for forces working against good health: healthcare, air quality and pollution; education and knowledge; food environment; government and politics; substance abuse and addiction; and personal accountability. Healthcare issues were again a major theme. Other responses of note are busy lives, economy, finances, housing, misinformation, obesity, population growth, public opinion, and transportation.

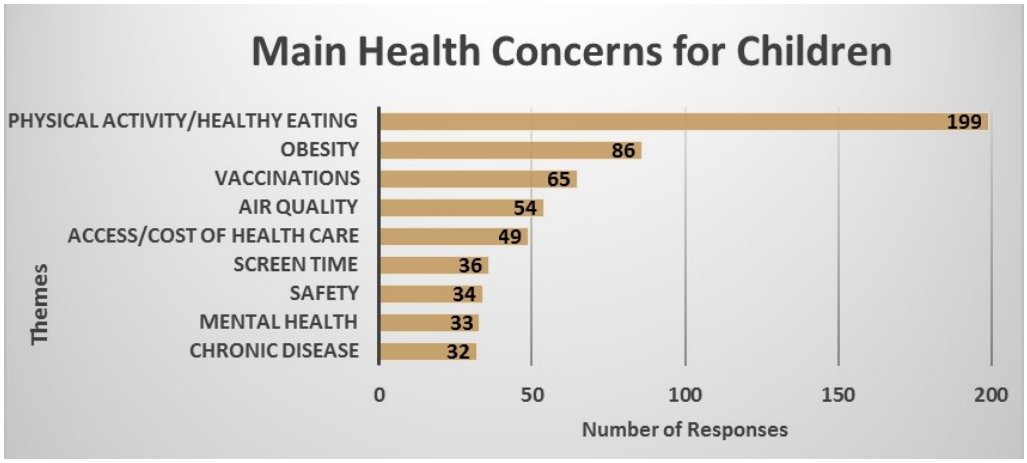


Community Survey

The Davis4Health Community Survey was conducted to learn community opinions about health needs and issues in the county. The focus areas included health concerns by age groups; social determinants of health and health equity; forces of change; and mental health. Nearly 400 residents participated. More than half of respondents reported living in the county more than 15 years which indicates this group is very familiar with the community.

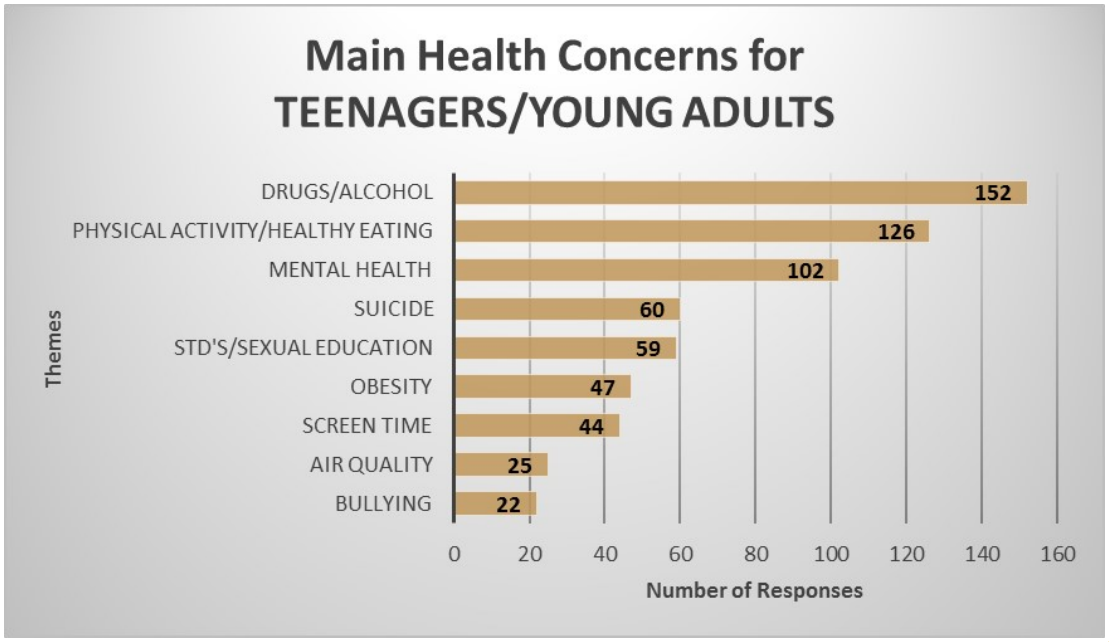


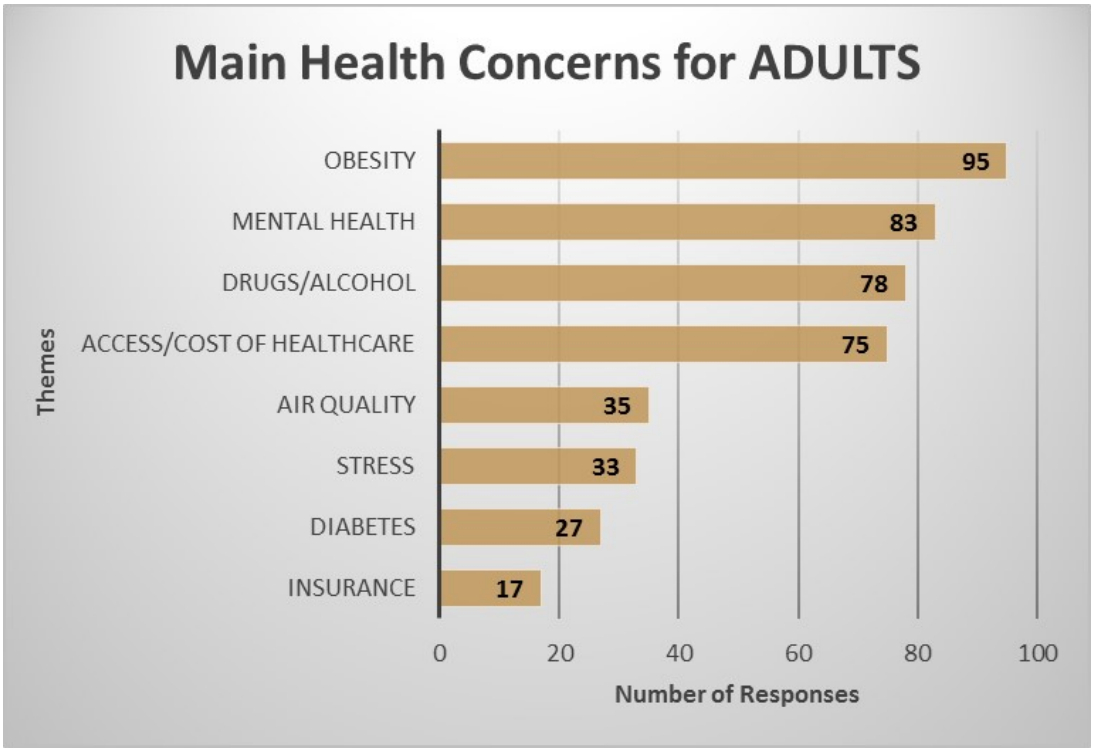
Leading health concerns crosscutting most age groups are: healthy eating, inactivity, and obesity; affordable healthcare, access to healthcare, and insurance issues; mental health; air quality; screen time and use of electronics; as well as drug use. Other community themes mentioned to a lesser degree include: transportation, employment, and water quality.



"...Chronic conditions - obesity, asthma, behavior conditions - ADD, Autism Spectrum, unhealthy eating"

"I feel that because of technology there is a serious lack of outdoor activity."

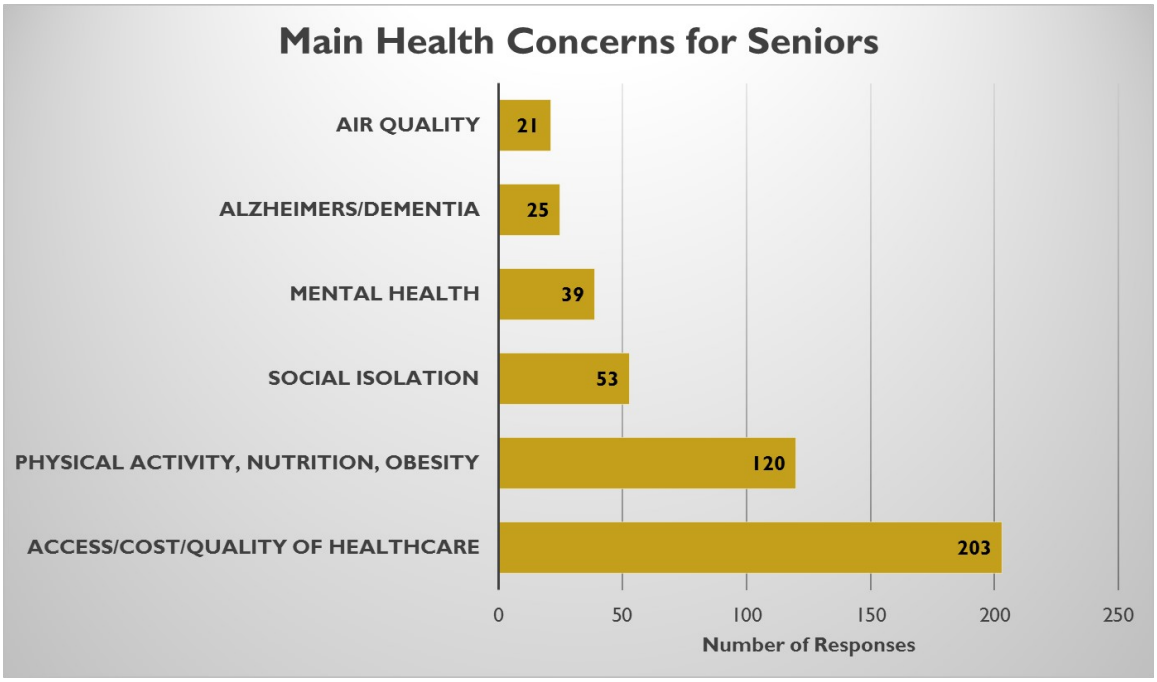




"Healthcare and mental health care needs to be affordable for all to get what is needed."

"The air quality is worsening every year.
What was once a problem only in the winter now seems year round."

"...declining physical strength and health needs coupled with diminished resources."

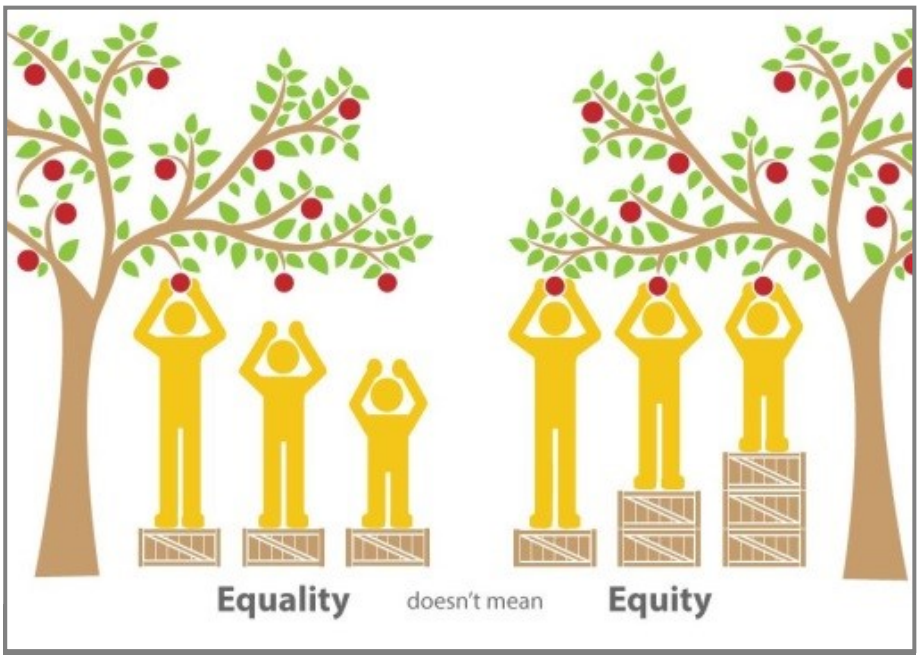


Health Equity

In this iteration of the CHA local health equity issues were explored in more detail. Davis4Health is working to improve health outcomes for all residents and to close health gaps between those with the most and least opportunities for good health. Our intent is for every resident to have fair and just opportunities to be as healthy as possible, regardless of race, ethnicity, gender, income, location, or any other factor.

Over the last five years partners have worked together to examine health equity topics and health issues affecting special populations. Assessments are available with information specific to seniors, teens, refugees and immigrants, and LGBTQ populations. Special assessments were conducted to dive deeper into issues such as mental health, access to healthcare, food environment, housing environment, and transportation (all of which are intertwined with health equity).

Geographic disparities are identified by using small area data. Significant differences can be noted in health outcomes between cities and zip codes. An area deprivation index map has been developed for the county, highlighting census block groups that are most vulnerable based on social and economic data (see page 105.



HEALTH EQUITY

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty and discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and healthcare.

HEALTH DISPARITIES

Health disparities are differences in health or in the key determinants of health, such as education, safe housing, and discrimination, which adversely affect marginalized or excluded groups.

It can be difficult to identify differences among different racial and ethnic groups due to insufficient numbers at the county level for a reliable sample size. The proportion of non-white race groups in Davis County is still relatively small, which at times makes comparisons across racial and ethnic groups problematic. The Utah Health Status by Race and Ethnicity 2015 reports presents information on health disparities and can be useful to Davis County. Highlights found on pages 139-140.

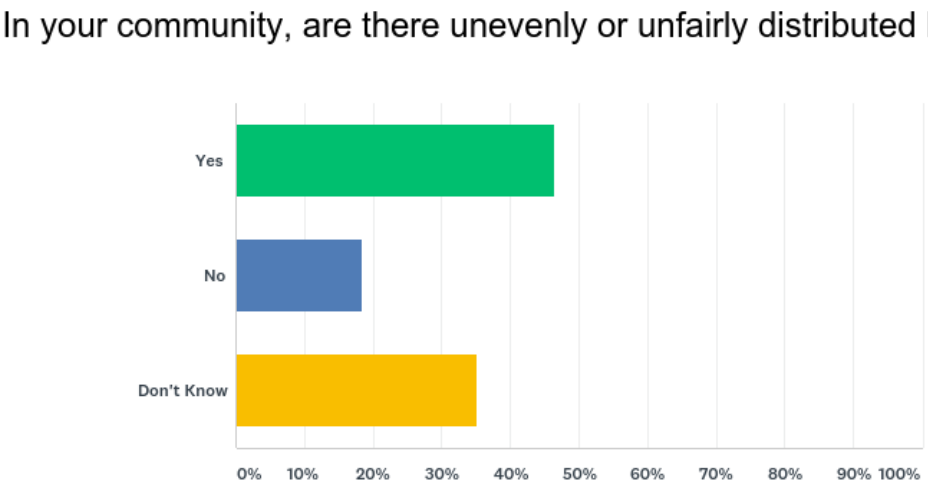
In the Davis4Health Community Survey the following questions were asked to determine residents' perceptions about the social determinants of health, health inequities, and vulnerable populations.

1) In your community, are there unevenly or unfairly distributed health issues?
2) In your opinion, what environmental, social, and economic conditions cause health issues to be unevenly or unfairly distributed in your community?
3) In your community, which populations are most affected by unevenly or unfairly distributed health issues?
4) In your opinion, what can be done to improve health in communities that are underserved or most vulnerable?

Community Health Inequity Themes

392 responses were analyzed to find the following themes.

- 46% of survey participants believe that there are unevenly or unfairly distributed health issues in our community.
- Those with low income and low education are considered to be the most vulnerable and experience the most inequities.
- Vulnerablility of seniors is also a common theme considering isolation, mobility issues, and neglect.
- Inequities occur for economic reasons. Examples: People are working but don't make a living wage to cover basic necessities (rent, food, transportation, childcare, healthcare). Those with low income can't afford the cost of health insurance and healthcare. People believe that healthy food costs more. Some can't afford the cost of transportation (car, gas, insurance, price of transit).
- There are environmental and air pollution themes as causes of health inequities. The community mentions smoking, powerlines, refineries, freeways, and gravel pits.
- Social causes of health inequities occur due to perceived cultural influences that lead to not addressing sex education, mental health, and domestic violence. The anti-vaccine movement is referenced as well.
- Health issues identified that affect those most vulnerable include: barriers accessing healthcare, adequate/proper nutrition, addictions, mental health, and smoking.
- To improve the health of vulnerable and underserved populations the most common suggestions included addressing cost of care, increasing access and reach of services, and better promotion of existing services.

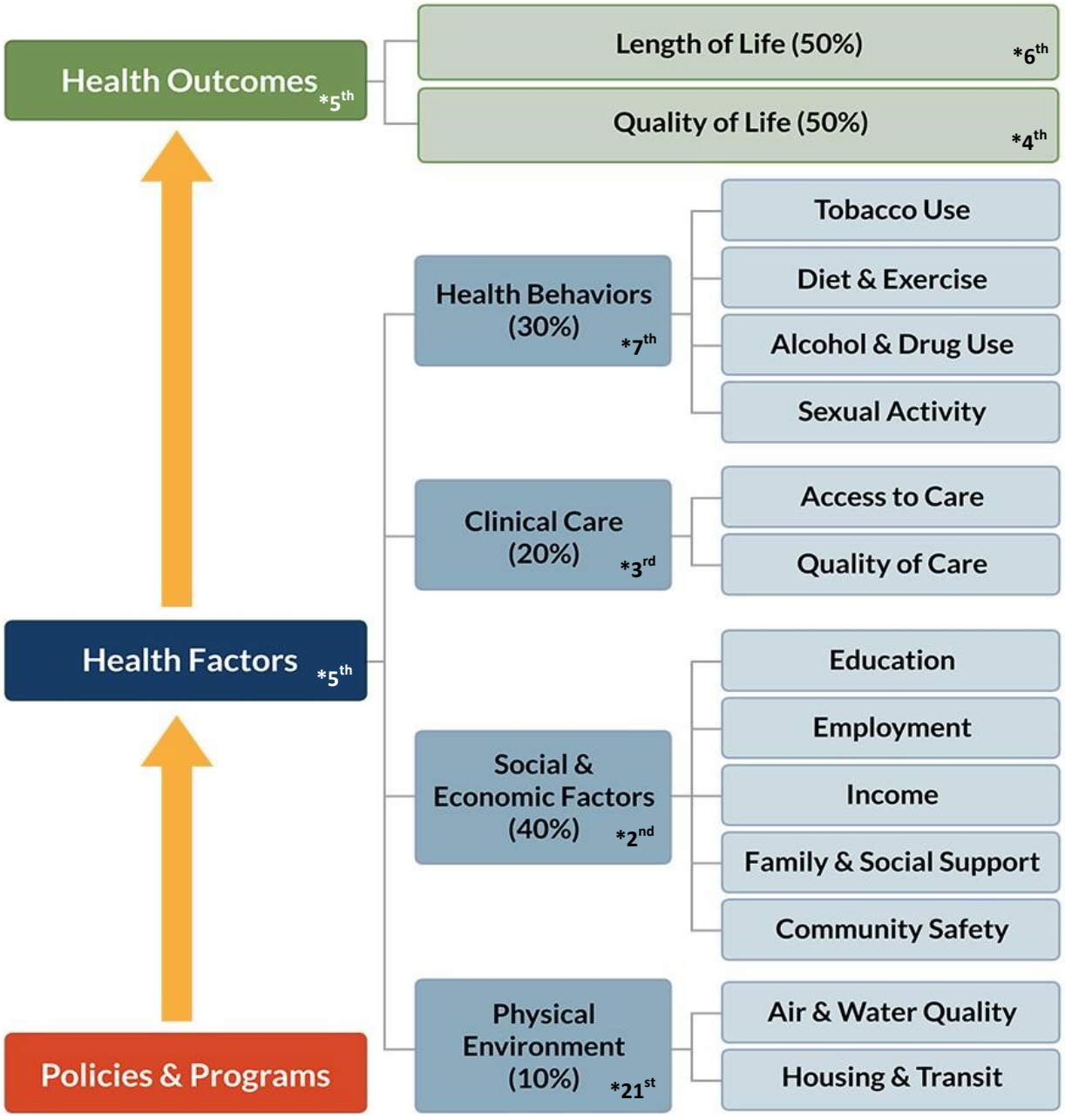


Community Health Status

The **Community Health Status Assessment** analyzes data about health status, quality of life, and risk factors in the community. Questions answered include:

1) "How healthy are our residents?"
2) "What does the health status of our community look like?"

The County Health Rankings is a good starting point for a local community health status assessment. The County Health Rankings model is shown below. The 2017 Davis County rank for each area is included. The overall health outcomes score is a composite of length of life and quality of life. Health factors score is a composite of four components. Component weights are listed. Percentages add up to 100%.



County Health Rankings model © 2016 UWPHI

* Davis County Rank

University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2017. www.countyhealthrankings.org.

Health outcomes in the County Health Rankings represent how healthy a county is. They measure two types of health outcomes: how long people live (mortality) and how healthy people feel while alive (morbidity). The analysis allows Davis County residents to see how they compare to other counties in Utah. The overall Health Outcomes summary score is a weighted composite of Length of life (50%) and Quality of life (50%).

The 2017 CHR show Davis County is the 5th healthiest county in Utah out of 27 ranked counties. Davis County's ranking of 5th is based on a composite score of mortality and morbidity measures.

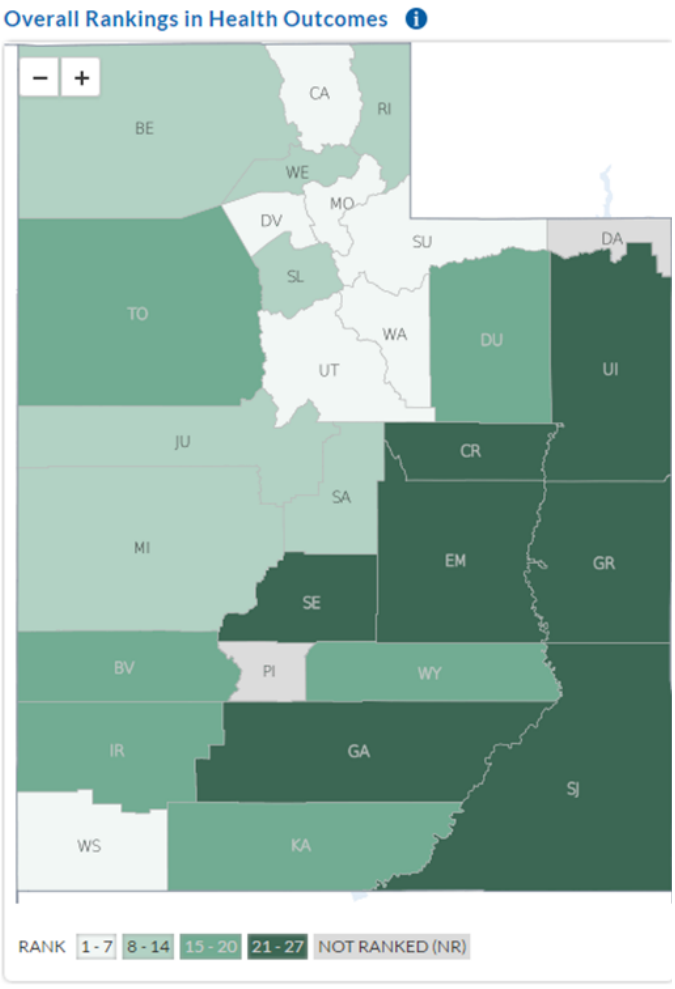
Davis County is ranked the 5th healthiest county in Utah.

Davis County has consistently ranked 5th, 6th, or 7th since the rankings began in 2011.

County Health Rankings, Health Outcomes, Utah Summary

Rank	County
1	Wasatch
2	Cache
3	Utah
4	Morgan
5	Davis
6	Summit
7	Washington
8	Salt Lake
9	Box Elder
10	Sanpete
11	Juab
12	Weber
13	Millard
14	Rich
15	Iron
16	Kane
17	Beaver
18	Toole
19	Wayne
20	Duchesne
21	Uintah
22	Emery
23	Garfield
24	Grand
25	Sevier
26	San Juan
25	Carbon

Not ranked: Daggett, Piute



Mortality

Mortality measures relate to how long we live and what's killing us. **Premature death** is measured by years of potential life lost (YPLL), before age 75. **Death Rate** is the number of persons who died from any cause. **Life Expectancy** is an estimate of the expected average number of years of life (or a person's age at death) for individuals who were born into a particular population. Life expectancy is a measure that is often used to gauge the overall health of a community. The lower the death rate, the higher the life expectancy, which is currently 80.8 years in Davis County.

Factors contributing to low death rates and long life expectancy in the community include healthy lifestyles (especially low rates of tobacco and alcohol use) and low poverty. As life expectancy increases there are growing numbers of older individuals and people living with chronic illnesses. This trend will place increasing economic demands on the healthcare system, including aging services, long-term care, and assisted living.

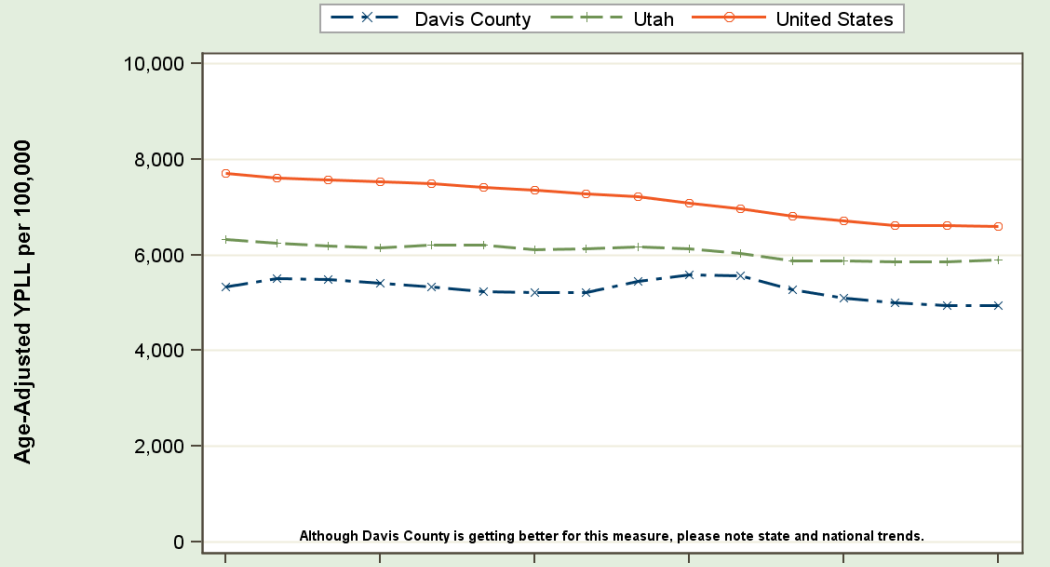
Premature death is measured by years of potential life lost, before age 75.

Davis County is in the top 10% best of all counties in the U.S. for this measure.

Mortality	Davis	Utah	U.S.	Source
Premature Death, Years of Potential Life Lost Before Age 75 (2012-2014)	4,943	5,889	6,601	CHR
Death Rate per 100,000 (2015)	590.9	709.2	724.6*	IBIS, UDOH
Life Expectancy (2011-2015)	80.8	80.0	78.8*	IBIS, UDOH
Average Age at Death (2015)	72.77	72.65	—	IBIS, UDOH
Infant Mortality, Deaths/1,000 Live Births (2010–2015)	4.9	5.05	6.0*	IBIS, UDOH

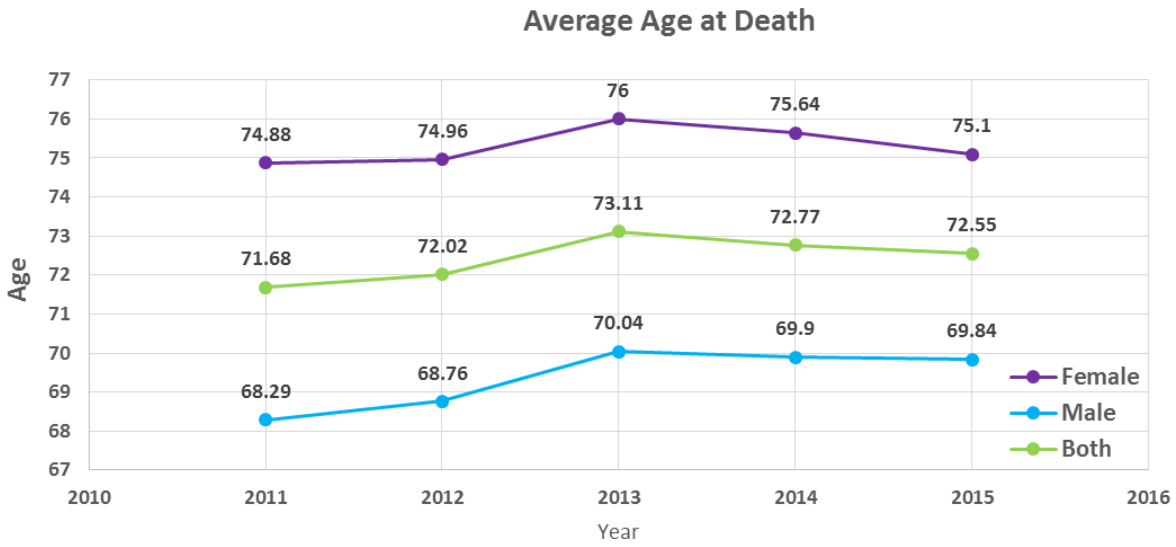
*2010-2014 or 2014

Source: CHR, 2017

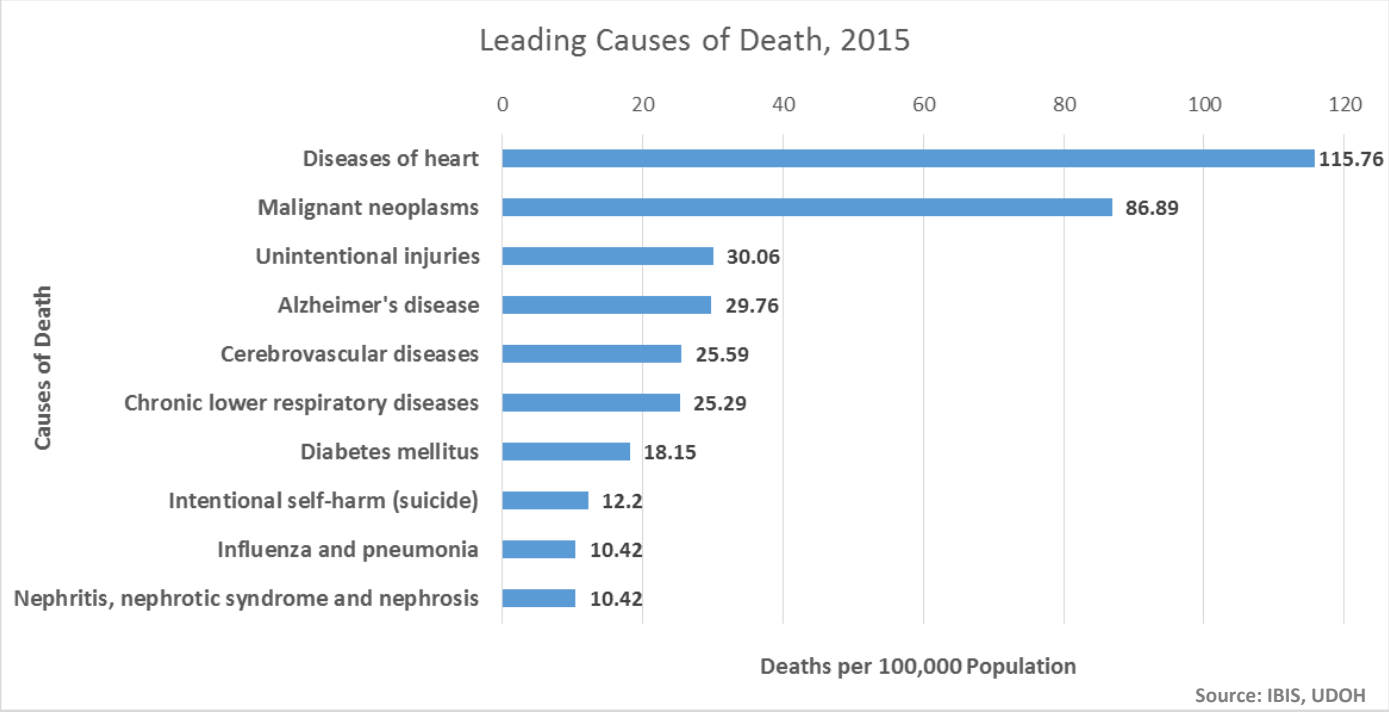


Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

The **Average Age at Death** in Davis County during 2015 was 72.55, 75.1 for females, 69.84 for males.



The **Leading Causes of Death** overall in Davis County are heart disease, cancer, unintentional injury and Alzheimer's. Influenza and pneumonia deaths are the only infectious diseases in the top 10. It is helpful to look at chronic disease death rates, injury death rates and infant mortality as well.



Leading causes of death vary depending on the age group of interest. In Davis County, the leading cause of death for ages 35-54 is cancer, ages 11-17 and 18-34 it is injuries (unintentional and suicide), and prenatal and congenital conditions for ages 0-10.

Chronic Disease Deaths

The two leading causes of death in Davis County are heart disease and cancer (all cancers combined). Although they are the most common causes of death in the county, we compare well in these indicators and are meeting HP2020 targets. At a national level, Utah is recognized for low cancer and heart disease deaths due to low tobacco use and alcohol use rates across the state.

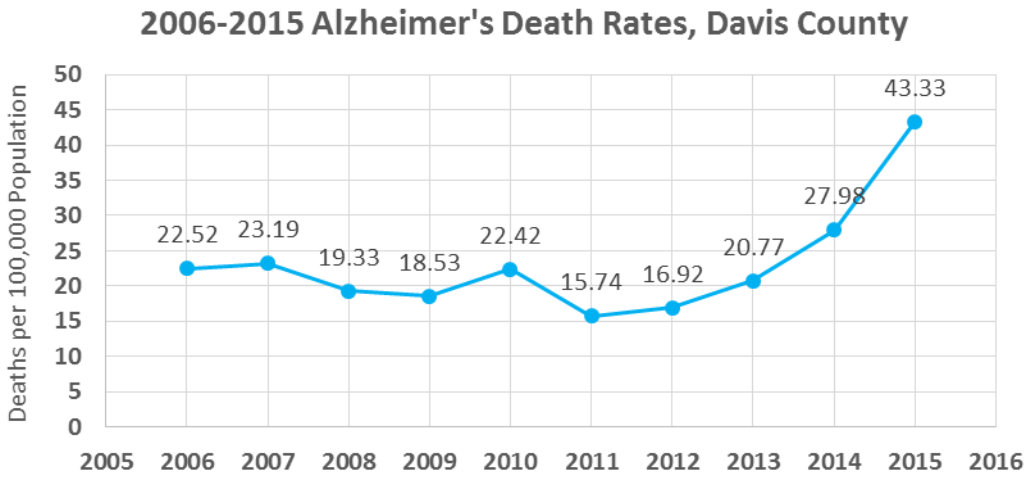
Chronic Disease Death Rates	Davis	Utah
Coronary Heart Disease Deaths (2013-2015)	71.7	68.3
Stroke Deaths (2013-2015)	36.8	38.2
Prostate Cancer Deaths (2011-2015)	20.0	20.4
Alzheimer's Disease Deaths (2012-2014)	21.9	22.0
Diabetes—Underlying Cause— Deaths (2013-2015)	23.3	24.7
Breast Cancer Deaths (2011-2015)	20.8	20.3
Lung Cancer Deaths (2013-2015)	17.3	18.8
Colorectal Cancer Deaths (2011-2015)	10.0	11.3
Melanoma of the Skin Deaths (2011-2015)	3.4	3.4

Age-adjusted per 100,00 population

Source: IBIS, UDOH

Alzheimer's Disease

Alzheimer's Disease (AD) deaths are trending up in Davis County, Utah, and most states in the nation. According to The Centers for Disease Control 2017 analysis, possible reasons for the increase include the growing population of older adults, increases in diagnosis of AD at earlier stages, increased reporting by physicians and others who record the cause of death, and fewer deaths from other causes of death for the elderly.



Source: IBIS, UDOH & Taylor CA, Greenlund SF, McGuire LC, Lu H, Croft JB. Deaths from Alzheimer's Disease — United States, 1999–2014. MMWR Morb Mortal Wkly Rep 2017;66:521–526. DOI: http://dx.doi.org/10.15585/mmwr.mm6620a1

alz.org®

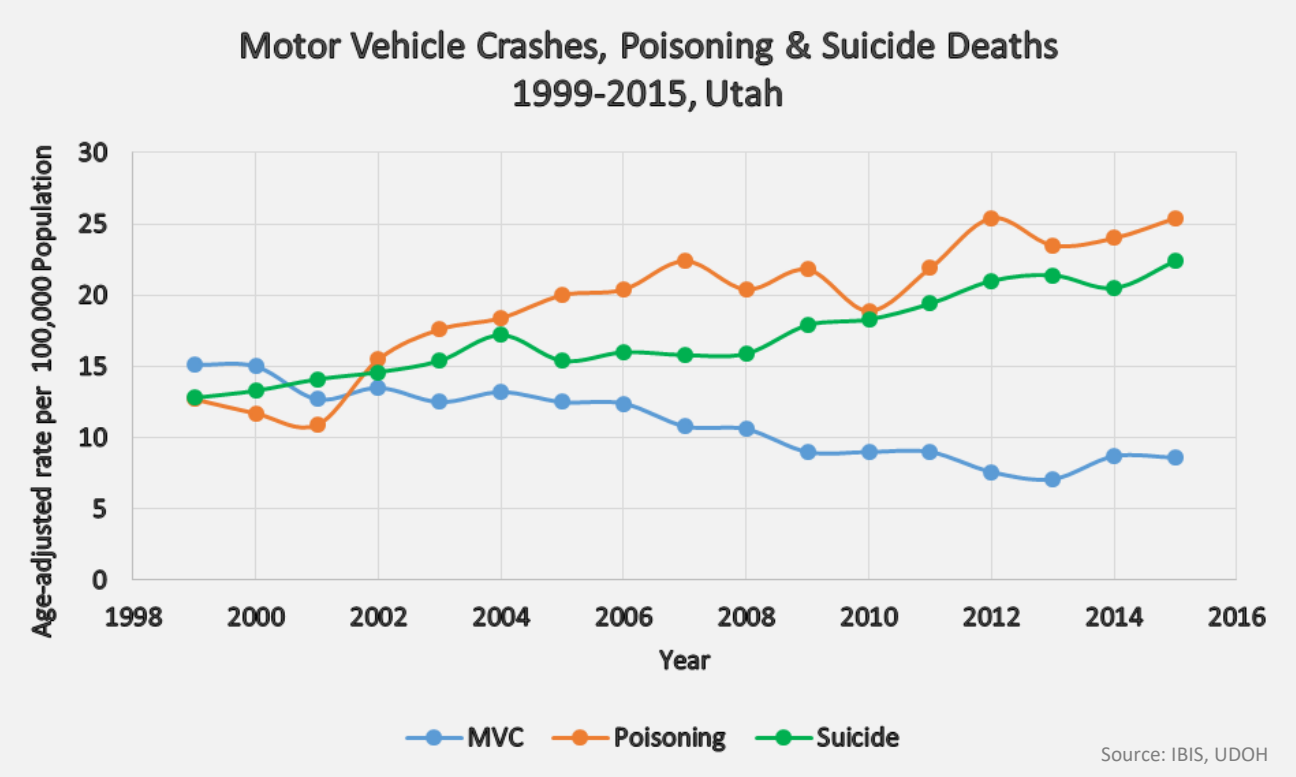
The 2016 Alzheimer's Association Needs Assessment Toolkit can provide guidance and resources for public health agencies who wish to conduct a comprehensive needs assessment related to Alzheimer's and other dementias.

Injury deaths are often classified as unintentional or intentional. The categories in the table below are not mutually exclusive. For example, unintentional injury deaths include motor vehicle traffic crash deaths and some poisonings, and poisonings may be unintentional or intentional (suicide). In 2015, the top five leading causes of unintentional injury death for all ages in Utah were poisoning, motor vehicle traffic crashes, falls, suffocation, and natural/environmental exposure.

Injury Deaths	Davis	Utah	U.S.	Source
Unintentional Injury Deaths (2010-2014)	37.9	43.4	39.2	CHNA
Poisoning Deaths (2013-2015)	16.9*	24.3	16.3	IBIS, UDOH
Suicide (2010-2014)	15.4*	20.2	12.5	CHNA
Motor Vehicle Traffic Crash Deaths (2010-2014)	7.0	8.8	10.6	CHNA

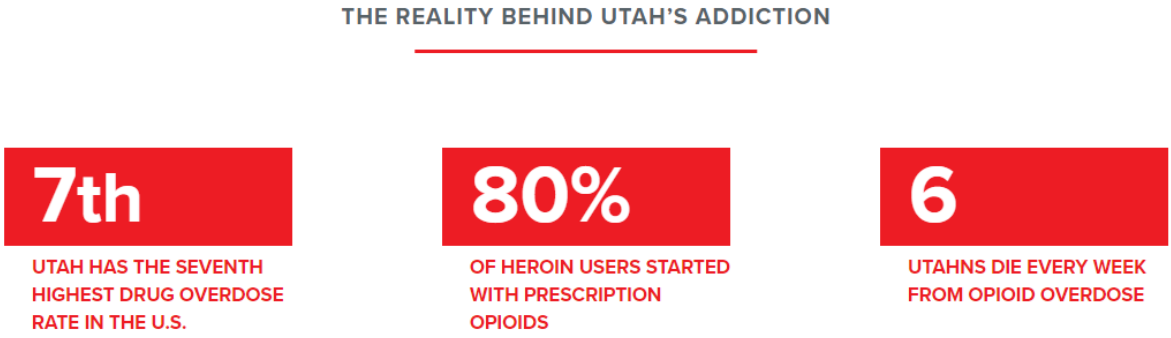
Age-adjusted per 100,000 *Not meeting HP2020 Target 13.2 for Poisonings & 10.2 for Suicide.

Over the last 10 years, poisoning and suicide deaths surpassed the rate of motor vehicle crash deaths in Davis County and Utah. The most common substances reported to Utah Poison Control in 2016 from Davis County residents are pain killers, household cleaners, and cosmetics/personal care items.



Poisoning Drug Deaths

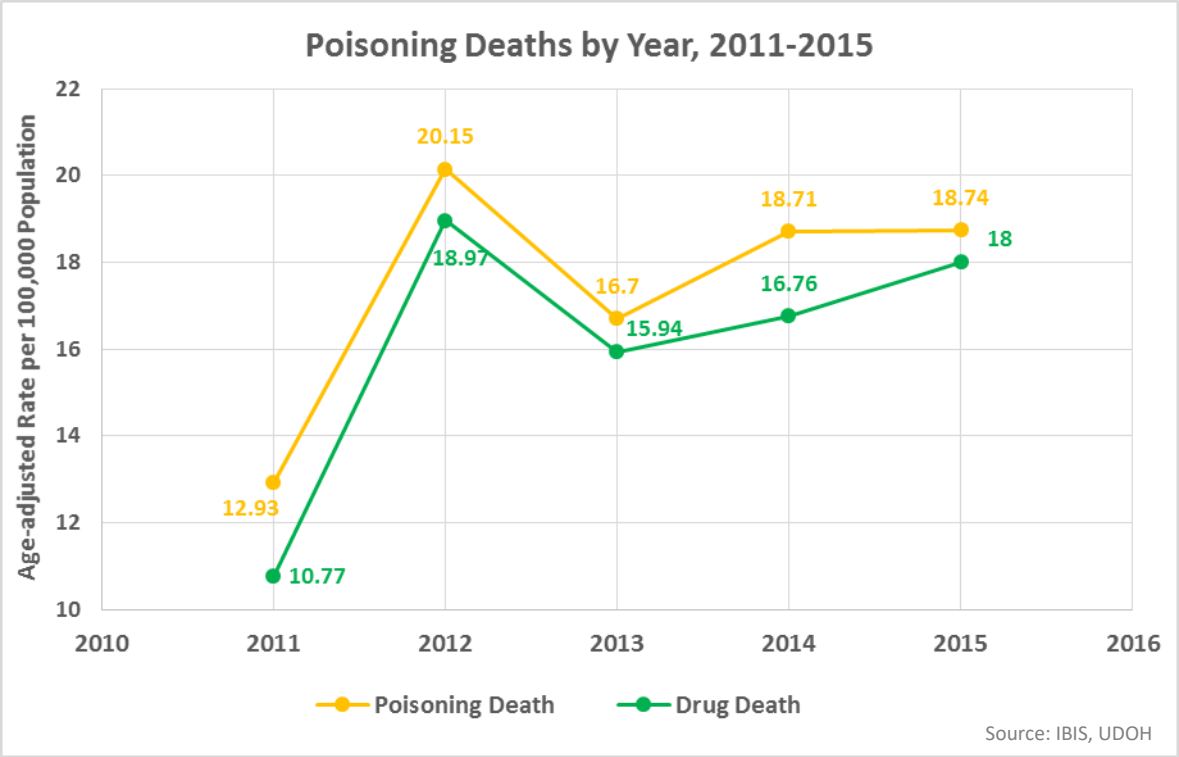
The White House Office of National Drug Control Policy and the Departments of Health and Human Services, Department of Justice, Department of Veterans Affairs, and Department of Defense are part of the national all hands on deck response to the widespread opioid epidemic and opioid crisis. During 2016, 116 people died everyday due to opioid-related drug overdoses in the U.S. This is due to the rapid increase in the use of prescription and non-prescription opioid drugs, known to have the risk of dependence and addiction. Source: HHS.gov/opioids

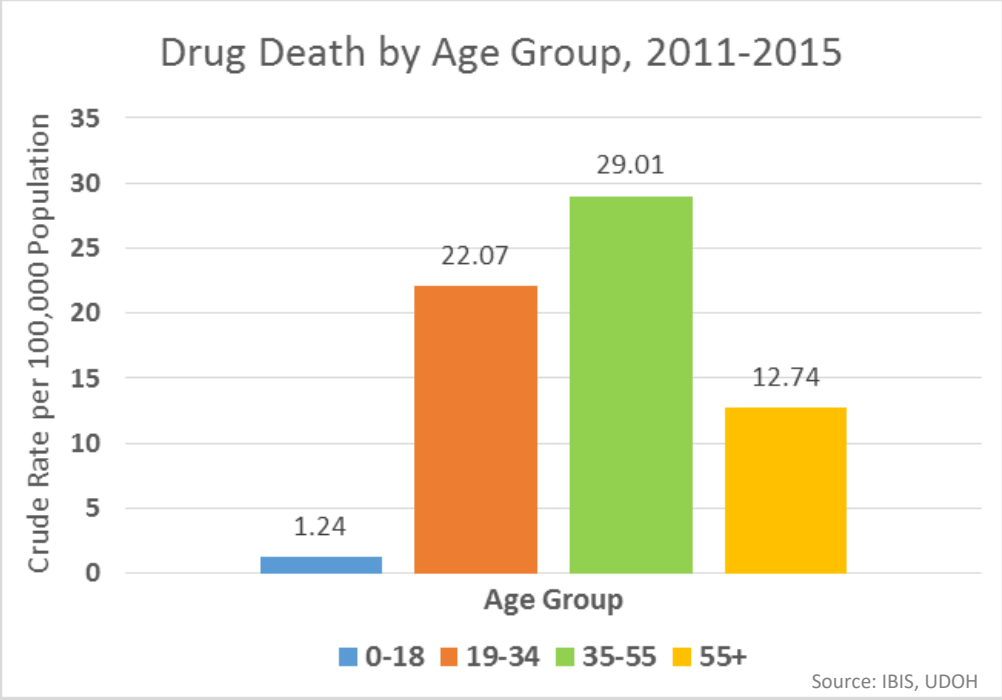


Drug poisoning deaths are a preventable public health problem and have outpaced deaths due to firearms, falls, and motor vehicle crashes in Utah. Utah ranks between 7th-9th (depending on methodology) in the U.S. for drug poisoning deaths. Every month, 52 Utah adults die as a result of a drug poisoning, 83.8% of which are accidental or of undetermined intent, and of these, 77.6% involve opioids. Utah is particularly affected by prescription opioids, which are responsible for many of the drug poisoning deaths. Source: www.opidemic.org

Prescription drug/opioid misuse and overdose prevention have been prioritized by the Utah Department of Health, Intermountain Healthcare, other state agencies, and some local health departments as a result of community health assessments and health improvement initiatives.

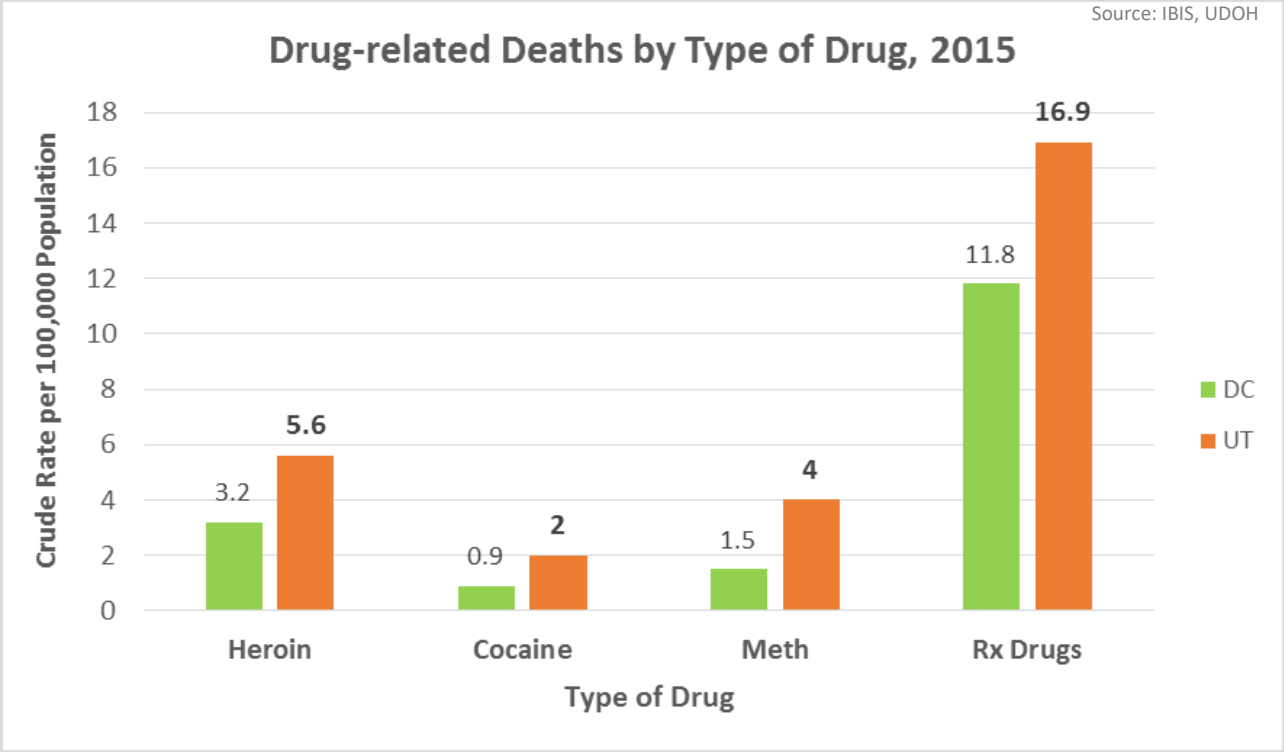
Opioid abuse and misuse is a growing health threat throughout Davis County. Many individuals prescribed opioid medication for legitimate reasons now face addiction to the drug. Almost all poisoning deaths in the county are drug related. Poisoning deaths are most common among those ages 19-55.

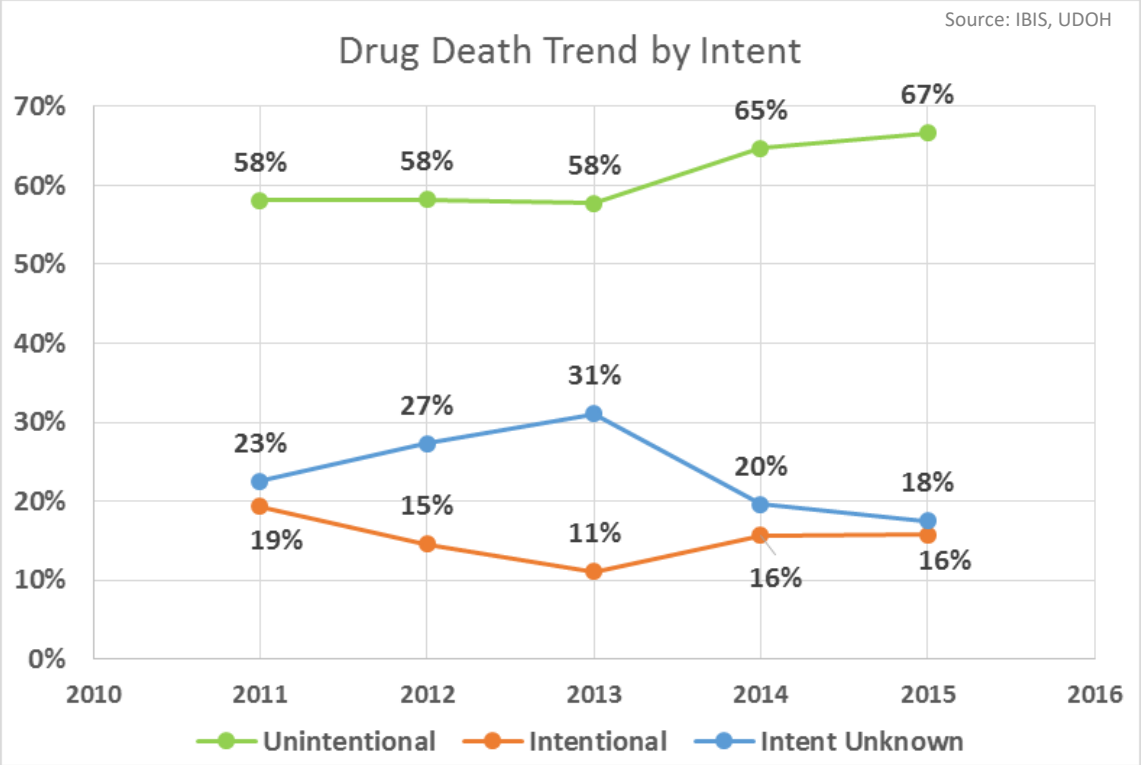




Poisoning Drug Deaths

In Davis County, 67% of drug-related deaths are from prescription drugs. Over the last 5 years, 82% of drug deaths were accidental or of undetermined intent, 18% were suicide related.





COUNTY, STATE & NATIONAL OPIOID RESOURCES

Davis Behavioral Health—Opioid Community Collaborative, www.dbhutah.org/prescription-drug-misuse

Davis County Health Department—Davis County Opioid Overdose Prevention Program, www.daviscountyutah.gov/health/health-services/health-education-services/opioid-saftey

Davis Metro Narcotics Strike Force—Opiate Overdose Pilot Program for Nalaxone Distribution

Use Only As Directed—useonlyasdirected.org lists 16 permanent prescription drug drop off locations in Davis County

Intermountain Healthcare—#SpeakOutOptOutThrowOut

Utah Department of Health—Violence & Injury Prevention Program, www.health.utah.gov/vipp/topics/prescription-drug-overdoses

Utah Controlled Substance Database—dopl.utah.gov/programs/csdb

Stop the Opidemic Campaign—www.opidemic.org

Utah Naloxone—utahnalaxone.org

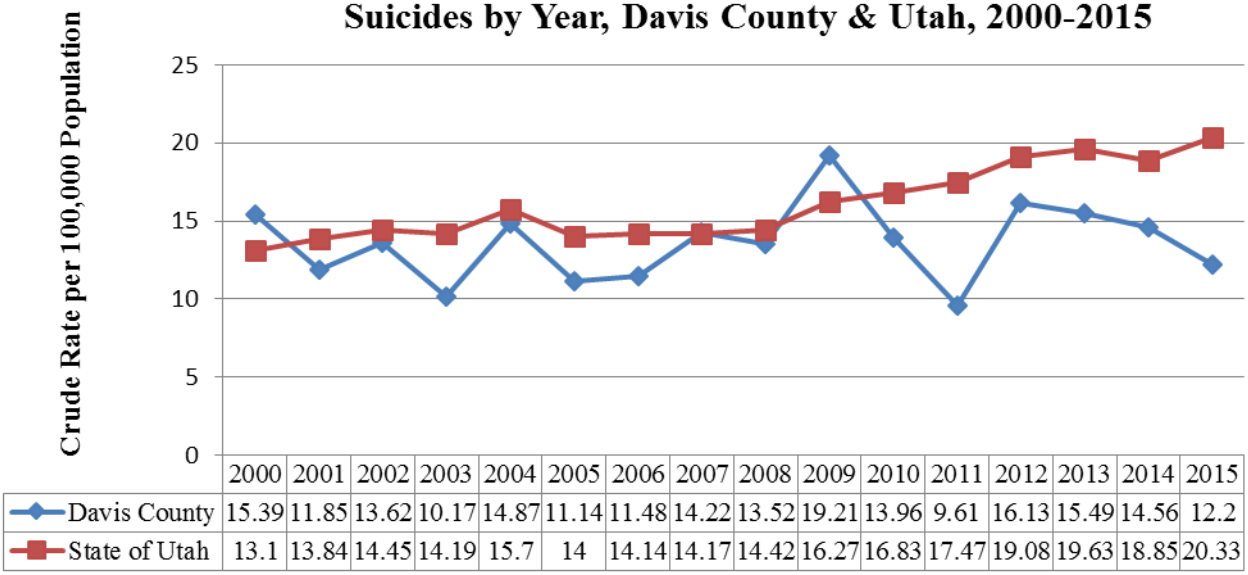
Centers for Disease Control— CDC Guideline for Prescribing Opioids for Chronic Pain, www.cdc.gov/drugoverdose/prescribing/guideline.html

U.S Department of Health and Human Services— HHS.gov/opioids, The U.S. Opioid Epidemic

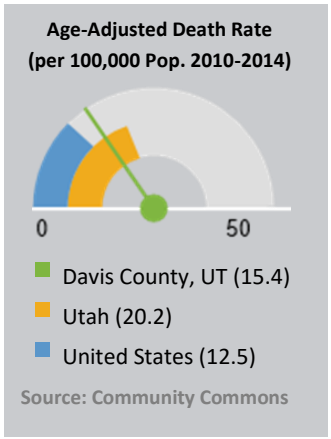
Suicide

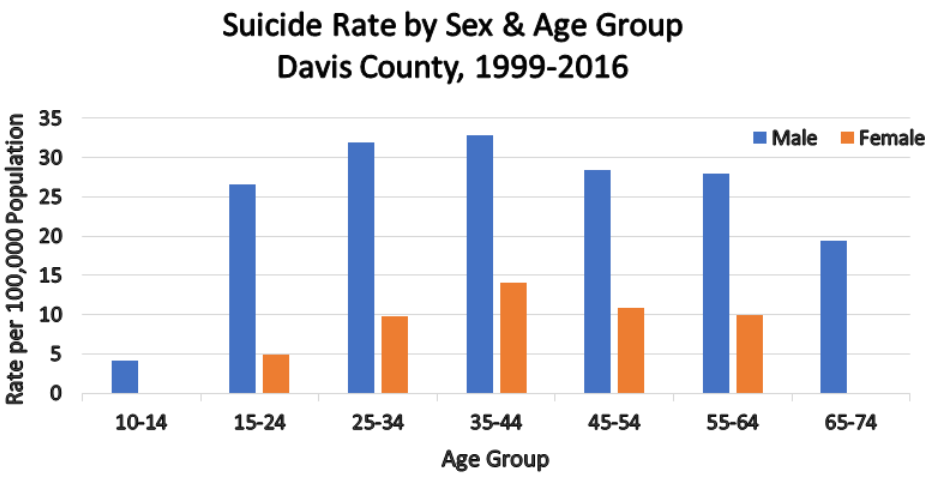
Suicide is the 8th leading cause of death in Davis County and 11th leading cause of hospitalization. Males have significantly higher suicide rates compared to females. Females have a significantly higher suicide emergency department visit rate compared to males. Firearms are used in 53% of suicides. Source: IBIS, UDOH

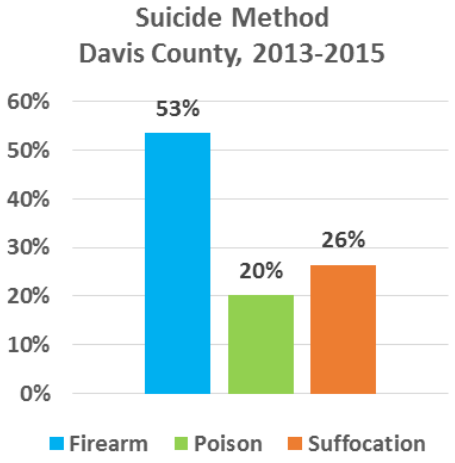
Suicides by Year, Davis County & Utah, 2000-2015



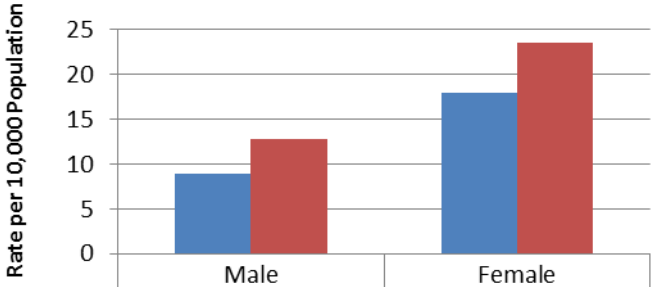
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Davis County	15.39	11.85	13.62	10.17	14.87	11.14	11.48	14.22	13.52	19.21	13.96	9.61	16.13	15.49	14.56	12.2
State of Utah	13.1	13.84	14.45	14.19	15.7	14	14.14	14.17	14.42	16.27	16.83	17.47	19.08	19.63	18.85	20.33







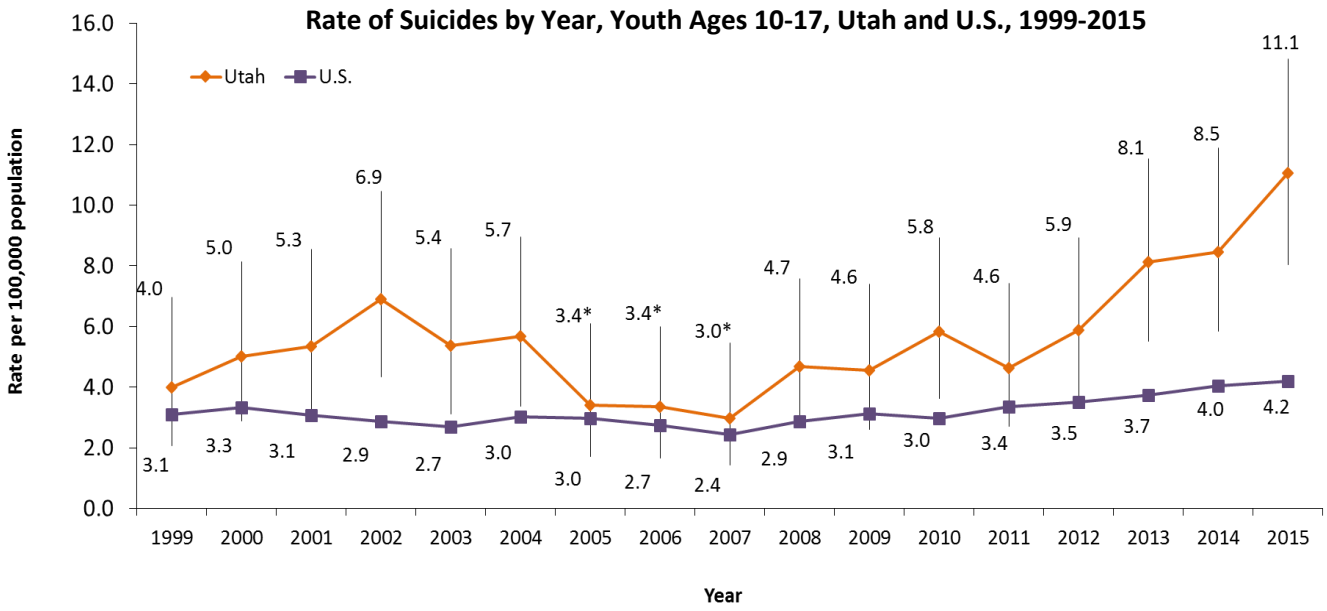
Suicide Emergency Department Encounters by Sex
Davis County & Utah, 2012-2014



	Male	Female
Davis County	8.95	17.97
Utah	12.85	23.58

Utah Youth Suicide Study

Suicide is the leading cause of death among youth ages 10-17 in Utah. The Utah Department of Health (UDOH) observed a 141.3% increase in suicides among Utah youth aged 10-17 from 2011 to 2015, compared to an increase of 23.5% nationally. Suicidal ideation and attempts among Utah youth also increased during this time period.



*Insufficient number of cases to meet the UDOH standard for data reliability, interpret with caution.

From 2011 to 2015, 150 Utah youth aged 10-17 died by suicide, the majority of which were aged 15-17 years (75.4%), male (77.4%), and non-Hispanic white (81.3%). More than a third (35.2%) of youth who died by suicide had a mental health diagnosis and nearly a third (31.0%) were depressed at the time of their death.

In addition to mental health concerns, family relationship problems, other forms of violence such as bullying at school and electronic bullying, substance use, and psychological distress were common risk factors in youth suicides. However, supportive family, community, and peer environments were protective against suicidal ideation and suicide attempts.

Additional findings showed that among those youth who died by suicide:

- 55.3% experienced a recent crisis within two weeks of the death (family relationships and dating partner problems were the most common recent crisis)
- 23.9% disclosed their intent to die within one month prior to their death
- 20.5% had a history of cutting or had evidence of recent cutting
- 12.6% experienced family conflicts as a result of restriction to technology use or that resulted in a restriction to technology, such as having a mobile phone, tablet, laptop, or gaming system being taken away by a parent or guardian
- Of the 40 cases that had information on the decedent's sexual orientation, six (15.0%) were identified as sexual minorities

A three-page summary report of the findings is available at http://ow.ly/4rME30gTMBl. The complete CDC investigation report is available at http://ow.ly/FDYf30gVe4u.

Youth Suicide

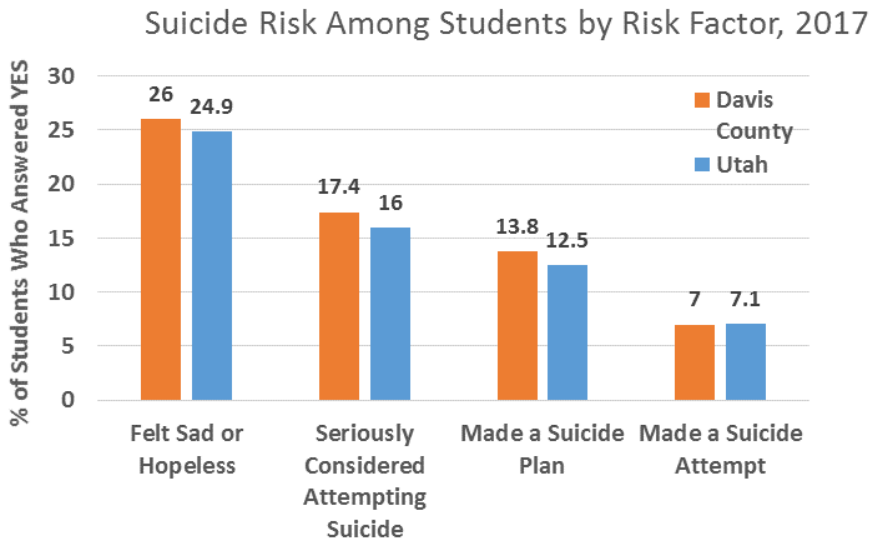
Suicide is a complex behavior with multiple risk and protective factors. The CDC made the following recommendations based on the study findings:

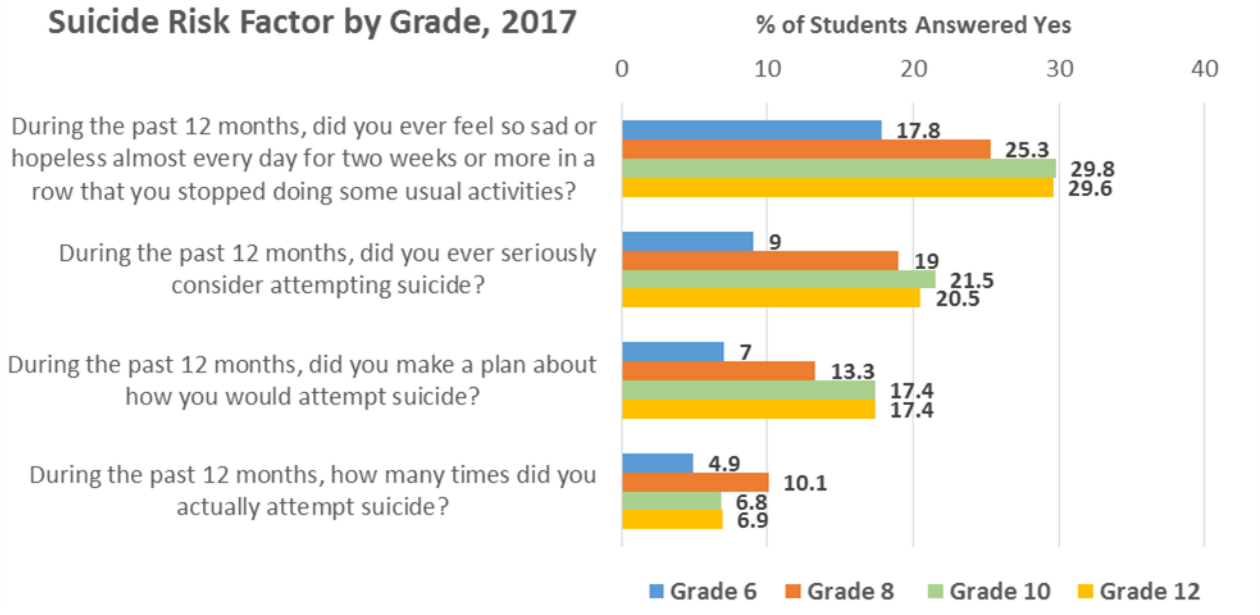
- Increase access to evidence-based mental health care for youth
- Strengthen family relationships
- Promote connectedness within the home, peer, school, and community environments
- Identify and provide support to youth at risk of suicidal behaviors
- Prevent other forms of violence among youth
- Reduce access to lethal means
- Teach coping and problem solving skills
- Consider comprehensive and coordinated suicide prevention programs that address multiple risk and protective factors simultaneously
- Conduct ongoing comprehensive evaluation of suicide prevention programs

Davis School District Student Suicide Risk Factors

County youth suicide risk factor data can be found in the Student Health and Risk Prevention (SHARP), Prevention Needs Assessment Survey (PNAS) results reports conducted during odds years. Felt sad or hopeless and suicide ideation, plans, and attempts have all been trending up each year for all grades.

Source: dsamh.utah.gov/data/sharp-student-use-reports





SUICIDE PREVENTION RESOURCES

DAVIS BEHAVIORAL HEALTH 24-HOUR CRISIS RESPONSE LINE:
801-773-7060 —dbhutah.org

NATIONAL SUICIDE PREVENTION HOTLINE:
1-800-273-TALK (8255) —A free 24-hour service, connects individuals to trained crisis workers from the University of Utah Neuropsychiatric Institute. suicidepreventionlifeline.org

SAFE UT
The SafeUT Crisis Text and Tip Line service provides real-time crisis intervention to youth through texting and a confidential tip program right from a smartphone. Download the App.
healthcare.utah.edu/uni/clinical-services/safe-ut

COMMUNITY SUICIDE PREVENTION TRAINING
www.dbhprevention.org/trainings

MAN THERAPY CAMPAIGN
mantherapy.org

NATIONAL ALLIANCE ON MENTAL ILLNESS (NAMI) UTAH
801-323-9900 —Free education classes and peer support for those who struggle with mental illness, and separate education and peer support for family members. www.namiut.org

AMERICAN FOUNDATION FOR SUICIDE PREVENTION
To find more resources and to reach out to, or hear the stories of, others who have lost a loved one to suicide. AFSP also provides training for survivors who wish to facilitate survivor support groups or to get involved in education and advocacy. www.afsp.org

THE TREVOR PROJECT
1-866-488-7386 —This free 24-hour service is geared toward LGBT teens in crisis. thetrevorproject.org

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS
Suicide Prevention and Ministering, www.lds.org/get-help/suicide

Suicide prevention, mental health, and depression screening have been prioritized by the Utah Department of Health, Intermountain Healthcare, Davis4Health and other state and local agencies as a result of community health assessments and health improvement initiatives. In January 2018, Utah's Governor, Gary Herbert announced a new Youth Suicide Task Force.

Morbidity

Morbidity refers to how healthy people feel while alive and what's making us sick. This section includes: health-related quality of life, birth outcomes, hospitalizations, chronic disease prevalence, cancer incidence, communicable disease incidence, mental health, and oral health. Davis County is ranked 4th for morbidity and health related quality of life according to CHR.

Health-Related Quality of Life

Health-related quality of life (HRQoL) is a multi-dimensional concept that includes physical, mental, emotional, and social functioning. It focuses on the impact health status has on quality of life. The CDC has defined HRQoL as "an individual's or group's perceived physical and mental health over time." Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population.

The CHR uses five county-level measures from the Behavioral Risk Factor Surveillance System (BRFSS) data provided by the CDC as measures of health-related quality of life: the percent of adults reporting poor or fair health, the average number of physically and mentally unhealthy days reported per month, and frequent physical and mental distress measured by the percentage of adults reporting 14 or more days of poor physical health and mental health per month.

With only 11% of the population reporting that they are in poor or fair health (other options: excellent, very good, good), Davis County is within the top 10% (best) of all counties in the U.S. for this measure. With only 9% of adults reporting 14 or more days of poor physical health per month Davis County is also among the 10% best of all counties in the nation for frequent physical distress.

Health-Related Quality of Life (2015)	Davis	Utah	National Benchmark
Poor or Fair Health	11%	13%	12%
Poor Physical Health Days	3.3	3.4	3.0
Frequent Physical Distress	9%	10%	9%
Poor Mental Health Days	3.3	3.5	3.0
Frequent Mental Distress	10%	10%	9%

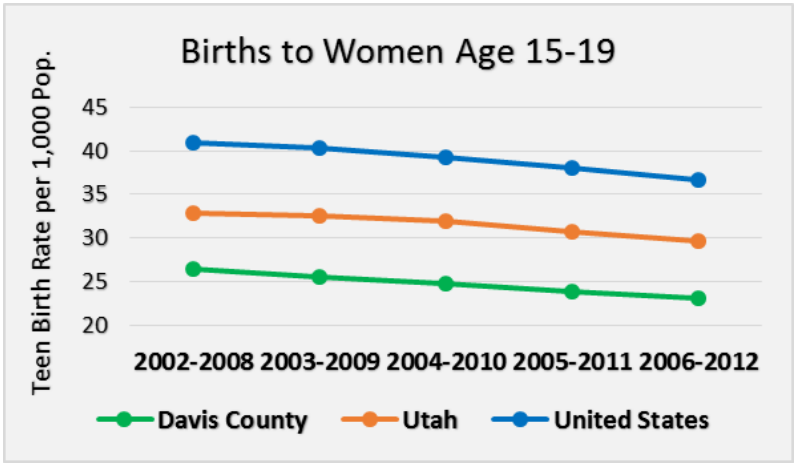
Source: CHR, 2017

Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birth weight, represent a child's current and future morbidity, or whether a child has a healthy start. Other birth outcomes examined include birth rates, gestational diabetes, births from unintended pregnancies, and adolescent births (included as teen birth rate in CHR).

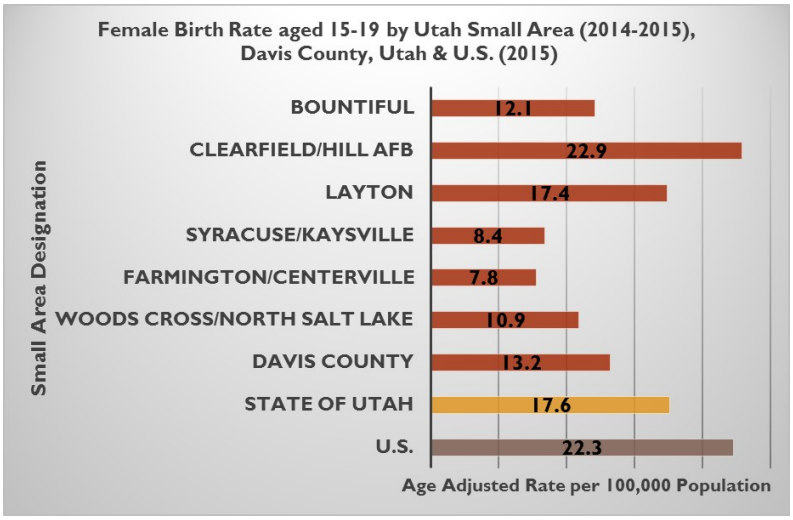
Birth Outcomes	Davis	Utah	U.S
Birth Rates, # of Births per 1,000 Residents (2015)	17.5	17.0	12.9
Low Birthweight (2015)	6.3%	7.0%	8.1%
Gestational Diabetes (2015)	5.1%	5.3%	—
Births from Unintended Pregnancies (2012-2013)	19.5%	23.8%	45.0%
Birth Rate per 1,000 Adolescent Females Ages 15-19 (2014–2015)	13.2	17.6	22.3

Source: IBIS, UDOH

Birth rates in Utah are the highest in the nation, over 17 births per 1,000 residents. Birth rates overall and teen birth rates have been gradually declining in Davis County, Utah, and the U.S. Birth rates can provide understanding about population growth and change. Birth rates among teens in Davis County are lower than the state and national average and have been declining across the country. Looking at Davis County's small area data shows a wide range of teen birth rates across communities. This indicator can highlight the existence of health disparities.



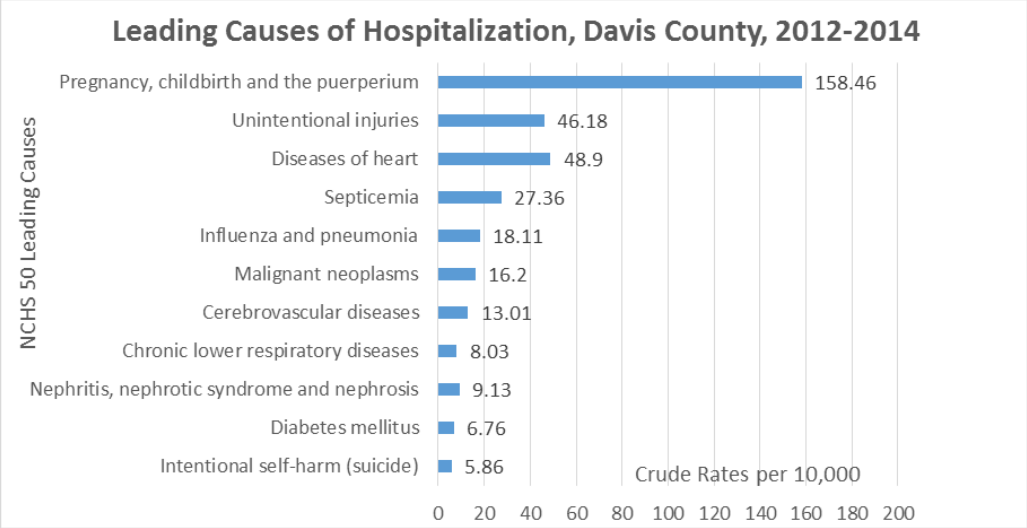
Low birthweight (LBW) is the percentage of live births < 2500 grams. At 6.3% Davis County has lower prevalence of LBW compared to the state and the nation. This represents multiple factors: maternal exposure to health risks, the infant's current and future morbidity, and premature mortality risk. LBW serves as a predictor of premature mortality and/or morbidity over the life course. This indicator is relevant because LBW infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

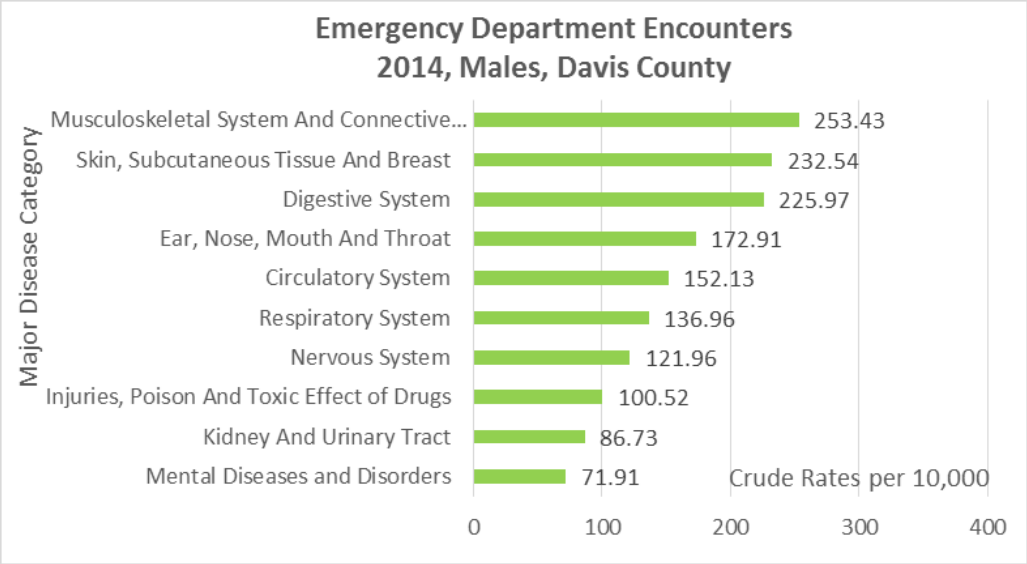


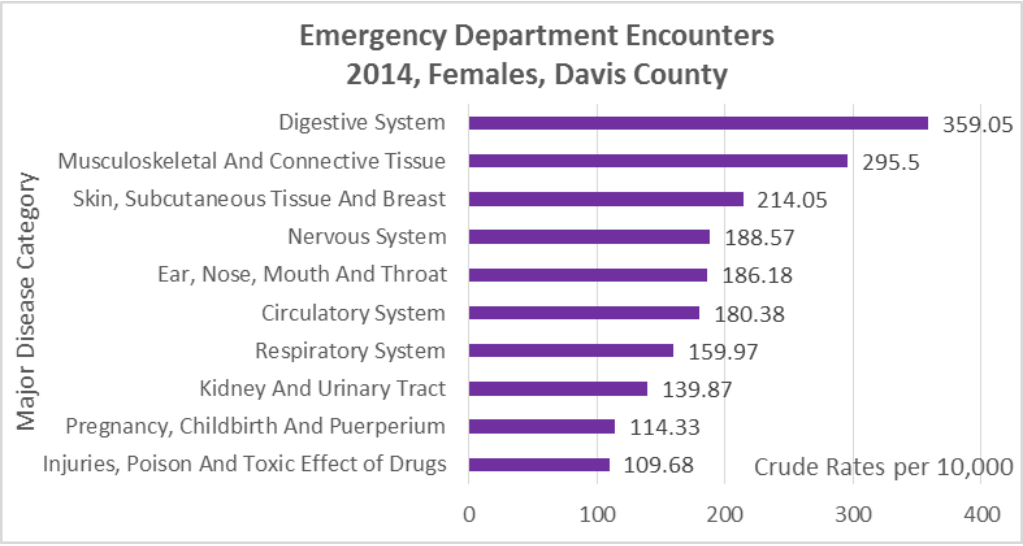
Hospitalization

The leading cause of hospitalization in Davis County is childbirth. Unintentional injury, heart disease, infection in the blood, influenza/pneumonia and cancer also rank high. There is concern that the National Center for Health Statistics (NCHS) form of categorizing leading causes does not account for mental diseases and disorders. Hospital staff report many mental health emergency department (ED) encounters. Davis4Health partners are interested in getting data from hospitals and examining state hospital utilization data to find more information.

Source: IBIS, UDOH







Chronic diseases such as heart disease, stroke, cancer, and diabetes are among the most common, costly, and preventable of all health problems.

Chronic Disease Prevalence	Davis	Utah	U.S	Source
High Blood Cholesterol (2015)	26.2%	24.5%	27.2%	IBIS, UDOH
Hypertension (2014-2015)	25.4%	25.0%	30.0%	IBIS, UDOH
Heart Disease Prevalence 18+ (2011–2012)	2.1%	2.8%	4.4%	CHNA
Arthritis Prevalence (2014-2016)	22.3%	21.4%	23.5%	IBIS, UDOH
Asthma: Adult Prevalence 18+ (2016)	9.0%	8.3%	8.9%	IBIS, UDOH
Asthma: Childhood Prevalence, Ages 0–17 (2014-2015)	7.1%	6.8%	8.2%	IBIS, UDOH
Prediabetes: Adult Prevalence (2014-2016)	6.2%	5.7%*	9.5%*	IBIS, UDOH
Diabetes: Adult Prevalence (2014-2016)	7.9%	7.1%	10.6%	IBIS, UDOH

*2016

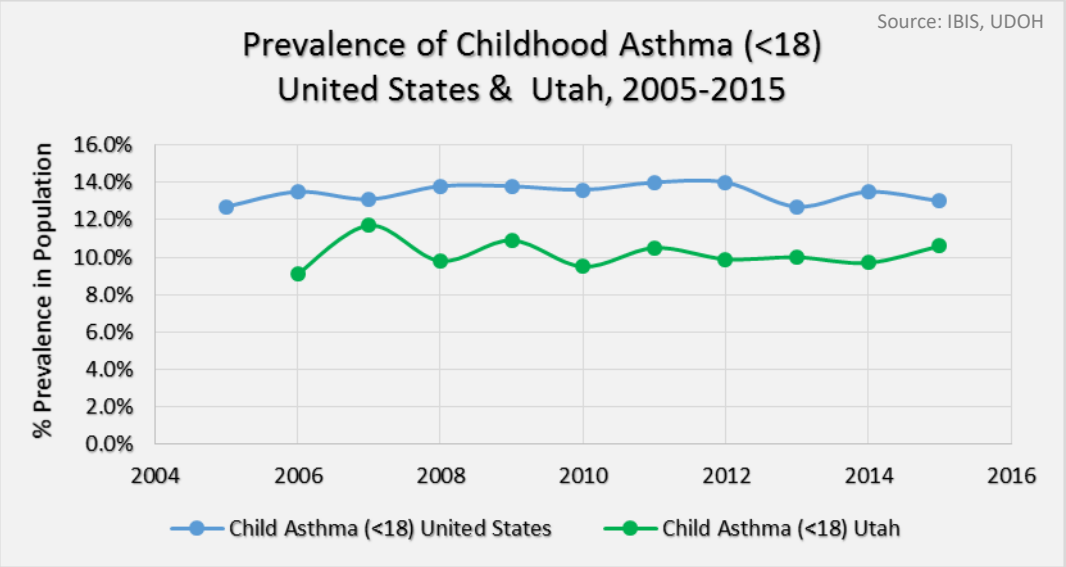
Davis School District school nurses report 4,871 out of 70,064 students with school healthcare plans in 2017. The most common is for asthma (4,084) followed by seizures (434) and Type 1 Diabetes (353).

Asthma

Asthma is a serious personal and public health issue that has far-reaching medical, economic, and psychosocial implications. The burden of asthma can be seen in the number of asthma-related medical events, including emergency department visits, hospitalizations, and deaths. More information can be found at: http://health.utah.gov/asthma.

Hospitalizations & Emergency Department Encounters (Age-adjusted Rate per 10,000 Population)	Davis	Utah
Asthma Hospitalizations (2011–2014)	4.2	5.5
Asthma-related ED Visits (2013-2014)	18.3	23.7

Source: IBIS, UDOH



Obesity

Obesity is one of the leading causes of preventable death in the U.S. Obesity is often the result of an energy imbalance due to poor diet and limited physical activity. Obesity puts an individual at risk of morbidity from hypertension, elevated LDL cholesterol, type 2 diabetes, coronary heart disease, stroke, osteoarthritis, sleep apnea, respiratory problems, and some cancers.

Obesity Community Themes:

- The U.S. Surgeon General issued a call to action in 2003 that described obesity as a crisis affecting every state, every city, every community, and every school across our nation.
- Obesity is one of the leading causes of preventable death in the U.S.
- 1 in 4 adults in Davis County are obese.
- Nearly 2/3 of adults in Davis County are at an unhealthy weight.
- 19% of young people ages 10-17 in Utah are overweight/obese.

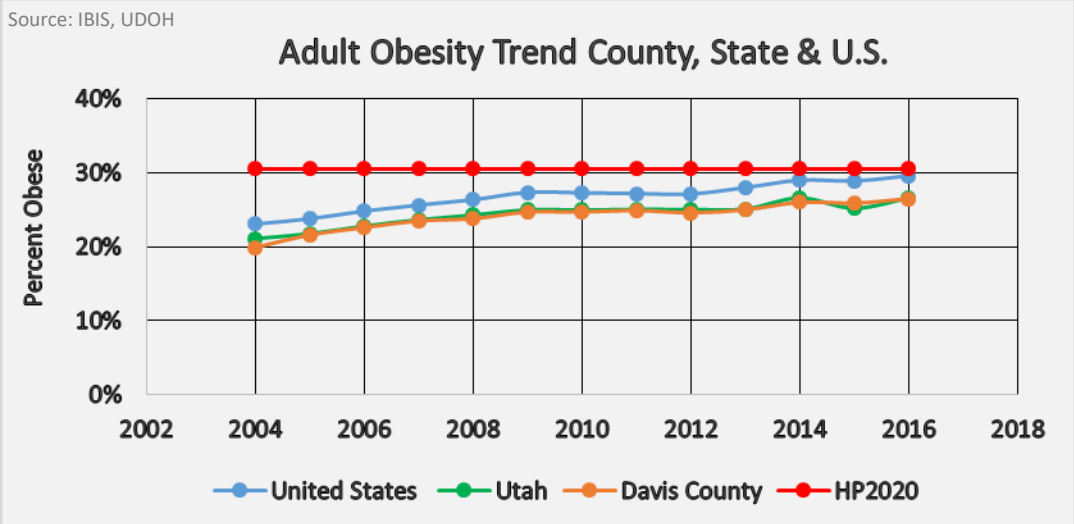
Obesity in adults is defined as a Body Mass Index (BMI) of 30 or more. Overweight is defined as a BMI of 25 or more. BMI is calculated by dividing weight in kilograms by the square of height in meters.

Nearly 27% of adults in Davis County are obese. When adults who are obese are combined with adults who are overweight, 60% of adults in Davis County are at an unhealthy weight. Davis County is meeting the Healthy People 2020 target for adult obesity, and according to the CHR, the county rate is in the top 10% (best) in the nation. However, obesity rates across the nation are too high and 27% is far too many residents who are at risk for serious and costly health conditions. Davis County is getting worse for this measure. The obesity epidemic that is occurring among Utahns threatens to reverse the decades-long progress made in reducing death from cardiovascular disease, diabetes, and certain cancers.

Adult Obesity & Overweight Prevalence	Davis	Utah	U.S.
Obesity, 18+ (2016)	26.5%	26.2%	29.6%
Obese or Overweight, 18+ (2016)	60.3%	61.6%	64.6%

Source: IBIS, UDOH

Source: IBIS, UDOH



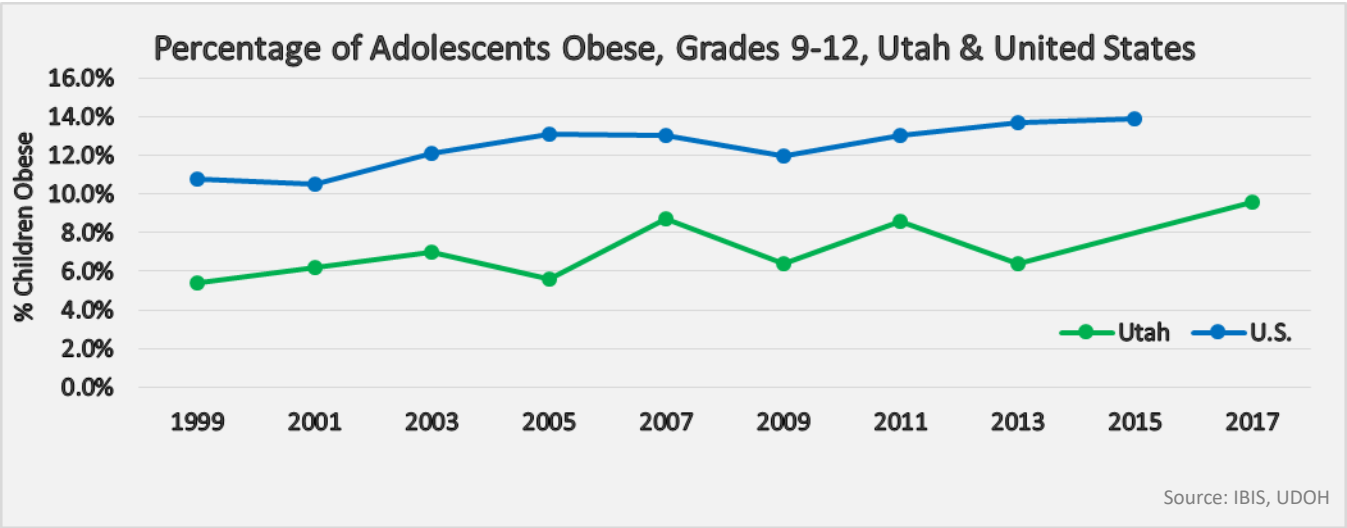
DCHD is working to gather data sources from across the life span to learn more about obesity trends in our community. Obese and overweight in children are defined differently than adults. Childhood measures are based on growth charts and take gender as well as age into account.

Childhood Body Weight Terminology:	
Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual. BMI is based on the CDC 2000 Growth Charts.	
Classification of Unhealthy Weight (Barlow 2007)	
Overweight	BMI ≥ 85th and <95th percentile for age & gender
Obese	BMI ≥ 95th percentile for age & gender

A statewide surveillance system is in place to estimate the prevalence of obesity in adolescents. Approximately 8% of students grades 8–12 are obese. Davis County is doing well in this measure compared to other counties in the state. In the 2012 National Survey of Children's Health (NSCH), Utah is the state with the lowest rate of overweight and obesity in young people ages 10–17 at 19.2% compared to the national rate of 31.2%.

Obesity & Overweight Prevalence	Davis	Utah	U.S	Source
Getting Recommended Physical Activity Grades 9-12 (2017)	18.3%	19.2%	27.1% (2015)	IBIS
Obese Children Aged 10-17 (2012)	—	19.2%	31.2%	NSCH
Grade School Obesity, Grades 9-12 (2017)	8.0%	9.6%	13.9% (2015)	IBIS
Childhood Overweight, WIC Clients, Age 5 & Under (2016)	6%	22.3%	27.1% (2014)	IBIS

Some additional obesity prevalence data is available through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for children ages 5 and under who are WIC clients. About 6% of Davis County's WIC children are obese. They are half as likely to be obese as WIC children nationwide.



Childhood Obesity

Obesity Among Elementary School Students in Utah

Since 2006, Davis County has participated in a biennial statewide height/weight assessment project for elementary school students. First, third, and fifth grade students from nine randomly selected public elementary schools throughout the county were weighed and measured to assess the extent of childhood overweight and obesity. In 2016, a total of 4,223 children were assessed. Link to most recent data: http://choosehealth.utah.gov/documents/pdfs/prek-12/HW_Elem_Project_2016_1-19-17.pdf.

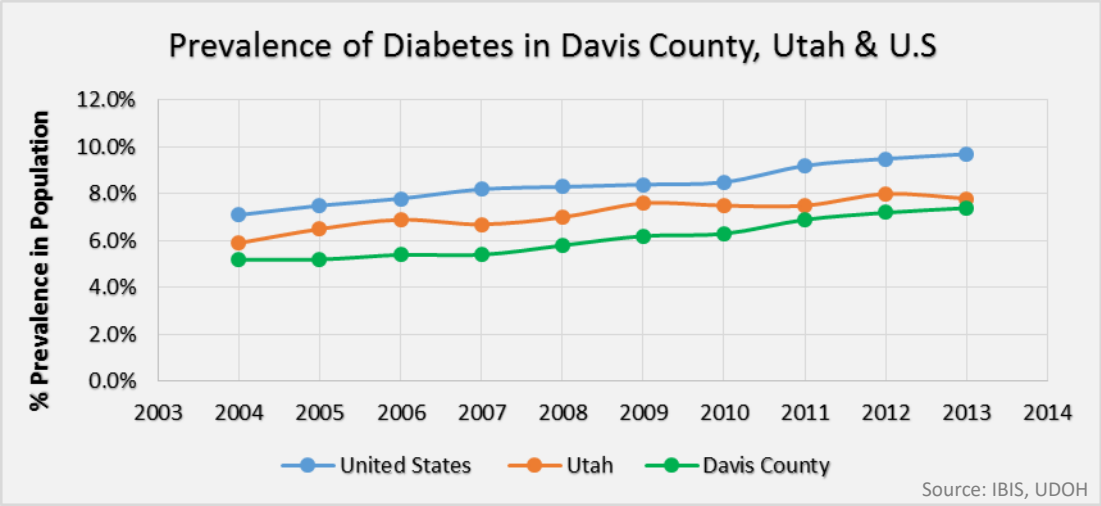
The most recent report on the extent of childhood overweight and obesity in Utah assessed through the elementary height/weight project found that:

- The percentage of girls at an unhealthy weight increased significantly between 1st and 3rd, and 1st and 5th grades.
- The percentage of boys at an unhealthy weight increased significantly between 1st and 3rd, and 1st and 5th grades. The highest rates seen since this study began are for 5th grade boys, with 27% at an unhealthy weight in 2016.
- By 5th grade, a higher percentage of boys were at an unhealthy weight than girls.
- In 2016, 21.5% of elementary school students were at an unhealthy weight. The rate in 2014 was similar at 20.9%.
- In 2016, 9.5% of elementary school students were obese, similar to 2014 when 8.9% were obese.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight. By 2016, the rate had increased to 23.1%.
- Overall, overweight and obesity rates among elementary school students did not increase significantly between 2014 or 2016.

Since the Davis County sample is not large enough to determine a county overweight and obesity rate, DCHD partnered with the Davis School District to conduct a local height and weight measurement project. Data from 37 randomly selected elementary schools (which includes nine from the statewide sample) will be collected to determine a county overweight and obesity rate. Measurements are being taken from January-March 2018.

Diabetes is the 7th leading cause of death in Davis County. Diabetes is a significant, costly disease that is often under-diagnosed. Between 2009-2014, approximately 5.8% of adult Utahns reported they were told by a healthcare provider they have prediabetes. In the same time period, approximately 7.6% of adult Utahns reported they have diabetes. Direct medical costs in Utah in 2012 were estimated at approximately $864 million for diagnosed diabetes, $139 million for undiagnosed diabetes, $272 million for prediabetes, and $8 million for gestational diabetes. Total cost (direct and indirect) of all forms of diabetes in Utah was estimated at approximately $1.7 billion. Source: choosehealth.utah.gov/documents/pdfs/diabetes/Utah_DiabetesPrevention_Strategic_Plan.pdf

Diabetes has reached epidemic proportions in the U.S. It is estimated that about one-fourth to one-third of people with diabetes don't know they have it and are not yet diagnosed. Many others have prediabetes, a condition that puts them at high risk for developing diabetes unless steps are taken to prevent it. In Utah, 20% of those over age 65 have diabetes. Diabetes management data is found in the clinical care section, page 85.



Adult Diabetes by Age Group, Utah 2015			
18-34	35-49	50-64	65+
1.1%	4.5%	11.8%	20.2%

Adult Diabetes by Ethnicity, Utah 2015	
Hispanic	Non-Hispanic
11.6%	7.0%

Adults with Diabetes by Race, Utah 2015					
American Indian/ Alaskan Native	Asian	Black/African American	Native Hawaiian/ Pacific Islander	White	Other
15.2%	5.5%	12.2%	15.1%	6.9%	12.1%

Diabetes by Small Area, Davis County 2012-2015					
Clearfield/Hill AFB	Layton	Syracuse/Kaysville	Farmington/Centerville	Woods Cross/NSL	Bountiful
8.6%	10.2%	6.6%	4.3%	7.8%	5.7%

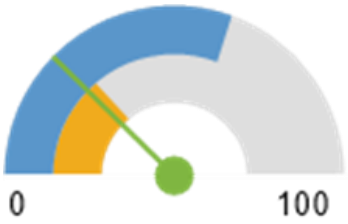
Source: IBIS, UDOH

Cancer Incidence

Cancer incidence measures the number of new cases of cancer in a population during a given time.

Cancer Incidence (age-adjusted per 100,000 population)	Davis	Utah	U.S	Source
Prostate Cancer Incidence (2010-2014)	155.8	130.6	114.8	CHNA
Breast Cancer Incidence (2010-2014)	121.4	114.7	123.5	CHNA
Skin Cancer Incidence (2014)	46.6	42.3	21.4	CDC
Colon & Rectum Cancer Incidence (2010-2014)	30.2	31.4	39.8	CHNA
Lung Cancer Incidence (2010-2014)	24.4	27.9	61.2	CHNA
Cervical Cancer Incidence (2010-2014)	5	5.2	7.62	CHNA

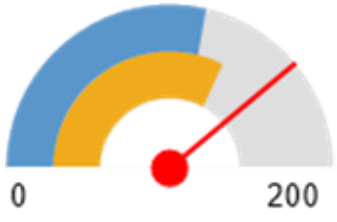
Lung Cancer Incidence, 2010-2014 (per 100,000 pop.)



- Davis County, UT (24.4)
- Utah (27.9)
- United States (61.2)

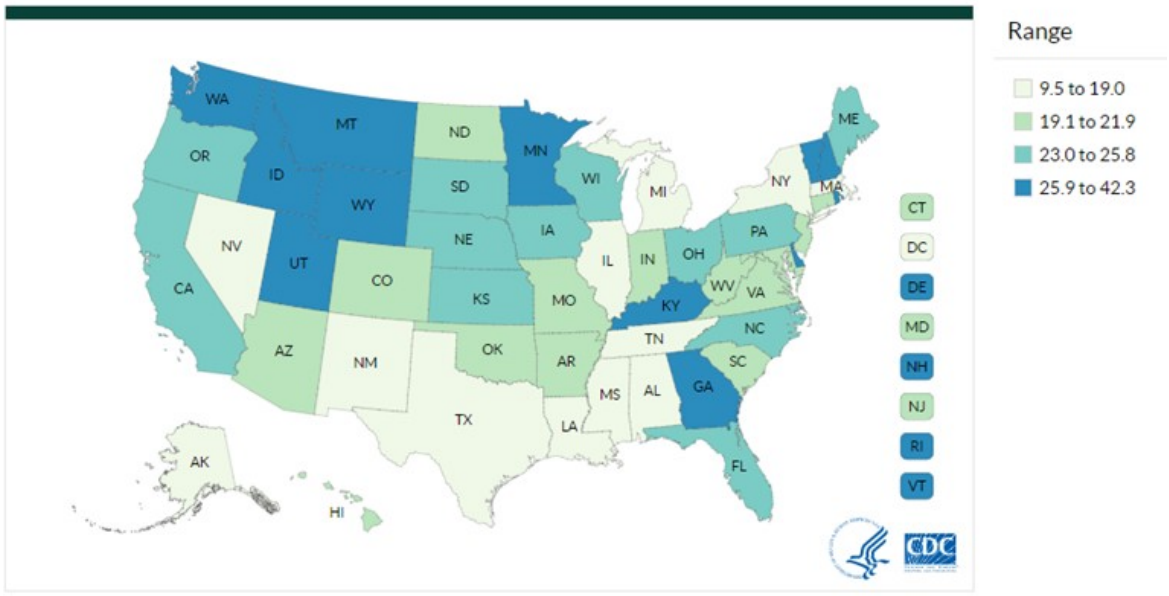
- Utah has the lowest incidence rate of lung cancer in the nation. Davis County's rate is lower than the state rate.
- Davis County has high prostate cancer incidence compared to the state and nation. Currently there is not a good explanation for the high rate.
- Utah has the highest skin cancer incidence in the U.S. and 2nd highest skin cancer deaths in the U.S. Davis County has a higher skin cancer incidence rate when compared to the state.

Prostate Cancer Incidence, 2010-2014 (per 100,000 pop.)



- Davis County, UT (155.8)
- Utah (130.6)
- United States (114.8)

Melanoma of the Skin
Incidence Rates* by State, 2014†



In Davis County, 71.4% of adults practice sun safety and do at least one thing to protect skin from the sun: wearing sunblock, wearing a hat, avoiding the sun, or wearing a long-sleeve shirt. (2012, IBIS, UDOH)

CHRONIC DISEASE PREVENTION RESOURCES

LOCAL CLASSES

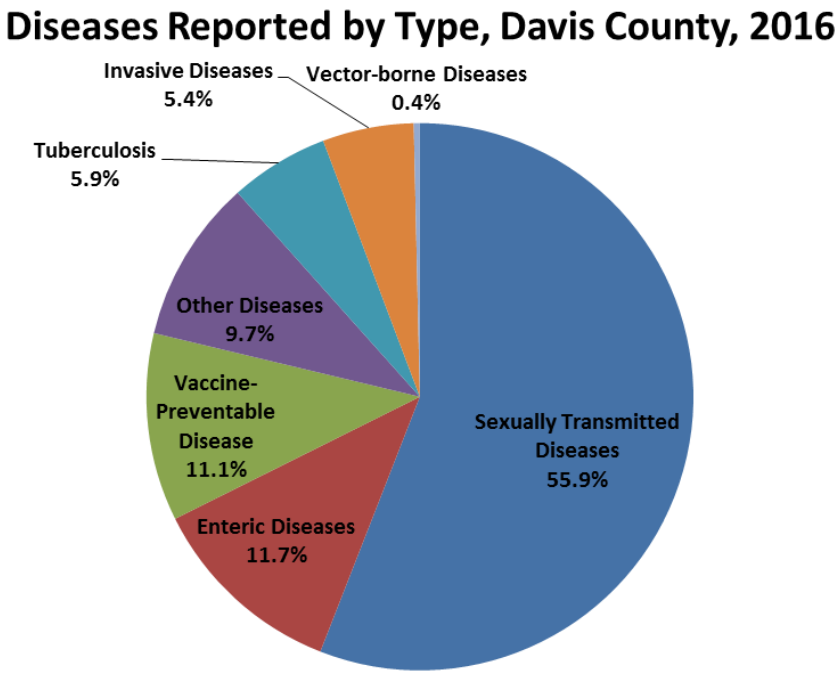
- **Prevent T2**, a proven program to help prevent or delay development of type 2 diabetes: 801-525-5087
- **Health Education Programs** that include Alzheimers, Arthritis, Asthma, Cardiovascular, Cancer, Chronic Pain, Prediabetes/Diabetes, Injury Prevention, Living with Disability: livingwell.utah.gov

NATIONAL RESOURCES

- **American Heart Association Utah Division:** http://www.heart.org/HEARTORG/Affiliate/SaltLakeCity/Utah/Home_UCM_WSA009_AffiliatePage.jsp
- **American Stroke Association:** http://www.strokeassociation.org/STROKEORG/
- **American Lung Association:** http://www.lung.org/?referrer=https://www.google.com/
- **American Cancer Society Utah:** https://www.cancer.org/about-us/local/utah.html
- **American Diabetes Association**: http://www.diabetes.org

Communicable Diseases

DCHD received a total of 1,947 disease reports during 2016, an 11% increase from the 1,755 disease reports received in 2015. This increase was primarily caused by elevated Sexually Transmitted Infection (STI) reports (particularly Gonorrhea) and a norovirus outbreak.



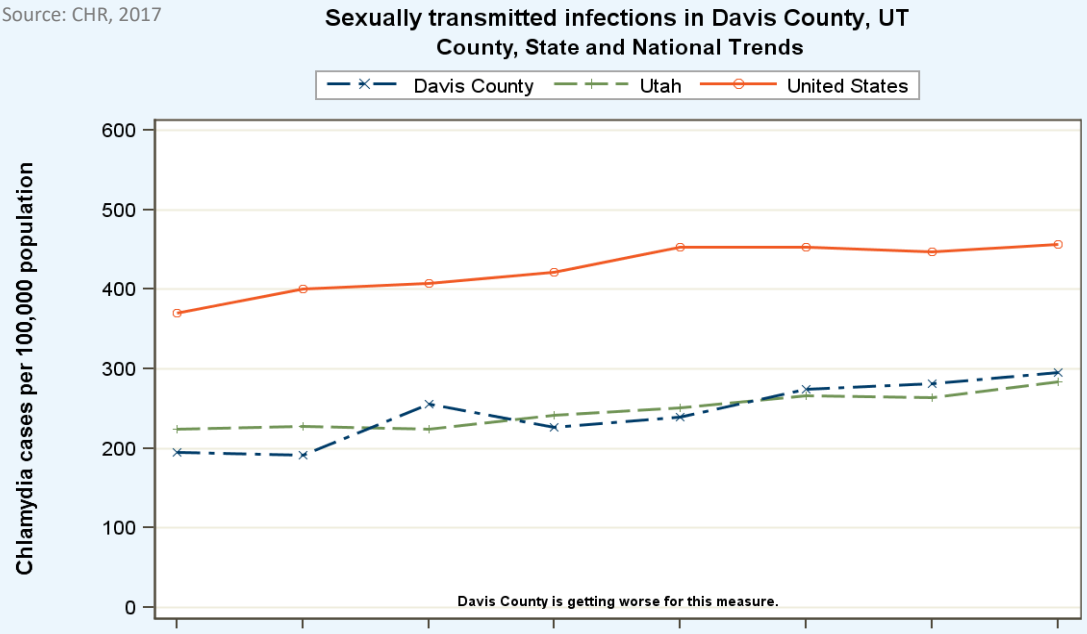
The top four diseases in Davis County in 2016 were chlamydia, hepatitis C, hospitalized influenza, and gonorrhea (see the top 20 in **Appendix 8**. STIs made up over half of reported diseases (55.9%), followed by enteric diseases (11.7%), vaccine-preventable diseases (11.1%), other diseases (9.7%), tuberculosis infections (5.9%), invasive diseases (5.4%) and vectorborne/zoonotic diseases. Davis County annual disease reports can be found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.

Communicable Diseases	Rate per 100,000 Population		
	Davis*	Utah*	U.S.
Sexually-Transmitted Infections			
Chlamydia	277.9 (2016)	310.0 (2016)	497.3 (2016)
Gonorrhea	38.4 (2016)	68.8 (2016)	145.8 (2016)
Syphilis (All Stages)	5.7 (2016)	4.7 (2016)	27.4 (2016)
HIV/AIDS Incidence	2.1 (2016)	4.0 (2015)	12.3 (2016)
HIV Prevalence	60.1 (2016)	103.8 (2016)	303.5 (2016)
Vaccine Preventable Diseases			
Pertussis	7.1 (2016)	4.9 (2016)	4.9 (2016)
Hospitalized Influenza	39.6 (2016)	38.5 (2016)	--
Enteric Diseases			
Campylobacteriosis	12.2 (2016)	16.9 (2016)	18.6 (2016)
Cryptosporidiosis	8.0 (2016)	4.8 (2016)	4.2 (2016)
Giardiasis	8.0 (2016)	3.9 (2016)	5.0 (2016)
Shiga Toxin-Producing *E. Coli* Infection	3.3 (2016)	2.6 (2016)	2.5 (2016)
Salmonellosis	12.5 (2016)	10.9 (2016)	16.7 (2016)
Other			
Hepatitis C (Acute & Chronic)	49.4 (2016)	52.4 (2016)	--
Tuberculosis (Active Disease)	0.6 (2016)	0.7 (2016)	2.9 (2016)
West Nile Virus	0.0 (2016)	0.4 (2016)	0.67 (2016)
Rabies - Animal (# of cases)	5 (2016)	20 (2016)	5,508 (2016)

Source: DCHD, UDOH, CDC

In 2016, Davis County saw a significant increase in STIs, particularly gonorrhea, which accounted for 55.9% of all reported diseases. Similar increases also occurred throughout Utah and the U.S. between 2015 and 2016. Chlamydia cases in Davis County increased 5% and gonorrhea cases increased 48%. However, overall STI rates in Davis County are significantly lower than the U.S.

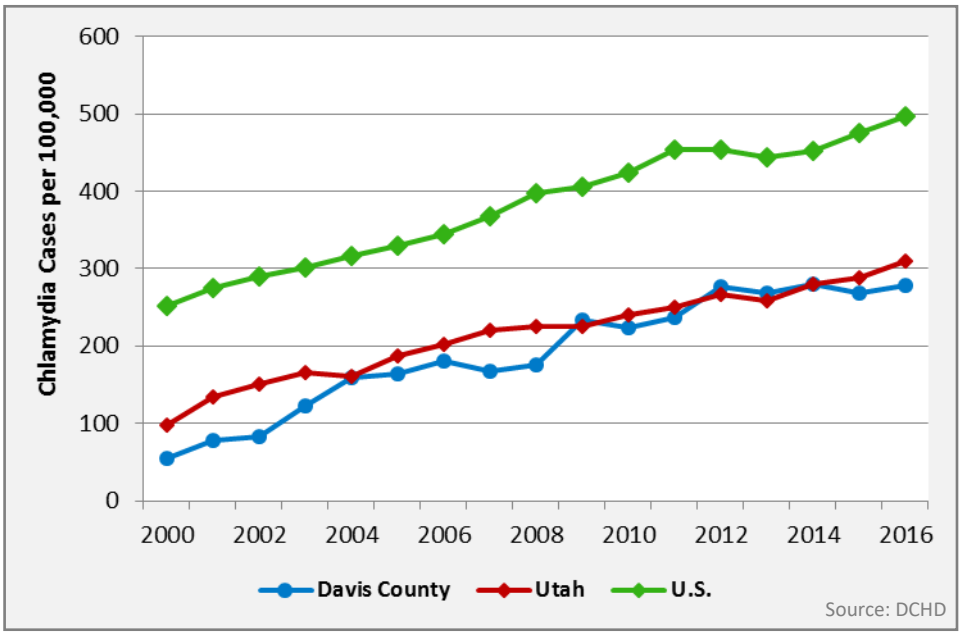
Source: CHR, 2017



Year	2007	2008	2009	2010	2011	2012	2013	2014
United States	370	401	408	422	453	453	447	456
Utah	224	228	225	242	252	267	264	284
Davis County	195	192	256	227	240	274	281	296

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Chlamydia is the most common STI reported in Davis County, making up over 85% of all STI cases. In Davis County, young people aged 20-24 have the highest rates of chlamydia infection. The STI rates in some Davis County cities are heavily impacted by special populations within those cities, including Hill Air Force Base (military population), Clearfield (Clearfield Job Corps Center), Farmington (Davis County Jail) and South Weber (Weber Basin Job Corps Center).

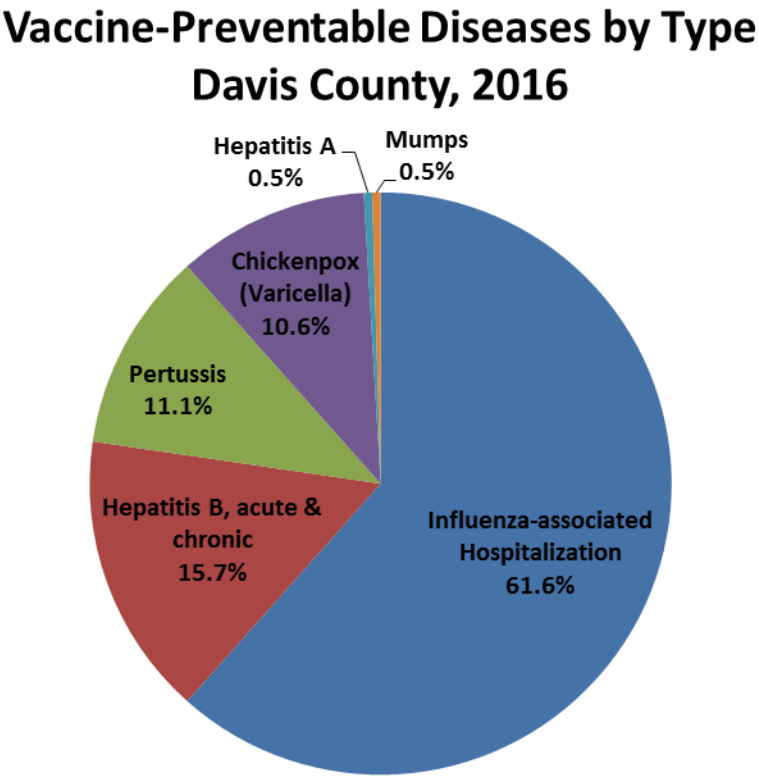


Vaccine-Preventable Diseases

Vaccine-preventable diseases (VPDs) are infectious diseases that have a vaccine available that may prevent diseases. Immunizations are the most effective step in protecting the community against VPDs. However, the diseases still occur because of importation, vaccine failure or breakthrough, and incomplete or no vaccinations.

When a VPD is diagnosed, it is important that public health measures be quickly implemented to contain the spread. The measures include the administration of prophylactic medications and vaccines, isolation of the infected individual, quarantine of exposed individuals, and public education.

In 2016, hospitalized influenza was the most commonly reported VPD in Davis County with 133 cases (61.6%), followed by hepatitis B with 34 cases (15.7%), pertussis with 24 cases (11.1%), chickenpox with 23 cases (10.6%) hepatitis A with one case (<1%), and mumps with one case (<1%).



"Stop doctors and government agencies from pushing and almost forcing vaccines. Let it be a personal choice not a forced one."
—Davis4Health Community Survey, Fall 2017

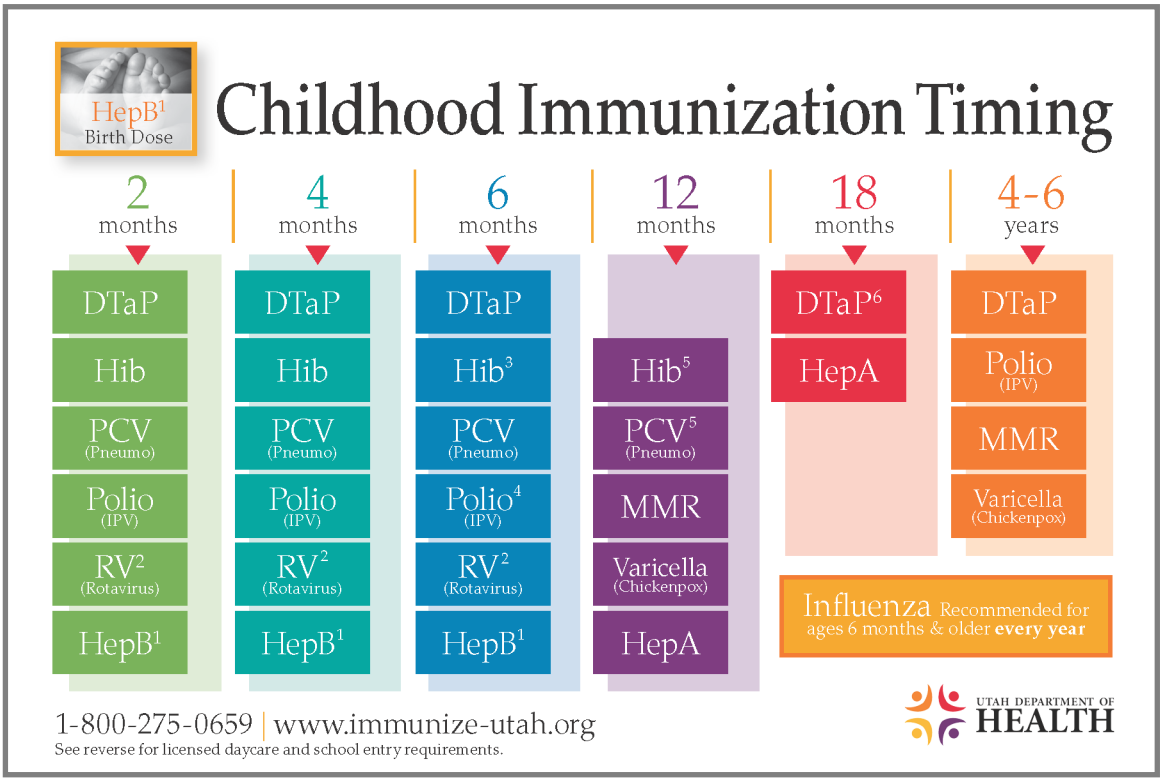
In community surveys some residents express concern about the anti-vaccine movement and equally as many residents express concern over vaccine safety and government overreach.

Vaccinations play a critical role in the prevention of many diseases. Many adults are under-immunized against vaccine preventable diseases like influenza, pneumococcal and hepatitis A. Barriers to adult immunization include, but are not limited to, cost, lack of knowledge and misconceptions about needed immunizations, and lack of recommendations from healthcare providers.

Immunizations	Davis	Utah	U.S.	Source
Adults Receiving Influenza Vaccination in Past 12 Months, Ages 65+ (2016)	57.0%*	54.9%	58.8%	IBIS, UDOH
Adults Ever Receiving Pneumococcal Vaccination, Ages 65+ (2015)	71.6%**	72.1%	71.9%	IBIS, UDOH
Children Adequately Immunized at Kindergarten Entry (2016)	92.2%***	91.3%	95.2%	UDOH
Children Adequately Immunized at 7th Grade Entry (2016)	93.3%	91.7%	—	UDOH
Immunization Exemptions Prior to Kindergarten Entry (2016)	4.5%	4.6%	—	UDOH
Immunization Exemptions Prior to 7th Grade Entry (2016)	5.3%	5.2%	—	UDOH

*Not meeting the HP2020 Target of 70% **Not meeting the HP2020 Target of 90%***not meeting HP2020 target of 95%
Source: IBIS, UDOH & Immunize-Utah 2016 Coverage Report

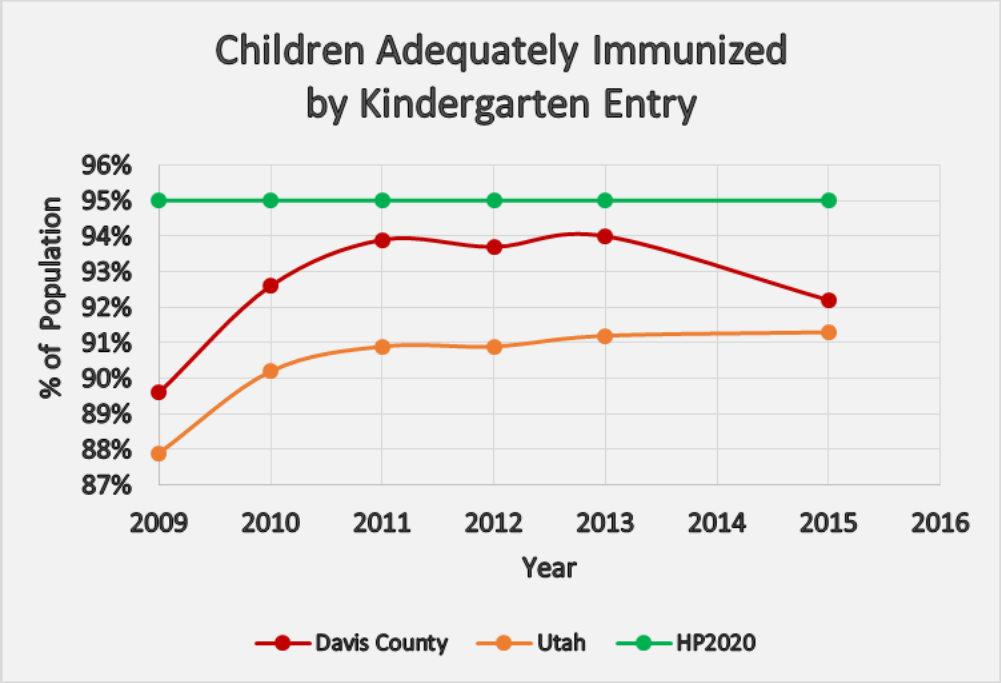
Utah is in the bottom 10 states in the U.S. for percentage of fully immunized children by age 2. Coverage levels are determined by assessing the basic childhood immunization series, referred to as the 4:3:1:3:3:1 series: 4 DTaP, 3 polio, 1 MMR, 3 Hib (Haemophilus influenza type b), 3 hepatitis B, and 1 chickenpox vaccine. Children under 2 need the most protection because of their developing immune system.

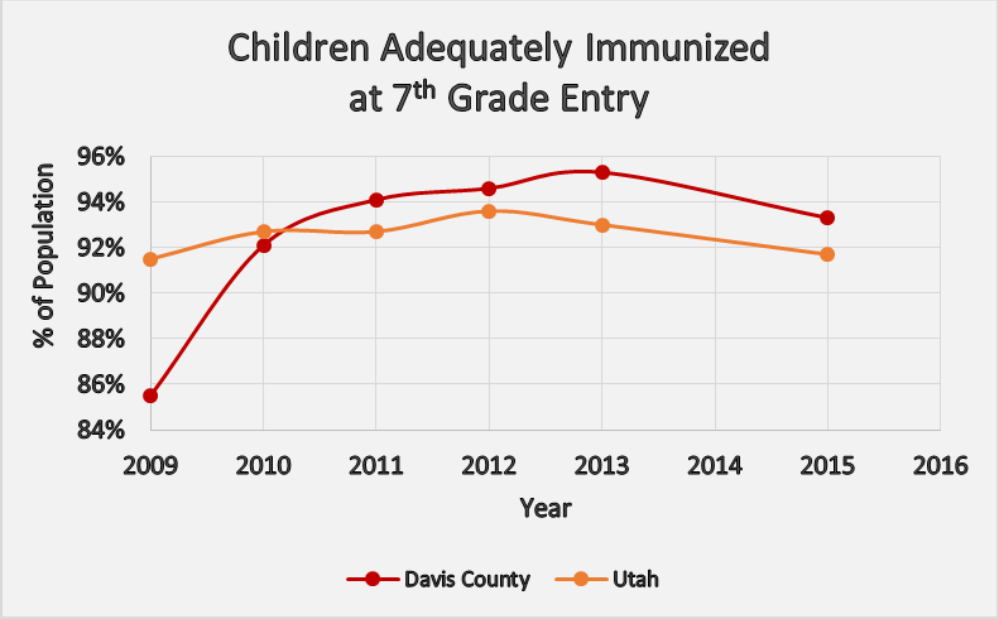


For child, teen, adult, and travel vaccination schedules, recommendations and requirements visit:
www.immunize-utah.org or www.cdc.gov/vaccines.

Immunizations for Children

State required kindergarten entry immunizations include: 4 doses of diphtheria, tetanus, and acellular pertussis (DTaP), 3 doses of polio, 2 doses of measles-mumps-rubella (MMR), 2 doses of varicella (chicken pox), 2 doses of hepatitis A, and 3 doses of hepatitis B. In Davis County, 92.2% of children entering kindergarten are adequately immunized. Children entering 7th grade must have hepatitis B, varicella and Tdap. In Davis County, 93.3% of youth entering 7th grade are adequately immunized. Immunization trends can often times be linked to state-wide policy changes.

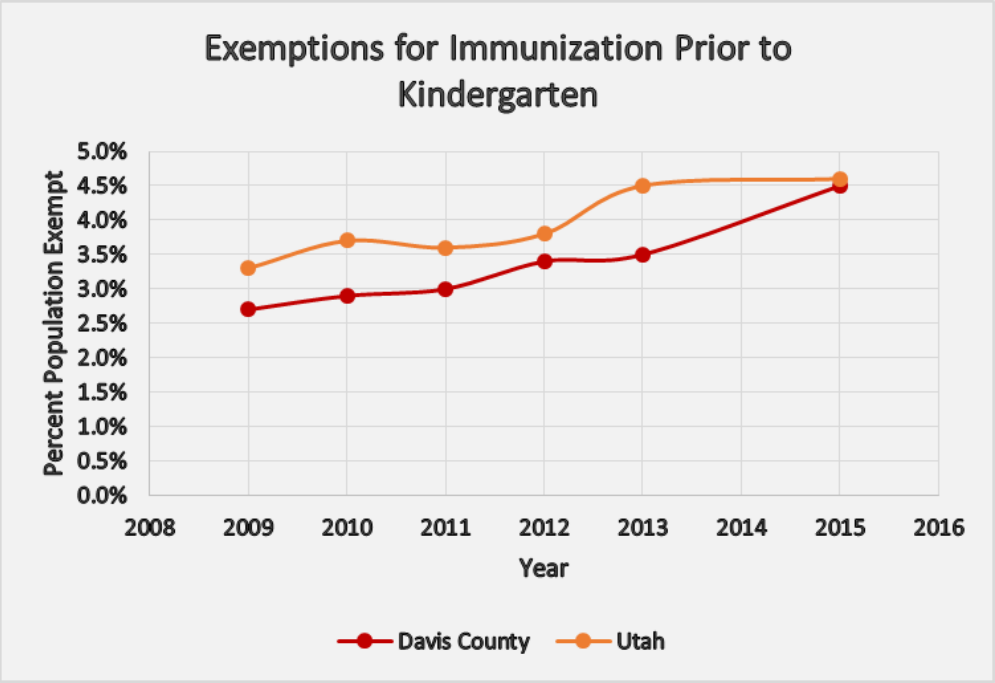


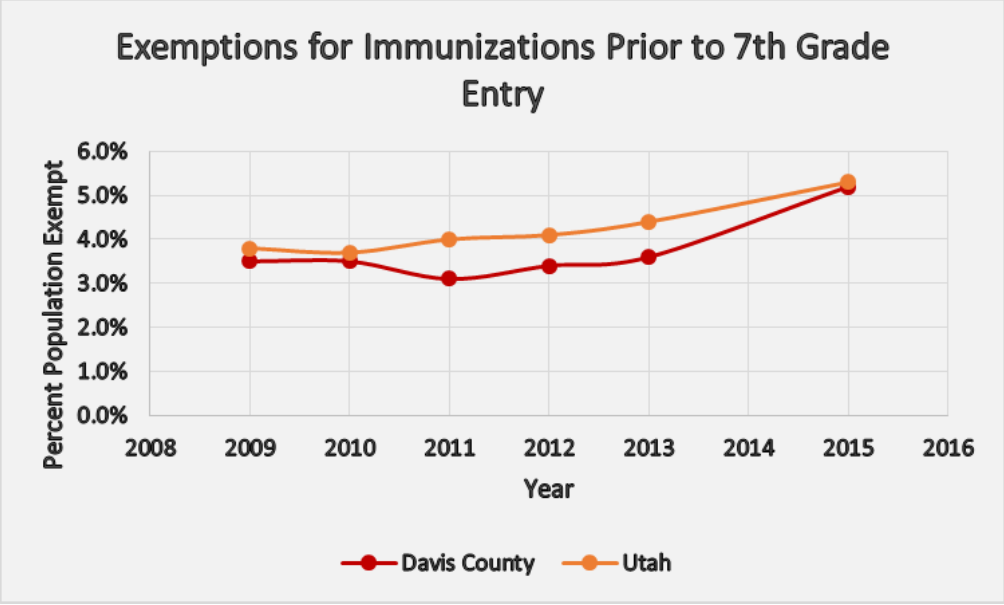


Source: Immunize-Utah 2016 Coverage Report

Vaccination Exemptions

A parent may claim an exemption to immunization for medical, religious, or personal reasons, as allowed by Section 53A-11-302 of the Utah Statutory Code. Immunization exemptions are increasing in Davis County and across the state. In 2016, a bill passed by the Utah State Legislature requires parents to complete a 20-minute online education course before obtaining a vaccine exemption for public school students while at the same time eliminating a requirement to visit the local health department to obtain the exemption.





VACCINES

Vaccines are the most important form of primary prevention against diseases.

Because of vaccines, some diseases (like polio and diphtheria) are becoming rare in the U.S.

Vaccination can prevent certain deadly diseases in infants, children, teens, adults and travelers of all ages.

CDC has given five reasons why you should vaccinate your child.

1. **Immunizations can save your child's life.**
2. **Vaccinations are very safe & effective.**
3. **Immunization protects others you care about.**
4. **Immunizations can save your family time & money**
5. **Immunization protects future generations.**

Vector-borne/Zoonotic Diseases

Vector-borne and zoonotic diseases are those diseases transmitted by an animal or insect. Vector-borne and zoonotic diseases do not occur very often in Davis County. Some of these diseases, such as malaria and dengue fever, are typically acquired outside of the United States. Most of the cases reported in 2016 were acquired outside of Utah and two cases were acquired outside of the United States.

In 2016, there were seven cases of vector-borne/zoonotic diseases reported in Davis County, including one chikungunya case, one hantavirus case, two Lyme disease cases, one spotted fever rickettsiosis case, and two Zika virus cases. Neither Zika case occurred in a pregnant female. One Zika case traveled internationally and had known exposure to mosquitoes. The second case of Zika virus was a contact to a confirmed case in Salt Lake County, who acquired the disease while out of the country and had passed away. Interviews with the Davis County case could not identify an established mode of transmission. This was the first Zika virus case known to have developed the disease through means other than the expected routes (travel to areas with ongoing Zika virus transmission, sexual contact with a person who recently traveled, or receipt of a blood transfusion/organ transplant). Public health officials and healthcare professionals continue to study this unique situation for new information regarding potential routes of exposure.

Disease (2016)	Location(s) of Exposure	Suspected Source of Infection	Number of Cases
Chikungunya	Bolivia	Mosquito bite	1
Hantavirus	Utah	Rodent droppings	1
Lyme Disease	Idaho, Illinois	Tick bite	2
Spotted Fever Rickettsiosis	Utah	Tick bite	1
Zika virus	Mexico, Utah	Mosquito bite	2

Source: DCHD

COMMUNICABLE DISEASE RESOURCES

Sexually Transmitted Diseases (STD) Testing and Treatment, Midtown Community Health Center
(801)393-5355, 22 South State Street, Suite 1007, Clearfield
www.midtownchc.org

Tuberculosis (TB) Testing and Treatment, Davis County Health Department, Disease Control & Prevention
801-525-5200, 22 South State Street, Suite 1007, Clearfield
http://www.daviscountyutah.gov/health/about-dchd/divisions/disease-control-prevention-division

Report a Foodborne Illness, I Got Sick
(801)525-5128, https://health.utah.gov/phaccess/public/illness_report

Immunization Clinics, Davis County Health Department
Bountiful/Woods Cross Clinic, 596 West 750 South, Woods Cross
Clearfield Clinic, 22 South State Street, 1st Floor
(801) 525-5020, http://www.daviscountyutah.gov/health/health-services/clinical-services-bureau

Incidence and prevalence rates for many mental health conditions are not readily available. The table below provides some estimates for the population.

Mental Health Condition Prevalence	Davis	Utah	U.S.	Source
Depression, Adult Prevalence (2014-2016, U.S. 2016)	21.7%	21.0%	17.3%	IBIS, UDOH
Postpartum Depression, Medicaid Population (2012-2013)	—	19.4%	—	PRAMS, UDOH
High Depressive Symptoms, Adolescents (2017)	6.9%	6.3%	—	PNAS
Moderate Depressive Symptoms, Adolescents (2017)	69.3%	68.5%	—	PNAS
High Mental Health Treatment Needs, Adolescents (2017)	19.4%	18.0%	—	PNAS
Moderate Mental Health Treatment Needs, Adolescents (2017)	26.0%	25.5%	—	PNAS
Autism, Age 8 per 1,000 (2012)	—	17.3	14.6	MMWR, CDC
Children with Current ADHD (2011)	—	5.8%	8.8%	CDC
Confusion/Memory Loss Age 60+ (2011)	16.8%	16.7%	12.7%	BRFSS, UDOH
Insufficient Sleep (2014)	31.0%	31.0%	—	CHR

Davis Behavioral Health is the publically funded local substance abuse and mental health agency in Davis County. The most common mental health client diagnosis information is provided here.

Mental Health Diagnosis: Davis Behavioral Health Clients					
Diagnosis	Adults Served		Diagnosis	Youth Served	
Anxiety	5,089	21.3%	Anxiety	2,165	16.5%
Substance Abuse	3,996	16.7%	Attention Deficit	2,124	16.2%
Depression	2,425	10.2%	Conduct Disorder	1,114	8.5%
Mood Disorder	2,359	10.0%	Mood Disorder	1,076	8.2%

Source: Division of Substance Abuse & Mental Health Annual Report, 2016

MENTAL HEALTH RESOURCES

Davis County Behavioral Health Directory
http://www.daviscountyutah.gov/docs/librariesprovider5/davis4health-docs daviscountymentalhealthdirectory.pdf

Davis HELPS Youth Services Directory
https://go.usa.gov/xn4FK

Davis Behavioral Health
24 Hour Crisis Service, 801.773.7060, dbhutah.org
Classes: www.dbhprevention.org/mental-and-emotional-health
Training: www.dbhprevention.org/trainings

Help Yourself. Help Others. Screening for Mental Health
helpyourselfhelpothers.org

The Church of Jesus Christ of Latter-Day Saints
www.lds.org/mentalhealth

Mindweather 101
www.alloflife.org

Autism

Current and accurate Autism Spectrum Disorder (ASD) prevalence rates are difficult to estimate because of differences in surveillance methods, definitions of diagnosis, and missing records. Prevalence rates of ASD have risen significantly in Utah and the U.S. Reasons for increases in rates of ASD are unknown but are likely to include multiple factors.

The Autism and Developmental Disabilities Monitoring (ADDM) Network is an active surveillance system that provides estimates of the prevalence and characteristics of ASD among children aged 8 years whose parents or guardians reside in 11 ADDM Network sites in the United States (Arkansas, Arizona, Colorado, Georgia, Maryland, Missouri, New Jersey, North Carolina, South Carolina, Utah, and Wisconsin).

Utah findings:

- About 1 in 58 or 1.7% of 8-year-old children were identified with ASD by UT-ADDM in 2012. This percentage is higher than the average percentage identified with ASD (1 in 68 or 1.5%) in all communities in the United States where CDC tracked ASD in 2012.
- Boys were 4.3 times more likely to be identified with ASD than girls.
- White children were 1.3 times more likely to be identified with ASD than Hispanic children.
- Among children identified with ASD who had IQ scores available, 20% had an intellectual disability.
- Even though ASD can be diagnosed as early as age 2 years, about half of children were not diagnosed with ASD by a community provider until after age 4 years and 2 months.

Sources:

- A Snapshot of Autism Spectrum Disorder in Utah: https://www.cdc.gov/ncbddd/autism/documents/Community_Report_Autism_Utah_WEB.pdf
- CDC, MMWR, 2016;65(No. SS-3): http://dx.doi.org/10.15585/mmwr.ss6503a1

AUTISM RESOURCES

Autism Council of Utah
www.autismcouncilofutah.org

Baby Watch Early Intervention Services
801-273-2998
www.utahbabywatch.org

Learn the Signs, Act Early
health.utah.gov/utahactearly

Utah Parent Center
801-272-1051
www.utahparentcenter.org

Utah State Office of Education
801-538-7587
www.schools.utah.gov/sars

Connect with UT-ADDM
Deborah Bilder, MD
University of Utah
801-585-9107
Debora.Bilder@hsc.utah.edu

Dental caries (tooth decay) is one of the most common health problems in the United States. Among school-aged children, 45% have caries in their permanent teeth. Among adults, 94% show evidence of past or current dental caries. Untreated dental caries is an important indicator of adequate and timely access to dental care. CDC has put a big emphasis on dental caries because it is largely preventable and affects a person's overall general health. Tooth decay is four times more common than asthma.

Oral Health Conditions	Davis	Utah	U.S.	Source
Poor Dental Health (2006-2010)	6.2%	8.6%	15.7%	CHNA.org
Prevalence of Dental Caries/Cavities Ages 6–9 (2015)	—	65.5%*	—	IBIS, UDOH
Untreated Decay Ages 6–9 (2015)	—	19.1%	—	IBIS, UDOH

Just over 6% of Davis County residents self-reported poor dental health. This represents the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. Davis County is doing better in this measure when compared to the state and nation.

In order to assess the oral health status of Utah school-aged children (6–9 years), the UDOH Oral Health Program (OHP) conducted a statewide oral health survey in fall 2015. The survey collected information on caries experience, untreated decay, need for urgent dental care, sealants, and access to care (e.g., insurance status, frequency of dental visits, and unmet dental needs).

Key findings from the report include:

- Overall, among 6–9 year-old children who received dental screening, nearly two-thirds (65.5%) had caries experience. Utah is far from meeting the HP2020 target of 49%.
- Close to one-fifth (19.1%) of children had untreated dental decay.
- About one-half (44.9%) of children had sealants present on at least one permanent molar tooth.
- Of all children screened, 1.5% had a need for urgent dental care.
- Children who met the criteria of long-term optimal levels of fluoride, either from fluoridated water or fluoride supplements, had substantially fewer decayed, missing, and filled tooth surfaces compared to children without optimal fluoride levels.

Source: 2015-2016 Oral Health Status of Utah's Children, http://health.utah.gov/oralhealth/resources/2015-2016%20Oral%20Health%20Survey.pdf

Access to dental care is a serious concern in Davis County identified in the 2015 Access to Healthcare Assessment. Oral health is seen as a primary care need and an issue where there is a large gap in preventive care. Community partners want an increase in dental providers and programs that serve low income and uninsured/underinsured residents.
More oral health screening is needed in children.

Health Factors

Health factors in the CHR represent what influences the health of a county. Four types of health factors are measured: health behaviors, clinical care, social/economic, and physical environment factors. The overall Health Factors summary score is a weighted composite of four components: Health behaviors (30%), Clinical care (20%), Social and economic factors (40%), and Physical environment (10%). Each of these factors is based on several measures in this assessment.

Davis County strengths are in indicators measuring social and economic factors (2nd) and clinical care (3rd). Health behaviors rank 7th. The lowest ranking is 21st for physical environment.

A 5th set of factors that influence health, genetics and biology, is not included in the CHR. Some biological and genetic factors affect specific populations more than others. Examples of biological and genetic determinants of health include:

- Inherited conditions, such as sickle-cell anemia, hemophilia, and cystic fibrosis
- Carrying the BRCA1 or BRCA2 gene, which increases risk for breast and ovarian cancer
- Family history of heart disease

HEALTH FACTORS

County Health Rankings measure 4 types of factors:

- **Health Behaviors**
- **Clinical Care**
- **Social & Economic**
- **Physical Environment**

Davis County strengths are social/ economic and clinical care.

CHR Health Factors Utah Summary

Rank	Health Factors
1	Morgan
2	Summit
3	Utah
4	Cache
5	Davis
6	Wasatch
7	Box Elder
8	Washington
9	Kane
10	Rich
11	Tooele
12	Sanpete
13	Salt Lake
14	Emery
15	Juab
16	Iron
17	Millard
18	Beaver
19	Sevier
20	Grand
21	Weber
22	Carbon
23	Wayne
24	Duchesne
25	Garfield
26	Uintah
27	San Juan

Not Ranked: Daggett & Piute

Many health outcomes are directly linked to certain health behaviors and risk factors. Practicing healthy behaviors, like exercising, or refraining from unhealthy behaviors, like smoking, can reduce an individual's risk for many chronic conditions and adverse health outcomes. In addition to practicing healthy behaviors, monitoring and addressing certain risk factors, like blood pressure, can greatly reduce the risk for negative health outcomes. One health behavior can have a large effect on individual risk.

Health behavior indicators in this section include tobacco, alcohol, and drug use; healthy eating; and physical activity. Other behaviors of interest to community partners include use of technology, sexting/pornography, safe sex practices, and sleep.

Much more information about youth substance abuse in Davis County is available in the 2017 Prevention Needs Assessment Survey (PNAS) Results. The report also includes risk and protective factor indicators, which measure specific aspects of a youth's life experience that predict whether he/she will engage in problem behaviors.

Obesity, motor vehicle crash deaths, sexually transmitted infections, and teen birth rates are indicators that are included in the health behaviors section of the CHR as proxy measures of behavior. In this assessment those indicators were covered previously in the morbidity section, pages 49-68.

Preventive care measures can be found in the clinical care section, page 87.

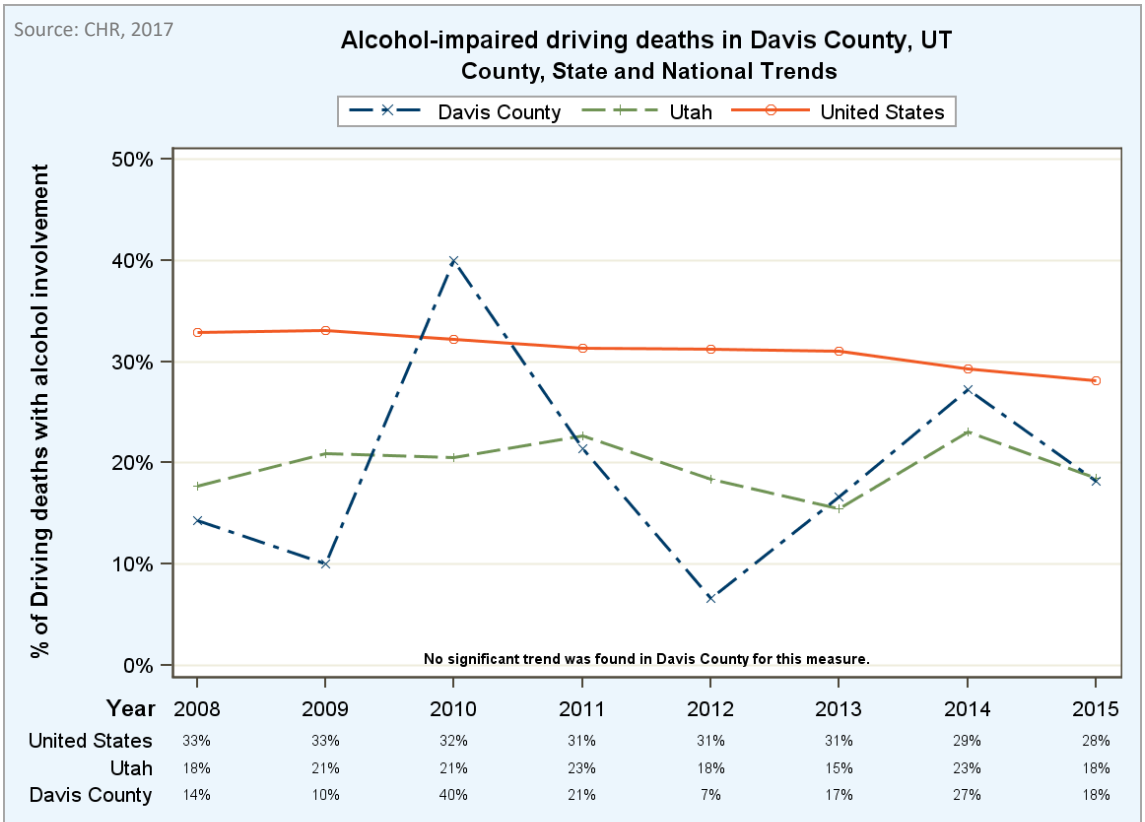
Walking, biking, use of transit, driving, seatbelt use and crash data can be found in the physical environment section, pages 130-137.

Tobacco, Alcohol & Drug Use

Davis County tobacco and alcohol use rates are some of the lowest in the country. Davis County is ranked in the top 10% best of all counties in the nation for low adult smoking rate of 8.7%. The County is also ranked in the top 10% best of all counties across the country for low binge drinking among adults, 8.6%.

Tobacco, Alcohol & Drug Use	Davis	Utah	U.S.	Source
Adult Smoking (2014)	8.7%	9.5%	16.8%	TPCP, UDOH
Youth Smoking, Grades (2017)	2.8%	3.9%	-	SHARP
Adult E-Cigarette/Vaping (2014-2016)	4.3%	4.7%	3.8%	IBIS, CDC
Youth E-Cigarette/Vaping (2017)	8.9%	5.8%	16.0%	SHARP, CDC
Pregnant Women Smoking (2014, 2014, 2011)	2.4%	2.9%	10.0%	TPCP, UDOH
Illegal Sales of Tobacco to Underage Buyers (Davis/Utah 2015, U.S. 2012)	5.4%	8.1%	9.1%	TPCP, UDOH
Binge/Excessive Drinking, Adults (2014)	8.6%	11.4%	16.0%	UDOH, CDC
Youth Alcohol Use (2017)	5.1%	7.6%	-	SHARP
Youth Binge Drinking (2017)	3.0%	4.3%	-	SHARP
Illegal Sales of Alcohol to Underage Buyers (2013)	8.0%	8.3%	-	EASY/UHSO
Alcohol-impaired Driving Deaths (2015)	18%	18%	28%	CHR
Youth Prescription Drug Abuse (2017)	2.5%	2.6%	-	SHARP
Youth Marijuana (2017)	4.0%	6.1%	7.1%	SHARP, CDC

Source: CHR, 2017



Davis Behavioral Health (DBH) is the publicly funded local substance abuse and mental health agency in Davis County. A summary of primary substance of abuse for DBH clients at admission is provided here. The most common abused substance among clients receiving treatment is methamphetamine.

2016 Primary Substance of Abuse at Admission Davis Behavioral Health Clients

Substance	# of Clients	% of Clients
Methamphetamine	321	30.8%
Heroin	254	24.4%
Alcohol	162	15.6%
Marijuana/Hashish	110	10.6%

Source: Division of Substance Abuse & Mental Health Annual Report, 2016

SUBSTANCE ABUSE TREATMENT & RECOVERY RESOURCES

Davis County Behavioral Health Directory
http://www.daviscountyutah.gov/docs/librariesprovider5/davis4health-docs/daviscountymentalhealthdirectory.pdf

Davis HELPS Youth Services Directory
https://go.usa.gov/xn4FK

Davis Behavioral Health
Outpatient and Recovery Services, 801.773.7060, dbhutah.org
Opioid Community Collaborative, www.dbhutah.org/prescription-drug-misuse
Substance Abuse Classes, www.dbhprevention.org/substance-abuse

Ending Nicotine Dependence (END) Class
http://www.daviscountyutah.gov/health/health-services/health-education-services/tobacco-education

Opioid Addiction Treatment Providers
http://www.daviscountyutah.gov/health/health-services/health-education-services/treatment-in-davis-county

Help Yourself. Help Others. Screening for Mental Health & Substance Abuse
helpyourselfhelpothers.org

The Church of Jesus Christ of Latter-Day Saints
Addiction Recovery Program, addictionrecovery.lds.org

Red Barn Farm
Long Term Recovery, 801.939.5100, www.redbarnfarms.org

Healthy Eating

Fruits and vegetables contain essential vitamins, minerals, fiber, and other compounds that may help prevent many chronic diseases. Fruits and vegetables help people to achieve and maintain a healthy weight because they are relatively low in energy density. These indicators are relevant because unhealthy eating habits may be the cause of significant health issues, such as obesity and diabetes. When it comes to fruits and veggies, more matters.

Healthy Eating	Davis	Utah	U.S.	Source
Fruit Consumption, 2 or more servings (2015)	29.4%	29.8%	28.8%	IBIS, UDOH
Vegetable Consumption, 3 or more servings (2013, 2015)	15.3%	17.4%	16.8%	IBIS, UDOH
Breastfeeding, children 0-5 who were ever breastfed (2014)	-	89.6%	79.2%	DCHD, WIC
Breastfeeding, WIC children 0-5 who were ever breastfed (Davis & Utah 2015, U.S. 2014)	82.0%	86.0%	89.6%	DCHD WIC

The following recommendations for the Davis County food system and public health partners are from the 2017 Food Environment Assessment:

- Raise awareness and improve reach of underutilized nutrition education resources and programs such as USU nutrition education, diabetes prevention/management classes, WIC, etc.
- Work with Bountiful Farmer's Market to implement and offer Double Up Bucks SNAP benefit.
- Continue great work of partnerships to use local agriculture excess.
- Continue promotion and support and expansion of community gardens and their benefits.
- Promote benefits of family meal time and programs that teach residents how to plan and prepare nutritious family meals.
- Promote and recommend land use policies and zoning regulations supporting healthy eating and local agriculture.
- Review and improve school food policies and curriculum where possible in conjunction with federal requirements.
- Ensure information about Nutrition Education, Healthy Eating, and Food Assistance Resources is accessible to the public and that human service providers are aware of what exists.

These recommendations and much more about the status of the food environment can found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments. Additional food insecurity data and food environment data can be found in other sections of this report (pages 98-99 and 125-127).

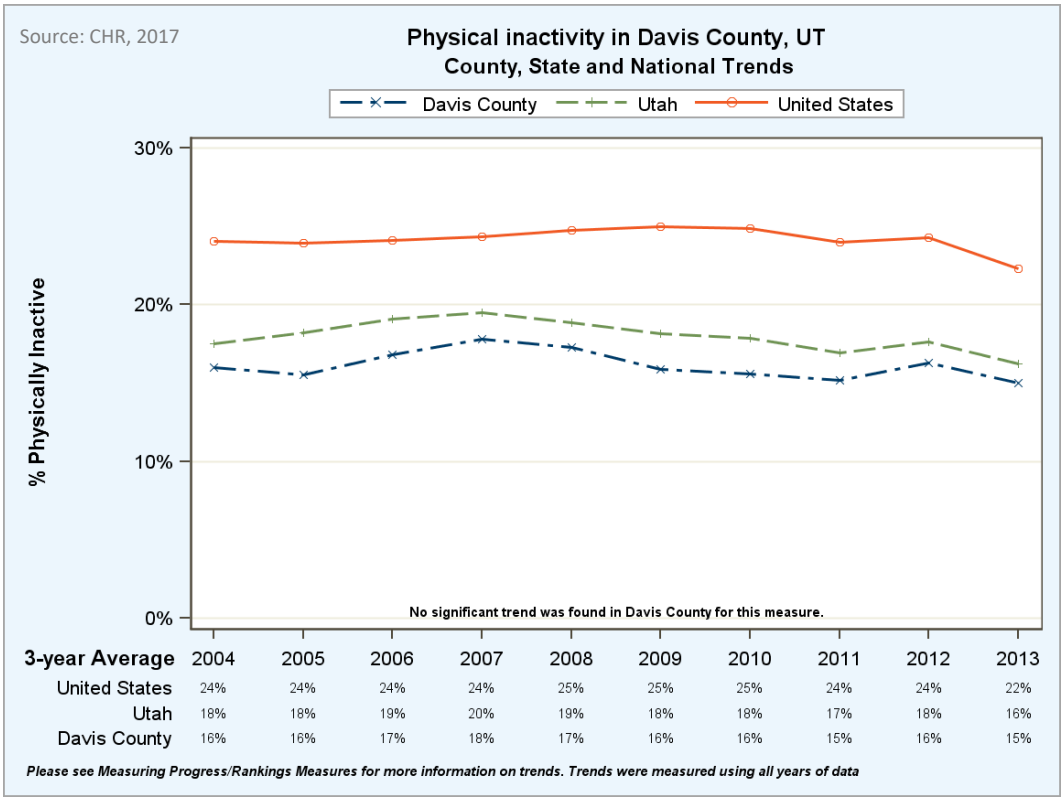
Healthy eating resources can be found at Davis4Health.org and include:

- Community Gardens
- Produce Stands
- Farmers' Markets
- Nutrition Education
- Breastfeeding
- Food Assistance

Physical activity has been shown to reduce the risk of chronic diseases, improve physical and mental health and help maintain a healthy weight. Weight-bearing activity can improve bone density, reducing the risk of hip fractures in elderly persons. Regular physical activity is also known to improve affective disorders such as depression and anxiety, and increase quality of life and independent living among the elderly. Decreased physical activity has been related to disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality independent of obesity.

Physical Activity	Davis	Utah	U.S.	Source
Recommended Physical Activity Adults (2015)	56.8%	55.5%	50.8%	IBIS, UDOH
Recommended Physical Activity Grades 9-12 (2017)	18.3%	19.2%	27.1%	IBIS, UDOH
Physical Inactivity, Ages 20+ (2013)	15.0%	16.0%	—	CHR
Activity Limitation, Ages 18+ (2015)	17.7%	17.9%	19.3%	IBIS, UDOH

The Centers for Disease Control and Prevention recommends adults participate in at least 30 minutes of moderate-intensity aerobic physical activity every day. In 2015, 56.8% of adults and 18.3% of high school students in Davis County reported getting the recommended amount of physical activity. An estimated 15% of adults ages 20 and over in Davis County reported no leisure time physical activity. This is low compared to the national average. Davis County is within the top 10% (best) of all counties for this measure.



HEALTHY EATING & PHYSICAL ACTIVITY RESOURCES

NUTRITION EDUCATION

- **USU Extension:** 80 E Sego Lily Drive, Kaysville, 435.919.1334, extension.usu.edu/davis
  Expanded Food Nutrition Education Program (EFNEP), Food $ense, SNAP-Education (SNAP-ED), Cooking Classes, Youth Can Cook Program
- **Women, Infants, and Children (WIC), Davis County Health Department**
  Clinics in Clearfield and Woods Cross, 801.525.5010, http://www.daviscountyutah.gov/health/health-services/women-infants-children-(wic)-2-0

LOCAL WEBSITES

- **Davis County Staycation Guide:** http://www.co.davis.ut.us/docs/librariesprovider5/community-health-services/sg-edit-final.pdf
- **Davis County Utah Trails and Bikeways Map**: www.daviscountyutah.gov/trails
- **Eat Well Utah:** eatwellutah.org
- **Utah Family Meals:** utahfamilymeals.org
- **Davis County Community Gardens, Farmers Markets, and Produce Stands:** http://www.daviscountyutah.gov/health/about-dchd/divisions/community-health-services-division/nutrition
- **Davis4Health Resource Locator:** davis4health.org

NATIONAL RESOURCES

- **Recommended Physical Activity Guidelines:** https://health.gov/paguidelines/guidelines/adults.aspx
- **2015-2020 Dietary Guidelines for Americans:** https://health.gov/dietaryguidelines/2015/
- **Choose My Plate:** www.choosemyplate.gov
- **Surgeon General's Call to Action to Promote Walking and Walkable Communities:** https://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/index.html
- **Healthy Food Environments:** https://www.cdc.gov/obesity/strategies/healthy-food-env.html
- **Breastfeeding Promotion & Support:** https://www.cdc.gov/breastfeeding/promotion/index.htm

Access to Care

Access to healthcare measures accessibility to needed primary care, healthcare specialists, emergency treatment, mental healthcare, and dental care. While having health insurance is a crucial step toward accessing the different aspects of the healthcare system, health insurance by itself does not ensure access.

This section includes measures of insurance coverage, cost of healthcare, healthcare provider ratios, preventable hospital stays, mental health treatment, substance abuse treatment, diabetes management, and preventive care.

Quality of Care

A basic way of explaining quality healthcare is the right care, for the right person, at the right time. The Institute of Medicine (IOM) further defines the quality of healthcare as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." The IOM lists six characteristics of quality healthcare: safe, timely, effective, efficient, equitable, and patient centered.

This section includes the results of a hospital acquired infections report.

Quality Comparison Tools

- Utah Health Plan Quality of Care Report (HEDIS): stats.health.utah.gov/reports/hedis
- 2017 Utah Health Plan Patient Experiences Report: http://stats.health.utah.gov/reports/cahps/2017
- Utah Healthcare Associated Infections Annual Report: health.utah.gov/epi/diseases/HAI/surveillance
- Utah Healthscape: new.utahhealthscape.org
  Online guide to navigating the Utah healthcare landscape, find comprehensive listings of Utah doctors, hospitals, clinics, nursing homes and home health care companies. You'll also find information about the quality of care they deliver and what you might expect to pay.
- National Hospital Comparison: www.medicare.gov/hospitalcompare
- Utah PricePoint, utpricepoint.org
  This website allows health care consumers to receive basic information about services and charges at Utah hospitals, and compare between hospitals.

Access to Healthcare

DCHD and healthcare system partners convened in August 2014 to assess the capacity of the healthcare system and community members' access to healthcare services in Davis County. This is a summary of the findings about healthcare system partners' experiences providing and connecting residents to healthcare services. The full report can be found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.

Utah/Davis County Clinical Care Measures Compared to the Nation

- Lower prevalence of disease
- Lower than average healthcare expenditures
- Competitive insurance market
- Low unemployment rate
- Higher percentage of population with employer-sponsored insurance
- Higher percentage of the population underinsured
- Lower percentage of population on Medicaid

Health Professional Shortage Areas (updated 2017)

- Not a federally designated primary care health professional shortage area
- Designated as a full-county geographical health professional shortage area for mental health (psychiatric physicians only)
- Low-income population dental health professional shortage area for eight census tracts in north end of the county (Clearfield area)
- One Federally Funded Community Health Center (Midtown Medical & Dental Clinics in Clearfield)

Data Gaps

- County residents enrolled in Primary Care Network (PCN)
- County residents enrolled via Affordable Care Act (ACA) Marketplace
- Davis County residents in the Medicaid gap (not eligible for Medicaid, not receiving subsidies through ACA)
- Prescription drug use (cost, most prescribed, who is receiving them)
- Access to home healthcare
- Dental care (insurance coverage, needs of children and young people)
- Underinsured (how many, who they are, coverage gaps/costs, enrollment in high deductible plans)
- Unnecessary emergency room visits and use of EMS to access services

Other Potential Data Sources

- All Payer Claim Database (APCD) – Office of Healthcare Statistics, UDOH, Norman Thurston, Director
- Utah Controlled Substance Database - Department of Professional Licensing (DOPL)
- Clinical Health Information Exchange (CHIE) – Utah Health Information Network, UDOH, Jan Root, Executive Director
- Underinsured Report - America's Underinsured, 2014, A State-by-State Look at Health Insurance Affordability Prior to the New Coverage Expansions, The Commonwealth Fund

Access to Healthcare Community Themes

- In Davis County, populations which experience the greatest barriers to accessing healthcare services are those with low income, those who are uninsured/underinsured, and those with mental/behavioral health issues.
- Mental/behavioral health services and programs are most difficult to access, and this is viewed as the most urgent healthcare access issue in Davis County.
- There is a gap in education for residents about what healthcare services are available, what services are covered by insurance, the importance of preventive care, and what services are available for low income/ uninsured/underinsured individuals.
- Access to dental care is a serious concern in Davis County. Oral health is seen as a primary care need and an issue where there is a large gap in preventive care. Community partners want an increase in dental providers and programs that serve low income and uninsured/underinsured residents. More oral health screening is needed in children.

Recommendations

- Davis County could benefit from an increase in healthcare system navigators who educate about services available, connect the community to resources, and help residents access the healthcare system. Regular training for county navigators was suggested. Navigators to be invited include: care coordinators, case managers, social workers, outreach workers, EMS, dispatchers, 211, religious leaders, etc.
- The county's current efforts to develop a health resource locator and a behavioral health provider directory should be linked and expanded to include healthcare services to help meet the need for an unbiased, centralized clearinghouse of healthcare system resources. This information can be used by residents, providers, and navigators. The online directory is a tool to increase public awareness about services and resources that are available.
- Improving access to behavioral health services is a top health priority in the county. Those interested in helping can join the community health improvement action group working on the issue. To find out more information or to participate in group meetings contact, Davis County Health Department, 801-525-5212.

Healthcare Facilities

There are three main hospitals in Davis County:

- Davis Hospital and Medical Center in Layton (a Steward Family Hospital)
- Lakeview Hospital in Bountiful (A MountainStar Healthcare Facility)
- South Davis Community Hospital in Bountiful. This is a nonprofit facility, that provides specialty services for rehabilitation, transitional care, and long-term care.

Intermountain Healthcare, the largest employer and healthcare system in Utah, has plans to open a hospital in Layton in 2018. Davis County does not have a Level 1 Trauma Center within its boundaries. Residents needing the highest level of surgical care are sent to Salt Lake or Ogden.

There are 12 urgent care facilities operated by five different healthcare systems or companies throughout Davis County.

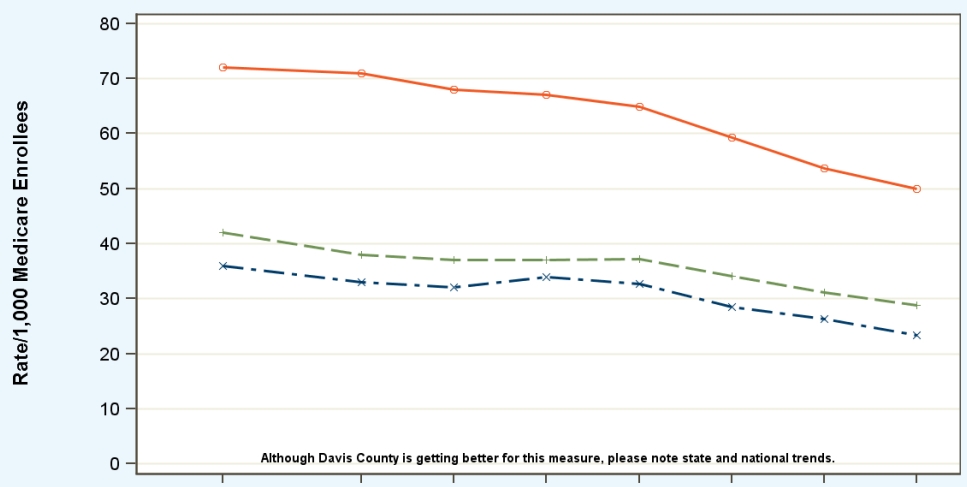
Midtown Community Health Center is a federally qualified health center. The Midtown Davis County Medical and Dental Clinics are co-located in the same building as the DCHD in Clearfield.

More information about healthcare facilities located in the county can be found in the health resource locator at Davis4Health.org.

Preventable Hospital Stays

Hospitalization for diagnoses treatable in outpatient services suggests the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care. Davis County had 23 hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees. This low rate puts Davis County in the top 10% best in the U.S. for this measure.

Source: CHR, 2017



Year(s)	2006-2007	2008	2009	2010	2011	2012	2013	2014
United States	72	71	68	67	65	59	54	50
Utah	42	38	37	37	37	34	31	29
Davis County	36	33	32	34	33	28	26	23

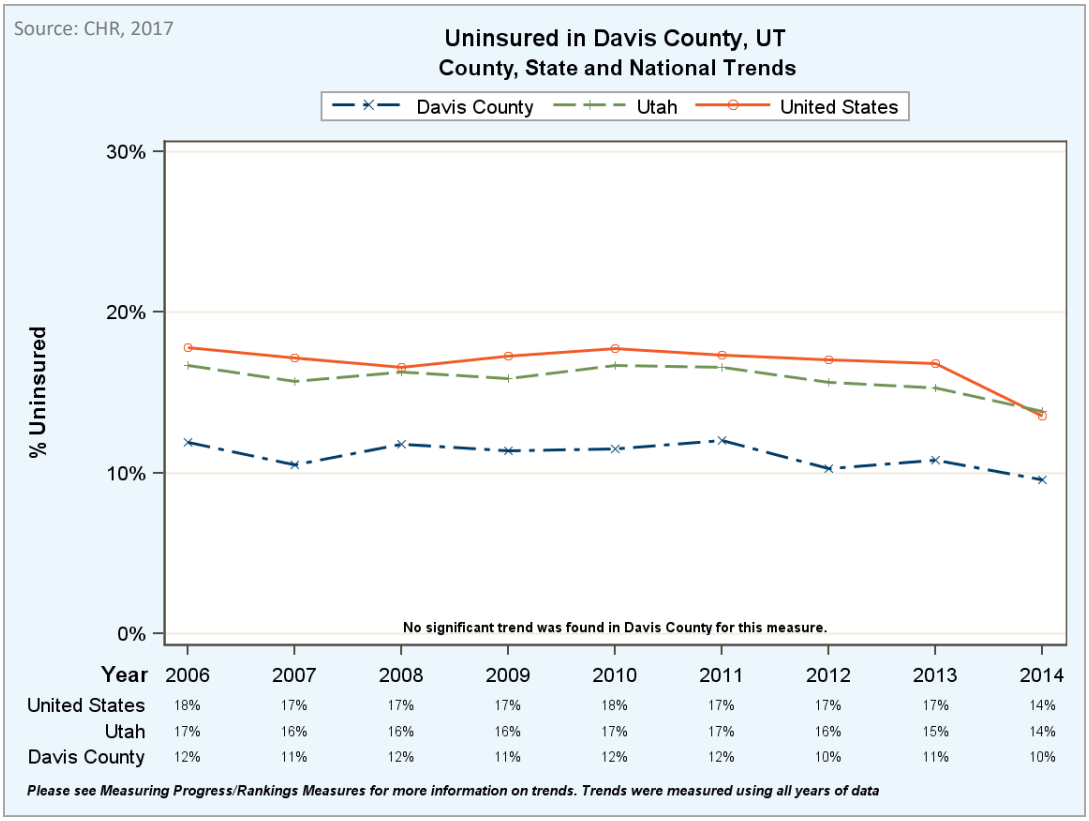
Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Lack of health insurance coverage is a significant barrier to accessing needed healthcare. Employer-based coverage is the largest source of health coverage in the U.S., and many unskilled, low-paying, and part-time jobs do not offer benefits. Uninsured individuals experience more adverse outcomes (physically, mentally, and financially) than insured individuals. Individuals without insurance are less likely to receive preventive and diagnostic healthcare services, are more often diagnosed at a later disease stage, and, on average, receive less treatment for their condition than insured individuals. The IOM reports that the uninsured population has a 25% higher mortality rate than the insured population.

There are several surveys that estimate the population of uninsured and among different age groups. Depending on the survey, Davis County rates range from 4.9%–12%.

Insurance Coverage	Davis	Utah	U.S.	Source
No Health Insurance Coverage (2016)	4.9%	8.7%	8.6%	BRFSS, UDOH
Uninsured Adults (2014)	12.0%	16.0%	—	CHR
Uninsured Children (2014)	7.0%	9.0%	—	CHR

Source: CHR, 2017



A competitive health insurance market, low unemployment rates, and a high percentage of the population with employer-sponsored insurance are favorable conditions for residents.

The community is concerned about the high percentage of the population that is underinsured and/or has high deductible plans. Also of concern is the very limited population eligible for Medicaid and lack of Medicaid expansion in Utah.

Affordable Care Act (ACA), Health Insurance Market Place,

- Utah's ACA enrollment: 3rd highest growth rate among 39 states using healthcare.gov, (2017)
- Utah ACA enrollment: 84,601 in 2014 to 176,889 in 2017
- 87% of Utahns qualified for ACA premium subsidies (2014)
- 28 plans, 2 insurers (2018)
- Utah's 18-34 year olds (invincibles) enrolling at a higher rate than other states (2017)

ACA enrollment numbers are available through Utah Health Policy Project (UHPP), a nonpartisan, nonprofit organization advancing sustainable healthcare solutions for underserved Utahns through better access, education, and public policy. UHPP is a good source for data and information about access to affordable physical, oral and behavioral healthcare, enrollment in safety net healthcare insurance programs, underserved populations, and Medicaid expansion at www.healthpolicyproject.org. UHPP's Utah Healthcare Index, 3rd Edition, 2017 can be found in **Appendix 9**.

Health Insurance Market Place (2014)	Davis	Utah	U.S.	Source
Healthcare.gov (ACA Federal Exchange for Individuals & Families)	--	176,889	8,019,763	UHPP
Avenue H (Individuals)	939	10,635	--	Ave H
Avenue H (State Exchange for Small Employer Groups)	43	473	--	Ave H

Avenue H, Utah's Small Business Health Insurance Marketplace, began in 2010. It is an online health insurance marketplace designed to help Utah's small businesses with 1- 50 eligible full-time equivalent employees. Avenue H was disbanded by the Utah Legislature in 2017. Wind down operations will occur during 2018. Most of Avenue H's customers are high-end employers, law and accounting firms.

Davis County has a smaller proportion of the population that qualifies and is enrolled in government funded health insurance programs.

Insurance Coverage	Davis County	Utah	U.S.	Source
Medicaid (2014)	7.3%	13.8%	22%	Statista, UDOH
CHIP (2016)	2.8%	1.9%	2.8%	KFF.org, UDOH
Medicaid/CHIP (2017)	8.9%	12%	20%	CMS, UDOH
Medicare (2015)	10.0%	12%	17%	KFF.org, UDOH
Primary Care Network (PCN)	—	13,779	—	UDOH

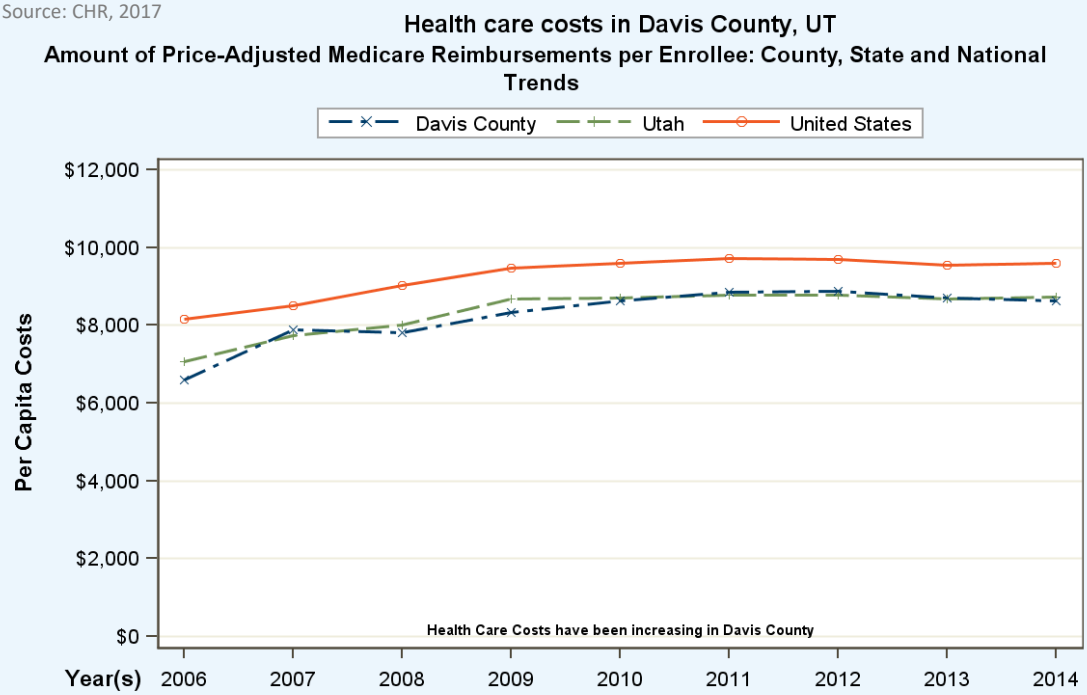
In Utah, cost is the most commonly reported barrier to getting needed healthcare. The percent of adults who could not see a doctor in the past 12 months because of cost is 8% in Davis County compared to 11.6% in Utah and 13.5% nationally. Utah adults with low incomes had a higher rate of reporting cost as a barrier to healthcare than those with higher incomes, as did those without health insurance versus the insured.

Cost of Healthcare	Davis	Utah	U.S.	Source
Cost as a Barrier to Care in Past Year (2016)	8.0%	11.6%	13.5%	IBIS, UDOH
Price Adjusted Medicare Reimbursements (2014)	$8,638	$8,717	$9,589	CHR
Average Inpatient Hospital Discharge Charges (2014)	$12,150	$12,731	—	IBIS, UDOH

Medicare Costs

The price-adjusted Medicare spending (Parts A and B) per enrollee in Davis County is $8,631. This is slightly below the state average.

Source: CHR, 2017



Year(s)	2006	2007	2008	2009	2010	2011	2012	2013	2014
United States	$8,150	$8,507	$9,021	$9,477	$9,584	$9,720	$9,687	$9,541	$9,589
Utah	$7,070	$7,731	$8,010	$8,685	$8,710	$8,787	$8,774	$8,673	$8,717
Davis County	$6,595	$7,892	$7,819	$8,319	$8,631	$8,861	$8,870	$8,698	$8,638

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Healthcare costs are an important measure of the efficiency of a healthcare system. However, in order to rank a measure, an "ideal" value must be known. Research shows that too little or too much healthcare spending is not good for healthcare outcomes. However, it is not yet known what the "ideal" level of spending on patients should be.

Utah PricePoint allows healthcare consumers to receive basic information about services and charges at Utah hospitals, and compare between hospitals and can be found online at utpricepoint.org.

Healthcare Provider Ratios

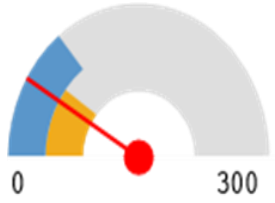
Access to care requires not only financial coverage but also access to providers. While high rates of specialist physicians have been shown to be associated with higher, and perhaps unnecessary utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.

Healthcare Provider Ratios	Davis	Utah	Source
Ratio of Primary Care Providers per Population (2014)	1:2,020	1:1,740	CHR
Ratio of Dentists per Population (2015)	1:1,610	1:1,490	CHR
Ratio of Mental Health Providers per Population (2016)	1:600	1:385	CHR
Ratio of School Nurses per Student Population (2013-2014)	1:4,662	1:4,537	DSD

Primary Care Physicians

The ratio of physicians to persons in a population is an indication of the capacity of the health system and the access to care for persons in the population. In Davis County, there are 2,020 residents for every one primary care physician. Primary care physicians include practicing physicians (M.D. and D.O.) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics.

Primary Care Physicians, 2014
Rate per 100,000 Population



- Davis County, UT (51.87)
- Utah (65)
- United States (87.8)

Source: CHNA

Dentists

There are 1,610 residents for every one dentist in Davis County.

Mental Health Providers

There are 600 residents for every one mental health provider in Davis County. Mental health professionals include child psychiatrists, psychiatrists, and psychologists active in patient care in a given county. Davis County is designated as a full-county geographical health professional shortage area for mental health which is a federal designation calculated by counting psychiatric physicians only. There are 10 full time (FTE) psychiatrists in the county for a population of 342,281. A psychiatrist per every 30,000 population is required to not be considered a shortage area. Psychiatrists are in short supply across the state and the entire country.

School Nurses

There are 4,662 students to one school nurse in Davis County. This ratio is not evenly dispersed throughout the state, some districts have a ratio as high as 1:6,191.

The annual report from the Utah Division of Substance Abuse and Mental Health looks at the public mental health system in each local jurisdiction. The data shows the estimated number of adults and youth who need mental health services and the actual number who needed substance abuse treatment versus the capacity of the local substance abuse and mental health authority (in this case Davis Behavioral Health) to provide services.

Davis Behavioral Health, Local Substance Abuse & Mental Health Provider Agency	Adults (18+)		Youth (12-17)	
	# Need Treatment	Current Capacity	# Need Treatment	Current Capacity
Mental Health Treatment Needs vs. Clients Served	10,958	3,925	11,363	2,154
Substance Abuse Treatment Needs vs. Treatment Capacity	13,163	1,003	1,479	69

Source: Division of Substance Abuse & Mental Health Annual Report, 2016

Davis Behavioral Health has contracts to provide mental health services to individuals with Medicaid, Medicare, commercial insurance, and unfunded county residents. Some individuals needing mental health and substance abuse treatment find service through private providers. Utilization and access statistics for other mental health and substance abuse service providers are not available. Stigma around mental health is a another factor that prevents people from seeking services even though a need exists.

In 2014 a survey of Davis County's behavioral health providers was used to assess mental, emotional, and substance abuse services offered in Davis County and to better understand the factors affecting access to behavioral health services. Seventy-nine providers responded to the Assets, Barriers, and Gap Analysis.

What's working well: (All were mentioned for the variety of programs they offer.)

- Davis Behavioral Health
- Private providers
- LDS Family Services

Barriers accessing behavioral health services:

- Insurance coverage issues
- Affordability
- Stigma
- Lack of awareness or education about services
- Lack of psychiatrists and other providers
- Too stressful or difficult to seek help

Gaps:

- Lack of services for low income individuals
- Lack of psychiatrists
- Medication Management
- Transitional/respite care/housing

Suggestions for improvement included more education about services, education to reduce stigma, and more funding for behavioral health.

Access to mental health services was identified as a top priority by the Davis County Human Service Directors in 2017, in addition to being a current priority of the Davis County 2014-2018 Community Health Improvement Plan.

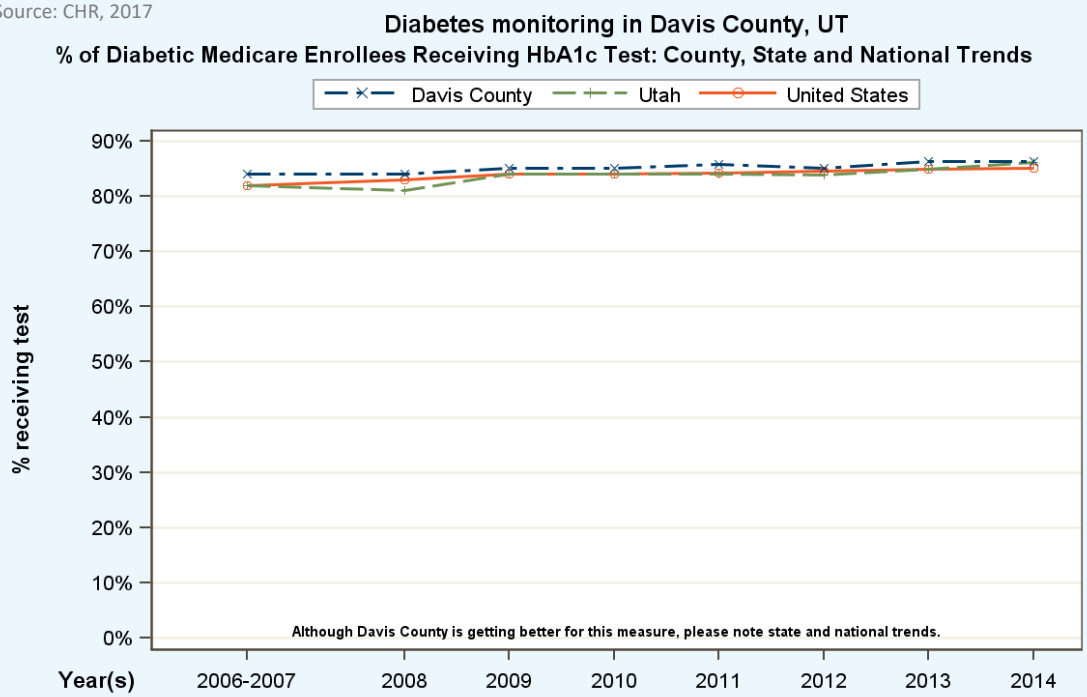
Diabetes Management

Proper diabetes management requires regular monitoring of blood sugar levels through the HbA1c (A1C) test. Higher levels suggest a change in therapy may be needed. The American Diabetes Association recommends that people with diabetes have an A1C test at least two times a year. However, the test should be conducted more often for individuals who are not meeting target blood sugar goals or who have had a recent change in therapy.

In Davis County, 69% of adults with diabetes had at least two A1C tests in the last 12 months. Diabetic screening in Medicare enrollees is calculated as the percent of diabetic patients whose blood sugar control was screened in the past year using an A1C test (86% for Davis County). Medicare claims data limits the population to mostly individuals age 65 and older. This measure, therefore, may potentially miss trends and disparities among younger age groups.

Diabetes Management & Screening	Davis	Utah	U.S.	Source
Diabetes Management, at Least 2 Hemoglobin A1C Tests in 12 Months, Adults (2009–2011)	69%	67%	66%	IBIS, UDOH
Diabetic Screening, Medicare Enrollees (2014)	86%	86%	85%	CHR

Source: CHR, 2017



Year(s)	2006-2007	2008	2009	2010	2011	2012	2013	2014
United States	82%	83%	84%	84%	84%	85%	85%	85%
Utah	82%	81%	84%	84%	84%	84%	85%	86%
Davis County	84%	84%	85%	85%	86%	85%	86%	86%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Regular A1C screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long-term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented. Additional diabetes indicators and resources can be found in the Morbidity/Chronic Diseases section, page 56.

Breast Cancer Screening

Breast cancer is the most commonly occurring cancer in U.S. women (excluding basal and squamous cell skin cancers) and the leading cause of female cancer deaths in Utah. Deaths from breast cancer can be substantially reduced if the tumor is discovered at an early stage. Mammography is currently the best method for detecting cancer early. Most experts agree that women aged 40 or older should undergo routine screening with mammography at least every two years.

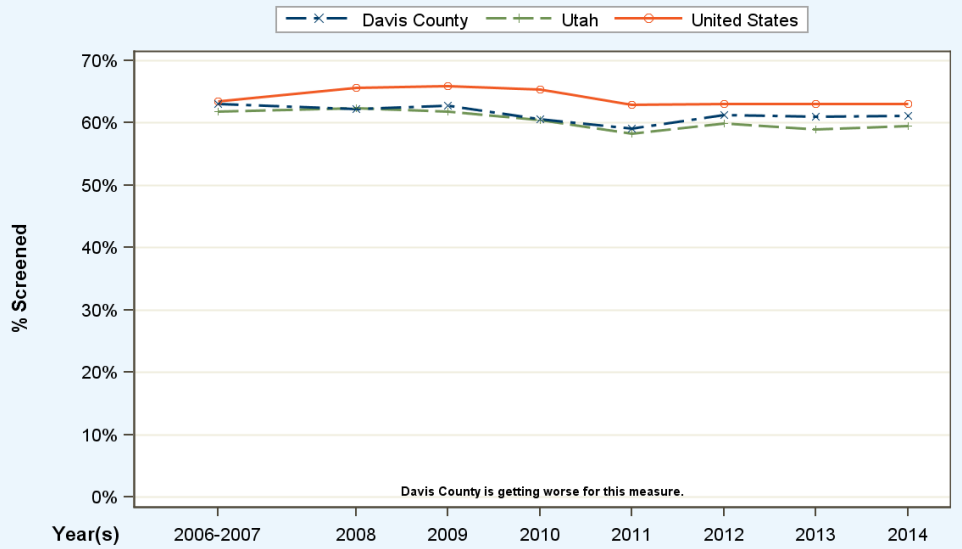
In Davis County, 64.7% of women age 40 and over have had a mammogram within the past two years. This is similar to the state rate but lower than the nation and is well below the HP2020 target of 81.1%. Of female Medicare enrollees ages 67-69 in Davis County, 61.0% had a mammogram over a two year period. In 2016, Utah had one of the lowest age-adjusted mammogram screening rates in the nation.

Breast Cancer Screening	Davis	Utah	U.S.	Source
Mammogram within the Past 2 Years, Age 40+ (2016, Age-Adjusted)	64.7%	65.4%	71.0%	IBIS, UDOH
Mammography Screening, Medicare Enrollees Ages 67–69 (2014)	61.0%	60.0%	63.0%	CHR
Recommended Colorectal Cancer Screening, Age 50+ (2016)	78.7%	72.7%	68.1%	IBIS, UDOH
Reported PSA Test for Men Aged 40+ (2014)	50.1%	49.3%	53.8%	IBIS, UDOH

Colorectal Cancer Screening

Screening for colorectal cancer is important as deaths can be substantially reduced when precancerous polyps are detected early and removed. The chance of surviving colorectal cancer exceeds 90% when the cancer is diagnosed before it has extended beyond the intestinal wall. In Davis County, 78.7% of those age 50+ have had a sigmoidoscopy, colonoscopy, or fecal occult blood test (FOBT).

Source: CHR, 2017



Year(s)	2006-2007	2008	2009	2010	2011	2012	2013	2014
United States	64%	66%	66%	65%	63%	63%	63%	63%
Utah	62%	62%	62%	61%	58%	60%	59%	60%
Davis County	63%	62%	63%	61%	59%	61%	61%	61%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Prostate Cancer Screening

The prostate cancer screening indicator measures the percentage of men aged 40 and above who reported having a prostate-specific antigen (PSA) test. In 2014, 50% of Davis County men aged 40 and older reported having a PSA test. The rate of PSA tests has significantly increased among the U.S. male population over the last several years.

Additional cancer incidence data and resources can be found in the Morbidity/Chronic Diseases section, page 57.

Preventive Care

Clinical preventive services are important for maintaining good health. Engaging in preventive behaviors decreases the likelihood of developing future health problems. Physician counseling can influence health behaviors and prevent disease entirely in many cases. In 2016, the percentage of individuals who reported having a routine checkup in the past year in Davis County was 66.5%, below the national average of 70%.

Preventive Care	Davis	Utah	U.S.	Source
Routine Medical Checkup in the Past 12 Months* (2016)	66.5%	62.2%	70.0%	IBIS, UDOH
Routine Dental Visit in the Past Year* (2016)	78.3%	73.0%	65.5%	IBIS, UDOH
Prenatal Care in the First Trimester of Pregnancy (2015)	81.0%	76.4%	73.1%**	IBIS, UDOH
High Blood Pressure Management (2006–2010)	31.6%	30.6%	21.7%	CHNA.org

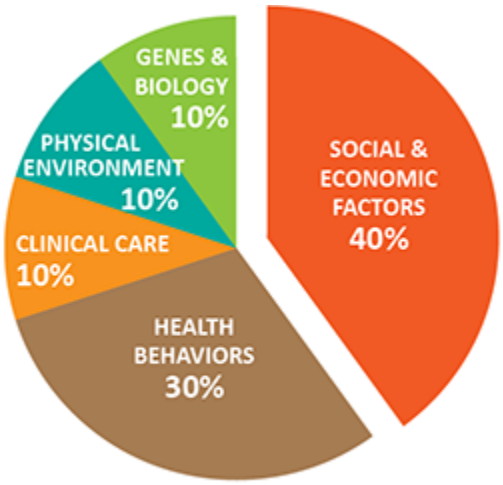
In 2016, 78% of adults reported a dental visit in the past year, which is higher than the national average of 65.5%. Regular dental visits are important in the prevention, early detection, and treatment of oral and craniofacial diseases and conditions for all ages. Infrequent use of dental services has been associated with poor oral health among adults.

In Davis County, 81% of pregnant women seek prenatal care early, which is better than the state and nation. Prenatal care is an important part of a healthy pregnancy. Women who receive early and consistent prenatal care enhance their likelihood of giving birth to a healthy child. Prenatal care can improve birth outcomes and prevent medical complications and their costs associated with premature births, low birthweight births, and maternal and infant mortality and morbidity.

In Davis County, 31.6% of adults are not taking medication for their high blood pressure compared to 21.7% nationally.

Additional disease prevention data and resources can be found in the Morbidity section which includes immunization rates and immunization exemptions, pages 62-64.

A range of personal, social, economic, and environmental factors also known as social determinants of health contribute to individual and population health. For example, people with a quality education, stable employment, safe homes and neighborhoods, and access to preventive services tend to be healthier throughout their lives. Conversely, poor health outcomes are often made worse by the interaction between individuals and their social and physical environment. Social and economic factors have the most influence on health (see graph to right). Higher income and education equates to better health. CHR accounts for this influence with these factors accounting for 40% of the score/rank.



DETERMINANTS OF HEALTH

Social determinants are in part responsible for the unequal and avoidable differences in health status within and between communities. These indicators provide some understanding about the critical role of home, school, workplace, neighborhood, and community in improving health.

Davis County ranks 2nd in the state for social and economic factors. Indicators included in this section: education; employment; income; intergenerational poverty; community safety, crime, abuse, and violence; as well as family and social support.

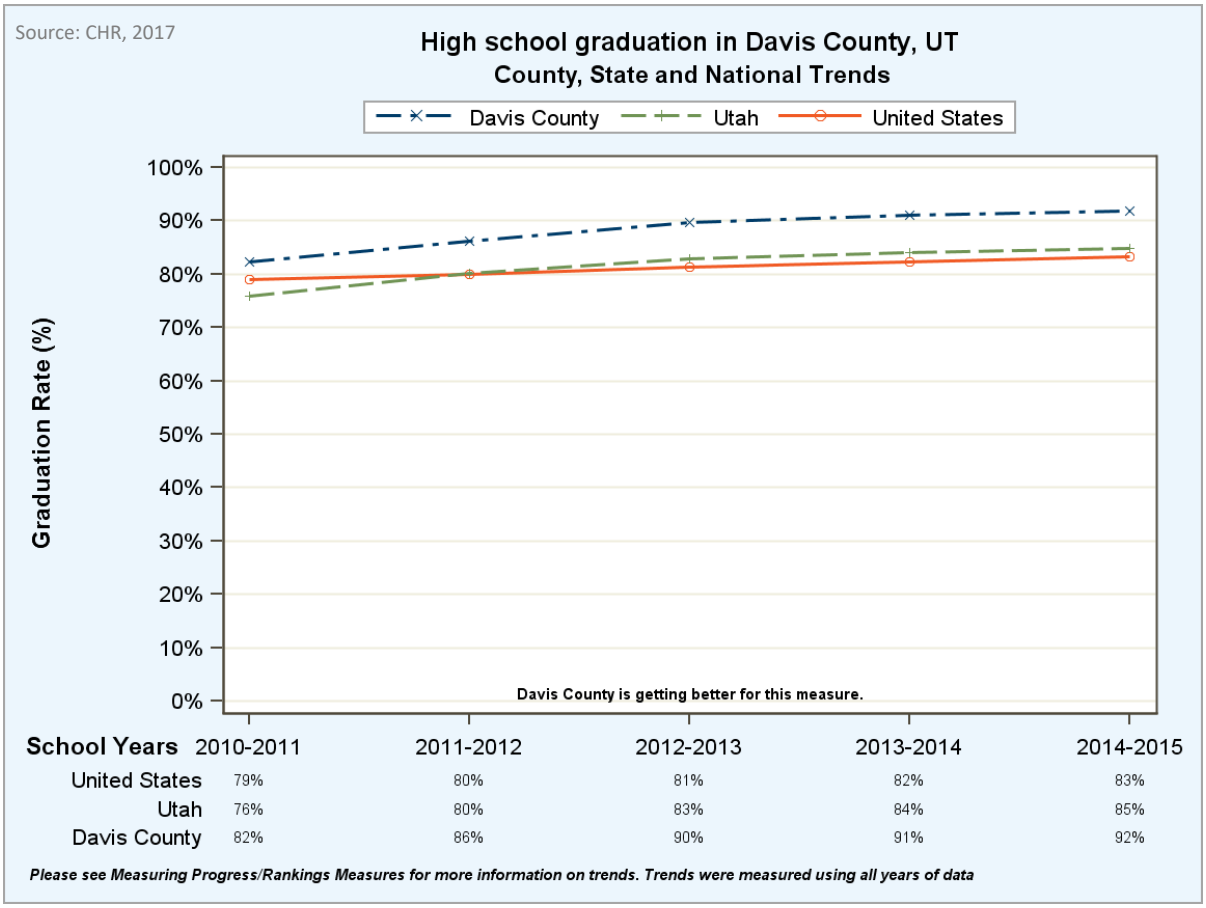
Education

The relationship between educational attainment and improved health outcomes is well known. Better-educated individuals live longer, healthier lives than those with less education, and their children are more likely to thrive. People with better education are more likely to understand the consequences of life choices, are more capable to make good life choices, and are more able to deal with stress and other environmental factors that influence health. In addition, education strongly correlates with income and work benefits.

Davis County is a well educated community ranking in the top 10% of all counties in the nation for percentage of population with some college.

Education	Davis	Utah	U.S.	Source
High School Graduation (2014-2015)	92.0%	85.0%	83.0%	CHR
High School Graduate or Higher, Age 25+ (2012-2016)	95.5%	91.5%	87.0%	Census
Some College, Ages 25-44 (2011-2015)	76.0%	69.0%	—	CHR
Educational Attainment, 25+ with Bachelor's (2011-2015)	34.79%	31.12%	29.77%	CHNA

Source: CHR, 2017



Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Public Education

The Davis School District (DSD) is the second largest school district in the state with more than 72,000 students enrolled. There are currently 62 elementary schools, 16 junior high schools, 8 high schools, and 3 alternative schools in the district. DSD has 18 Title 1 schools (17 elementary, and 1 junior high). With 6,200 employees, the district is the second largest employer in the county. www.davis.k12.ut.us

An additional 20 charter and private schools provide alternative education choices for families.

Higher Education

Weber State University operates its Davis Campus in Layton, offering many associates, bachelors, and masters degrees and certificate programs. There are over 3,800 students taking courses at the Davis Campus in Layton. In addition to regular classes, Weber State University offers online courses, distance learning, independent study, and evening classes. www.weber.edu/wsudavis/

Davis Technical College (Davis Tech) is Davis County's largest institution of higher education. It is a public technical training center located in Kaysville. It provides competency-based education in an open-entry, open-exit environment that prepares students with career and technical skills in more than 31 programs, certificates, and trades. Davis Tech offers students the most affordable, flexible, and short-term education in the state. www.davistech.edu

There are other private vocational colleges within the county including: Broadview University, University of Phoenix, Eagle Gate College, Marinello Schools of Beauty, Vista College, and Renaissance School of Therapeutic Massage.

Extension Education

Utah State University (USU) Extension provides research-based programs and resources with the goal of improving the lives of individuals, families and communities throughout Utah. USU Extension operates through a cooperative agreement between the United States Department of Agriculture, Utah State University, and county governments. Program areas include: 1) Agriculture and Natural Resources; 2) Gardening; 3) Home, Family, and Food; and 4) Utah 4-H and Youth. extension.usu.edu/davis

Utah State University owns and operates the Utah Botanical Center in Kaysville, which includes an education center. The Botanical Center guides the conservation and wise use of plant, water, and energy resources through research-based educational experiences, demonstrations, and technology. usubotanicalcenter.org

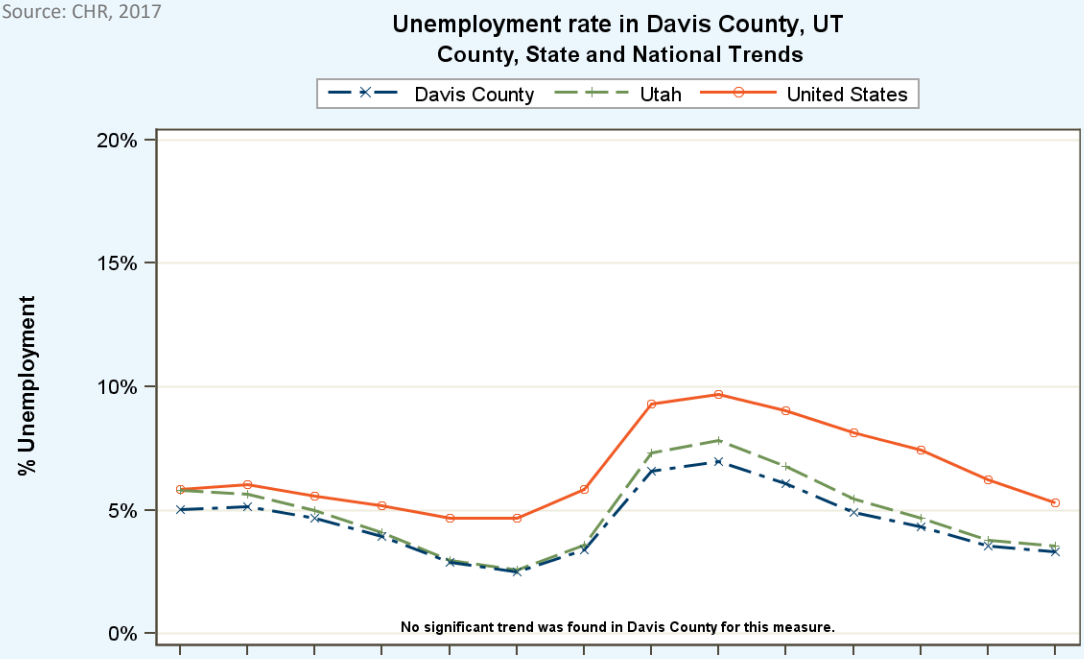
Employment

Davis County's unemployment rate was 3% in October 2017, among the lowest in the state and below the statewide average of 3.3% and the national average of 4.2%. The unemployment rate is a measure of those people who reside in a county, are jobless, and are available to take a job and have actively sought work in the past four weeks.

Credit: Salt Lake Tribune

While unemployment is relatively low in Davis County, the unemployment rate doesn't take into account workers who do not have secure employment, who may be temporary, part-time, or in another situation. Also of concern is the percentage of residents who have jobs but don't earn a sufficient income to meet the needs of their families or have a job that does not offer health insurance.

Source: CHR, 2017



Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
United States	6%	6%	6%	5%	5%	5%	6%	9%	10%	9%	8%	7%	6%	5%
Utah	6%	6%	5%	4%	3%	3%	4%	7%	8%	7%	5%	5%	4%	4%
Davis County	5%	5%	5%	4%	3%	3%	3%	7%	7%	6%	5%	4%	4%	3%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Department of Workforce Services Profiles, Snapshots, Data Reports and Infographics:

- Economic snapshot for jobs, wages, unemployment: https://jobs.utah.gov/wi/regions/county/davis.html
- Labor force: https://jobs.utah.gov/wi/data/laborforce/laborforceprofile.html
- Women in the workforce: https://jobs.utah.gov/wi/data/vizcentral/womenintheworkforce.html
- County demographic and economic annual profile: https://jobs.utah.gov/wi/pubs/eprofile/index.html

Workforce

Davis County has over 156,000 residents in the labor force. It is one of the youngest and most educated labor forces in Utah. The county is also experiencing the best employment growth rates in the state. A tight labor market is putting upward pressure on wages, and the overall outlook for the county is very positive. Economic growth is broad based with nearly all sectors adding jobs.

In Davis County, 22% of all jobs are in government. The economy in Davis County is heavily influenced by Hill Air Force Base (HAFB) which employs 25,550 total personnel: 5,785 active military members, 3,362 military dependents and 16,353 civilians. This industry is followed closely by Trade, Transportation, & Utilities with 18% of jobs. The Freeport Center, located in Clearfield, is a major manufacturing, warehousing, and distribution center for the western U.S. It is home to more than 70 national and local companies that have a workforce of over 7,000 employees. Lagoon, one of the Mountain West's largest amusement parks, is centrally located in the county. Davis County's largest employers can be seen in the table below.

Davis County's Largest Employers, 2017		
Company	**Industry**	**Employment**
Department of Defense, Hill Air Force Base	Federal Government	10,000–14,999
Davis School District	Local Government	7,000–9,999
ATK Space Systems/Alliant	Aerospace Manufacturing	1,000–1,999
Smith's Food & Drug/Marketplace	Grocery Stores	1,000–1,999
Wal-Mart	Warehouse Clubs & Supercenters	1,000–1,999
Lifetime Products	Sports & Athletic Equipment Mfg	1,000–1,999
Lagoon Corporation, Inc.	Amusement & Recreation	1,000–1,999
Davis County	Local Government	1,000–1,999

Source: Utah Department of Workforce Services, 2017

Cost of Living

Cost of living indices are based on a U.S. average of 100. A cost of living index above 100 means Davis County, Utah is more expensive than the US average. Davis County's cost of living is 105.60. Housing costs are the biggest factor in the cost of living difference. See Davis County and Salt Lake comparisons to the country in the table below.

2016 Cost of Living Comparison			
Cost of Living Category	**Davis County, UT**	**Salt Lake City, UT**	**United States**
Overall	106	108	100
Grocery	96.2	94.4	100
Health	91	95	100
Housing	127	131	100
Utilities	94	82	100
Transportation	98	100	100
Miscellaneous	95	99	100

Source: Bestplaces.net, 2016

Income

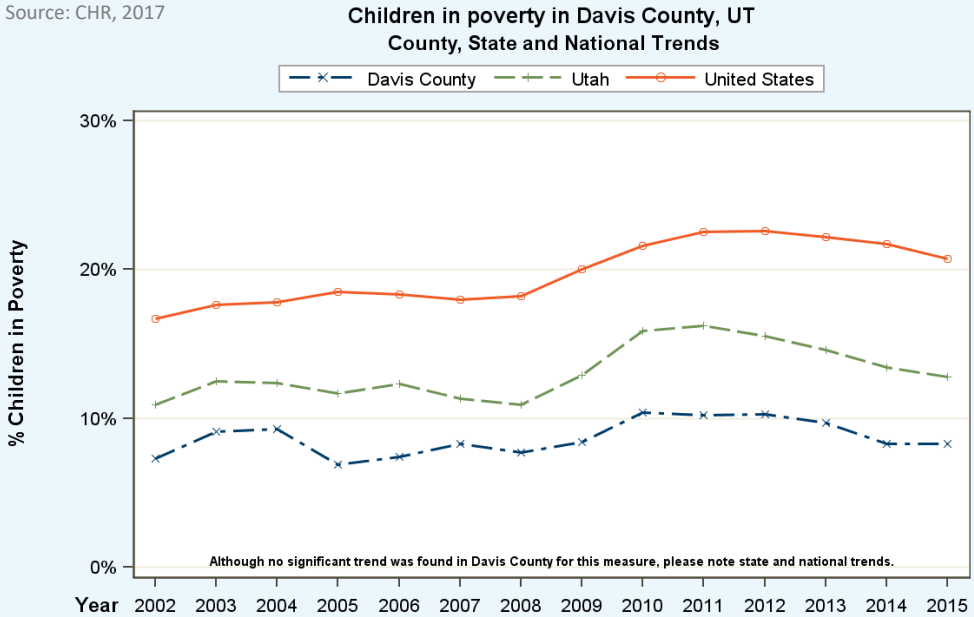
Income and financial resources are important to health. The CHR provide information about a community's ability to meet basic needs necessary to maintain health through an estimate of poverty. Poverty is commonly considered insufficient income to meet the needs for food, clothing, and shelter.

Households with higher incomes have better healthcare coverage and access to health services. People with higher incomes are more likely to have healthier diets, participate in recreational and personal fitness activities, and deal with stress.

Income	Davis	Utah	U.S.	Source
Median Household Income (2012-2016)	$72,661	$62,518	$22,322	Census
Persons Below Poverty Level (2012-2016)	6.3%	10.2%	12.7%	Census
Children in Poverty (2015)	8.0%	13.0%	21.0%	CHR
Income Inequality (2011-2015)	3.3	3.9	—	CHR

Among Davis County's children, 8% live in poverty. This is much lower than the state at 16% and the U.S. at 22.5%. Davis County's low rate puts it in the top 10% (best) of counties in the U.S.

Source: CHR, 2017



Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
United States	17%	18%	18%	19%	18%	18%	18%	20%	22%	23%	23%	22%	22%	21%
Utah	11%	13%	12%	12%	12%	11%	11%	13%	16%	16%	16%	15%	13%	13%
Davis County	7%	9%	9%	7%	7%	8%	8%	8%	10%	10%	10%	10%	8%	8%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Income inequality is the ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20% of households have higher incomes, and the 20th percentile is the level of income at which only 20% of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum. In 2016, the average income inequality of U.S. counties was 4.5, which would mean that the top 20% household income was 4.5 times higher than the lowest 20% household income. Income inequality for most counties ranged between 3.7 and 5.4. Davis County's low ratio of 3.3 puts it in the top 10% (best) of counties in the U.S. for this measure.

In 2012, the Utah Legislature adopted the Intergenerational Poverty Mitigation Act. This Act created the Intergenerational Welfare Reform Commission, requiring the Department of Workforce Services to combine forces with other state agencies to measurably reduce the incidence of children who remain in poverty, as they become adults. This goal will be achieved by focusing in the areas of early childhood development, education, economic stability and health.

Intergenerational poverty (IGP) occurs when two or more successive generations of a family continue in the cycle of poverty. Intergenerational poverty does not include situational poverty. IGP individuals are those using public assistance for at least 12 months as an adult and as a child. Public assistance includes the receipt of one or more services including food stamps, child care subsidies, cash assistance or Medicaid/CHIP. Using this definition, IGP individuals are then matched across several state and local databases to provide county level profiles. The state IGP dashboard summarizes data related to the well-being of IGP individuals in Utah and its 29 counties.

Intergenerational Poverty (2016)	Davis	Utah
Intergenerational Poverty, Children	4%	6.8%
Intergenerational Poverty, Adults	2%	10%
Adults Experiencing IPG Lacking Education Beyond High School	71%	72%
Average Annual Wages of those Experiencing IGP (2015)	$12,808	$12,494

Source: CHR, 2017

Utah Intergenerational Poverty Data Links:

- IGP Website: intergenerationalpoverty.utah.gov
- IGP Annual Report: https://jobs.utah.gov/edo/intergenerational/igp17.pdf
- IGP County Snapshot: https://jobs.utah.gov/wi/data/vizcentral/igp.html
- IGP Scorecard: https://jobs.utah.gov/edo/intergenerational/plans.html

Housing

The rate of homeownership in Davis County is 77%, which is higher than the state and national average. The average home value is $228,200, which is higher than the state at $221,300 and the nation at $188,200. High cost of housing is indicated by the percent of households with housing costs that are greater than or equal to 30% of the household income. In Davis County, 26% are in this situation compared to 30% in Utah.

Housing	Davis	Utah	U.S.	Source
Homeownership Rate (2012-2016)	76.8%	69.6%	63.6%	Census
Median Value of Owner-Occupied Housing Units (2012-2016)	$234,300	$224,600	$184,700	Census
% of Households with Housing Costs >=30% of Household Income (2011-2015)	25.71%	29.71%	33.93%	CHNA
Housing Units in Multi-Unit Structures (2012-2016)	16.1%	21.3%	26.1%	Census
HUD-Assisted Units/10,000 Housing Units (2010-2014)	198.52	190.01	377.87	CHNA
Housing Vacancy Rate (2010-2014)	3.62%	10.36%	12.45%	CHNA

There is a relatively low rate of multi-unit housing structures in the county, 16% versus 21% for Utah and 26% for the U.S. In 2015 the Fair Market Rent (FMR) was $778. Twenty-two percent of households were renters. The average wage per hour for renters was $10.03. The hourly wage that is needed to afford fair market rent (two bedrooms) was $14.96. Affordable rent needs to be as low as $521 a monthly to be affordable given average renters hourly wage. (Source: Community Action Partnership (CAP) of Utah, Annual Report on Poverty, 2015, Davis County, https://www.caputah.org/poverty-in-utah/poverty-reports/item/51-davis-county)

Fair Market Rents (FMRs) are used to determine initial rents for housing assistance payment. Currently, Davis County is lumped together with Ogden in the Metropolitan Statistical Area (MSA) designated by the federal government. Ogden has a very different housing environment and rent in Ogden is lower. A more representative MSA for Davis County would increase housing assistance funding to be more inline with actual rent. It is very difficult to find housing priced to be inline with fair market rent in Davis County. Low inventory of rentals, new builds, and existing homes is keeps housing costs and values high.

Fair Market Rents Davis County 2016	
Efficiency/Studio	$509
One-Bedroom	$645
Two-Bedroom	$826
Three-Bedroom	$1,165
Four-Bedroom	$1,377

Finding resources to address homelessness and affordable housing is a recurring theme among human service providers. A Davis County housing assessment is planned for the future to gather statistics and information and explore topics such as housing characteristics; housing services and providers; quantify assistance being provided; fair and affordable housing studies; community block grant activities; identify community themes; and provide recommendations.

Affordable Housing Locators

- Utah Affordable Housing Database, Department of Workforce Services, jobs.utah.gov/jsp/housing/
- Low Income Housing Search, http://www.lowincomehousing.us/cty/ut-davis
- Affordable Housing Online Search, https://affordablehousingonline.com/housing-search/Utah/Davis-County

Housing by City

American Community Survey, Census data has been compiled to compare housing cost and characteristics among Davis County's 15 cities.

CITY	Housing in Multi-Unit Structures (%)	Over-crowded Housing (%)	Housing Owner-ship (%)	Home-owners With Mortgage (%)	Median Home Value ($)	Median Gross Rent ($)	Cost Burd ened House-holds (%)	Cost Bur-dened (Owned) House-holds (%)	Cost Bur-dened (Rented) House-holds (%)
Bountiful	29.2%	1.5%	72.9%	65.7%	$257,300	$917	24.4%	25.0%	38.6%
Centerville	29.3%	1.1%	84.0%	69.3%	$252,500	$1,085	24.6%	21.7%	58.6%
Clearfield	41.1%	4.4%	54.2%	78.9%	$157,800	$934	33.4%	25.3%	48.0%
Clinton	6.9%	2.1%	85.2%	84.9%	$192,200	$1,258	21.6%	21.5%	39.4%
Farmington	21.6%	1.7%	83.1%	78.3%	$313,900	$1,032	22.1%	25.3%	29.2%
Fruit Heights	6.5%	2.4%	92.1%	64.4%	$346,400	$1,156	18.7%	26.6%	53.8%
Kaysville	11.1%	0.7%	87.6%	73.8%	$281,500	$760	21.8%	29.1%	42.8%
Layton	23.0%	3.3%	71.5%	75.1%	$212,000	$886	25.0%	29.8%	43.9%
N. Salt Lake	30.0%	4.0%	72.4%	75.5%	$241,100	$996	25.1%	39.9%	34.1%
S. Weber	6.6%	1.8%	86.1%	84.6%	$273,600	$1,071	26.9%	26.6%	54.0%
Sunset	19.7%	6.4%	73.5%	75.2%	$134,900	$735	27.6%	33.7%	46.8%
Syracuse	3.8%	2.0%	92.8%	86.6%	$256,100	$1,478	23.0%	27.7%	54.7%
W. Bountiful	5.9%	1.9%	91.3%	72.4%	$245,600	$844	22.1%	33.1%	34.7%
West Point	3.4%	6.5%	91.1%	80.0%	$213,700	$1,579	25.4%	30.3%	38.7%
Woods Cross	17.3%	0.9	78.9%	80.8%	$226,200	$969	23.5%	34.1	41.7
Davis County	**21.5%**	**2.5%**	**76.8%**	**75.7%**	**$234,300**	**$943**	**24.9%**	**30.7%**	**43.8%**

Source: Census, ACS, 2012-2016

Large populations of minorities, disabled, low-income and other protected classes are found in Clearfield. Affordable housing for protected classes was found to be available throughout Clearfield with very little segregation, but there is not enough throughout the county leading to concentrations of protected class populations within Clearfield, (as well as Sunset and Layton) and a need for a more regional approach to serving protected classes and providing an adequate supply of affordable housing.

Additional housing environment indicators can be found in the physical environment section of this report, page 123. A more comprehensive Davis County Housing Environment Assessment is planned in the near future to compile data, quantify housing assistance, provide maps, and make recommendations.

Homelessness

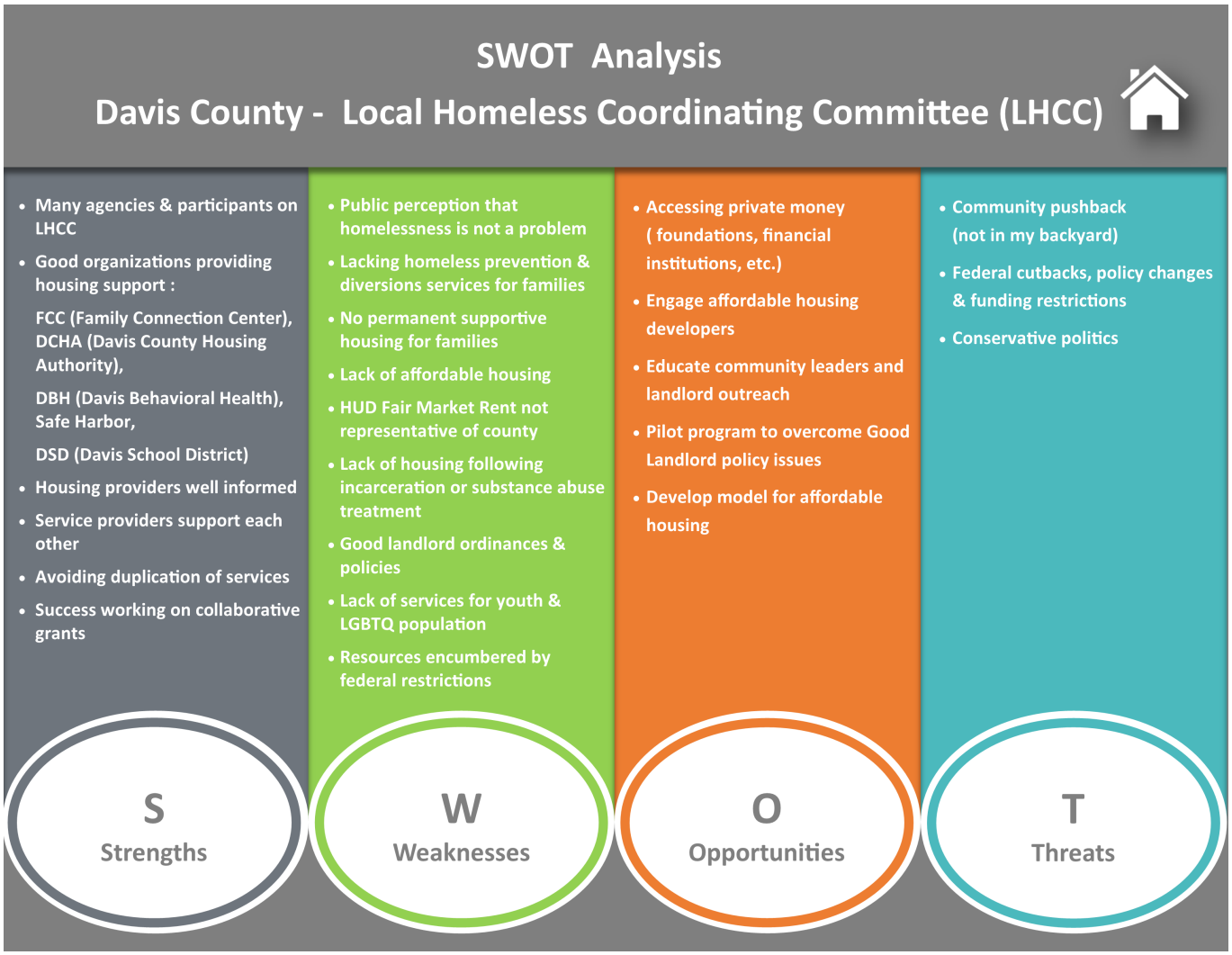
Davis County has a very small homeless population that is not visible to the general public. There is no homeless shelter in the county. According to the Davis School District, in 2018 there are 1,371 homeless students from 1,174 homeless families. This includes those who are "doubled up" with friends or relatives because they cannot find or afford housing.

A SWOT analysis was conducted by the Local Homelessness Coordinating Committee (LHCC) in September 2016 to assess the strengths, weaknesses, opportunities, and threats to address homelessness in Davis County.

The analysis identified primary needs of:

- Affordable housing
- Resources unencumbered by federal restrictions
- Homelessness prevention, diversion services, transitional and respite housing for: families; individuals coming out of jail, prison, or substance abuse treatment; youth; and LGBTQ community
- More representative Metropolitan Statistical Area (MSA) designated by federal government

Unfortunately, communities and city leaders that attempt to work toward affordable housing face significant community pushback, "not in my backyard".



Food insecurity refers to United States Department of Agriculture's (USDA) measure of lack of money and other resources for enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food insecure households are not necessarily food insecure all the time. Food insecurity may reflect a household's need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods. Our community includes families who run out of food before the end of the month, children who go to school hungry, older people on fixed incomes who sometimes have to choose between food and medication, families who are house poor or are unable to find affordable housing and have to choose between paying rent/mortgage and buying food.

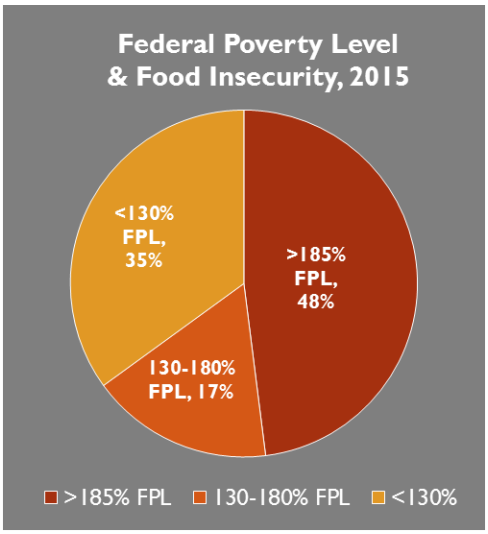
Food insecurity is linked to health issues and chronic diseases including obesity, type 2 diabetes, hypertension, hyperlipidemia, and cardiovascular problems. (Utahns Against Hunger)

FOOD INSECURITY INDICATORS

MEASURES	DAVIS COUNTY	UTAH	UNITED STATES
Children Participating in Free/Reduced Price Lunch† (2013-2014)	16,688 Children* 24.32%	231,165 Children 36.98%	26,012,902 Children 52.35%
Food Insecure Children† (2013)	18,500 Children 17.43%	179,130 Children 19.97%	17,284,530 Children 23.49%
Food Insecure Children Ineligible for State or Federal Nutrition Assistance† (2013)	**9,805 Children 53%**	71,652 Children 40%	5,358,204 Children 31%
Total Food Insecure† (2014)	39,040 People 12.29%	416,670 People 14.2%	47,448,890 People 14.91%
Total Food Insecure and Ineligible for State or Federal Nutrition Assistance† (2014)	**19,910 People 51%**	150,001 People 36%	13,760,178 People 29%
Households Receiving SNAP Benefits† (2014)	6,783 Households 7.01%	81,055 Households 9.04%	15,089,358 Households 12.98%
Persons living in Poverty (2015)	6.9%	11.2%	14.7%
Child Poverty Rate† (2015)	7.1%	13%	19.7%

*2016 data retrieved from the Davis County School District
† Data retrieved from commuitycommons.org & Minding the Meal Gap 2017, Feeding America
Red font highlights areas in need of improvement.

Not everyone struggling with hunger qualifies for federal nutrition assistance. Of the 12.3% of the population who are food insecure in Davis County, 48% are above 185% Federal Poverty Level (FPL) and are not eligible for federal food assistance (represented in chart to the right). This recent data released by Feeding America has led to community concern about food insecurity among those above eligible poverty levels. The working poor are those who have too much income to be eligible for assistance but their income is not enough to meet their basic needs of housing, healthcare, childcare, food, etc.



Source: Feeding America

Food Assistance

The amount of food assistance being provided in Davis County is surprisingly large given income and employment statistics that show the economic prosperity of the residents. Food assistance is provided by many agencies such as food pantries, food banks, SNAP benefits, WIC vouchers, senior centers, churches, Bishop's Storehouses, and schools.

2016 DAVIS COUNTY CUMULATIVE FOOD ASSISTANCE	
Pounds of Food Distributed	3,816,547* pounds
People Served (Duplicated)	216,037 people
People Served (Unduplicated Estimate)	48,227+ people
Number of Pantry Packs Distributed	63,440 packs
Number of CSFP Boxes Distributed	322 boxes
Dollar Value of Food Assistance from SNAP & WIC	$26,221,351

Source: DCHD

In 2016, more than 3,816,547 pounds of food were distributed, more than 48,227 unduplicated residents were served and $26,221,351 in SNAP benefits and WIC vouchers were provided to clients. The LDS Church's welfare program provides supplemental food to many Davis County residents and is a huge community resource. Unfortunately, the LDS Church does not share information on how much food and other welfare assistance it provides to members. It is difficult to determine if needs are being met and if additional resources are needed in Davis County. Because data is not being provided by all agencies providing food assistance, the current level of assistance being provided cannot be quantified.

Populations identified at highest risk for food insecurity in Davis County include children/teens, low income individuals, seniors, homeless, and undocumented individuals. Residents living in zip code 84015 are particularly vulnerable.

Food assistance recommendations for Davis County food system and public health partners:

- Create city level maps showing locations of healthy food resources and food assistance providers. City maps may also show access to healthy food compared to fast food/convenience stores.
- Collaboration is needed among health, human services, transportation and city planning officials to ensure healthy food resources are located and accessible to vulnerable populations.
- Explore transit options and unique transportation arrangements and delivery services for those who lack transportation, have limited mobility or other challenges accessing healthy food and food assistance.
- Improve reach of underutilized food assistance services such as free and reduced school breakfast and lunch programs, free summer lunch program, and double up bucks at farmers markets.
- Implement Davis School District food strategy which includes plans for every school to address food insecurity needs.
- Food assistance providers should consider after-hours access for the working poor.
- Identify locations for additional food pantries. Consider a permanent location in the city of Sunset, an especially vulnerable community according to social and economic census measures.
- Continue to work with food assistance providers to quantify food assistance being provided in the county.
- Create food assistance map showing where clients live and where they are served.
- Food assistance providers should review eligibility requirements to ensure they are including majority of those who experience food insecurity.
- Work toward a coordinated county food assistance system.

These recommendations along with food insecurity and food assistance data can be found in more detail in the 2017 Davis County Food Environment Assessment found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.

The CHR define family and social support as the quality of relationships among family members and with friends, colleagues, and acquaintances, as well as involvement in community life. Evidence has demonstrated that poor family and social support is associated with increased morbidity and early mortality.

There are 81,187 families residing in the county. Families are different than households because of the presence of children 18 and under. The average family size is 3.29. Of the families, 83.3% (67,657) had husbands and wives living together.

The number of parents living with a child helps to determine the human and economic resources available to that child. Children who live with one parent are more likely to live in poverty than children who grow up in households with two parents. Single parents also face specific challenges including lack of leisure time, increased need for child care, and stressed financial resources.

The percent of children living in family households who are raised by a single parent is 16% in Davis County compared to 19% in Utah. Davis County's low rate puts it in the top 10% (best) of all counties in the U.S. for this indicator.

Family & Social Support	Davis	Utah	U.S.	Source
Children in Single-Parent Households (2011-2015)	16.0%	19.0%	—	CHR
Single Female Households with Children (2011-2015)	5.8%	5.6%	7.1%	IBIS, UDOH
Single Male Households with Children (2007–2011)	2.1%	2%	2.2%	Census
Lack of Social or Emotional Support, Adults (2006-2012)	13.0%	15.2%	20.7%	CHNA
Disconnected Youth, not working or in school ages 16-24 (2010-2014)	12.0%	12.0%	—	CHR
Social Association, memberships per 10,000 population (2014)	2.4	3.5	—	CHR
Residential Segregation Non-White/White (2011-2015)	35	40	—	CHR
Residential Segregation Black/White (2011-2015)	46	62	—	CHR

Social association was added to CHR in 2015 as a new way to measure social support. It represents the number of associations per 10,000 population,. The higher number the better. Davis County measures low at 2.4/10,000. CHR suggests this is an area to explore for the county. It is hard to know if this is a valid measure of social support in Davis County and Utah. Total associations for Davis County are 79, including religious organizations. There are far more than 79 religious congregations in Davis County.

Residential segregation is the index of dissimilarity where higher values indicate greater residential segregation between non-white/white county residents and between black/white county residents. The residential segregation index ranges from 0 (complete integration) to 100 (complete segregation).

Other measures of social risk factors can be found in the 2017 Student Health and Risk Prevention Survey. Risk factors of concern for students are: family conflict, low neighborhood attachment, and parental attitudes favorable to anti-social behavior. Risk and protective factors in four domains (family, school, peer, and neighborhood) are contained in the survey results at https://dsamh.utah.gov/pdf/sharp/2017/Davis%20County%20LSAA%20Profile%20Report.pdf.

Community Safety & Crime

The health impacts of community safety are far-reaching, from the significant impact of violence on a victim to the symptoms of Post-Traumatic Stress Disorder (PTSD) and psychological distress felt by those who are regularly exposed to unsafe communities. Community safety impacts other health factors and outcomes as well, including birth weight, diet and exercise, and family and social support.

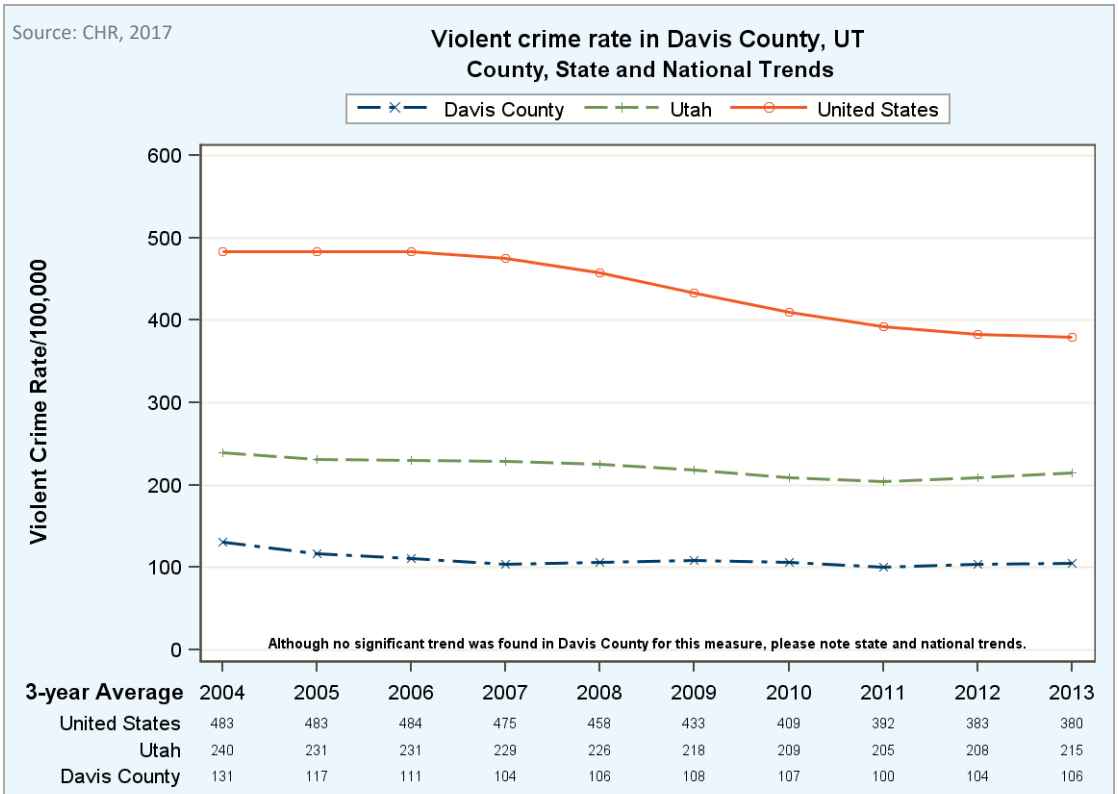
High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders.

Davis County is recognized as a safe community by residents. Violent crimes are defined as offenses that involve face-to-face confrontation between a victim and a perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

Community Safety	Davis	Utah	U.S.
Violent Crime Rate (2012-2014)	106	215	380
Homicide Rate (2009-2015)	1	2	—
Firearm Fatalities (2011-2015)	8	12	—

Source: CHR, 2017

Source: CHR, 2017



Domestic violence is the top safety priority picked by the Human Service Directors of Davis County in 2017.

- 1 in 3 Utah women experience domestic abuse or intimate partner violence in their lifetime.
- 1 in 5 Utah women have experienced domestic violence or intimate partner violence in the past 12 months.
- Since 2000, 42% of adult homicides in Utah were domestic violence related.
- The majority of male homicide perpetrators die by suicide.
- 8,608 crisis calls were made to Safe Harbor in 2016
- Of 900 Davis County law enforcement screenings conducted in 2016-2017, 80% screened high danger/ lethal situation.

  Source: Utah Domestic Violence Coalition, 2016 & Safe Harbor, 2016

Local domestic violence data is difficult to find and access. A violence and abuse assessment is planned for the future to gather statistics and information and explore topics such as domestic violence, child abuse, sexual abuse/ assault, dating violence, human trafficking, exploitation, and assess community resources that are available.

24/7 Crisis Helpline: 801-444-9161

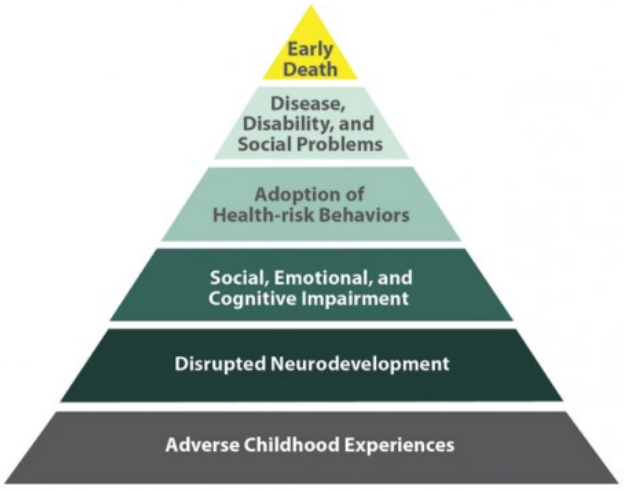
Outreach Center
225 Adamswood Road, Layton
801-444-9161

Adverse Childhood Experiences

Childhood experiences, both positive and negative, have a tremendous impact on future violence victimization and perpetration, and lifelong health and opportunity. As such, early experiences are an important public health issue. Much of the foundational research in this area has been referred to as Adverse Childhood Experiences (ACEs). Adverse Childhood Experiences have been linked to:

- risky health behaviors,
- chronic health conditions,
- low life potential, and
- early death.

As the number of ACEs increases, so does the risk for these outcomes. The wide-ranging health and social consequences of ACEs underscore the importance of preventing them before they happen.



Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

Source: CDC

What constitutes an ACE during the first 18 years of life?

- **Emotional abuse:** A parent, stepparent, or adult living in your home swore at you, insulted you, put you down, or acted in a way that made you afraid that you might be physically hurt.
- **Physical abuse:** A parent, stepparent, or adult living in your home pushed, grabbed, slapped, threw something at you, or hit you so hard that you had marks or were injured.
- **Sexual abuse:** An adult, relative, family friend, or stranger who was at least 5 years older than you ever touched or fondled your body in a sexual way, made you touch his/her body in a sexual way, attempted to have any type of sexual intercourse with you.
- **Mother treated violently:** Your mother or stepmother was pushed, grabbed, slapped, had something thrown at her, kicked, bitten, hit with a fist, hit with something hard, repeatedly hit for over at least a few minutes, or ever threatened or hurt by a knife or gun by your father (or stepfather) or mother's boyfriend.
- **Household substance abuse:** A household member was a problem drinker or alcoholic or a household member used street drugs.
- **Mental illness in household:** A household member was depressed or mentally ill or a household member attempted suicide.
- **Parental separation or divorce:** Your parents were ever separated or divorced.
- **Criminal household member:** A household member went to prison.
- **Emotional neglect:** No one in your family loved you or thought you were important or special. Your family didn't look out for each other, feel close to each other, or support each other.
- **Physical neglect:** You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you. Your parents were too drunk or high to take care of you or take you to the doctor if you needed it.

ACE questions were included in the 2013 Utah Behavioral Risk Factor Surveillance System (BRFSS) creating the opportunity to examine the adjusted effects of direct and environmental ACEs on tobacco and alcohol use as well as selected health outcomes.

Key Findings:

- ACEs are associated with negative health behaviors and outcomes in adulthood.
- More than half (63.1%) of Utah's adult population reported experiencing ACEs.
- The most common adverse childhood experience reported was verbal abuse (35.6%).
- Females were more likely to report living with a mentally ill adult and experiencing sexual abuse.
- Direct ACEs (exposure to physical, sexual, or verbal abuse) were not associated with adults use of tobacco or alcohol, but were associated with fair or poor health status, depression, and obesity.
- Environmental ACEs (exposure to mental illness, substance abuse, divorce, incarceration, or witnessing abuse) were associated with all of these risk behaviors and health outcomes except heavy drinking and obesity.
- Having both direct and environmental ACEs was associated with greater odds for all the examined risk behaviors and health outcomes.
  Source: http://health.utah.gov/opha/publications/hsu/1507_ACE.pdf

ACEs are being included in Utah's Intergenerational Poverty work. Across the state and county, human service providers, healthcare professionals, and schools are exploring how to get additional ACEs data to guide their work.

ADVERSE CHILDHOOD EXPERIENCES RESOURCES

ACE Study, CDC
www.cdc.gov/violenceprevention/acestudy

Resilience: The biology of stress & the science of hope (documentary, 60 minute)
kpjrfilms.co/resilience

Ted Talk: How Childhood Trauma Affects Health Across A Lifetime, Nadine Burke Harris (15 min)
https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime

Adverse Childhood Experiences (UK Cartoon, 6 min)
http://www.acesconnection.com/clip/adverse-childhood-experiences-6-min-substance-org-uk

Trauma Informed Approaches and Interventions, SAMHSA
www.samhsa.gov/nctic/trauma-interventions

Davis Behavioral Health, Mental & Emotional Health Classes
www.dbhprevention.org/mental-and-emotional-health

Mindful Schools
www.mindfulschools.org

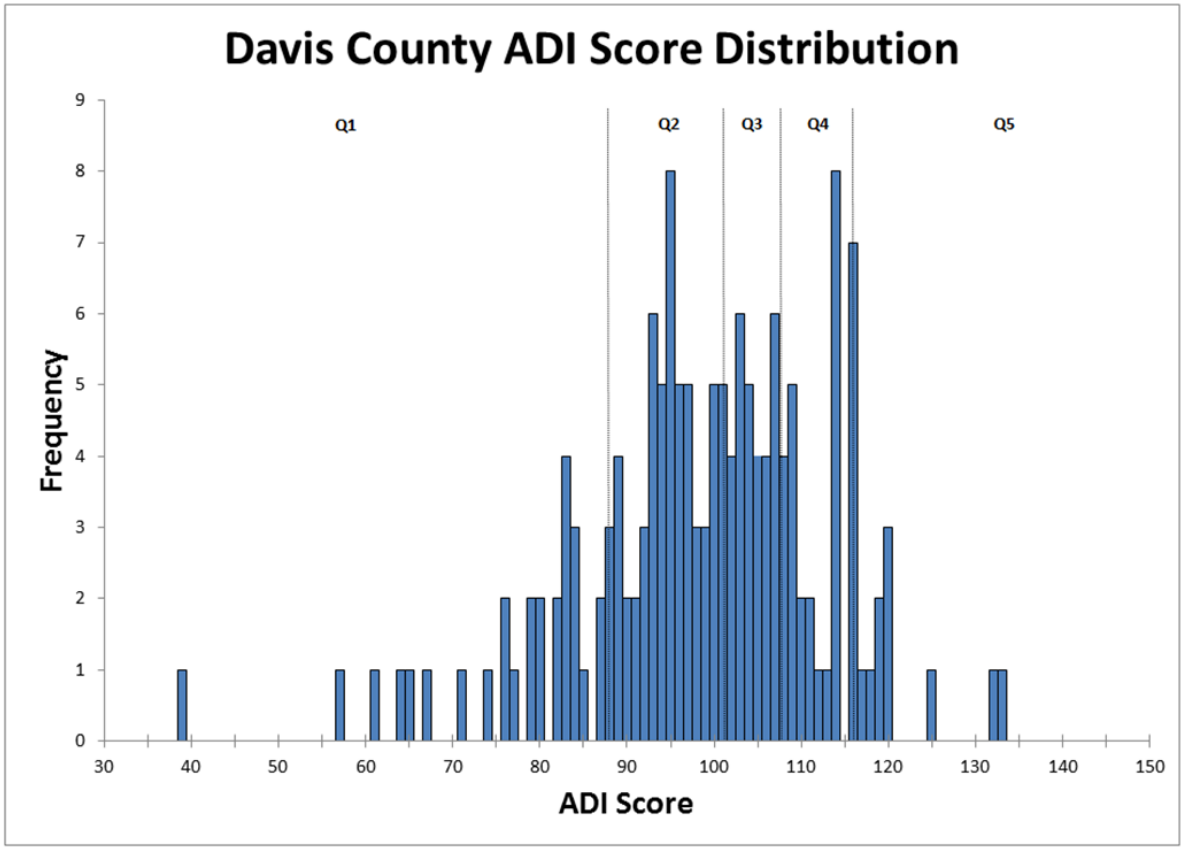
Area Deprivation Index

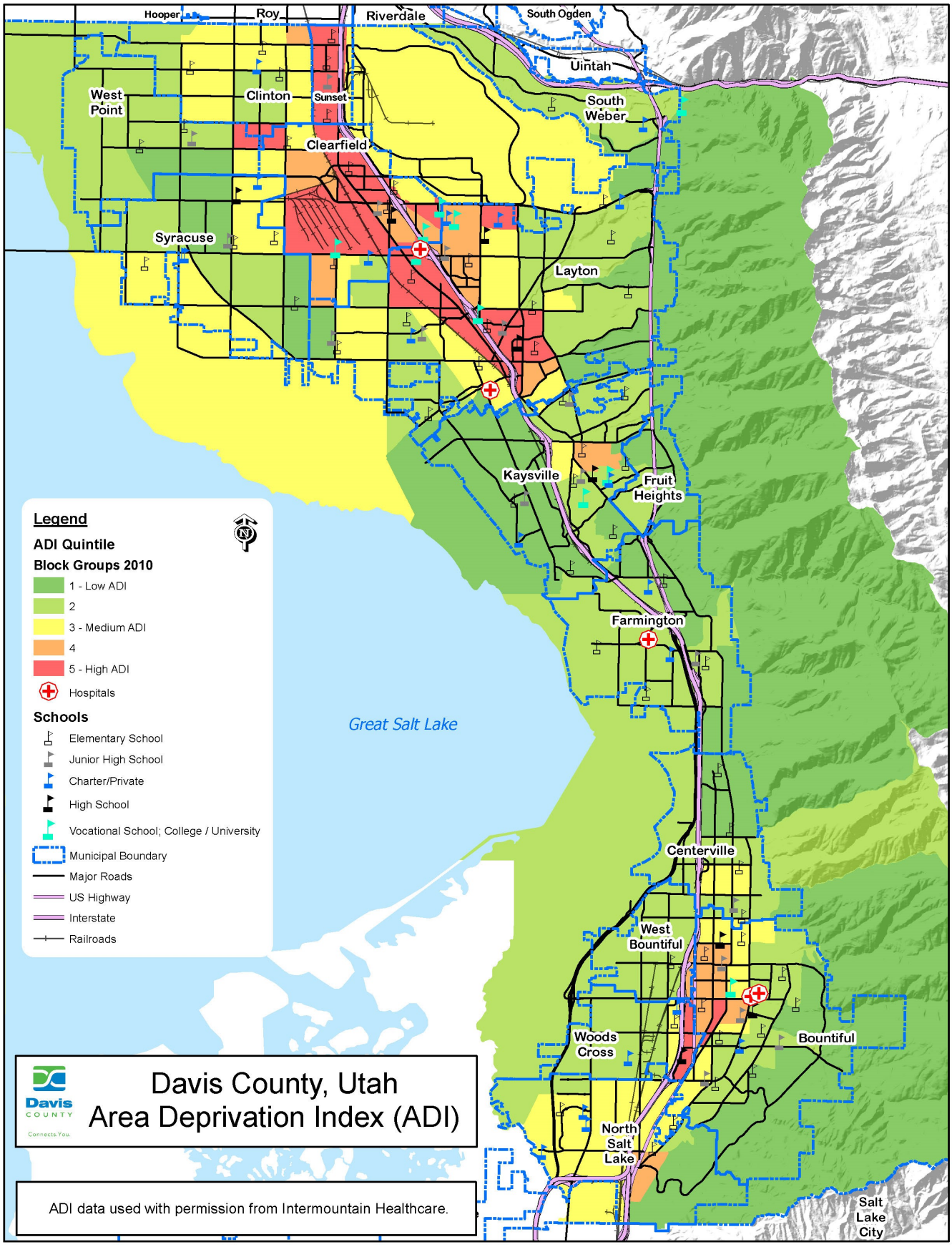
Income, education, and other economic and social risk factors affect individual health and well-being. The Area Deprivation Index (ADI) is a community socio-economic composite measure used by Intermountain Healthcare at the U.S. Census block group level to measure the distribution of socio-economic disadvantages within the community. The index is based upon 17 census measures for education, employment, income, and living conditions. ADI serves as a surrogate measure for impact of deprivation and social determinants of health. Higher socioeconomic deprivation levels in communities (noted in red and orange on the map) have been associated with poorer health and health outcomes. The ADI has many public health applications and can be used to help target community health improvement efforts. Over the last couple of years the ADI map has been widely used by health and human service partners to understand community needs and target resources.

Cities with high (red) ADI census block groups representing high levels of vulnerability are found in these cities:

- Bountiful/West Bountiful: 2 Census Block = 1,620 residents
- Clearfield: 7 Census Blocks = 9,946 residents
- Layton: 10 Census Blocks = 14,155 residents
- Sunset: 4 Census Blocks = 5,108 residents (entire city)

While the least vulnerable areas (lowest score) in the county are in North Salt Lake, they are quite higher than the lowest score in the state found in Park City. The most vulnerable (highest scores) in Layton are comparable to the most vulnerable areas of Salt Lake. ADI materials can be found at this link: [www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.](www.daviscountyutah.gov/health/about-dchd/reports-and-assessments)




Hooper
Roy
Riverdale
South Ogden
Uintah
West Point
Clinton
Sunset
South Weber
Clearfield
Syracuse
Layton
Kaysville
Fruit Heights
Farmington
Great Salt Lake
Centerville
West Bountiful
Woods Cross
Bountiful
North Salt Lake
Salt Lake City
Legend
ADI Quintile
Block Groups 2010
1 - Low ADI
2
3 - Medium ADI
4
5 - High ADI
Hospitals
Schools
Elementary School
Junior High School
Charter/Private
High School
Vocational School; College / University
Municipal Boundary
Major Roads
US Highway
Interstate
Railroads
Davis County, Utah
Area Deprivation Index (ADI)
ADI data used with permission from Intermountain Healthcare.

Physical Environment

A community's health is also affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. The CHR include indicators for both environmental quality and the built environment. Davis County ranks 21st in the state for physical environment, the county's lowest ranking in any section.

Environmental Quality

Adequate environmental quality in terms of clean air, water, food, and sanitation are prerequisites for health. Poor air or water quality can be particularly detrimental to the very young, the old, and those with chronic health conditions. Indicators in this section measure air quality, hazardous waste, drinking water, recreation water, and food safety.

Built Environment

The built environment refers to human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, grocery stores, and other amenities. Information on the availability of healthy food and opportunities for exercise will enable communities to take action to reduce adverse health outcomes associated with a poor diet and lack of physical activity. Indicators in this section include measures of the food environment, parks and recreation, active transportation, crashes, commutes, and housing environment.

The relationship between elevated air pollution and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. Exposure to excessive levels of fine particulate matter is associated with compromised respiratory function along with all-cause mortality. Studies have demonstrated several pollutants, notably ozone and fine particulate matter (particulates less than 2.5 micrometers in diameter), can contribute to increased morbidity and mortality.

Air Quality Community Themes:

- The Salt Lake City-Ogden-Clearfield, Utah, metropolitan area is ranked 7th most polluted in the U.S. for PM2.5.
- Davis County is located in an Environmental Protection Agency nonattainment area for exceeding the 24-hour PM2.5 standard.
- In 2013, Davis County residents identified air pollution as the leading environmental health concern and the leading force working against health in Davis County.
- Poor air quality has been identified as a primary threat to Utah's economic development and continued growth.
- Poor air quality negatively impacts tourism, business recruiting, and employee retention efforts.
- Utah residents reported air quality as a leading quality of life issue along with public education and job availability.
- Vehicles contribute over half of the emissions that lead to formation of fine particulate matter.
- Almost 80% of the workforce in Davis County commutes to work alone.

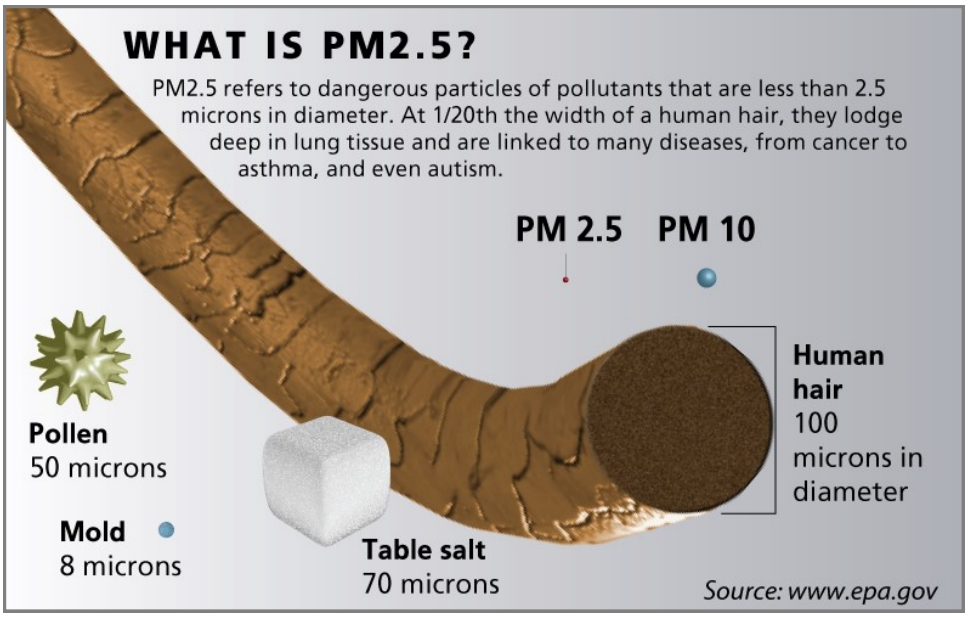
On many days the air quality is good in Davis County and along the entire Wasatch Front. However, there are times during the winter when Davis County experiences high levels of air pollution, levels that are among the worst in the nation. Pollution levels are also elevated in the summer due to fireworks, forest fires, and ozone.

Many high pollution periods occur during temperature inversions. Temperature inversions are common in mountainous areas. Inversions happen during the winter when warm, high pressure systems trap colder air in mountain valleys and keep it there. The cold air mixes with emissions from cars, home/ commercial heating, and industrial processes to form fine particulate matter (PM2.5) in the atmosphere. Because the air is not moving, the pollution has nowhere to go and begins to build up. An inversion will linger until wind or a storm front comes through.

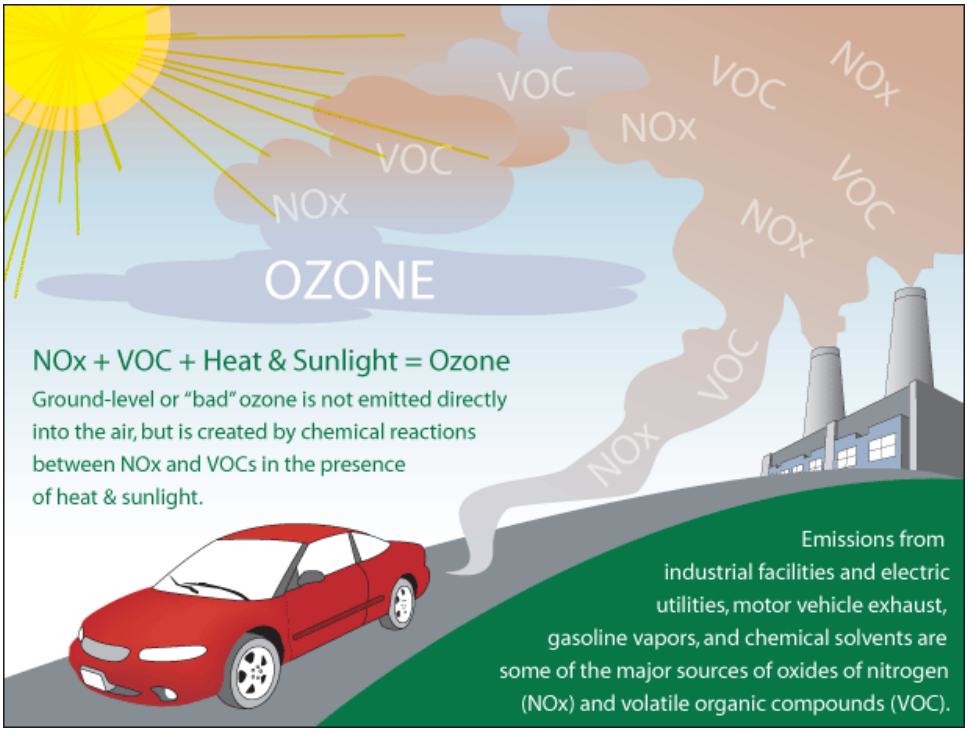
Air Pollution

The Environmental Protection Agency (EPA) has set standards for six "criteria" pollutants. The criteria pollutants include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. The EPA regularly reviews and revises the standards they have set and determines whether areas meet the standards. The primary air pollutants in Davis County are particulate matter and ground-level ozone.

Particulate matter (PM) is a complex mixture of extremely small dust and soot particles. PM is typically measured in two categories: PM10 and PM2.5. PM10 is made of particles that are 10 microns in diameter or less, about 1/10 the width of a strand of human hair. PM2.5 is even smaller, 2.5 microns or less. Particulate matter is produced anytime fuels such as coal, oil, diesel, or wood are burned and by many sources such as vehicles (i.e. cars, trucks, buses, boats), power plants, wood-burning stoves, barbecues, etc. In Davis County, PM is commonly worse in the winter due to temperature inversions, however, it can also be elevated in the summer due to fireworks and forest fires.



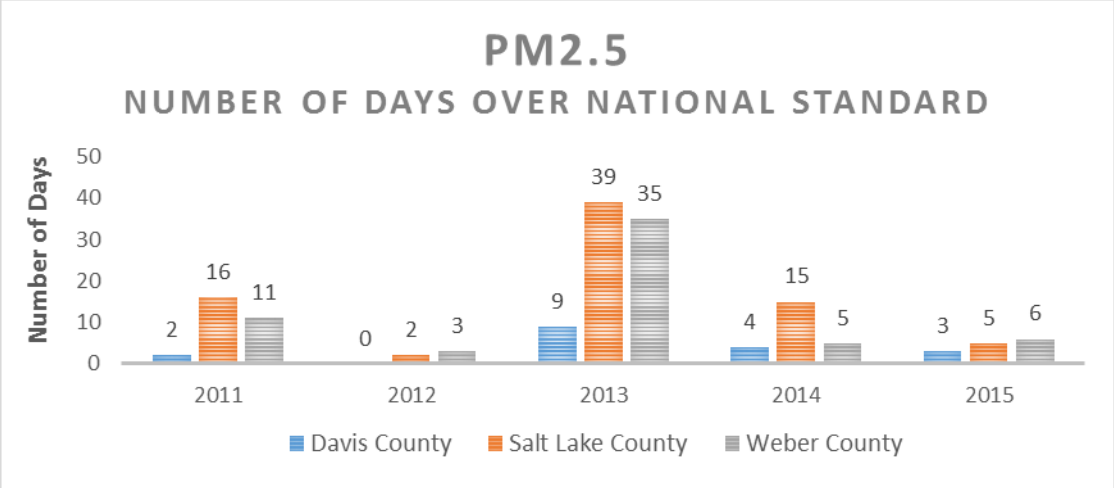
Ground-level ozone is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx) chemically react. Pollutants emitted by vehicles, power plants, refineries, and other sources react with sunlight and create ozone pollution. Ozone pollution is typically worse in the warm summer months.

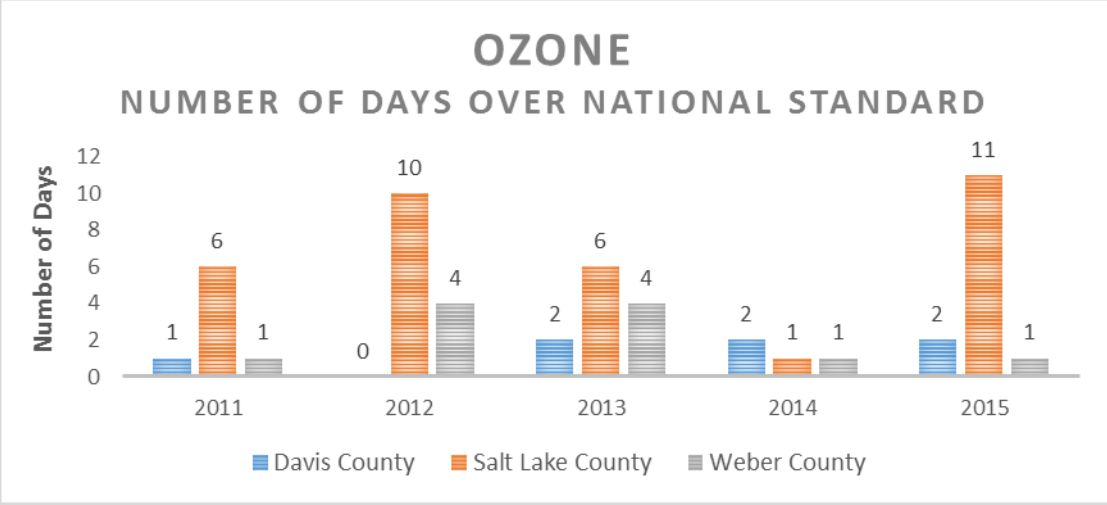


The Department of Environmental Quality (DEQ) Air Monitoring Center (AMC) is responsible for operating and maintaining an ambient air monitoring network that protects the health and welfare of the citizens of Utah. The AMC provides air pollution information for the daily air quality, health advisories, winter season wood burn conditions, and summer season ozone action alerts. The AMC data is used to determine the relationship of existing pollutant concentrations to the National Ambient Air Quality Standards, to assist in the development of strategies to reduce pollution levels where necessary, and track the effectiveness of those strategies.

The Bountiful/Viewmont air monitor is the primary location for measuring air quality in Davis County. It is located at the northern end of Bountiful, which is situated in the southern end of the county. The site is used to determine public exposure to air pollution. The site also monitors the ambient air near the oil refineries and local sand and gravel operations. The monitor is specialized to measure PM2.5 and ozone. The monitor does not measure larger particulates known as PM10.

Assessing air quality data in the county can be challenging due to limited official data. Air monitoring measures from the north end of Salt Lake County and southern end of Weber County should also be considered. Air quality data from neighboring counties is used for comparison in the graphs below.





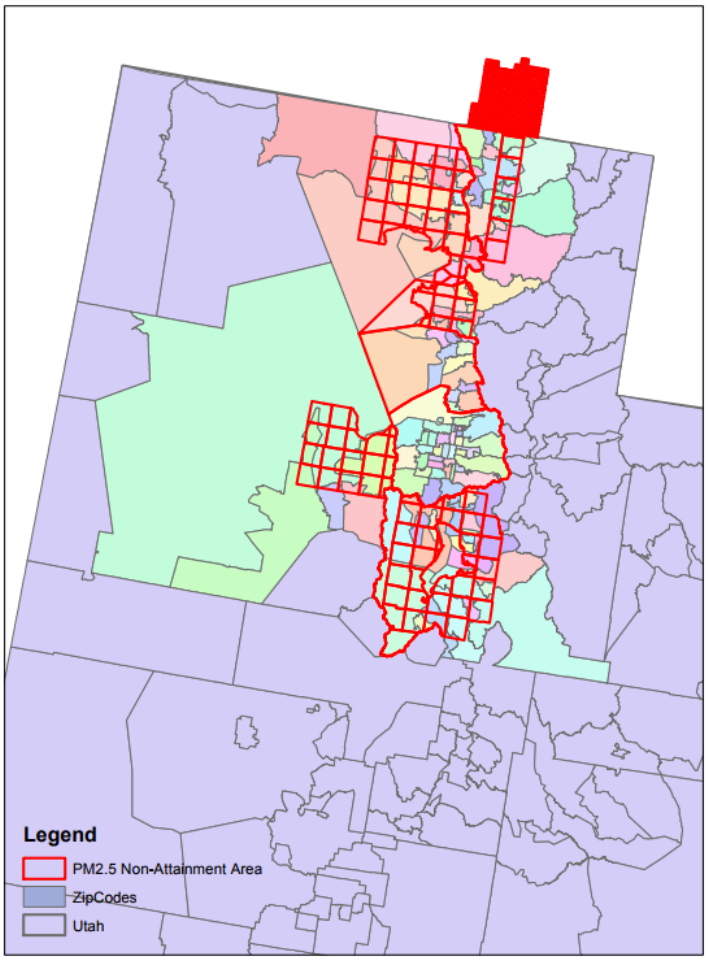
Source: IBIS, UDOH

National Air Quality Standards

The Clean Air Act established the National Ambient Air Quality Standards (NAAQS) for pollutants considered to be harmful to public health and the environment. When the concentration of air pollutants surpasses the NAAQS limits, prolonged exposure can have a negative impact on health, especially for sensitive populations. When an area exceeds the standard, the EPA designates it as a non-attainment area for that pollutant.

EPA Non-Attainment

In 2009, the EPA identified the Provo, Salt Lake, and Logan Utah/Idaho areas as not meeting the federal health standard for PM2.5. Davis County is one of seven counties included in this designation. The areas are designated as a non-attainment area because of high levels of PM2.5 over a 24-hour standard. Non-attainment areas for PM2.5 area outlined in red on the map.



Source: Utah Division of Air Quality

While the EPA does not designate Davis County as a non-attainment area for PM10, both Salt Lake and Weber Counties are designated as non-attainment areas. Since Davis County is in the same airshed as its neighboring counties, there is some concern that these particulates may also affect Davis County residents.

Davis County is classified as a maintenance area for ozone. This means that it was once designated as a non-attainment area, and subsequently demonstrated to the EPA that it has a plan to attain and maintain the ozone standard for a period of ten years. Davis County is projected to be designated as a non-attainment area for ozone again in 2018. The inability to sustain maintenance standards is likely due to the increasing population in Davis County, coupled with the high volume of commuter traffic that continues through the warm summer months.

The Air Quality Index (AQI) is an index for reporting daily air quality. It tells how clean or polluted the air is and associated health effects. The EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, the EPA has established national air quality standards to protect public health.

The EPA has assigned a specific color to each AQI category to make it easier for people to understand quickly whether air pollution is reaching unhealthy levels in their communities. (See AQI table on the next page.) The numerical value assigned to the AQI categories are calculated from the concentration of the specific pollutant. The AQI categories are the air quality classification method that most people are familiar with, as the categories are what is commonly reported to the public, i.e. "Today is a 'red' air day." Based on the specific air quality concentration and the health risk it poses, a daily classification is made, which may require unrestricted action, voluntary action, or mandatory action. Daily air quality conditions can be found at air.utah.gov, as well as any required actions that correspond to the Air Quality Action Forecast.

Air Quality Index

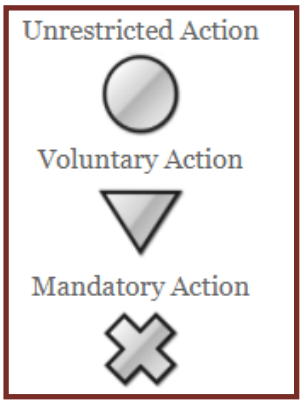
Levels of Health Concern	Numerical Value	PM2.5 Concentration ($\mu g/m^{3)}$	Ozone Concentration (ppm)	Meaning Source: airnow.gov
Good	0 to 50	0—12.0	0—0.054	Air quality is considered satisfactory, and all pollution poses little or no risk.
Moderate	51 to 100	12.1—35.4	0.055—0.070	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	35.5—55.4	0.071 –0.085	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	55.5—150.4	0.086—0.105	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	150.5—250.4	0.106—0.200	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Above 250.5	Above 0.201	Health alert: everyone may experience more serious health effects.

The Utah Recess Guidance is a set of recommendations for when elementary school students should stay indoors for recess based on current air quality. These guidelines are followed regardless of the pollutant causing the poor air quality. http://health.utah.gov/asthma/airquality/recess.html

The EPA Air Quality Flag Program for schools and community organizations uses brightly colored flags based on the EPA Air Quality Index (AQI) to notify people and their communities about outdoor air quality conditions. Organizations raise a flag each day that corresponds to their local air quality forecast. http://www.health.utah.gov/asthma/airquality/flag.html.

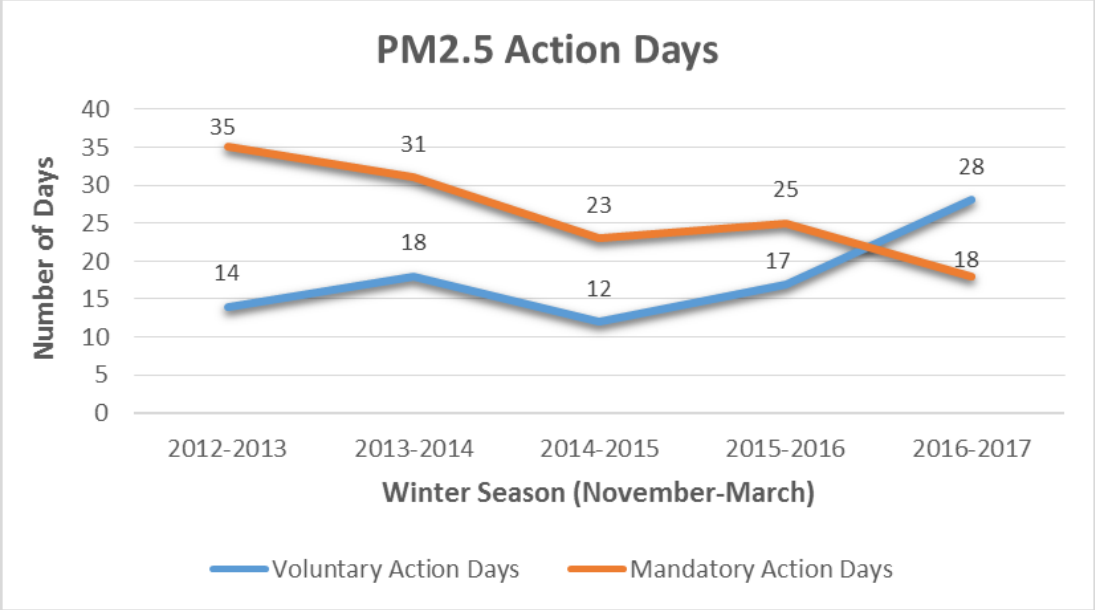
Air Quality Action Days

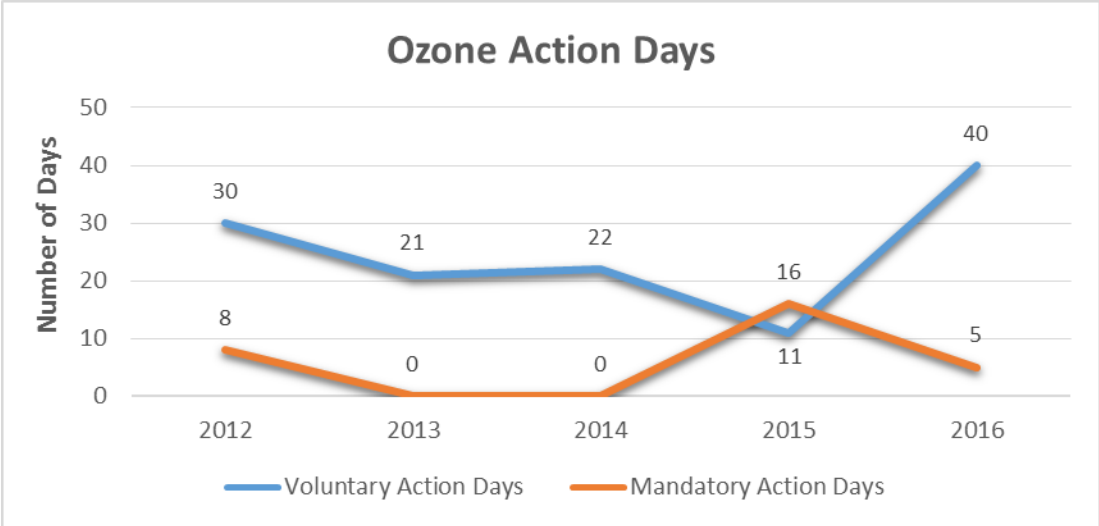
The Air Quality Action Forecast (right) is used to help residents in areas with poor air quality determine if they need to take action on a given day depending on the air quality. The DAQ creates the forecast based upon predictions of the air quality and weather for dates in the near future.



On unrestricted action days, residents may use solid fuel burning devices, including wood and coal burning stoves and fireplaces. Voluntary action days are days that residents are asked to voluntarily not use solid fuel burning devices, reduce/stop open burning, and combine errands to consolidate vehicle trips. Mandatory action days prohibit the use of solid fuel burning, including wood and coal burning stoves. Open burning is also prohibited and residents are still encouraged to consolidate trips.

Mandatory action days due to PM2.5 have been trending down over the last several years.





Source: Utah Division of Air Quality

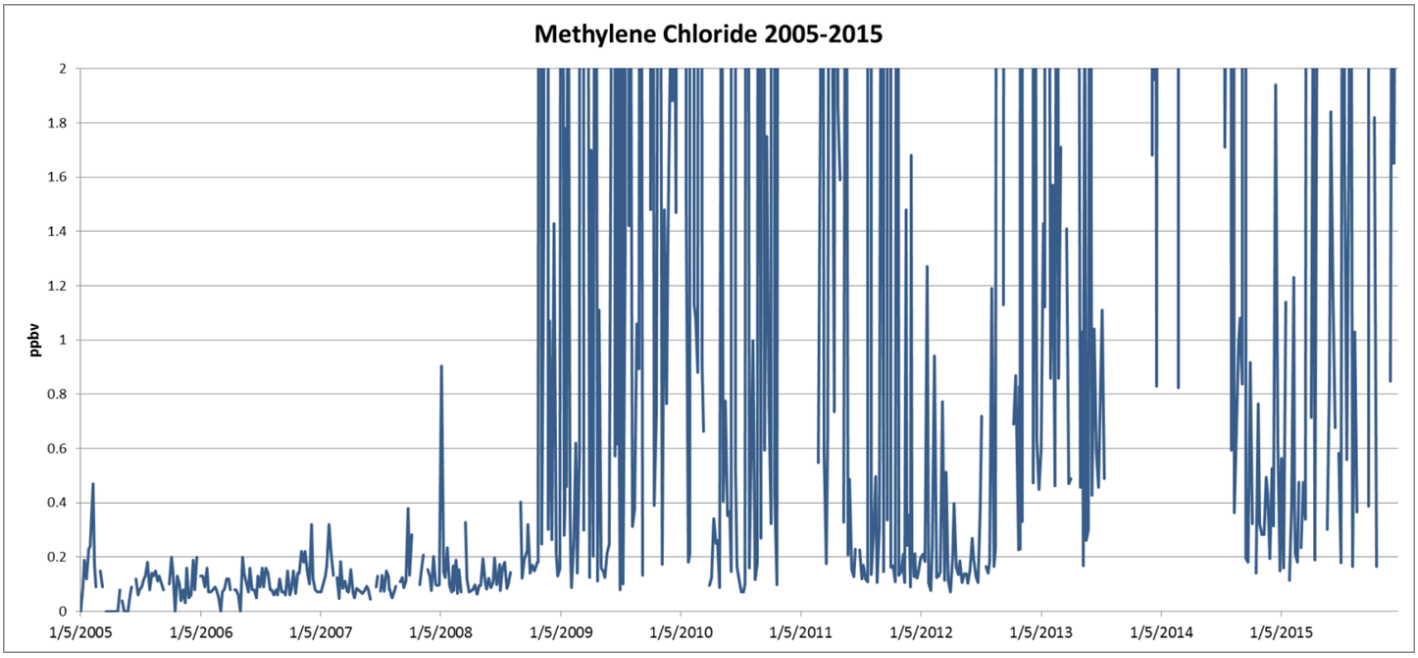
Hazardous air pollutants were analyzed from the EPA certified collection site located in Bountiful from 2003-2012. This analysis identified some abnormal findings which resulted in a year-long study conducted by the Utah Division of Air Quality (DAQ) in 2015. This study identified periodic increases in formaldehyde, acetaldehyde and methylene chloride. In 2017, two phases of sampling occurred in order to collect more specific data and hopefully determine the source of these pollutants. The sample sites were selected based on their proximity to emission sources, typical wind patterns, and distance from busy roadways.

Phase I of this sampling occurred from January 9 – February 28, 2017.

- There were 34 sites selected by DCHD and DAQ within the communities of Bountiful, North Salt Lake, Woods Cross, and West Bountiful. After Phase I, the source of methylene chloride was narrowed down to the northern Bountiful/southern Centerville area.

Phase II occurred from June 5 – July 22, 2017.

- Again, 34 sites were selected with more precision based on phase 1 of the study in an effort to narrow down the source location(s). The DAQ anticipates that a summary report will be completed by April 2018.



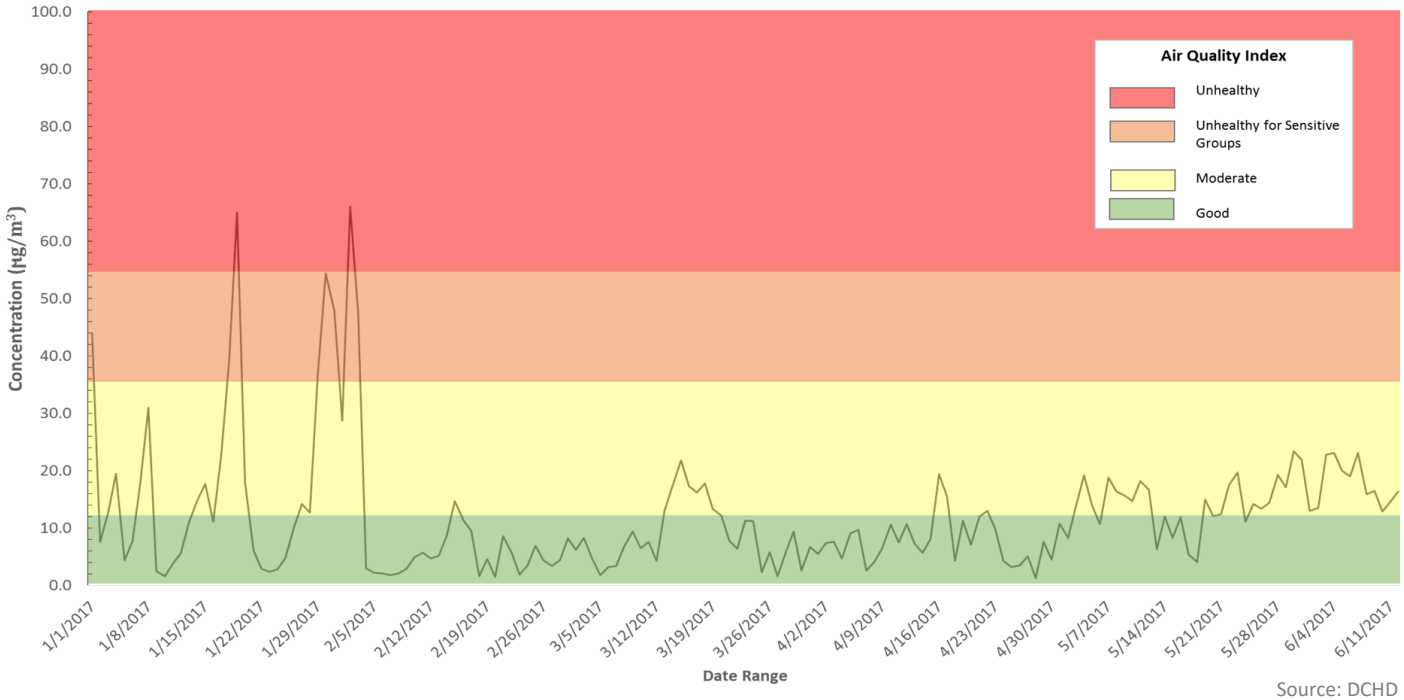
Source: DAQ

Local Air Monitoring

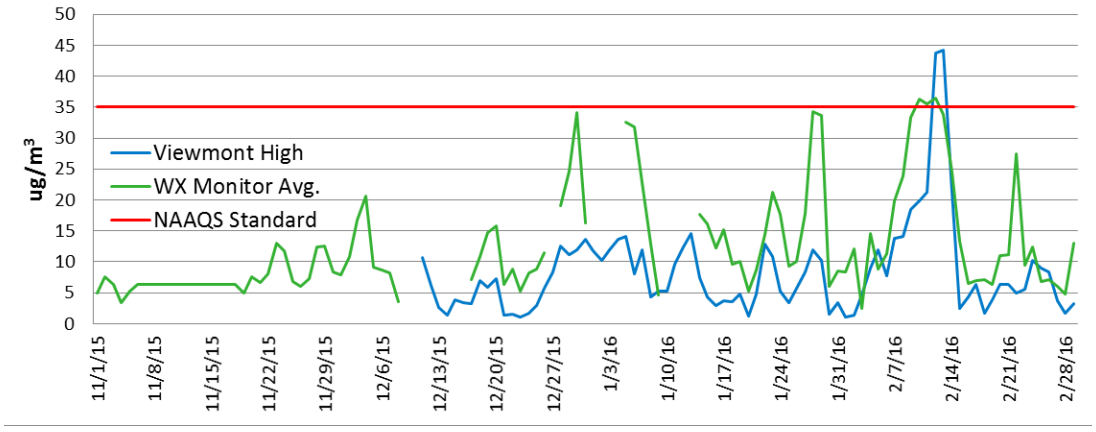
Additional non-regulatory air monitoring systems have been introduced in Davis County to get a more comprehensive picture of air quality across the area.

Five HAZ-SCANNER air quality monitoring systems are placed in the south end of the county and one in Clearfield in an effort to collect real-time air quality data. These devices can monitor for primary pollutants of concern PM2.5, PM10, and ozone, as well as NO, NO_2, CO, H_2S, and VOCs. 2017 data from one of the monitors shows most unhealthy air days for PM2.5 occur in the winter. Moderate air days occur throughout the year. These county owned monitors mirror the trends of the regulatory monitor although values are not the same.

Daily Average of PM2.5, DCHD Woods Cross Monitor, From January 2017 - June 2017



Source: DCHD



The KSL Air Quality Network is an additional resource that pulls real-time air quality data from PurpleAir.com. No evaluation of these monitors has been completed to determine how measures compare to official air quality data.

Vehicles contribute over half of the emissions that lead to formation of fine particulates. According to the Utah Department of Transportation, the Average Daily Vehicle Miles Traveled (VMT) in Davis County were 8,009,406 in 2016. This is a result of being a suburban community where a high proportion of the population commutes to work in surrounding counties. Approximately 79% of the workforce in Davis County drives alone to work. This is higher than the state average of 76%. Twenty-six percent of residents have a commute of more than 30 minutes. The average commute time for residents is 22.5 minutes. Nearly 80,000 residents travel outside the county for work.

Travel & Vehicle Emissions	Davis	Source
Commuting Alone (2011-2015)	79%	CHR
Long Commute (more than 30 minutes) Alone (2011-2015)	26%	CHR
Residents who use Public Transportation for Commute (2015)	2.8%	Census
Average Travel Time to Work , in minutes (2017)	22.5	DWS
Average Daily Vehicle Miles Traveled (VMT) (2016)	8,099,406	UDOT
Smoking Vehicles Reported (2017)	219	DCHD
Initial Failed Emissions Tests—Diesel or Gasoline (2017)	18,924 (9.04%)	DCHD

Individual Commute Patterns, Davis County

Source: DWS, https://jobs.utah.gov/wi/data/laborforce/laborforceprofile.html

Vehicles that emit excessive smoke or fail an emissions test contribute to poor air quality. In 2017, 18,924 vehicles failed their initial emissions test. This number represents 9.04% of all vehicles tested in the county during the year.

Smoking Vehicle Program

The public can report smoking vehicles that they see within Davis County. DCHD staff follow-up on each complaint in an effort to ensure all Davis County vehicles are in compliance with the emissions standards. In 2017, 219 smoking vehicles were reported. Smoking vehicle complaints can be submitted at this link: www.daviscountyutah.gov/health/environmental-health-services/vehicle_emissions/smoking-vehicle-report.

Air Quality Partnerships

Many public, private, and nonprofit agencies as well as residents share the common goal of improving the air quality in Davis County.

Woods Cross Air Quality Committee

The Woods Cross Air Quality Committee is comprised of several community stakeholders, including some Davis County residents, as well as company representatives from Silver Eagle Refining, HollyFrontier Corporation, Foreland Refining Corporation, MC Oil and Gas, Idaho Asphalt Supply (subsidiaries: Peak Asphalt & Western Emulsions), United Fuel Supply, Woods Cross City, the DAQ, and the DCHD.

Idle Free Policies

In 2016, the DCHD partnered with the Davis County School District, as well as the private and charter schools in Davis County, to post idle-free signs in the drop-off areas at each schools. Additionally, letters were sent home with parents explaining the idle-free initiative and how it benefits our children and our environment.

In March 2017, Lagoon Corporation implemented an idle-free policy. The policy outlines their commitment to improve air quality, the responsibilities of employees and vendors to eliminate vehicle idling, and disciplinary actions for non-compliance. Lagoon additionally placed idle-free stickers on all of the Lagoon-owned vehicles and idle-free signs were strategically placed throughout the park. The DCHD is proud to call Lagoon a public health partner.

Air Quality Education

Breathe Utah's mission is to "… improve the air we breathe through education, collaboration, and policy." Through their free Air Aware School Program, Breathe Utah has taught over 10,000 Utah students grades pre-K through 12th since 2010. In 2017, Breathe Utah gave 18 Air Aware presentations to students in the Davis County School District.

UCAIR Grants

Additional air quality improvement projects are planned in 2018. A UCAIR grant has been awarded to provide financial assistance to vehicle owners in Davis County to aid in the repair of excessively polluting vehicles. Another UCAIR grant provides funds to implement the Cut Pollution—Mow Electric Program. This exchange program will replace polluting gas-powered mowers with zero-emissions electric equipment.

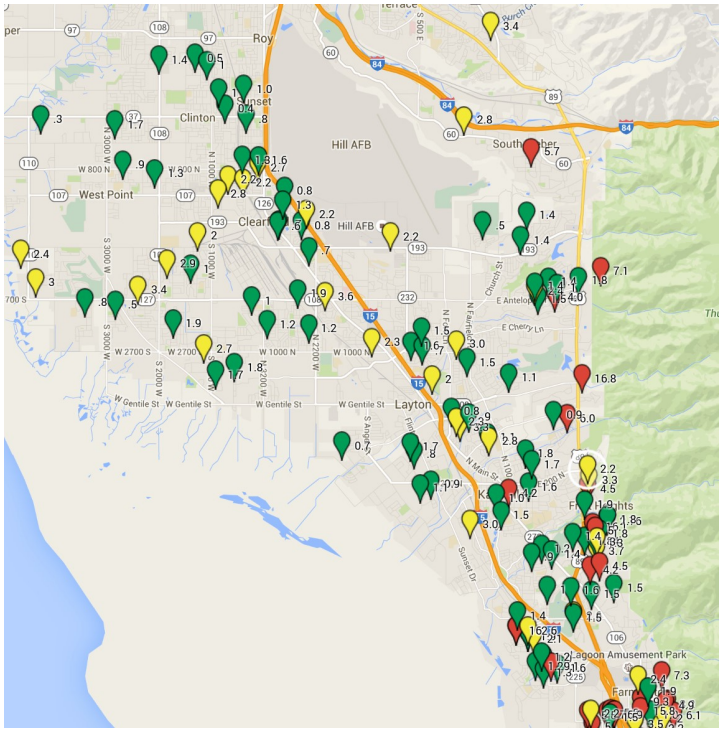
UCAIR | UTAH CLEAN AIR PARTNERSHIP

The National Cancer Institute estimates that between 16,000 and 22,000 lung cancer deaths each year in the United States are related to radon exposure. Exposure to radon is the number one cause of lung cancer among non-smokers and the second leading cause of lung cancer overall. Those who smoke and are exposed to radon have an especially high risk of developing lung cancer.

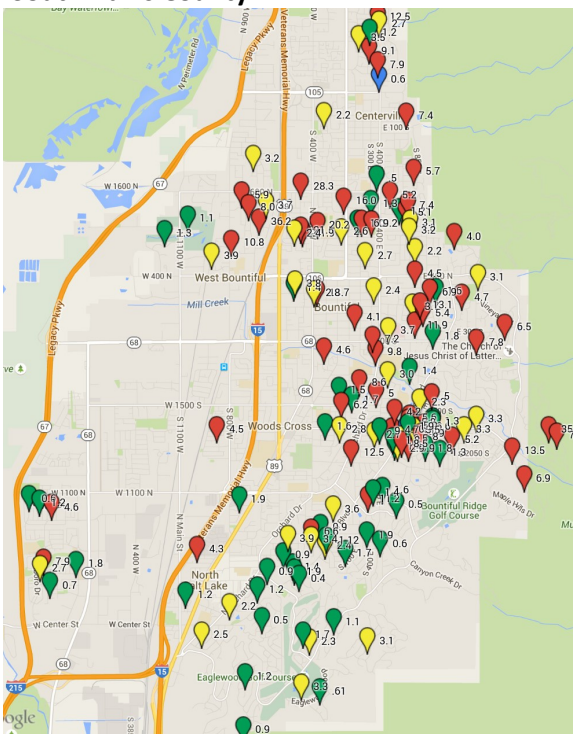
Testing homes for radon levels is the only way to know if people in a home are at risk from radon. Since 2008, 4,720 homes in Davis County have conducted short-term radon tests that were reported to the DEQ. The DCHD also performs free, short-term radon tests for Davis County residents between November - April of each year. In 2017, 65 radon tests were performed in Davis County homes by DCHD staff. If a home radon test result measures 4.0 pCi/L or higher, the EPA recommends taking action including performing long term testing or installing a mitigation system. In 2015, 33.5% of the sites sampled by DCHD were above 4.0 pCi/L. The average measure of radon in Davis County is 4.4 pCi/L, which is lower than the average state measure of 5.1 pCi/L.

In 2015, the DCHD received a grant from the DEQ which allowed them to contract the Utah Geological Survey to perform Phase I of a radon hazard potential mapping project for southern Davis County. Mapping of radon hazard potential provides a categorized estimate of the radon risk based on the underlying geologic conditions. Phase II, mapping of northern Davis County, is expected to be completed in 2018.

North Davis County



South Davis County



Source: DCHD

Drinking Water

Water is a precious commodity within our state. Healthy living requires an adequate supply of good quality water for drinking and domestic uses. People drink and use water every day. The majority of Americans, including most Davis County residents, get their water from a community water system rather than from a smaller water supply such as a private well. The EPA sets regulations for treating and monitoring drinking water delivered by community water systems.

Drinking Water

Contaminants in drinking water have the potential to affect many people. The EPA has set water quality standards and monitoring requirements for over 90 contaminants. If a person is exposed to a contaminant in high doses or for a prolonged period of time, they may become ill. Effects can be short-term or long-term and depend on the specific contaminant, the level of contaminant in the water, the amount of exposure, and the person's individual susceptibility. Drinking water protection programs perform a critical role in ensuring high-quality drinking water and protecting public health.

Drinking Water	Davis	Utah	U.S.	Source
% of Drinking Water Systems with Initial Coliform Positive Samples (2017)	0.37%	—	—	DCHD
% of Population with Fluoridated Water Supply (2015)	96.6%	51.7%	66.3%	DCHD, CDC

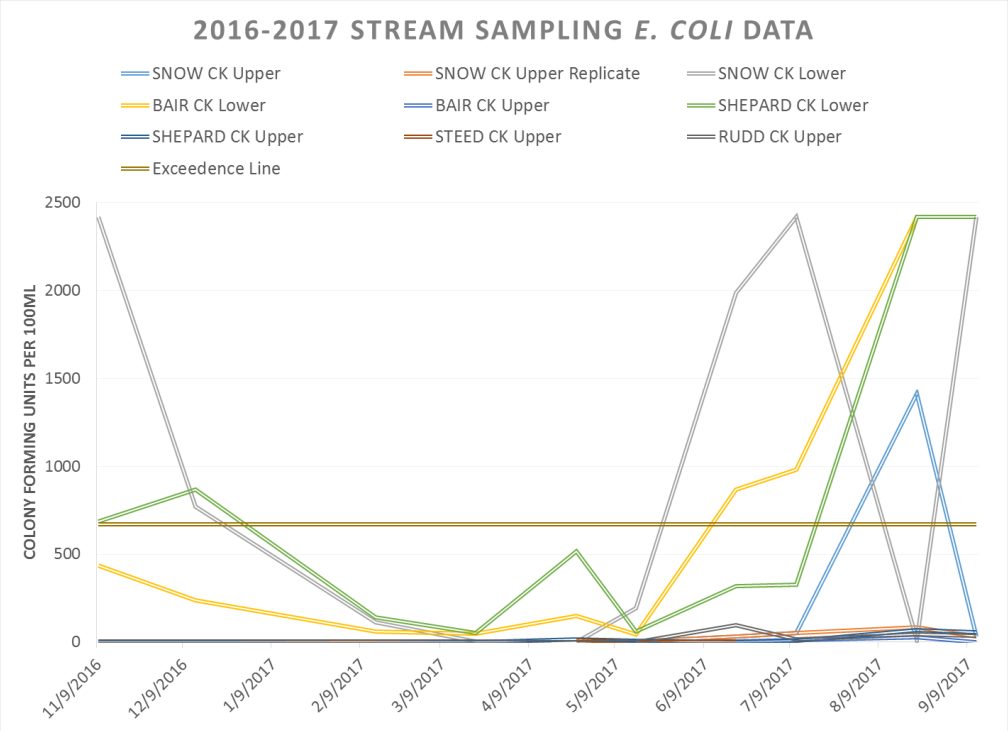
There are 29 public drinking water systems in the county, ranging from a small US Forest Service water system to a large wholesale water provider. In 2017, 2,676 routine bacteriological drinking water samples were taken by the DCHD. Of those, only ten samples (0.37%) tested positive for coliform, a bacterial indicator. The DCHD worked with the affected water provider to track down and mitigate the issue as quickly as possible in each circumstance. Only three water systems were impacted by these positive bacterial results.

Davis County became a fluoridated community in 2001 through a community vote and the subsequent creation of the Davis County Board of Health Drinking Water Fluoridation Regulation. Of the 29 water systems in Davis County, Weber Basin Water Conservancy District provides fluoridated water to 12 water systems, eight water systems directly add fluoride to meet the fluoride levels required by the regulation, and the remaining nine water systems are not fluoridated. Eight of the nine non-fluoridated systems are not community systems serving residential connections (i.e. campgrounds, amusement parks, etc.) and are therefore exempt from the requirements of the regulation. Woods Cross city maintains a legal exemption and does not add fluoride to its water.

Lead Testing in Schools

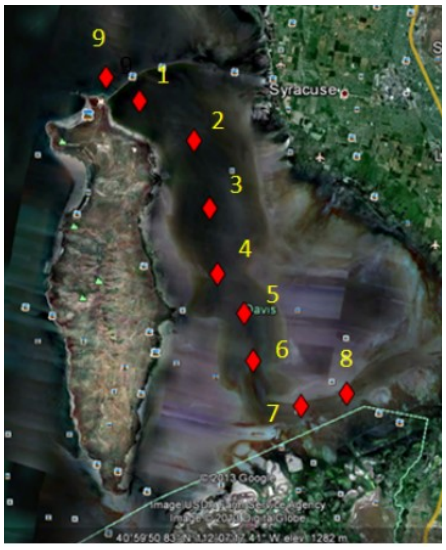
In January 2017, the EPA recommended that all drinking water being provided to children in schools should be tested for lead. This spurred a statewide initiative and a massive volunteer effort to test the drinking water in all Utah schools for lead. The DCHD partnered with the Weber Basin Water Conservancy District, the Davis School District, as well as charter and private schools in Davis County, to ensure the health and safety of the school children and staff. In total, 104 samples of Davis County schools' drinking water were tested for lead. Additional sampling was conducted to confirm that all lead levels fell below the action level of 15 parts per billion (ppb).

In coordination with the Utah Division of Water Quality (DWQ), the DCHD works to maintain standards to monitor and protect the recreational water bodies within the county. There are 30 streams and ponds in Davis County which are sampled for coliform, *E.coli*, total water chemistry, nutrients, and metals. Ponds are sampled monthly from May - October. Bodies of water that exceed the standards set are placed on the 303(d) list as either impaired or threatened with regards to a specified pollutant. Six streams were listed as impaired in 2016 at the time of the last assessment including: Holmes Creek (Layton), Farmington Creek , Barnard Creek (Centerville), Parrish Creek(Centerville), Stone Creek (Bountiful), and Mill Creek (Bountiful). Two ponds were posted closed for high *E. coli* levels in 2017, Clinton Pond and Syracuse Pond.



Source: DEQ

Since 2011, the DCHD has joined efforts with the DEQ and U.S. Geological Survey (USGS) to set baseline standards for key contaminants in the Great Salt Lake. Several types of samples are collected including selenium, Methyl-Mercury, trace metals, and nutrients.



Source: Central Davis Sewer District

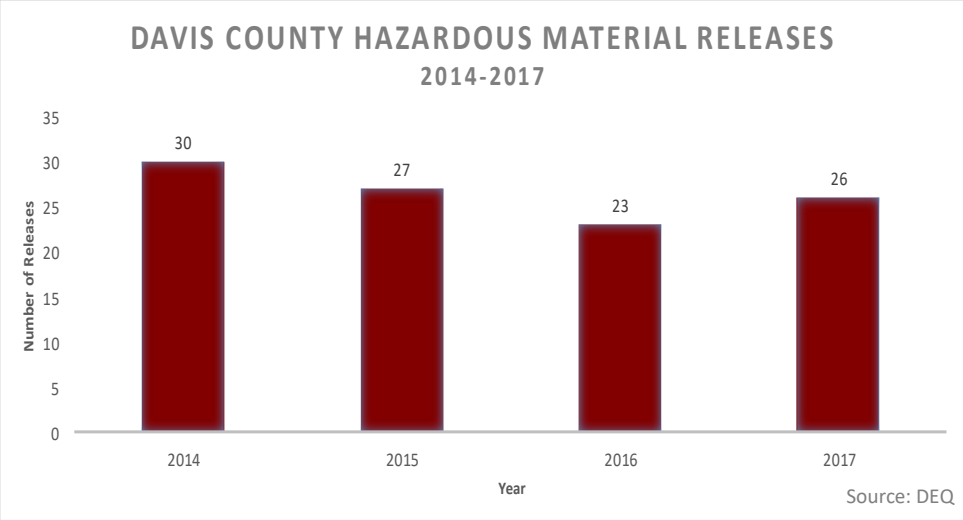
Algal Bloom

For the past several years, Davis County has had positive sample results for cyanobacteria (also known as harmful algal blooms) in the Farmington Bay portion of the Great Salt Lake. The Central Davis Sewer District has taken initiative to sample and evaluate the data collected to provide Davis County with information regarding these blooms. While high counts of cyanobacteria in recreational waters can be harmful to humans and animals, the area of Farmington Bay that is routinely affected by the bacteria (site 4—see map) is not readily accessible to the public.

Hazardous Materials

In 2017, 26 hazardous material releases occurred in Davis County that were reported to the 24/7 reporting hotline managed by the DEQ. The DCHD responded to 61 environmental emergencies including spills, illicit discharges, and other environmental emergencies.

Hazardous Waste Management	Davis	Utah	Source
# of Hazardous Material Releases (2016)	23	340	DEQ
# of Environmental Emergencies Responded to by the DCHD (2017)	61	—	DCHD
# of Superfund Sites (2017)	4	25	DCHD



Superfund Sites

In Davis County, there are currently four Superfund sites. A Superfund site is an uncontrolled or abandoned place where hazardous waste is located, possibly affecting local ecosystems or people. All of the Superfund sites within Davis County are listed with a status of "Final" National Priorities List (NPL). This means that the site is determined to pose a real or potential threat to human health and the environment and requires further investigation. All of the sites in Davis County have undergone clean-up, however, additional analysis is still required prior to the sites being deleted from the NPL. The Superfund sites in Davis County are:

- Bountiful/Woods Cross 5th South PCE Plume — Final NPL
- Five Points PCE Plume, Woods Cross — Final NPL
- Intermountain Waste Oil Refinery, Bountiful — Final NPL
- Hill Air Force Base — Federal Facility Final NPL

Source: https://www.epa.gov/region8/superfund-sites-region-8

ENVIRONMENTAL HEALTH RESOURCES

Air Quality Resources

- **Utah Recess Guidance**
  http://health.utah.gov/asthma/airquality/recess.html
- **EPA Air Quality Flag Program**
  http://www.health.utah.gov/asthma/airquality/flag.html
- **PurpleAir Air Quality Monitoring**
  http://www.mylocation.purpleair.com
- **KSL Air Quality Network**
  https://www.ksl.com/?nid=1314
- **Breathe Utah**
  http://www.breatheutah.org
- **UCAIR**
  www.ucair.org
- **Current Air Quality Conditions**
  http://air.utah.gov
- **Division of Air Quality Annual Reports**
  https://deq.utah.gov/Divisions/daq/info/annualreports/index.html
- **Davis County Smoking Vehicle Report Form**
  http://www.daviscountyutah.gov/health/environmental-health-services/vehicle_emissions/smoking-vehicle-report

Water Quality Resources

- **Drinking Water Consumer Confidence Reports**
  https://ofmpub.epa.gov/apex/safewater/f?p=136:103:::NO:RP,103:P103_STATE:UT
- **Consumer Information About Drinking Water**
  https://deq.utah.gov/ProgramsServices/services/consumerinfo/index.htm

Other Environmental Resources

- **Superfund Sites**
  https://www.epa.gov/region8/superfund-sites-region-8
- **Radon Resources**
  https://deq.utah.gov/ProgramsServices/programs/radiation/radon/
  http://www.co.davis.ut.us/health/environmental-health-services/environmental_testing/radon
- **Environmental Public Health Tracking**
  http://epht.health.utah.gov/epht-view/
- **Davis County Restaurant Inspection Results**
  http://www.daviscountyutah.gov/health/environmental-health-services/inspections/inspections
- **CDC Food Safety Resources**
  https://www.cdc.gov/foodsafety/index.html

Housing Environment

There are an estimated 99,495 households in Davis County. The average household size is 3.29, which was higher than Utah at 3.16 and the U.S at 2.64. Overall, the housing environment in Davis County is safe and properties are in good condition. DCHD received 156 housing complaints in 2017, 23 of those resulted in a notice that required the owner to take action to remediate an issue.

Measures	Davis County	Utah	U.S.	Source
Median Household Size (2012-2016)	3.29	3.15	2.64	Census
Median Year Housing Structures Built (2012-2016)	1988	1984	1976	Census
Overcrowded Housing (2012-2016)	2.5%	3.6%	3.3%	Census
Substandard Housing (2010-2014)	26.82%	32.18%	35.57%	CHNA
Households Lacking Complete Plumbing Facilities (2012-2016)	0.3%	0.3%	0.4%	Census
Households Lacking Complete Kitchen Facilities (2012-2016)	0.7%	0.6%	0.8%	Census
Housing Lacking Telephone, Landline or Cell Phone (2012-2016)	2.3%	2.3%	2.5%	Census
Owner Occupied Housing, Lacking Telephone (2012-2016)	1.6%	1.7%	1.7%	Census
Renter Occupied Housing, Lacking Telephone (2012-2016)	4.6%	3.7%	4.0%	Census
Severe Housing Problem % (2009-2013)	11%	16%	—	CHR

Overcrowded housing is defined as having more than one occupant per room. Households lacking complete plumbing facilities do not have one or more of the following: hot and cold running water, flush toilet, bathtub or shower. All three must be located inside the house. Households lacking complete kitchen facilities do not have one or more of the following: sink with faucet, stove or range, refrigerator. All three must be located inside the house. Severe housing problems are households with at least 1 of 4 housing problems: overcrowding, cost burdened, lack of kitchen, or lack of plumbing facilities. These conditions are rare in Davis County when compared to the state and the nation.

Low-income families and those in high density areas are more likely to experience housing problems such as small space, old pipes, tobacco use by neighbors, bad landlords, fungus, insects, and neighbors who are strangers.

Substandard housing is defined as one or more of the following: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) more than 1 occupant per room, 4) monthly housing cost is greater than 30% of household income. In Davis County it is most likely that housing cost is the primary contributor in the 27% of residents in “substandard housing”. The primary housing concern in Davis County is affordability. More housing indicators are found in the social and economic factors section, pages 95-97.

CDC estimates 48 million people nationwide get sick from a foodborne illness each year. While children, the elderly, pregnant women and people with weakened immune systems are the most susceptible to illness and death from food contamination, foodborne illness can affect anyone.

Foodborne illnesses are typically the result of consumers eating food that has been contaminated with bacteria, viruses, or parasites. Contamination can occur at the point of production or distribution, in the home, or in a food service establishment. As a result, foodborne illness is often difficult to detect and track. Restaurants, bars, schools, food trucks, temporary food establishments, and seasonal food establishments are routinely inspected by DCHD and education is provided.

Food Safety (2017)	Davis
Permitted Food Service Establishments	747
Permitted Mobile Food Establishments	72
Routine Food Service Inspections	1,353
% of Inspected Food Service Facilities Needing Follow-Up Inspections	6.2%
Food Service Establishment Closures	0
Food Handler Permits Issued	10,012
Foodborne Illness Complaints Received by DCHD	63
Foodborne Illness Investigations Tied to Local Food Service Establishments	3
Foodborne Illness Cases Tied to State/National Outbreaks (Lab Confirmed)	3

Source: DCHD

In 2017, 1,353 routine food service inspections were conducted. Of those, 6.2% (84) required a follow-up inspection because the inspector determined the facility was at an elevated risk for foodborne illness. A total of 63 foodborne illness complaints were filed in 2017. Of these, three complaints triggered foodborne illness investigations. In 2017, 10,012 food handler permits were issued to Davis County residents and 217 food service managers were registered. Food workers are educated through food handler trainings and the food safety newsletter, *The Davis Digest*.

The CDC recommends following four simple steps at home — Clean, Separate, Cook, and Chill — to help protect you and your loved ones from foodborne illness.

Food Environment

Early food environment research provides strong evidence that access to fast food restaurants and limited access to healthy foods correlate with a high prevalence of overweight, obesity, and premature death. Supermarkets traditionally provide healthier options than convenience or corner stores. Limited access to fresh fruits and vegetables is a barrier to healthy eating and is related to premature mortality. Among children, fast food restaurants are the second highest energy provider, second only to grocery stores. Environments with a large proportion of fast food restaurants have been associated with higher obesity and diabetes levels.

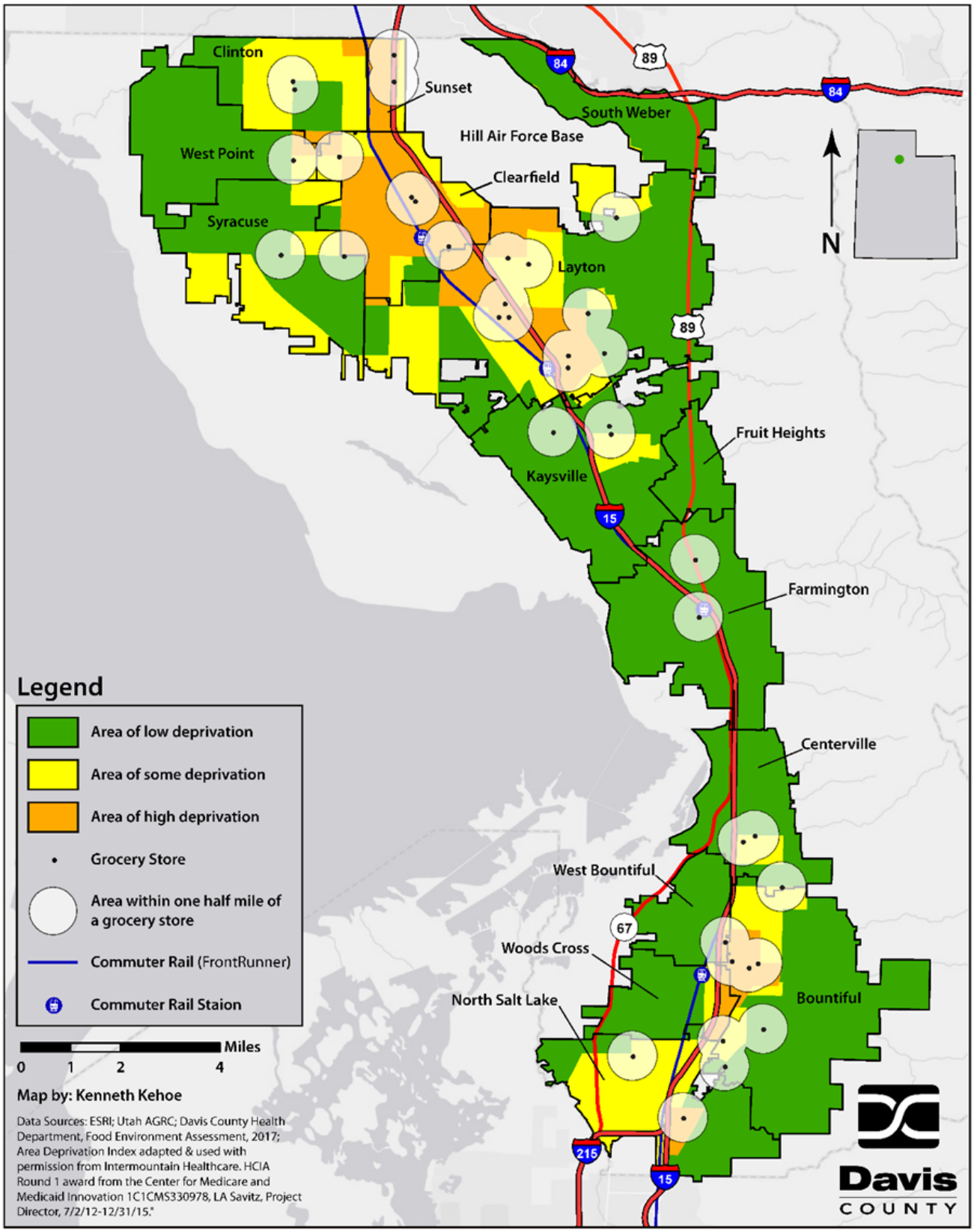
The data in the table below is available to show some indicators related to accessing healthy food. The number of food outlets is not the only important factor to access healthy food. Access to nutritious food is especially important for those who lack transportation. Residents also need information, skills and time to prepare nutritious meals.

There are 10.7 grocery stores per 10,000 population in Davis County, which is lower than the rate for Utah (13.3) and the U.S. (21.2). Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Convenience stores, large general merchandise stores, supercenters, and warehouse club stores are excluded. There is a correlation between obesity rates and the number of grocery stores. The CDC recommends one full service grocery store per 10,000 residents. Davis County has fewer grocery stores, SNAP authorized food stores and WIC authorized stores when compared to the state and nation.

FOOD ACCESS INDICATORS				
Measures	Davis County	Utah	United States	Source
Fast Food Restaurants/100,000 Population (2013)	64.93 Restaurants	76.4 Restaurants	72.7 Restaurants	CHNA
Grocery Stores/10,000 Population (2016)	10.7 Stores	13.3† Stores	21.2† Stores	DCHD
Low Food Access* (2010)	105,228 People 34.33%	739,587 People 26.76%	73,905,540 People 23.61%	CHNA
SNAP-Authorized Food Stores/10,000 Population (2016)	3.95 SNAP Stores	5.21 SNAP Stores	8.29 SNAP Stores	CHNA
WIC-Authorized Food Stores/10,000 Population (2011)	8.7 WIC Stores	11 WIC Stores	15.6 WIC Stores	IBIS, UDOH
Limited Access to Healthy Foods, low income individuals that live more than 1 mile away from grocery store (2013)	4%	5%	8%	CHR

*Low food access is defined by percent of census tracts where at least 33% of the population is more than ½ mile away from a grocery store.

2017 Grocery Store Access, Davis County, Utah



Grocery Store Access

Grocery Store Access Map Summary

The map shows the distribution of grocery stores across Davis County. Colored background represents census block groups and level of deprivation/vulnerability. Income, education, and other economic and social risk factors affect individual health and well-being. The Area Deprivation Index (ADI) is a community socio-economic composite measure used by Intermountain Healthcare at the U.S. Census block group level to measure the distribution of social and economic disadvantage within the community. The index is based upon 17 census measures for education, employment, income, and living conditions. Area Deprivation Index serves as a surrogate measure for impact of deprivation and social determinants of health. Higher socioeconomic deprivation levels in communities (noted in orange on the map) have been associated with poorer health and health outcomes.

Lack of grocery stores (access to healthy food) does not seem to be a problem in Davis County. One half mile buffers around grocery stores is one way to show area of walkability. This buffer does not take into account connectivity of neighborhoods, sidewalks, or geographical barriers such as freeways. The grocery industry considers catchment areas within two miles. At Hill Air Force Base there is a concern about access to healthy food for the night shift. There is interest in other maps with more detail at the city level. Future maps could include concentration of fast food, convenience stores, food pantries, farmer's markets, and more. It is also important to note that even if healthy food is accessible it doesn't mean it's affordable for residents.

Healthy Food Access by City

Healthy food resources in each city were documented during 2017. The table below shows the number of each resource type by city and provides totals of healthy food resources in the county.

HEALTHY FOOD RESOURCES BY CITY, 2017							
City	Grocery Store	Membership Required Store	Farmer's Market	Produce Stand	Community Garden	Food Pantry	Total
Bountiful	6	0	1	4	0	1	12
Centerville	3	0	0	1	2	0	6
Clearfield	4	0	0	2	1	2	9
Clinton	2	0	1	1	1	0	5
Farmington	2	0	0	1	1	0	4
Fruit Heights	0	0	0	2	0	0	2
Kaysville	3	0	1	2	1	1	8
North Salt Lake	1	0	0	0	1	1	3
Layton	9	1	1	7	0	2	20
South Weber	0	0	0	1	0	0	1
Sunset	2	0	0	0	0	0	2
Syracuse	2	0	1	1	1	0	5
West Bountiful	0	1	0	0	0	0	1
West Point	1	0	2	2	1	0	4
Woods Cross	1	0	0	0	0	0	1
Total	36	2	5	24	9	7	83

Source: DCHD

A food environment stakeholder meeting was held in January of 2017. Forty partners convened to discuss food environment issues. The chart below summarizes the Strengths, Weaknesses, Opportunities and Threats (SWOT analysis) of the food environment identified by stakeholders. The full meeting report can be found in the 2017 Davis County Food Environment Assessment found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.

SWOT Analysis
Davis County Food Environment

- Local agriculture
- Choices
- Grocery stores
- Food safety
- Availability
- Affordability
- Sharing of community resources

- Need for transportation to access healthy food & food assistance
- Prevalence of fast food
- Large families
- Lack of knowledge about what is healthy nutrition
- Language barriers
- School lunch waste
- Limited food assistance
- Lack of knowledge about how to prepare healthy meals

- Nutrition education
- Food rescue
- Support for local agriculture
- Double up bucks at farmers markets
- Coordinated food assistance system
- Additional pantry locations
- Partnerships & collaboration
- Promotion of family meal time
- Land use & urban planning
- School food policies & curriculum

- Busy lifestyle
- Fast food
- Development & loss of farms
- Health is not a priority
- High cost of healthy food
- Marketing & advertising
- Changing family structure
- Lack of transportation/transit
- Processed foods

Parks & Recreation

Access to places for recreation is associated with higher rates of physical activity and lower rates of obesity by encouraging physical activity and other healthy behaviors. The evidence for the effectiveness of improving access to recreational facilities is so strong that the CDC recommends it as one of the 24 environmental and policy strategies to reduce obesity.

The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise. According to the CHR, 95% of Davis County residents have access to exercise opportunities which means they live close to a park or recreational facility.

This is better than the Utah average of 87%. Davis County is ranked in the top 10% best in the U.S. for this measure.

Recreation	Davis	Utah	U.S.
Access to Exercise Opportunities (2017)	95%	87%	91%

A measure of parks per square mile for each city is in the table below. The number of parks in this table doesn't reflect park acreage or developed parks/acres per population.

Davis County Park Summary 2017			
City	# of Parks 2017	# of Square Miles	Parks Per Square Mile
Bountiful	15	13.45	1.12
Centerville	6	5.98	1.00
Clearfield	15	7.62	1.97
Clinton	10	5.85	1.71
Farmington	15	9.86	1.52
Fruit Heights	4	2.27	1.76
Kaysville	12	10.45	1.15
Layton	13	22	0.59
North Salt Lake	9	8.52	1.06
South Weber	10	4.67	2.14
Sunset	3	1.31	2.29
Syracuse	12	9.57	1.25
West Bountiful	3	3.25	0.92
West Point	3	7.3	0.41
Woods Cross	3	3.88	0.77
Total	133	115.98	1.15

Source: DCHD

Sidewalks

Davis County is the best in the state when it comes to sidewalks. Only 7% of Davis County residents report that there are no sidewalks in their neighborhood. Statewide, 18% of residents report no sidewalks. While most residents have sidewalks, 41% of residents in Davis County would like more sidewalks.

Paved Shared Trails

Over the last decade Davis County has completed the Legacy Parkway Trail and D&RGW Rail Trail. These paved shared trails traverse the county and link cities north to south. They are popular among walkers, runners, and bikers.

Hiking Trails

With eight cities bordering the mountains and two entrances to the U.S. forest services, Davis County is also known for excellent hiking trials. Over 36 miles of the 100 mile Bonneville Shoreline Trail are in Davis County.

Davis County Trails, 2018					
City	Bike Lane Miles	Paved Shared Trail Miles	Gold Medal Miles	Hiking Trail Miles	Trail Heads
Bountiful	4.5	2.7	0	48	7
Centerville	5.19	9.95	1	33.3	12
Clearfield	1	6.76	1	0	6
Clinton	0	5.5	1	0	1
Farmington	16.8	61.1	0	119	128
Fruit Heights	3.5	0	0	15	4
Kaysville	1.1	13.2	1	5.1	1
Layton	4.51	14.57	1	7.42	33
North Salt Lake	7.7	9.2	0	6.9	4
South Weber	6	1	0	1	1
Sunset	4	0	1	0	0
Syracuse	5.7	7.55	0	0	5
West Bountiful	1.7	7.25	0	0	6
West Point	2.5	5.8	0	0	3
Woods Cross	2.3	5.33	0	1.56	2
County Totals	**66.5**	**149.91**	**6**	**237.28**	**213**

Source: DCHD

Definitions

- Bike Lanes: miles of on-street painted/striped lanes
- Paved Shared Trails: miles of paved walking, jogging, biking, and sometimes equestrian trails
- Gold Medal Miles: marked one-mile walking paths with beginning walkers in mind
- Hiking Trails: miles of natural surface mountain trails and lakeshore trails
- Trail Heads: number of designated starting points to enter trails system (may contain parking, restrooms, maps, and sign posts)

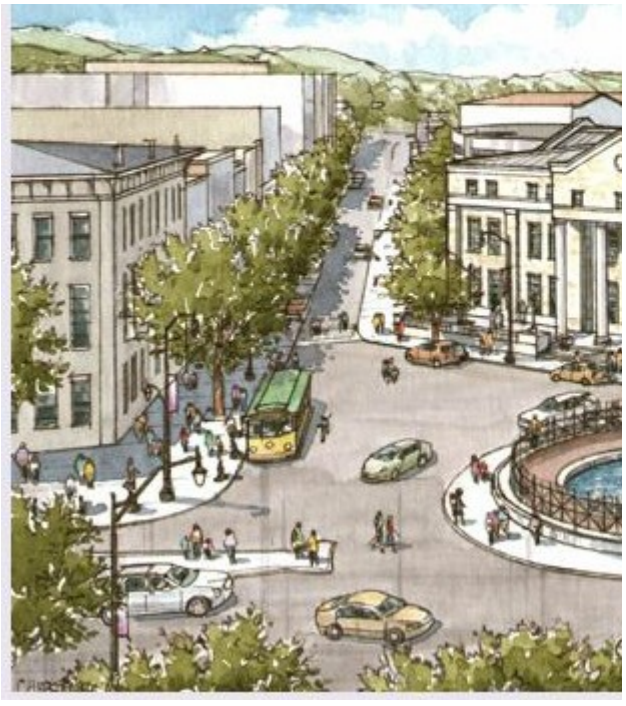
Active Transportation

Active transportation is a systematic approach to give people who walk, bike and use mass transit the same considerations as those using vehicles. Communities that prioritize active transportation tend to be healthier by enabling residents to be more physically active in their daily routines and by having cleaner air to breathe. Making walking and bicycling, or active transportation, safe and convenient meets a critical need of our community that benefits everyone. Active transportation strategies help reduce obesity, improve air quality, and have mental health benefits.

Gap Analysis

While sidewalks and trails are strengths in the community, there are gaps that have been identified that prevent active transportation by walking and biking. Identified weaknesses include:

- Very limited on-street bike lanes
- Lack of neighborhood connectivity
- Unsafe routes to school
- No bike or pedestrian paths across freeways, highways, overpasses, and rail lines to access shopping and entertainment
- Few bike racks
- Difficulty accessing public transportation on foot or by bike
- Lack of signage and wayfinding to direct people to trail systems, transit, and other destinations



WHY WALK?

Beyond the mode of travel, street design influences feelings & decisions of pedestrians and affects attractiveness & economic viability of an area. Streets play an important role in creating & hosting daily activity. It is important to understand how elements of successful streets influence economics, lifestyle & public health. In Utah, rapid growth presents many challenges. The vision Wasatch Choice 2040 focuses growth in compact centers based around walking. Understanding how to embrace & revive walkability is key to creating vibrant, prosperous centers & public spaces for generations to come.

Source: Wasatch Front Regional Council

In Davis County, the average walking trip distance is 1.8 miles; slightly more than the state average of 1.6 miles. The average bike trip is 2.3 miles, also close to the state average of 2.4 miles.

Average Walking Trip Distance	Average Biking Trip Distance	Miles of Non-Motorized Pathway	Miles of Bike Lanes
1.8 miles	2.3 miles	234+ miles	22 miles

Source: Utah Active Transportation Benefits Study, 2017

Active Transportation modes are an important part of the transportation system. Everyone is a pedestrian. Transit riders often walk or bike to and from their transit stop. Even those who park and ride have to walk from a parking area to the station and then from the station to their final destination. In Davis County, a majority drive, but 7.7% of trips are cycling or pedestrian trips. In Davis County, 2.6% of transit users commute to work which is larger than Utah's percentage at 2.0%. General information about the transportation system in Davis County can be found on page 15 of this report.

Travel Mode Split		WALK	BIKE	TRANSIT	AUTO	OTHER (Taxi, Motorcycle, Work from Home)
Overall Mode Share	Davis County	6.3%	1.4%	1.5%	87.3%	1.0%
	Utah	7.5%	1.8%	1.5%	87.3%	1.0%
Work Commute Mode Share	Davis County	1.3%	0.3%	2.6%	89.5%	6.0%
	Utah	3.0%	1.0%	2.0%	88.0%	6.0%

Source: Utah Active Transportation Benefits Study, 2017

Active Transportation Benefits Study

This Utah Active Transportation Benefits Study quantifies fiscal and health benefits of spending on active transportation projects and by people who walk and cycle to help guide policy, planning, investment, and programmatic decisions. Understanding the direct and induced impacts of active transportation helps elevate active travel in funding decisions and priorities. This can help governments and non-profits plan investments in healthy community infrastructure and programs. In response to this need, the Utah Transit Authority and 11 agency collaborators initiated this study to estimate the health and economic benefits of active transportation to inform policy and planning decisions. The 2017 Active Transportation, Davis County Current Conditions report is a product of the study **(Appendix 10)**. Link to full study: https://bikeutah.org/wp-content/uploads/2017/03/Utah-Active-Transportation-Benefits-Study-Final-Report.pdf.

Active Transportation Infrastructure Economic Benefits Calculator

As part of the Active Transportation Benefits Study, this tool was created to calculate the monetary direct, indirect, and induced benefits of investment in active transportation infrastructure given a set of user inputs on costs and facility use. Link to calculator: https://bikeutah.org/atbenefitsstudy/.

ACTIVE TRANSPORTATION RESOURCES

Active Transportation Talking Points, Davis County
http://www.daviscountyutah.gov/docs/librariesprovider5/davis4health-docs/active-transportation-talking-points.pdf?sfvrsn=0

Active Transportation Current Conditions, Davis County
Appendix 10, pages 169-174

Farmington Active Transportation Plan
https://bikeutah.org/wp-content/uploads/2015/12/Farmington-Active-Transportation-Plan.pdf

Kaysville Active Transportation Plan
https://bikeutah.org/wp-content/uploads/2015/12/Kaysville-Active-Transportation-Plan.pdf

Utah Active Transportation Benefits Study
bikeutah.org/atbenefitsstudy

Utah Active Transportation Economic Impacts Calculator
bikeutah.org/atbenefitsstudy

Utah Active Transportation Plan Standards
https://bikeutah.org/wp-content/uploads/2015/12/Active-Transportation-Plan-Standards.pdf

Davis County Utah Trails and Bikeways Map
http://www.daviscountyutah.gov/trails

Utah Bicycle & Pedestrian Master Plan Design Guide
choosehealth.utah.gov/documents/pdfs/Utah_Bike_Ped_Guide.pdf

The Surgeon General's Call to Action to Promote Walking and Walkable Communities
www.surgeongeneral.gov/library/calls/walking-and-walkable-communities

Utah Pedestrian Safety Action Plan
http://www.udot.utah.gov/main/uconowner.gf?n=30709316600516086

Walkability & Measuring Urban Street Design, Wasatch Front Regional Council
https://wfrcgis.maps.arcgis.com/apps/MapSeries/index.html?appid=7d1b1df5686c41b593d1e5ff5539d01a

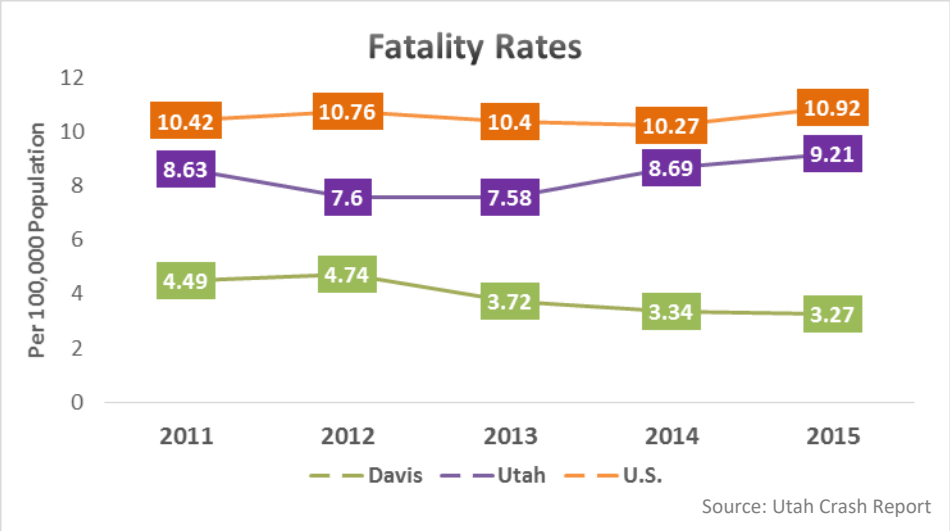
American Public Health Association Active Transportation Fact Sheet
https://www.apha.org/~/media/files/pdf/topics/transport/apha_active_transportation_fact_sheet_2010.ashx

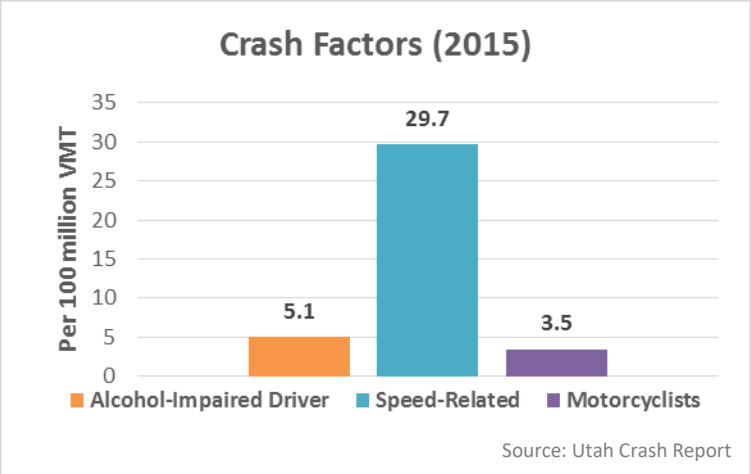
Partnership 4 Active Transportation
www.railstotrails.org/partnership-for-active-transportation

Utah Collaborative Active Transportation Study
http://blog.udot.utah.gov/wp-content/uploads/2013/12/UCATS-FINAL-REPORT-OCTOBER-2013.pdf

In Utah, a motor vehicle crash occurs every 10 minutes, a person is injured in a crash every 23 minutes, and a person dies in a crash every 36 hours. In 2012, there were 52,287 motor vehicle crashes on public roadways in Utah, resulting in 22,325 injured persons and 243 deaths. (Source: UDOH). Zero Fatalities is a state campaign with a goal to reduce the number of deaths on Utah's roads to zero.

In Davis County, motor vehicle crash fatality rates have decreased since 2012 and remain below the fatality rates for Utah and the U.S. Speed is the largest contributing factor in motor vehicle crashes when compared with alcohol impaired drivers and motorcyclists.





Crashes

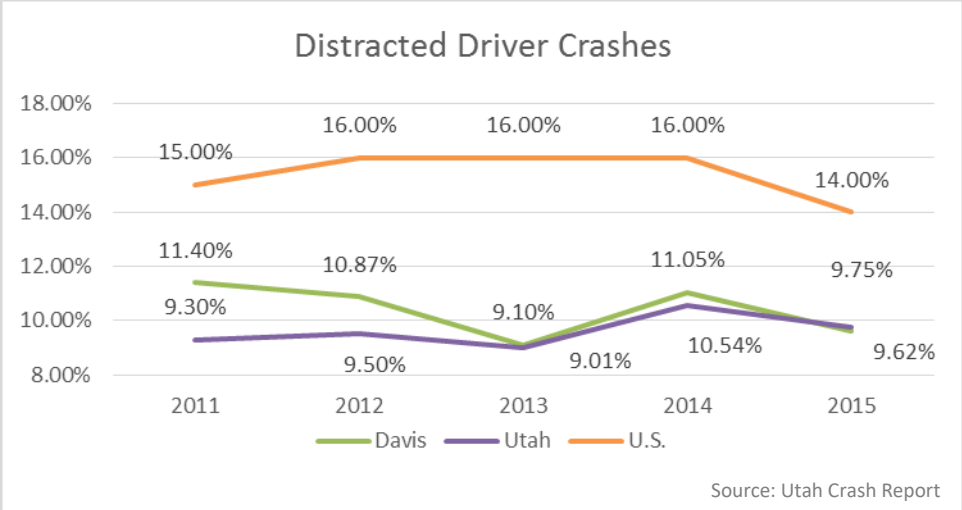
Teenagers and older drivers are unique groups when it comes to driving. Statistics show that overall, teenagers and older drivers are involved in far more crashes and highway fatalities than any other age group. In Davis County, teenage drivers are consistently ranked high in the percent of crashes compared to the state. For 2015, senior driver crashes are near the same rate as Utah and the U.S.

Percent of Driver Crashes by Age Group

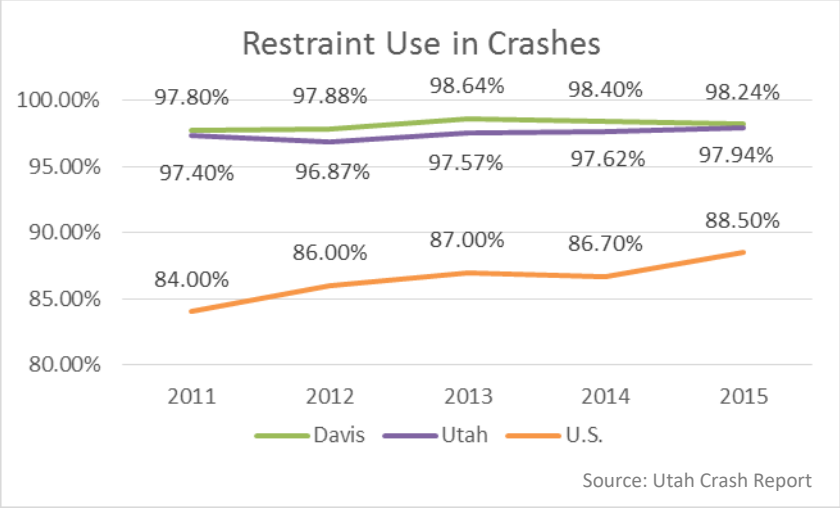
	Area	2011	2012	2013	2014	2015
Senior Driver	**Davis**	**12.70%**	**13.86%**	**12.89%**	**13.16%**	**13.28%**
	Utah	11.60%	12.15%	12.32%	13.42%	13.02%
	US	14.30%	14.10%	13.80%	13.60%	13.80%
Teenage Driver	**Davis**	**25.80%**	**23.36%**	**23.96%**	**23.89%**	**23.22%**
	Utah	20.10%	20.02%	19.51%	19.84%	20.65%
	US	23.20%	21.50%	27.40%	27.20%	26.90%

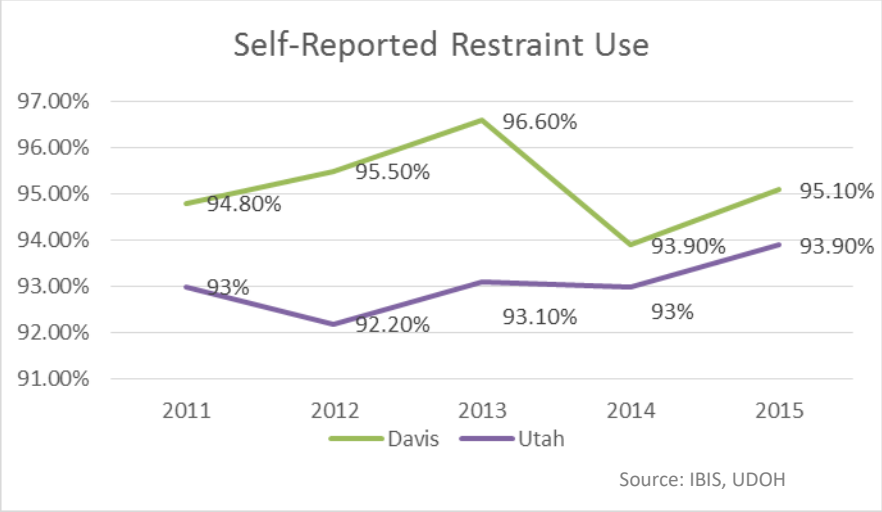
Source: Utah Crash Report

Distracted driving is any activity that diverts attention from driving, including talking or texting on a phone, eating and drinking, talking to people in the vehicle, adjusting the radio, entertainment or navigation system. Any non-driving activity engaged in is a potential distraction and increases the risk of crashing. Since 2011, distracted driving in Davis County is above the state rate but below the national rate.



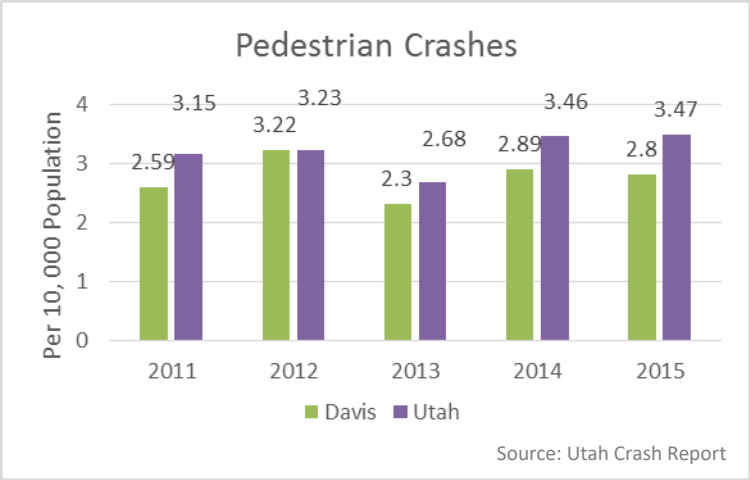
Seatbelt use is one of the most effective ways to prevent deaths and reduce injuries in crashes. Of the 217 people killed in Utah in traffic crashes in 2012, 78 drivers and passengers were not restrained (Zero Fatalities). Davis County has consistently ranked in the top 5 counties in Utah for seatbelt use in crashes. Davis County reports a high rate of seatbelt use when self-reported.

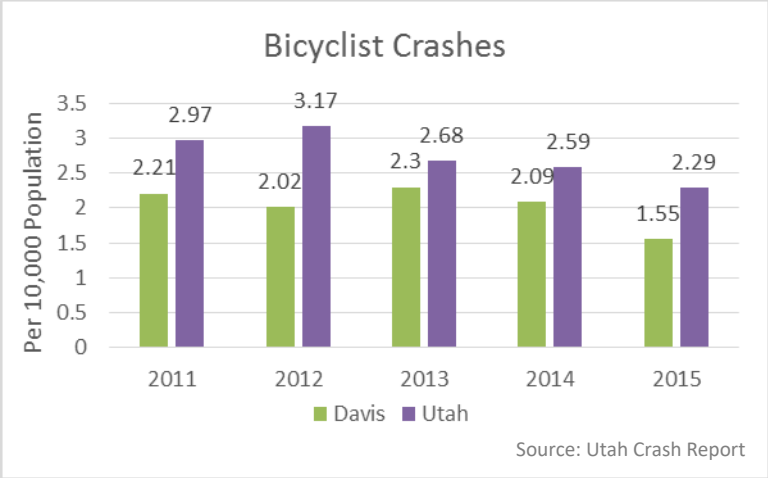




Pedestrian & Bike Crashes

An important component of encouraging walking and biking is to ensure people can walk and bike safely in their communities. Walking and biking safety measures should be considered for all ages, from young children to senior citizens.





A pedestrian and bike crash analysis map has been created for each Davis County city. Two cities may be represented on one map. The maps show pedestrian and bicycle crashes and whether the crash severity resulted in no injury, injury or fatality. The maps can be accessed at this link: http://www.daviscountyutah.gov/docs/librariesprovider5/default-document-library/crash-map-series-order-revision.pdf?sfvrsn=470d5c53_0.

Highights from the completed special populations assessments are provided here. Full reports can be found at this link: http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments.

LGBTQ

- National data shows higher risk for bullying, dating violence, and suicide
- Community concern for LGBTQ youth given recent suicides in the state
- Confidentiality concerns, awareness of LGBTQ community accessing resources secretly
- Lack of providers, professionals, and organizations with cultural competency training to offer appropriate services in affirming environments
- Us versus them mentality between LGBTQ community and some religious/political groups
- Social media platforms being used to out, bully, spread hate and share false information about LBQTQ individuals
- 40% of homeless youth in the United States identify as a member of the LGBTQ community as reported by the True Colors Fund
- There is need for sexual orientation data at the state and local level

Refugee/Immigrant

- Living in every city in Davis County
- Come from many countries and speak many languages
- Greatest barrier to providing services: language/translation
- Accessing affordable housing and mental health services is difficult for the general population and even more difficult for refugees/immigrants

Seniors **(Appendix 11)**

- 78% have self proclaimed health status of good or excellent
- Not meeting Healthy People 2020 targets for pneumococcal and influenza vaccination in Davis County
- Priority health issues: nutrition, mental health, caregiver support, isolation/social support, falls, mobility/ transportation, elder justice, Alzheimer's/memory loss/confusion

Teens **(Appendix 12)**

- Davis County teens have some of the lowest tobacco, alcohol, and marijuana use rates in the nation
- Suicide is leading cause of death for ages 11-17 in Utah
- 1 in 5 adolescents in Davis County have high need for mental health treatment (SHAPR Survey, 2017)
- Sexting referrals to the Davis School District Student Services staff exceed all other safe school violations
- A comprehensive teen assessment is in progress to review SHARP data, conduct youth serving adult survey, and conduct teen focus groups to learn more about the following issues: mental health, substance use, bullying, commitment to school, family conflict, sexting/pornography, new/emerging issues.

Health Disparities by Race/Ethnicity

Utah Health Status by Race and Ethnicity, 2015 presents information on health disparities as they impact racial and ethnic populations in Utah. A health disparity exists whenever the health status on a given measure in one or more racial/ethnic populations is found to be different from other groups.

Significant diversity exists within each of the race and ethnicity categories used in this report and it is acknowledged that the use of such broad categories will, at times, complicate health disparities among smaller subgroups. Whenever possible, five race categories were used (along with Hispanic origin or ethnicity), in accordance with the federal Office of Management and Budget categories utilized by the US Census Bureau. Findings listed here spotlight a few indicators where large disparities exist, although many health indicators and topics are explored in the complete report.

Asian

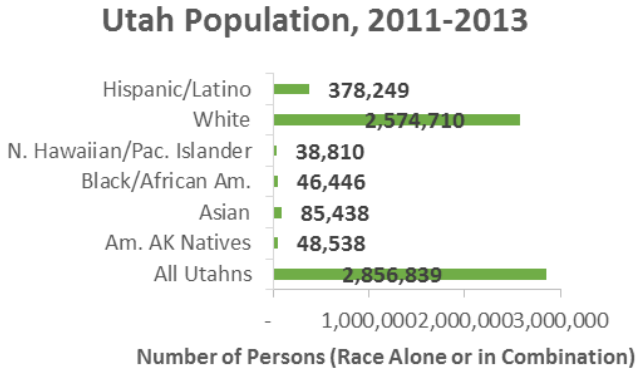
- The longest life expectancy was among the Asian population at 85.8 years compared to state average of 80.2 years. (2009-2013)
- Asian men had the lowest rate of prostate cancer screening (PSA testing), at 41.6% compared to the state average 55.6%. (2010, 2012)

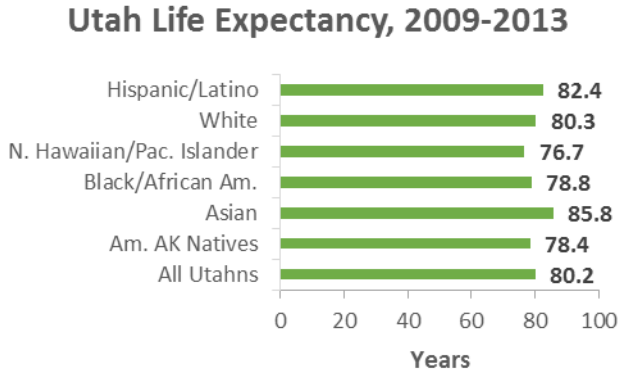
Black/African American

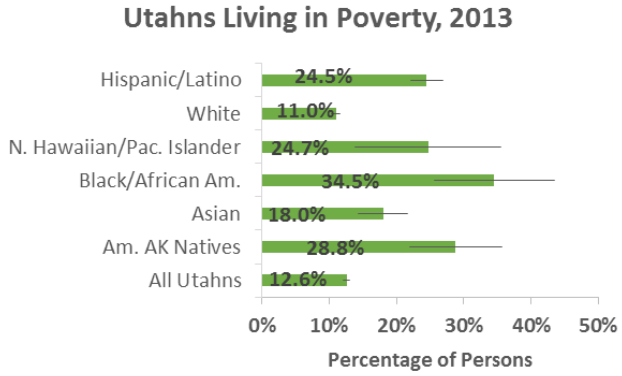
- The Black/African American population had the highest percentage of people living in poverty at 34.5% compared to the state average of 12.6%. (2013)
- The Black/African American population has a Chlamydia rate of 811.6 per 100,000 people compared to a state rate of 249.4 and a Gonorrhea rate of 107.5 per 100,000 people compared to a state rate of 16.8. (2009-2013)

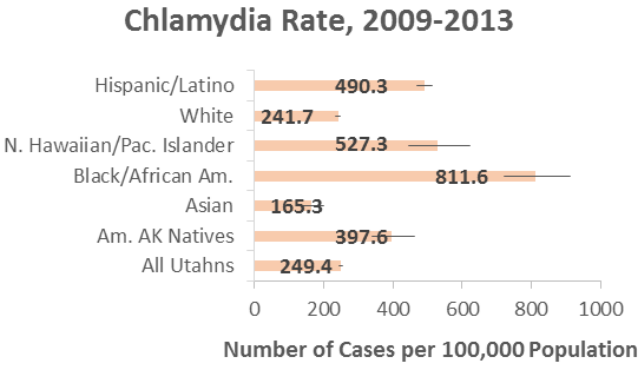
American Indian/Alaskan Native

- The biggest proportion of children 17 and under living in poverty was among the American Indian/Alaskan Native population at 35.3% compared to the state average of 14.7%. (2009-2013)
- The American Indian/Alaskan Natives population had the highest unintentional injury death rate at 73.4 per 100,000 compared to the state rate of 39.4. (2009-2013)



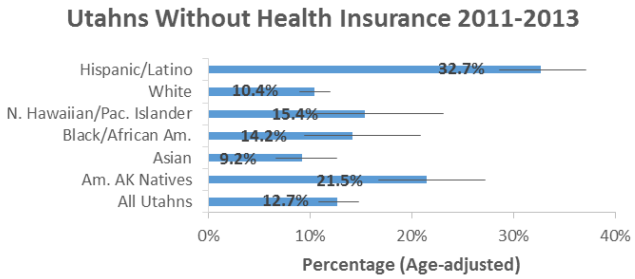






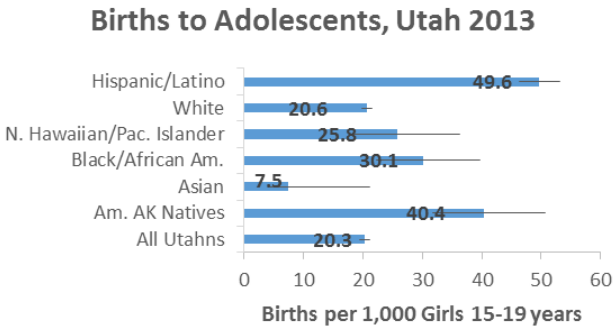
Hispanic/Latino

- The highest percentage of Utahns without insurance was among the Hispanic/Latino population at 32.7% compared to the state average of 12.7%. (2011-2013)
- The rate of teen births is highest in the Hispanic/Latino population at 49.6 per 1,000 girls ages 15-19 compared to the state rate of 20.3. (2011-2013)



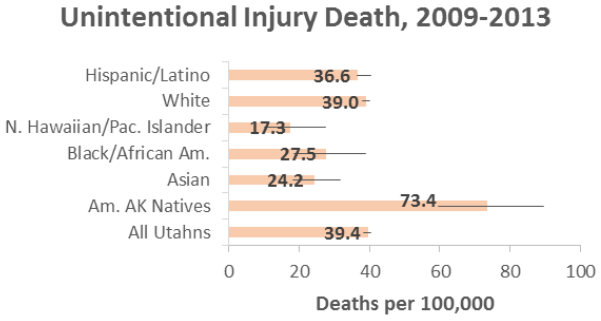
Native Hawaiian/Pacific Islander

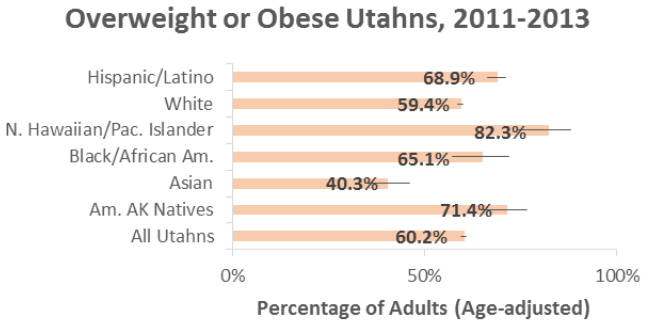
- Only 42.1% of the Native Hawaiian/Pacific Islander population received prenatal care in the 1st trimester compared to the state average of 74.2%. (2009-2013)
- 82.3% of the Native Hawaiian/Pacific Islander population is overweight or obese compared to the state average of 60.2% and 32.7% of adolescents are obese compared to state average of 9.0%. (2013)
- The Native Hawaiian/Pacific Islander population has the highest diabetes death rate at 72 per 100,000 people compared to the state rate of 18.5. (2009-2013)



White

- The White population has the highest percentage of people diagnosed with depression and the highest suicide rate. (2009-2013)
- The measures for the White population are very similar to state averages for all measures due to Whites accounting for 90% of the population.





Source: Utah Health Status by Race and Ethnicity 2015,
http://www.health.utah.gov/disparities/data/race-ethnicity-report/2015HealthStatusbyRace&Ethnicity.pdf

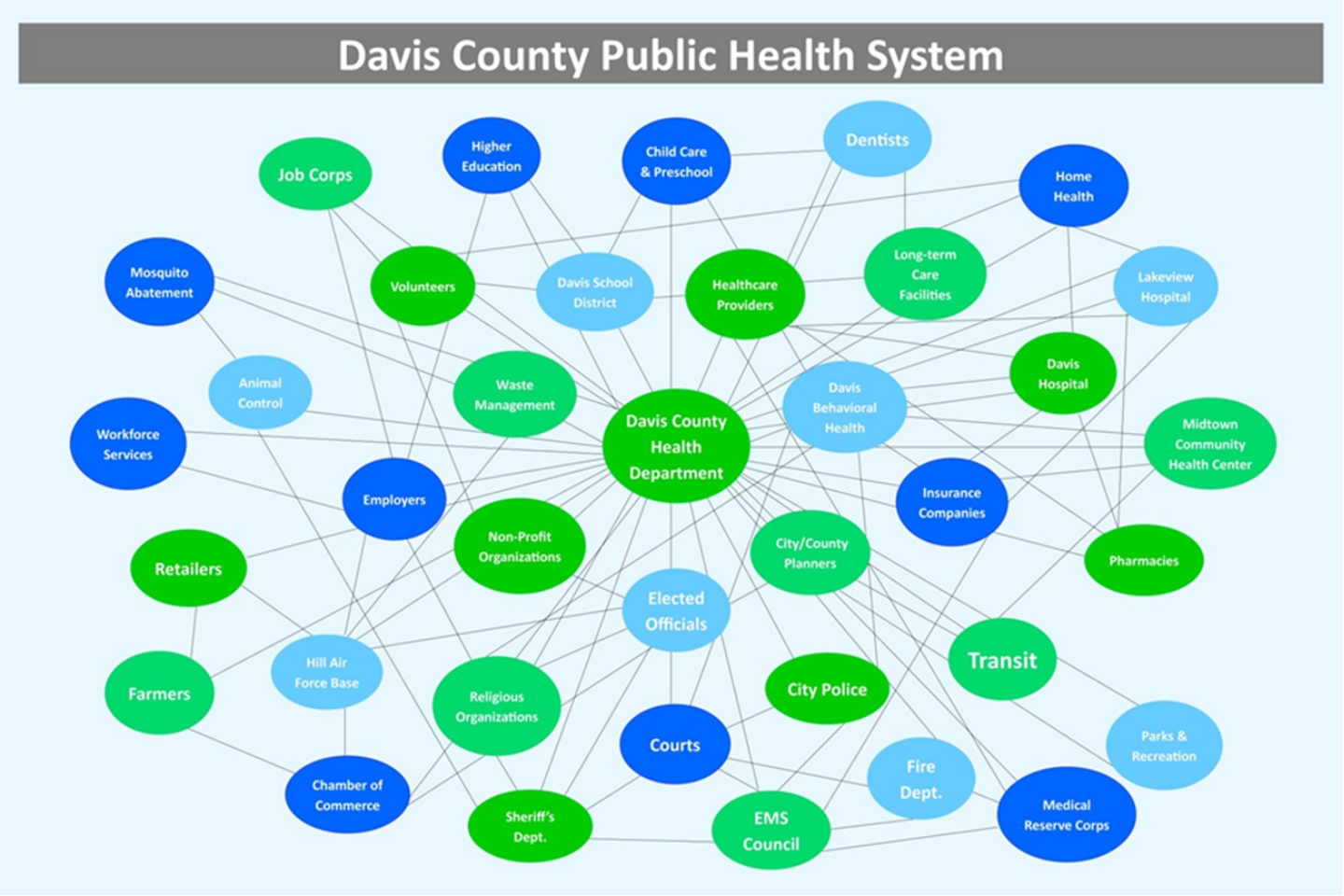
USU Extension, Davis County, was awarded a Culture of Health grant in 2017 as a result of a partnership with The Robert Wood Johnson Foundation and National 4-H Council which are funding projects to learn how a culture of health is created, enhanced, and maintained. A Latino Culture of Mental Health Council is being formed in north Davis County to maintain and grow a culture of mental health and well-being in Latino teens.

Local Public Health System

The **Local Public Health System Assessment** (LPHSA) measures the capacity of the local public health system to conduct essential public health services. It focuses on all of the organizations and entities that contribute to the public's health. The LPHSA answers the questions:

1. "What are the components, activities, competencies, and capacities of our local public health system?"
2. "How are the Essential Services being provided to our community?"

The Local Public Health System (LPHS) is made up of all entities that contribute to the delivery of public health services within Davis County. This includes public, private and voluntary organizations. This is a network of entities with differing roles, relationships and interactions whose activities combine to contribute to the health and well-being of the community. The graphic representation of the system is also known as the "Jelly Bean Chart" in some public health sources.

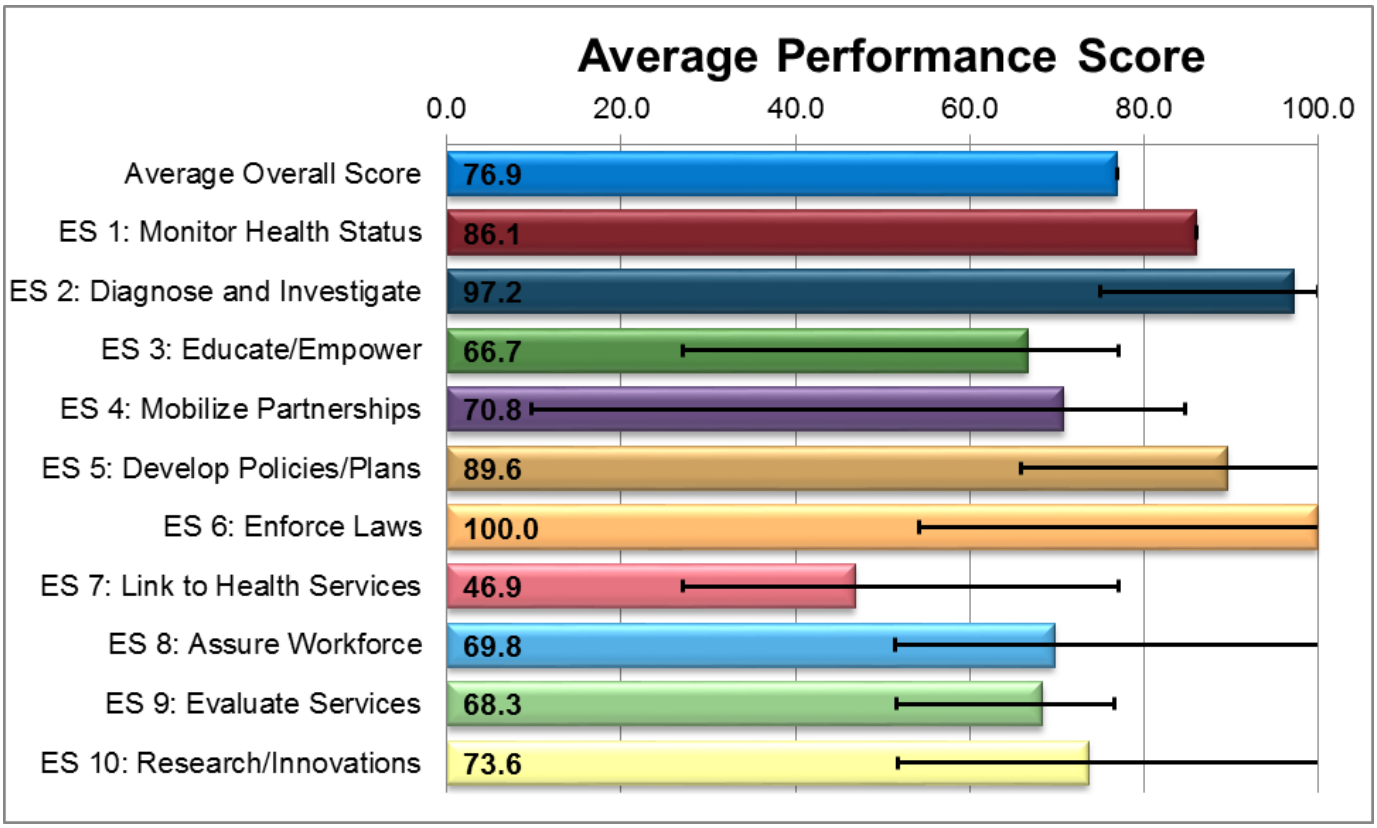


The LPHSA is a self-assessment tool that focuses on the delivery of the 10 Essential Public Health Services by the local public health system. The 10 Essential Public Health Services describe public health activities all communities should undertake.

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public health and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

Local Public Health System

Results



Local Public Health System Strengths

- The public health system is doing well in Essential Service 2: Diagnosing and Investigating Health Problems and Health Hazards; Essential Service 5: Developing Policies and Plans that Support Individual and Community Health Efforts; and Essential Service 6: Enforcing Laws and Regulations that Protect Health and Ensure Safety.
- The LPHS has successfully worked together on a community health improvement process including activities such as the CHA and CHIP.
- Population based public health services are evidence-based and quality personal healthcare services are being delivered according to guidelines.

Opportunities for Improvement

- System improvements are needed for Essential Service 7: Linking People to Needed Personal Health Services. Identify organizations that provide public and personal health services. Provide opportunities to learn what services each agency provides.
- Health promotion and education activities are common within LPHS agencies. There is concern they do not trickle down to impacted communities and general public. Work on partnerships and collaboration for more reach.

The **Forces of Change Assessment** identifies forces that are occurring or will occur that will affect the community or the local public health system. This answers the questions:

1) "What is occurring or might occur that affects the health of our community or the local public health system?"
2) "What specific threats or opportunities are generated by these occurrences?"

In 2017, the Davis4Health Steering Committee (18 participants) was asked to brainstorm and identify forces—such as trends, factors, or events—that are or will be influencing the health and quality of life of the community and the local public health system. Similar questions were included on the Davis4Health Community survey gathering more than 370 responses. These stakeholders were able to identify the impending changes that affect the context in which the community and the public health system operate. Over 40 themes were identified. Responses from the CASPER forces question (155 residents) are also incorporated. The forces identified through this process, together with the results of the three other MAPP assessments, will provide a good foundation to identify future strategic priorities.

Forces For Health

- ⇒ Renewable Energy Sources
- ⇒ Living Wages
- ⇒ Community Involvement
- ⇒ Awareness of Services
- ⇒ Medical Advancements
- ⇒ Education
- ⇒ Walkable Community
- ⇒ Access to Transit

Forces Against Health

- ⇐ Air Pollution
- ⇐ Uncontrolled Healthcare Costs
- ⇐ Aging Population
- ⇐ Lack of Funding
- ⇐ Over Population
- ⇐ Addictions
- ⇐ Effects of Social Media
- ⇐ Prevalence of Suicide & Mental Illness
- ⇐ Big Brother, Government, Politics
- ⇐ Fast Food/Processed Food
- ⇐ Lack of Knowledge & Education
- ⇐ Anti-vaccine Movement
- ⇐ Lack of Personal Accountability

Community Quotes

Energy:
"Decreasing the use of fossil fuels. Increase in renewable energy sources…"

Policy:
"...political support for regulation and price controls in the medical industry and health insurance industry."

Technological:
"Technology and its use will continue to grow creating greater opportunity and greater problems."

Financial:
"The evolution of economics and taxation have forced many to pay healthcare premiums and have nothing left to pay for care because of obscene deductibles…"

Education:
"Better education about health…"

Community Identity:
"A community isn't made by one group it's made of everyone."

Next Generation:
"What our children learn and love is what ends up shaping our communities in the future…"

Healthcare:
"When you are poor healthcare is only critical care, it is not preventative…"

Access to Services:
"Increased commuting as people move away from their areas of work and recreation to find affordable housing, lack of access to existing community resources…"

Quality of Life:
"...jobs, wages, housing cost, food cost, transportation all factor into the quality of life."

Changing Demographics:
"Increased minority populations driving cultural awareness and issues."

Mental Health:
"...education for both youth and adults will help with the mental illness problems and high suicide rates in our community."

Natural Resources:
"Increased population decreasing air quality and availability of water."

Vulnerable Populations:
"...lack of funding for underserved populations...low income children, people with disabilities, mental health issues, working poor, seniors…"

What's Next

The indicators presented have provided comprehensive, broad-based data from a variety of sources in an effort to identify health outcomes and health factors that describe the health status of Davis County's residents and environment. Collecting and analyzing data can be an overwhelming task. Hundreds, if not thousands, of indicators are available. This document contains sufficient data to understand the health status of Davis County residents.

Assessment efforts have helped identify areas where Davis County is doing well and those indicators where improvement is needed. The DCHD assessment efforts are ongoing and planned activities are often influenced by the latest data.

Folowing the release of the 2018 Davis4Health Community Health Assessment in February 2018, the next steps include:

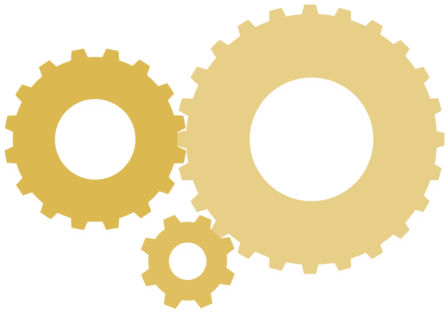
- Re-evaluate/select new community health improvement priorities (mid-year, 2018)
- Develop the 2019-2023 Davis4Health Community Health Improvement Plan (end of year, 2018)
- Select & develop a Davis4Health online platform for data, resources, events, etc. (2018-2020)
- Continuous assessment activities around topics such as: housing; violence & abuse; immunizations; access to healthcare; transportation; health inequities; etc. (2018-2023)

A complete and comprehensive community health assessment is necessary to keep the community moving toward action. The data should help public health agencies and partners focus on what is most important and act to improve those areas.

In some cases additional information may be helpful to move toward improving health in the community. As priority areas are selected, it may be necessary to look at individual measures by age, gender, race/ethnicity, and/or ZIP code or census tract if possible. In some instances data for specific indicators was limited or not available including Alzheimer's Disease incidence, utilization of mental health services, condom use, social isolation, connectedness, air pollution (PM10), etc.

Understanding Davis County's health status through examining health indicators is only one component of mobilizing the community to action. The second component to CHR is County Health Roadmaps, which provides tools to bring communities together from all sectors to look at the many factors that influence health, focus on strategies that are proven to work, learn from other communities' efforts, and make changes that will have a lasting impact on health as illustrated in the Take Action Cycle.

Davis4Health partners are working on a Community Health Improvement Plan which is a county-wide strategic plan to address top health priorities: suicide, obesity, access to behavioral health services, and air quality. The ultimate goal is to improve health in Davis County. These priorities will be reevaluated in 2018 with this new look at data to guide decisions about new priorities.



Appendix

Table: Davis County 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, 2014‡ (Percentage of persons)	41	7.2%	–	✓	11.8%	15.5%
Child Poverty, 2014‡ (Percentage of children)	43	8.3%	–	✓	13.4%	21.7%
Food Insecurity, 2014 (Percentage of the population)	45	12.3%	–	N/A	14.2%	15.4%
ENVIRONMENTAL HEALTH						
Air Quality ($PM_{2.5}$), 2014 (Percentage of days with $PM_{2.5}$ levels over the NAAQS)	49	3.3%	–	N/A	1.8%	N/A
Substandard Housing, 2010–2014 (Percentage of occupied housing units with 1+ substandard conditions)	51	26.8%	–	N/A	32.2%	35.6%
Occupational Fatalities, 2015 (Number of fatal injuries in construction, manufacturing, trade, transportation, utilities, professional, and business services per 100,000 workers)	53	N/A	–	N/A	4.0	3.7
RESPIRATORY CONDITIONS						
Uncontrolled Asthma, 2014 (Number of ED Visits due to Asthma [ICD-9 code 493] per 10,000)	57	20.6	19.7	✓	24.2	N/A
CARDIOVASCULAR CONDITIONS						
High Blood Pressure, 2013–2014 (Percentage of Adults with doctor-diagnosed hypertension)	61	22.6%	25.5%	≈	25.3%	N/A
DIABETES CONDITIONS						
Diabetes Prevalence, 2012–2014 (Percentage of adults)	65	7.4%	7.9%	≈	7.7%	N/A
OBESITY/PHYSICAL ACTIVITY						
Obesity—Adult, 2014 (Percentage of adults with a body mass index of 30 or more)	69	26.1%	26.5%	≈	26.3%	28.8%
Obesity—Minor, 2015§ (Percentage of students in grades 8, 10, and 12)	71	7.8%	–	✓	9.6%	N/A
Physical Activity—Adult, 2013 (Percentage of adults that meet recommendation for aerobic physical activity)	73	55.7%	56.8%	≈	55.7%	50.1%
Physical Activity—Minor, 2015§ (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)	75	18.5%	–	≈	19.9%	N/A
MENTAL HEALTH						
Mental Health Status, 2014 (Percentage of adults with 7+ days poor mental health in past 30 days)	79	15.4%	15.0%	≈	15.5%	16.5%
Suicide, 2012–2014# (Rate per 100,000 [ICD-10 codes X60–X84, Y87.0, *U03])	81	15.4	17.0	✓	20.8	12.7
Depression, 2012–2014 (Percentage of adults ever told by a doctor they had a depressive disorder)	83	21.5%	21.2%	≈	21.2%	N/A
ADDICTIVE BEHAVIORS						
Drug Overdose Involving Opioids, 2013–2014 (Rate per 100,000 [ICD-10 codes X40–X44, X60–X64, X85, and Y10–Y14 with T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6])	87	10.9	11.9	✓	16.4	8.5
Cigarette Smoking—Adult, 2013–2014 (Percentage of adults reporting current cigarette smoking)	89	8.1%	7.9%	✓	9.8%	N/A
Cigarette Smoking—Minor, 2015§ (Percentage of students in grades 8, 10, & 12 reporting current cigarette use)	91	2.5%	–	✓	3.4%	N/A
Binge Drinking, 2014 (Percentage of adults reporting 5+ drinks for men, 4+ drinks for women, on occasion 1 or more times in the past month)	93	8.6%	8.4%	✓	11.1%	16.8%

✓ 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.
Chronic Drinking, 2013–2014 (Percentage of adults reporting >30 for women and >60 for men drinks per month)	95	2.8%	2.8%	✓	3.9%	N/A
Illicit Substance Use, 2013–2014 (Percentage of persons aged 12+ reporting illicit drug use in the past month)	97	N/A	N/A	N/A	7.3%	9.8%
Illicit Substance Dependence or Abuse, 2013–2014 (Percentage of persons aged 12+ reporting illicit drug dependence or abuse in the past year)	97	N/A	N/A	N/A	2.7%	2.6%
CARE ACCESS						
No Health Insurance, 2014 (Percentage of adults)	101	10.6%	10.3%	✓	13.4%	14.9%
Cost as a Barrier to Care, 2014 (Percentage of adults unable to get needed care due to cost)	103	11.3%	11.2%	✓	14.2%	14.9%
Primary Provider, 2014 (Percentage of adults with one or more personal doctor or healthcare provider)	105	76.7%	77.3%	✓	72.2%	75.9%
Non-emergent Emergency Department (ED) Use, 2014 (Non-emergent ED encounter rate per 100 ED treat and release encounters)	107	3.3	3.4	✓	4.5	N/A
Regular Dental Care, 2014 (Percentage of adults who reported a dental visit in the past year)	109	75.6%	75.4%	✓	69.0%	64.1%
PREVENTIVE SERVICES						
Childhood Vaccination, 2014 (Percentage of children aged 19–35 months with 4:3:1:3:3:1 vaccinations)	113	N/A	N/A	N/A	74.6%	74.6%
MATERNAL AND CHILD HEALTH						
Unintended Pregnancy, 2013 (Percentage of live births from unintended pregnancies)	117	17.9%	–	≈	22.8%	N/A
Developmental Screening, 2011–2012 (Percentage of children aged 10 months–5 years receiving developmental screening during a healthcare visit)	119	N/A	N/A	N/A	26.8%	30.8%
Autism, 2010†† (Rate per 1,000 children aged 8 years)	121	17.4	N/A	≈	18.6	14.7
VIOLENCE AND INJURY PREVENTION						
Helmet Use—Minor, 2013 (Percentage of students in grades 9–12 who had ridden a bicycle during the past 12 months reporting that they never or rarely wore a bicycle helmet)	125	N/A	N/A	N/A	74.6%	87.9%
Unintended Injury Deaths, 2012–2014# (Rate per 100,000—ICD-10 codes V01–X59, Y85–Y86)	127	33.4	41.0	≈	43.3	39.6
INFECTIOUS DISEASES						
Healthcare-Associated Infections, 2014 (Standardized Infection Ratio)	131	N/A	N/A	N/A		
Chlamydia, 2014‡‡ (Cases per 100,000 population)	133	289.1	–	≈	279.5	456.1
***Salmonella*, 2013–2014§§** (Infections per 100,000)	135	12.6	–	≈	11.8	N/A
Pertussis, 2013–2014§§ (Cases per 100,000)	137	32.2	–	✓	37.8	N/A

‡ All data in this row based on the 2014 Model-based Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States.
§ All data in this row are from the 2015 Prevention Needs Assessment.
# All Utah data in this row are from the Utah Death Certificate Database; U.S. data from CDC WONDER Compressed Mortality File 1999–2014 Series 20 No. 2T, 2015.
†† National data based on children living in Alabama, Arizona, Arkansas, Colorado, Georgia, Maryland, Missouri, New Jersey, North Carolina, Utah, and Wisconsin. Utah estimates based on information collected from records of children living in Salt Lake, Davis, and Tooele counties.
‡‡ All Utah data in this row are from the Utah Department of Health Prevention, Treatment and Care Program; U.S. data from Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2014. Accessed 3/28/2016 from http://www.cdc.gov/std/stats14/surv-2014-print.pdf.
§§ All data in this row are from the Utah Secured Communicable Disease data retrieved on 3/31/2016 from http://ibis.health.utah.gov/.

#2: McKay-Dee Hospital, CHNA Summary, 2016

McKAY-DEE HOSPITAL

Intermountain Healthcare
Healing for life®

2016 Community Health Needs Assessment Summary, May 2016

➢ **McKay-Dee Hospital** conducted a Community Health Needs Assessment (CHNA) of area health needs to understand how to help people live the healthiest lives possible. The hospital collaborated with Weber-Morgan Health Department and the Utah Department of Health to identify health indicators, gather current data, analyze, and then prioritize to determine the significant needs to address over the next several years. The Affordable Care Act requires that each not-for-profit hospital conduct a CHNA and plan strategies to address the identified need.

IDENTIFIED HEALTH PRIORITY

Prevention of prediabetes, high blood pressure, depression, and prescription opioid misuse.

COMMUNITY INPUT HIGHLIGHTS—We heard from the community

Community input meetings held in 2015 included people representing: local government, schools, senior services, safety net clinics, minority populations, uninsured and low-income people, social service providers, businesses, advocates, healthcare providers, the Weber-Morgan Health Department and the Utah Department of Health.

Participants identified these health issues as important in the community:

- Lack of education about and motivation for preventive care and healthy behaviors that prevent chronic diseases;
- Prevalence of obesity and unhealthy behaviors among adults and children, especially when correlated with low-income and affordability of healthy food;
- Lack of awareness and access to mental health resources;
- Stigma associated with mental health;
- Prevalence of substance use and addiction, lack of treatment resources; and
- Need for suicide prevention.

COMMUNITY HEALTH NEEDS DATA HIGHLIGHTS

Following are health indicators that present the most opportunity to improve health:

Health Indicators	Adults in McKay-Dee Hospital Community	Utah	U.S.
Prediabetes (% reported ever told by a doctor)	6.6%	5.3%	5.3%
Diabetes (% reported ever told by a health professional)	8.3%	7.6%	9.6%
High blood pressure (% reported ever told by a health professional)	26.1 %	25.2%	31.4%
High cholesterol (% reported ever told by a health professional)	23.9%	25.5%	39.1%
Obese (% self-reported BMI 30+)	26.5%	25.7%	29.4%
Physical inactivity (% self-reported no leisure time activity)	19.1%	18.7%	25.3%
Depression (% reported ever told by health professional)	22.5%	20.7%	18.2%
Poor mental health status (% self- reported mental health not good 7 or more of last 30 days)	16.4%	15.9%	16.5%
Suicide death rate per 100,000	18	20.1	12.5
Drug poisoning death rate per 100,000 (includes prescription opioid overdose)	18.4	21.7	13.2

From the Utah Department of Health Office of Public Health Assessment.

WHY WE ARE FOCUSING ON THESE HEALTH ISSUES

Highlights from the Utah Department of Health Public Health Indicator Based Information System (IBIS)

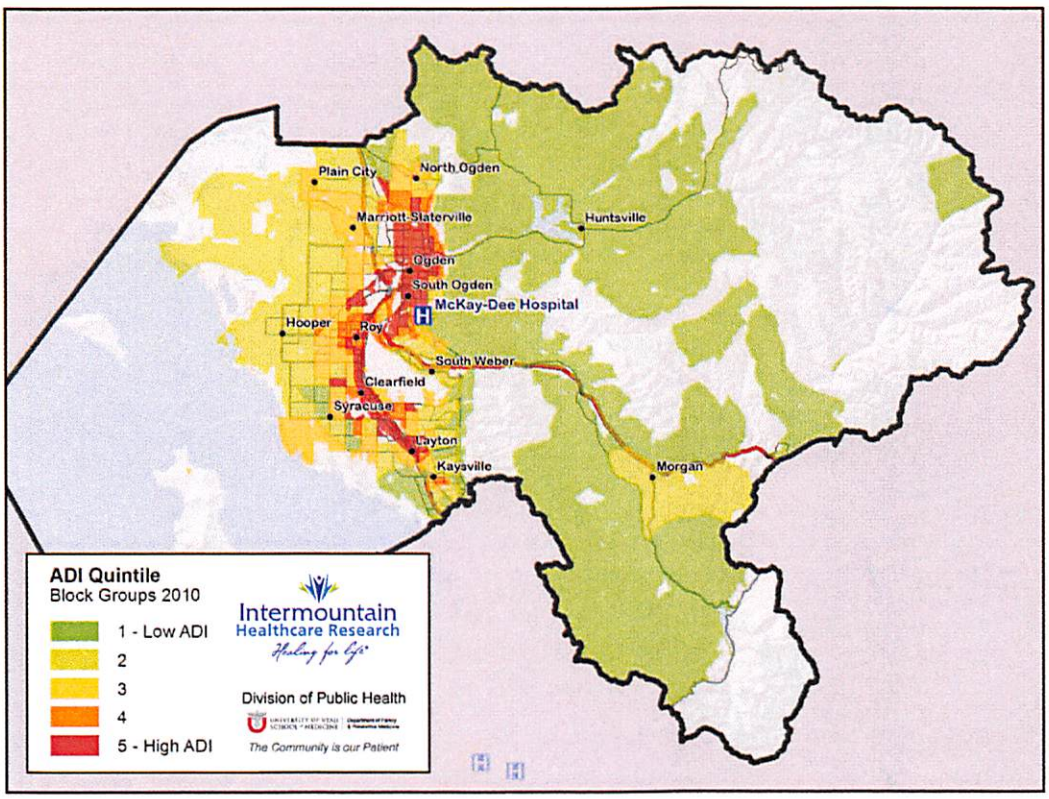
Prediabetes and high blood pressure—Prediabetes and high blood pressure are common among adults, many of whom do not know they have it. Diabetes affects as many as one in three individuals and in Utah costs more than $1 billion a year. Identifying people with prediabetes can help prevent the development of type 2 diabetes, which is the leading cause of non-traumatic lower-extremity amputation, renal failure, and blindness among adults younger than 75, and one of the leading causes of heart disease. High blood pressure usually has no symptoms and increases the risk for heart disease and stroke. Prediabetes and high blood pressure can be managed through lifestyle changes.

Depression—Mental illness affects 20 percent of the US population; depression is the most common illness. Depression is more common in people with other health conditions such as diabetes and heart disease, and can worsen outcomes in people with those conditions and contribute to a poorer overall quality of life.

Prescription Opioid Misuse—Prescription opioid misuse is a major problem in Utah. In 2013, Utah ranked 5th in the U.S. for drug poisoning deaths with a rate of 21.7 per 100,000 population. Every month, 49 Utahns die as a result of a drug poisoning, 82.3 percent of which are accidental or of undetermined intent. Of these, 74.8 percent involve opioids.

AREA DEPRIVATION INDEX (ADI)

Income, education, and other economic and social risk factors affect individual health and well-being. The ADI is a community socio-economic composite measure developed by Intermountain at the U.S. Census block group level to measure the distribution of socio-economic disadvantage within the community. Higher socio-economic deprivation levels in communities (noted in orange and red on the map below) have been associated with poorer patient health and health delivery outcomes.



The following elements comprise socio-economic deprivation: median family income; occupied housing units w/o complete plumbing; Households w/o a motor vehicle; income disparity; population aged 25+ with at least high school education; single parent households with dependents; median home value; population aged 25+ with <9 yr education; households with >1 person per room; median gross rent; civilian labor force unemployed (aged 16+); owner occupied housing units; households w/o a phone; employed person 16+ in white collar occupation; families below poverty line; median monthly mortgage; and population below 150% poverty threshold

ADDRESSING THE NEED

Based on the results of the CHNA, planning is underway with McKay-Dee Hospital and community partners to address the health need over the next several years through education, screening, and treatment.

For more information contact:
Kristy Jones, Community Benefit Manager: 801.387.7753; kristy.jones@imail.org
Mike Clark, Administrator: 801.387.3701; mike.clark@imail.org

County Health Rankings & Roadmaps
A Healthier Nation, County by County

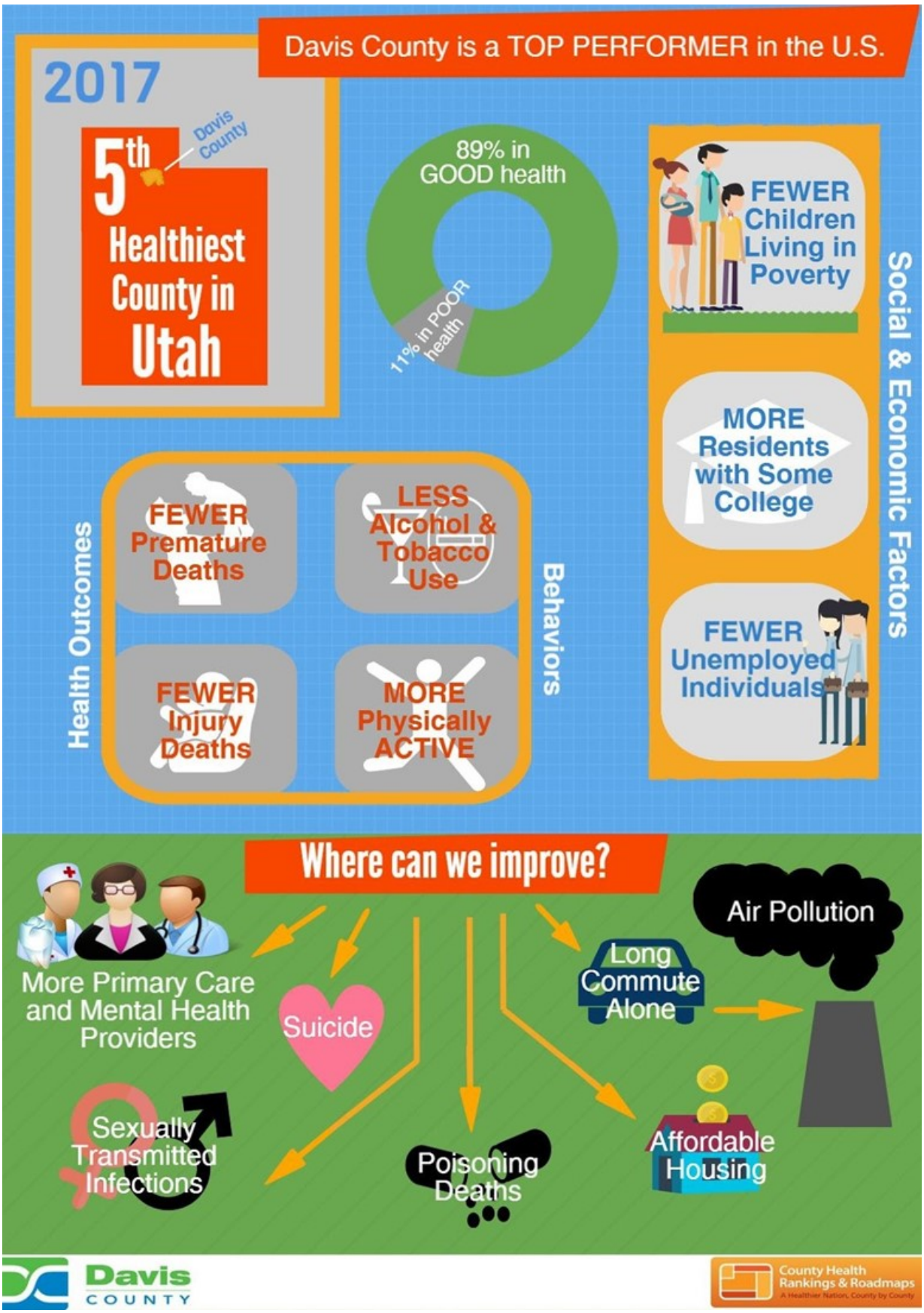
	Davis County	Error Margin	Utah	National Benchmark*	Rank (out of 27)
Health Outcomes					**6**
Mortality					**7**
Premature death	5,264	4,975–5,553	5,869	5,317	
Morbidity					**8**
Poor or fair health	10%	9–12%	13%	10%	
Poor physical health days	3.2	2.9–3.5	3.4	2.6	
Poor mental health days	3	2.8–3.3	3.2	2.3	
Low birthweight	6.90%	6.7–7.2%	6.80%	6.00%	
Health Factors					**4**
Health Behaviors					**5**
Adult smoking	7%	6–8%	10%	13%	
Adult obesity	25%	23–27%	25%	25%	
Physical inactivity	16%	14–17%	18%	21%	
Excessive drinking	8%	7–9%	9%	7%	
Motor vehicle crash death rate	7	6–8%	11	10	
Sexually transmitted infections	227		242	92	
Teen birth rate	25	24–26	32	21	
Clinical Care					**2**
Uninsured	12%	10–13%	17%	11%	
Primary care physicians**	2,138:1		1,795:1	1,067:1	
Dentists**	1,673:1		1,572:1	1,516:1	
Preventable hospital stays	34	31–37	37	47	
Diabetic screening	85%	80–89%	84%	90%	
Mammography screening	61%	56–65%	61%	73%	
Social & Economic Factors					**4**
High school graduation**	82%		76%		
Some college	75%	73–77%	67%	70%	
Unemployment	6.20%		6.70%	5.00%	
Children in poverty	10%	8–13%	16%	14%	
Inadequate social support	13%	12–15%	15%	14%	
Children in single-parent households	15%	14–17%	18%	20%	
Violent crime rate	108		217	66	
Physical Environment					**13**
Daily fine particulate matter	9.4	9.3–9.6	9.4	8.8	
Drinking water safety	17%		13%	0%	
Access to recreational facilities	9		7	16	
Limited access to healthy foods**	4%		5%	1%	
Fast food restaurants	63%		59%	27%	

* 90th percentile, i.e., only 10% are better

** Data should not be compared with prior years due to changes in definition

All health measures, interactive maps, and trend graphs can be found at www.countyhealthrankings.org.

#4: 2017 CHR Infographic



Davis Behavioral Health

Davis County

DAVIS BEHAVIORAL HEALTH INC

Population: 336,043

Davis Behavioral Health
County: Davis

Substance Abuse and Mental Health Provider Agency:
Brandon Hatch, CEO/Director
Davis Behavioral Health
934 S. Main
Layton, UT 84041
Office: (801) 773-7060
www.dbhutah.org

Davis Substance Abuse—Prevention

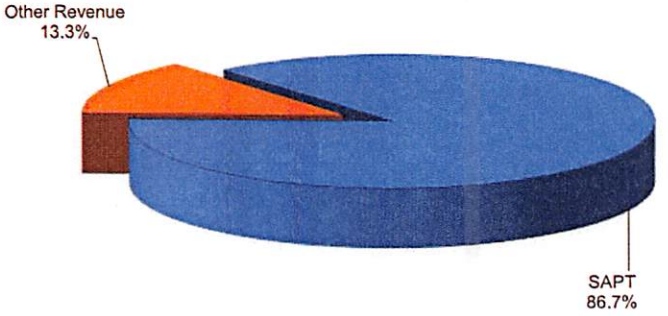
Protective Factors:

- Rewards & opportunities for pro-social involvement

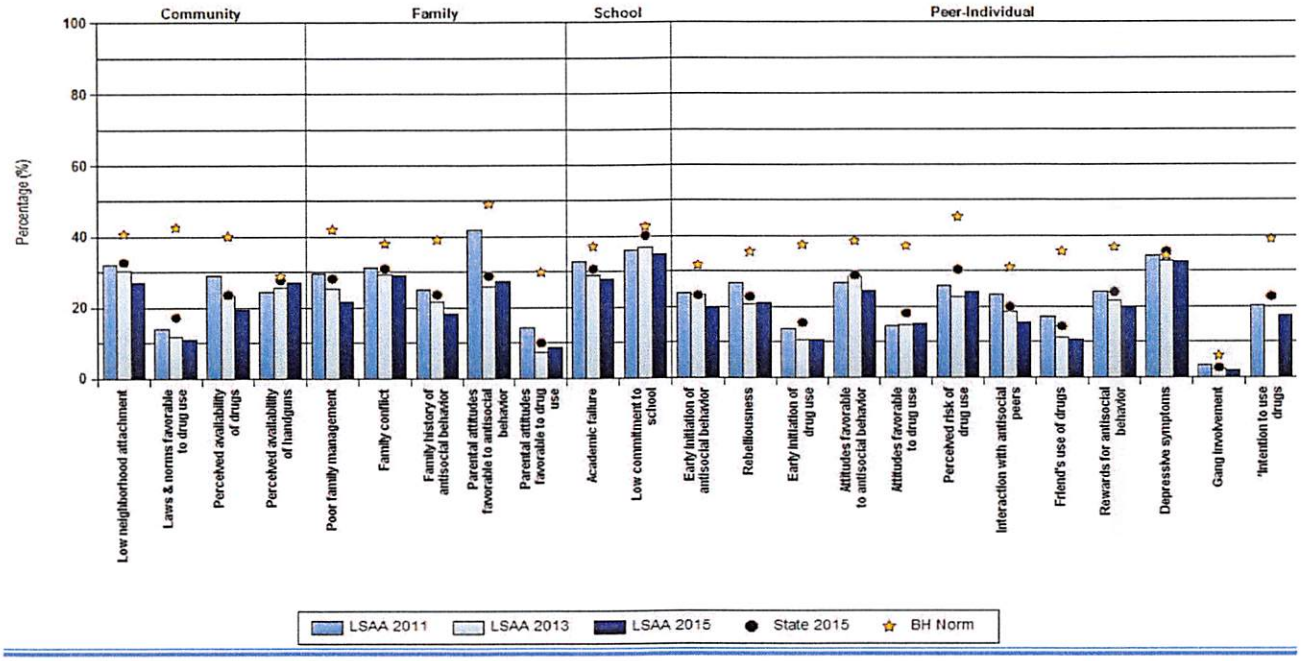
Prioritized Risk Factors:

- Family conflict
- Poor family management
- Low commitment to school
- Attitudes favorable to drug use
- Depressive symptoms

Source of Revenues
Fiscal Year 2016



Risk Profile
2015 Davis County LSAA Student Survey, All Grades

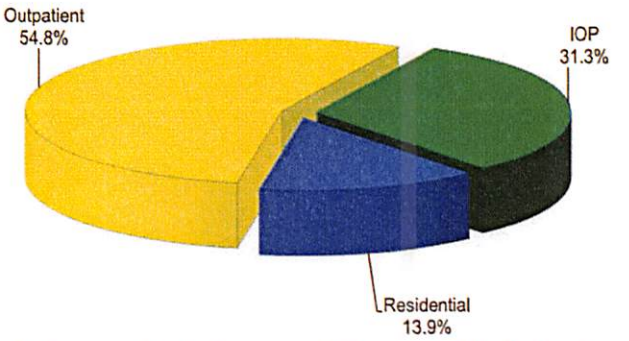


Davis Behavioral Health—Substance Abuse

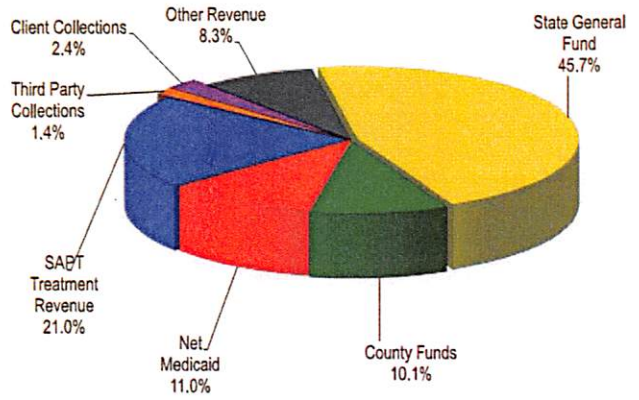
Total Clients Served.....1,072
Adult.....1,003
Youth.....69
Penetration Rate (Total population of area)..0.3%

Total Admissions.....1,041
Initial Admissions.....707
Transfers.....334

Admissions into Modalities
Fiscal Year 2016



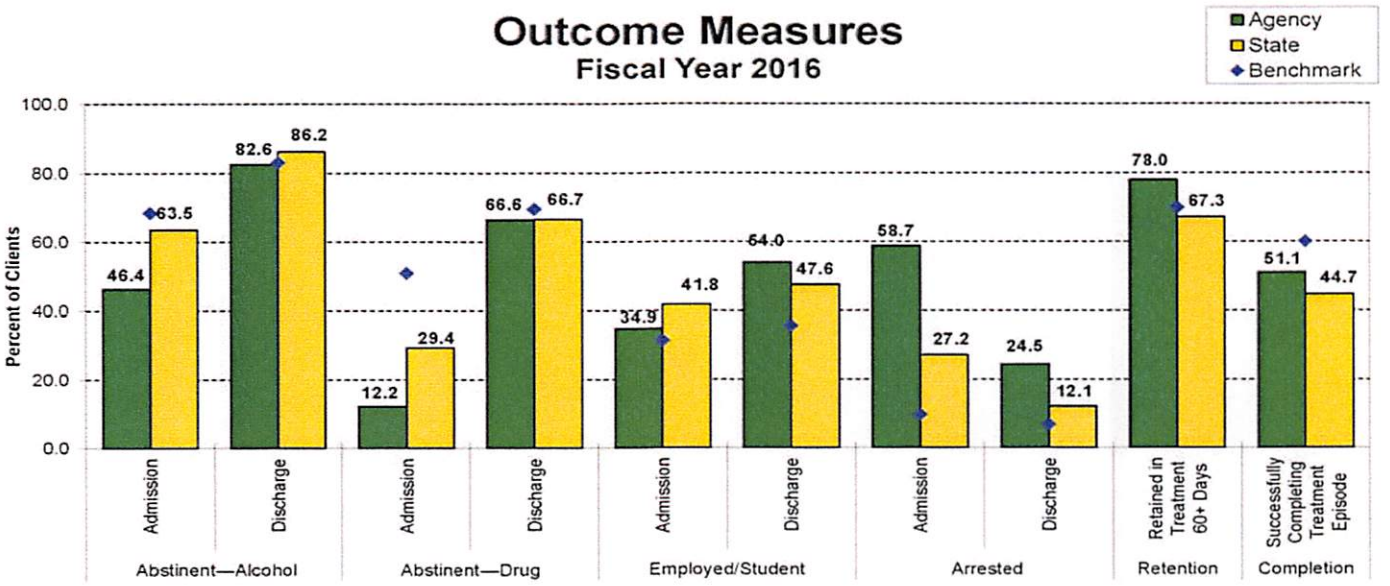
Source of Revenues
Fiscal Year 2016



Primary Substance of Abuse at Admission

	Male	Female	Total
Alcohol	87	75	162
Cocaine/Crack	9	8	17
Marijuana/Hashish	80	30	110
Heroin	149	105	254
Other Opiates/Synthetics	15	19	34
Hallucinogens	1	0	1
Methamphetamine	175	146	321
Other Stimulants	6	2	8
Benzodiazepines	1	7	8
Tranquilizers/Sedatives	4	2	6
Inhalants	0	0	0
Oxycodone	37	79	116
Club Drugs	1	0	1
Over-the-Counter	1	0	1
Other	1	1	2
Total	**567**	**474**	**1,041**

Outcome Measures
Fiscal Year 2016

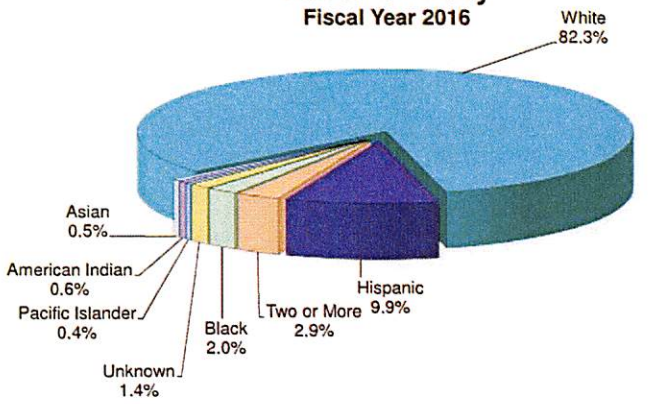


Benchmark is 75% of the National Average.

Davis Behavioral Health—Mental Health

Total Clients Served.....6,079
Adult.....3,925
Youth.....2,154
Penetration Rate (Total population of area)..... 1.8%
Civil Commitment.....124
Unfunded Clients Served.....2,084

Race/Ethnicity
Fiscal Year 2016

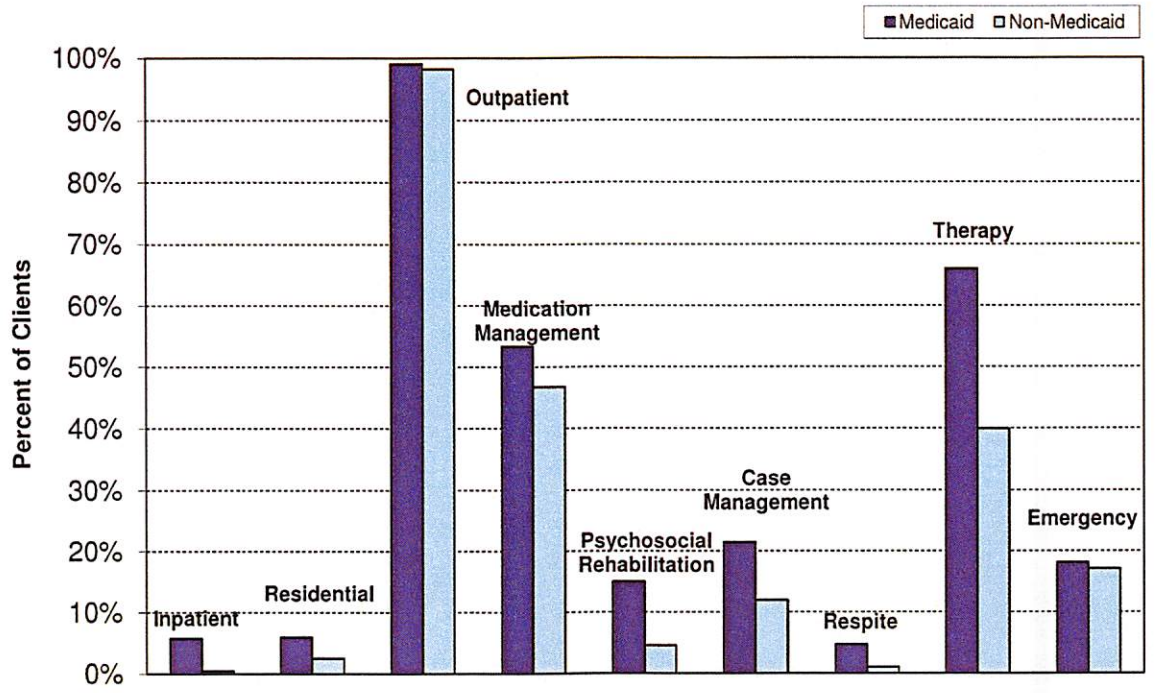


More than one race/ethnicity may have been selected.

Diagnosis

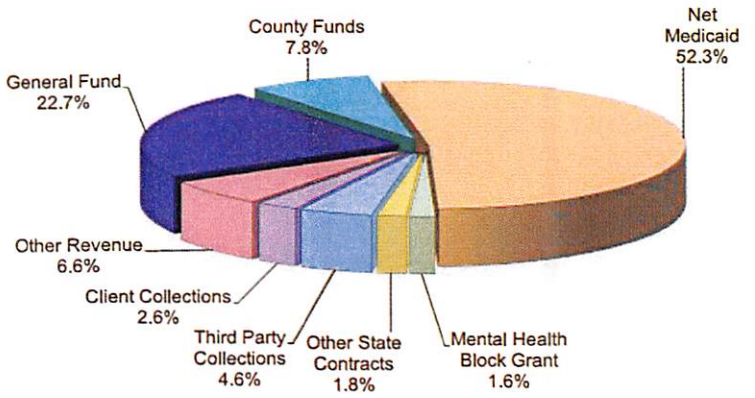
	Youth	Adult
Adjustment Disorders	1,178	801
Anxiety Disorders	2,165	5,089
Attention Deficit Disorders	2,124	1,084
Cognitive Disorders	49	306
Conduct Disorders	1,114	93
Depressive Disorders	1,172	2,425
Developmental Disorders	543	322
Dissociative Disorders	5	80
Eating Disorders	35	87
Factitious Disorders	0	0
Impulse Control Disorders	110	144
Learning Disorders	46	11
Mood Disorders	1,076	2,359
Neglect or Abuse Disorders	520	27
Neurological Disorders	11	53
Other	549	1,157
Personality Disorders	66	1,052
Pervasive Developmental Disorders	44	45
Physical Health Disorders	661	1,245
Schizophrenia and Other Psychotic Disorders	89	1,903
Substance Use Disorders	207	3,996
V Codes	1,353	1,585
	13,117	23,864

Utilization of Mandated Services
Fiscal Year 2016

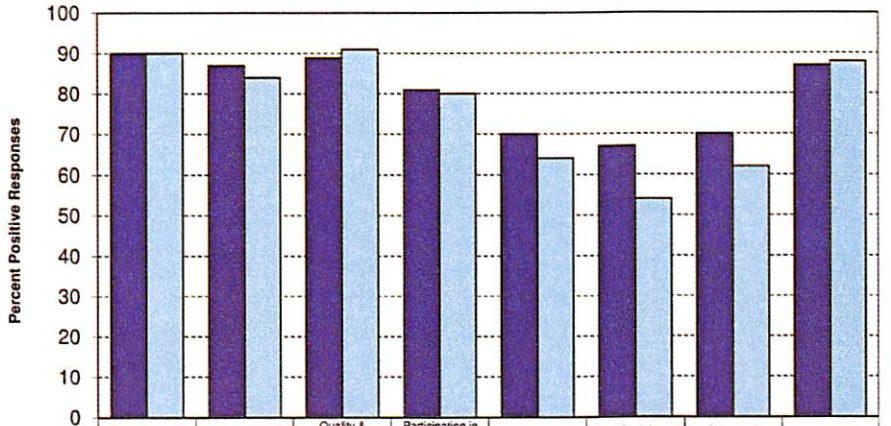


Davis Behavioral Health—Mental Health (Continued)

Source of Revenues
Fiscal Year 2016

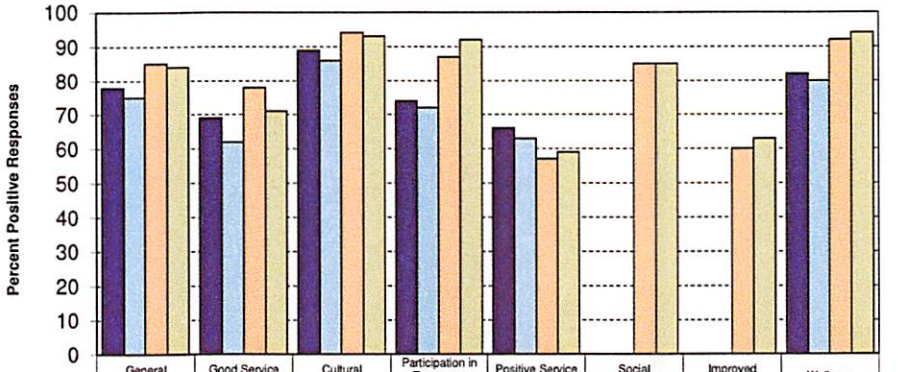


Adult Consumer Satisfaction Survey Mental Health Statistics Improvement Program (MHSIP)
2016



	General Satisfaction	Good Service Access	Quality & Appropriateness of Services	Participation in Treatment Planning	Positive Service Outcomes	Social Connectiveness	Improved Functioning	Wellness
Statewide 2016	90.0	87.0	89.0	81.0	70.0	67.0	70.0	87.0
Center 2016	90.0	84.0	91.0	80.0	64.0	54.0	62.0	88.0

Youth Consumer Satisfaction Surveys (YSS and YSS-F)
2016



	General Satisfaction	Good Service Access	Cultural Sensitivity	Participation in Treatment Planning	Positive Service Outcomes	Social Connectiveness	Improved Functioning	Wellness
Statewide YSS	78.0	69.0	89.0	74.0	66.0			82.0
YSS	75.0	62.0	86.0	72.0	63.0			80.0
Statewide YSS-F	85.0	78.0	94.0	87.0	57.0	85.0	60.0	92.0
YSS-F	84.0	71.0	93.0	92.0	59.0	85.0	63.0	94.0

#6: Healthy People 2020, Leading Health Indicators

Healthy People 2020 Leading Health Indicators

Healthy People 2020 provides a comprehensive set of 10-year, national goals and objectives for improving the health of all Americans. Healthy People 2020 contains 42 topic areas with more than 1,200 objectives. A smaller set of Healthy People 2020 objectives, called Leading Health Indicators (LHIs), have been selected to communicate high-priority health issues and actions that can be taken to address them. Out of the 20 LHIs, Davis County is meeting targets for 14 indicators, is not meeting targets for 3 indicators, and county data is lacking for 3 indicators.

Access to Health Services

Persons with medical insurance	• Healthy People 2020 Goal: **100%** • Davis County: 92.2% (2015)
Persons with a usual primary care provider	• Healthy People 2020 Goal: **83.9%** • Davis County: 78.7% (2015)

Clinical Preventive Services

Adults receiving colorectal cancer screening	• Healthy People 2020 Goal: **70.5%** • Davis County: 79.6% (2012-2014)
Children receiving vaccines by 35 months	• Healthy People 2020 Goal: **80%** • Utah: 68.1%*° (2015)

Environmental Quality

Children exposed to secondhand smoke	• Healthy People 2020 Goal: **47%** • Davis County: 1% (2008)

Injury & Violence

Injury deaths	• Healthy People 2020 Goal: **53.7 deaths per 100,000 Population** • Davis County: 38.3 per 100,000 Population (2013-2015)
Homicides	• Healthy People 2020 Goal: **5.5 homicides per 100,000 Population** • Davis County: 1.4 homicides per 100,000 Population (2011-2015)

Maternal, Infant & Child Health

All infant deaths	• Healthy People 2020 Goal: **6 infant deaths per 1000 live births** • Davis County: 4.9 infant deaths per 1000 live births (2010-2015)
Total preterm live births	• Healthy People 2020 Goal: **9.4%** • Davis County: 9.2% (2013-2015)

Mental Health

Suicide	• Healthy People 2020 Goal: **10.2 suicides per 100,000 Population** • Davis County: 17.3 suicides per 100,000 Population (2013-2015)

Nutrition, Physical Activity & Obesity

Adults meeting physical activity objectives	• Healthy People 2020 Goal: **20.1%** • Utah: 22.4%*° (2013)
Obesity among adults	• Healthy People 2020 Goal: **30.5%** • Davis County: 23.5% (2015)
Obesity among children and adolescents	• Healthy People 2020 Goal: **14.5%** • Davis County: 7.8% (2015)

Oral Health

Persons who visited the dentist in the past year	• Healthy People 2020 Goal: **49%** • Davis County: 78.3% (2016)

Reproductive & Sexual Health

Knowledge of serostatus among HIV-positive persons	• Healthy People 2020 Goal: **90%** • Utah: 86.5%* (2016, https://aidsvu.org/state/utah/)

Social Determinants

Students who graduate high school in 4 years	• Healthy People 2020 Goal: **87%** • Davis County: 92% (2014-2015, countyhealthrankings.org)

Substance Abuse

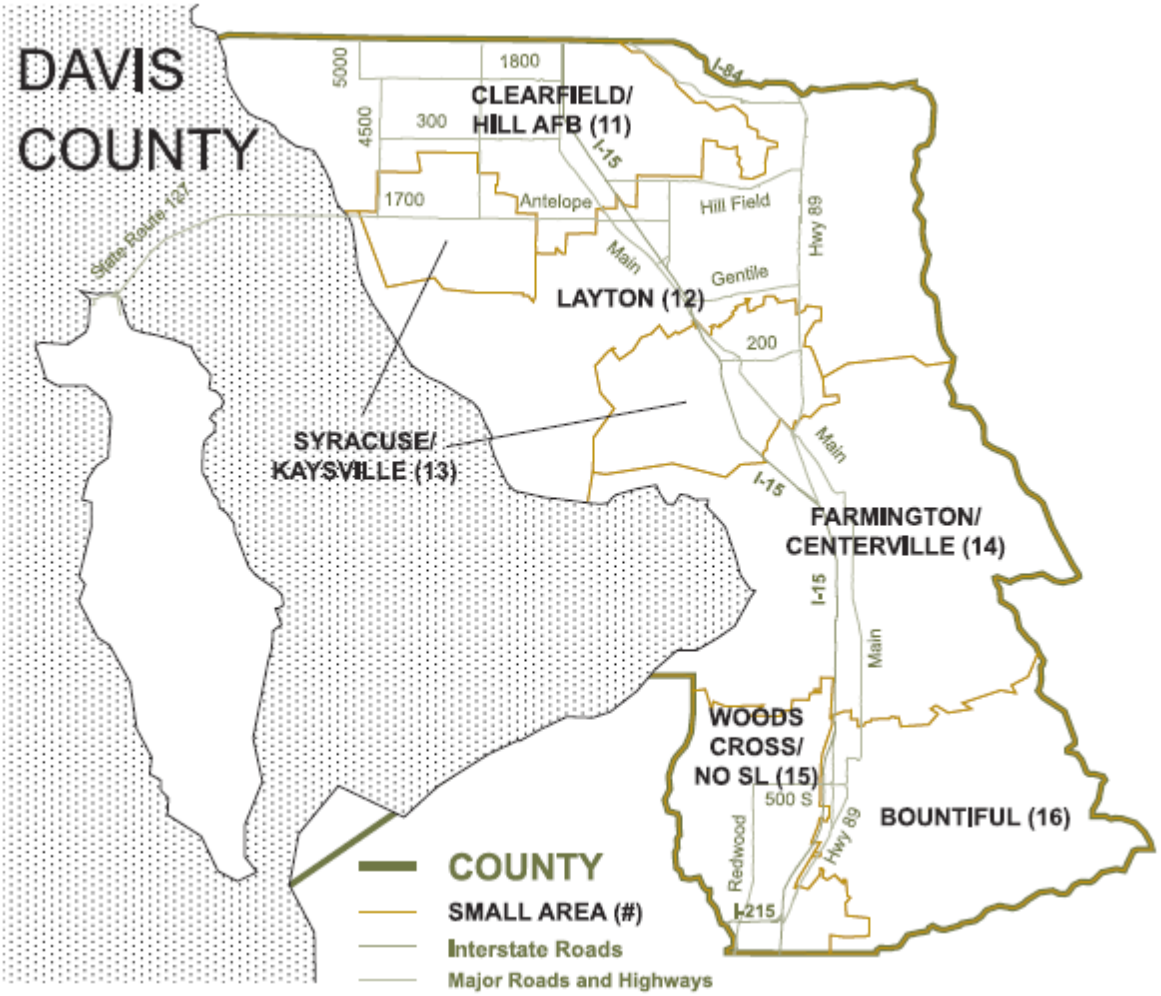
Adolescents using alcohol or drugs in past 30 days	• Healthy People 2020 Goal: **16.6%** • Davis County: 4.95% (2015)
Adults binge drinking in the past month	• Healthy People 2020 Goal: **24.4%** • Davis County: 10.5% (2015)

Tobacco

Adult cigarette smoking	• Healthy People 2020 Goal: **12%** • Davis County: 8.8% (2014-2015)
Adolescent cigarette smoking in the past 30 days	• Healthy People 2020 Goal: **16%** • Davis County: 2.5% (2015)

Notes
* Indicates Davis County data not available. State rate used as a surrogate measure.
° Indicates data obtained from HealthyPeople.gov.
All other data obtained from IBIS.health.utah.gov unless indicated.

In order to facilitate reporting data at the community level, Utah has been divided into small areas. Areas are determined based on specific criteria, including population size, political boundaries of cities and towns, and economic similarity. The health measures reported by small area are those with events occurring with sufficient frequency to be meaningful. Some indicators in IBIS can be queried for 61 small areas in Utah. Davis County is divided into 6 small areas: Clearfield/Hill AFB, Layton, Syracuse/Kaysville, Farmington/Centerville, Woods Cross/North Salt Lake, and Bountiful. The map and table below show small area boundaries and definitions as they apply to Davis County.



#	Small Area	Zip Codes
11	Clearfield/Hill AFB/Sunset/West Point/Clinton	84015, 84016, 84056
12	Layton/South Weber	84040, 84041, 84405*
13	Syracuse/Kaysville/Fruit Heights	84037, 84075
14	Farmington/Centerville	84025, 84014
15	Woods Cross/North Salt Lake/West Bountiful	84087, 84054
16	Bountiful	84010, 84011

* South Weber Only

Top 20 Diseases

Table 1. Frequently Occurring Diseases in Davis County, 2016

Rank	Disease	Number of Cases
1	Chlamydia	934
2	Hepatitis C, Acute & Chronic	166
3	Influenza-Associated Hospitalization	133
4	Gonorrhea	129
5	Tuberculosis, Latent Infection	112
6	Streptococcal Disease, Invasive	90
7	Norovirus	69
8	Salmonellosis	42
9	Campylobacteriosis	41
10	Hepatitis B, Acute & Chronic	34
11	Cryptosporidiosis	27
11	Giardiasis	27
13	Pertussis	24
14	Chickenpox	23
15	Syphilis – All Stages	19
16	Carbapenem-Resistant Enterobacteriaceae (CRE)	14
17	Shiga Toxin-Producing *E. Coli* (STEC)	11
18	Shigellosis	9
19	Viral/Aseptic Meningitis	7
19	Coccidioidomycosis	7
19	HIV	7

Source: Davis County Health Department, http://www.daviscountyutah.gov/health/about-dchd/reports-and-assessments

Utah Healthcare Index

3rd edition 2017

How Does Utah Compare?
Better
Worse

UHPP Utah Health Policy Project

COVERAGE

	UNINSURED				
	Under Age 65	Age 0-17	Latinos age 0-17	Income: 0-138%	Income 0-200%
	2016	2016	2016	2016	2016
	9.7%	5.8%	12.0%	16.8%	16.2%
	# 262,453	# 53,600	# 19,113	# 85,022	# 135,055
Utah	09-15: 14.6%	09-15: 9.8%	2016: 16.8%	2015: 22.0%	2015: 19.9%
U.S.	2016: 10.0%	2016: 4.5%	2016: 7.2%	2016: 15.5%	2016: 14.9%

Source: U.S. Census

PREVENTION

	INFANT MORTALITY	IMMUNIZATIONS	PRE-TERM BIRTHS
	NO UPDATES AVAILABLE 2015	NO UPDATES AVAILABLE 2015	NO UPDATES AVAILABLE 2015
	5.07 per 1,000 births	79.6%	9.28%
	257 total deaths	4:3:1 = 4+DTaP, 3+Polio, 1+MMR	4,712 PT births
Utah Trend	2010-14: 5.04/1,000	2014: 78.9%	2009-14: 9.52%
U.S. Average	2015: 5.9/1,000	2015: 83.2%	2017: 9.8%

Sources: [U.S.] National Vital Statistics Reports, Vol. 66, No. 6; 2017 March of Dimes Premature Birth Report Card; [Utah] ibis.health.utah.gov; DOH 2016 Immunization Coverage Report

ACCESS

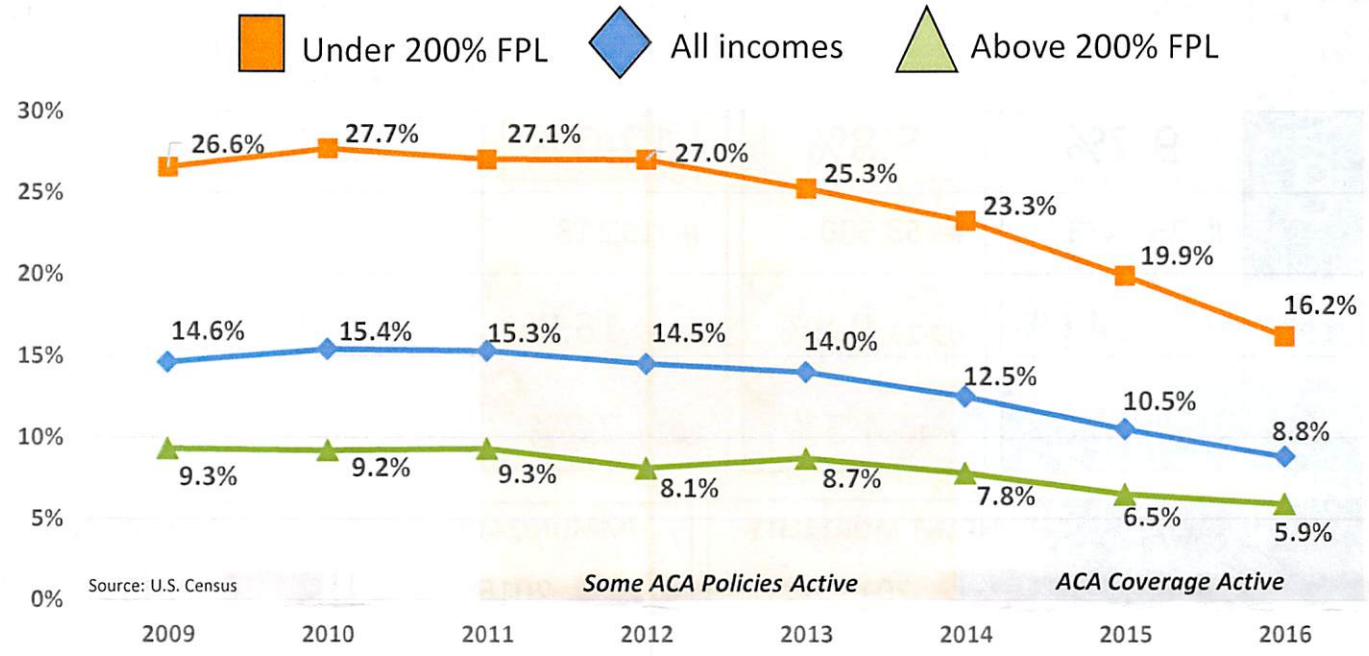
	ACA ENROLLMENT	PLANS / INSURERS*	AFFORDABILITY GAP
		2018	2018
	2013-14: 84,601 2014-15: 128,220 2015-16: 164,415 2016-17: 176,889 2017-18: _____	28 plans 2 insurers	$7
Utah Trend		2017: 28 Plans, 3 insurers 2016: 74 Plans, 4 insurers	2017: $34 2016: $34
Explanation	ACA enrollment rose 7.7% in 2017—the third-highest growth rate among 39 states using healthcare.gov	(*) Salt Lake County In 2018 Molina will leave Utah's individual marketplace—becoming the fifth plan to exit	The **Affordability Gap** is the difference in monthly premiums between the Benchmark and Median-priced Silver plans for Salt Lake County (21 year-old)

Sources: ASPE; healthcare.gov

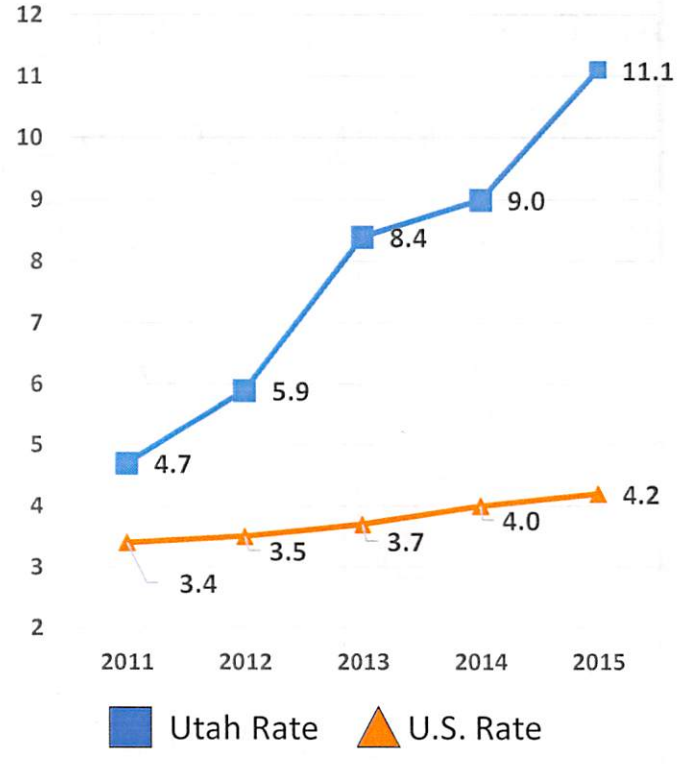
Utah Healthcare Index

3rd edition
2017

Utah Uninsured Rate by Income Level (2009 - 2016)

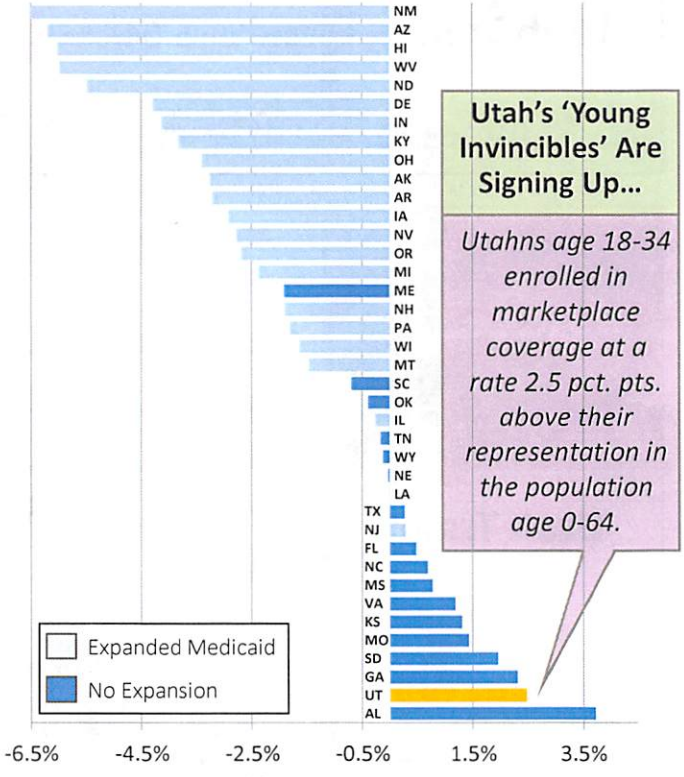


Suicide rate per 100,000 for Youth Age 10-17



Source: CDC, Epi-Aid # 2017-019: Undetermined Risk Factors for Suicide among Youth Aged 10-17 years –Utah, 2017; Table 1; page 86

Enrollment rate of 18-34 year-olds compared to representation in population age 0-64



Source: ASPE Marketplace enrollment as of 2/1/17 (OE4); US Census, American Community Survey, 2016, 1-Year Estimates, S2701, age 0-64

#10: Active Transportation, Davis County Current Conditions Report, 2017

DAVIS COUNTY

Active Transporation Current Conditions*
January 2017

WHY FOCUS ON ACTIVE TRANSPORTATION?

Active transportation refers to travel powered by human energy, primarily walking and bicycling. Evidence of the economic, environmental and health benefits from walking and bicycling is expanding. Governments and the private sector are working together to create communities that are more bicycle and pedestrian friendly.

While awareness of active transportation in the areas of planning, engineering, and policy exist, further exploring the benefits of implementing active transportation projects will help support active modes in communities. Utah has made significant progress in advancing active transportation via the planning, design, and construction of facilities, amenities, and the implementation of programs that support more walking and biking.

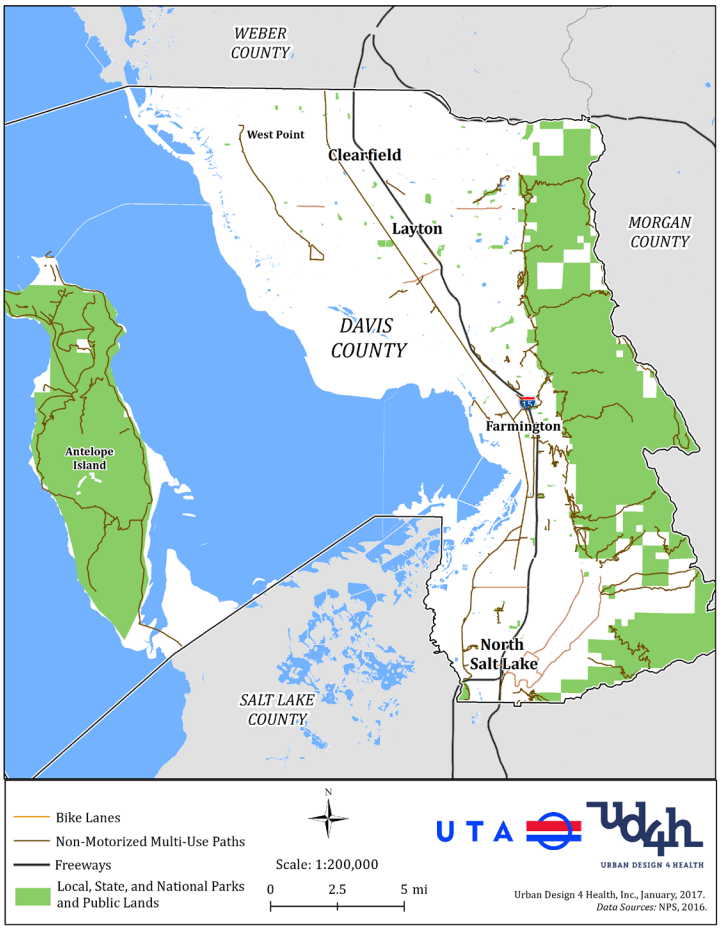
ACTIVE TRIPS IN DAVIS COUNTY

Active transportation modes are not exclusively recreational or for exercise. They represent viable, beneficial, affordable, healthy, and environmentally-friendly modes of transportation for trips with a destination or purpose too, like to the grocery store or work.

In Davis County the average walking trip distance is 1.8 miles; slightly more than the state average of 1.55 miles. In Davis County the average bike trip is 2.3 miles, also close to the state average of 2.4 miles.

POPULATION [1]

Davis County	336,043
Utah State	2,942,902



[1] *Census Population Estimates, 2014*
[2] *American Community Survey, 2010-2014*
[3] *Utah Automated Geographic Reference Center, 2016*

ACTIVE TRANSPORTATION BY THE NUMBERS [2, 3]

1.8mi Average Walking Trip Distance

2.3mi Average Biking Trip Distance

234+ Miles of Non-Motorized Pathway

22 Miles of Bike Lanes

*UTAH ACTIVE TRANSPORTATION BENEFITS STUDY (UTAH ATBS)

The Utah ATBS was created as part of a larger effort to support greater travel choice, preserve environmental quality, and improve public health outcomes through transportation planning in Utah.

http://urbandesign4health.com/

PROJECT TEAM:

ud4h URBAN DESIGN 4 HEALTH
FEHR PEERS HDR

STAKEHOLDER ADVISORS:

Utah Transit Authority
Utah Department of Transportation
Bike Utah
Governor's Office of Energy Development
Utah Department of Health
Salt Lake County Health Department
Tooele County Health Department
Salt Lake County Office of Regional Development
Wasatch Front Regional Council
Weber/Morgan Health Department
Mountainland Association of Governments
Park City
Intermountain Healthcare
Salt Lake County Bicycle Advisory Committee

TRANSPORTATION SYSTEM AND USAGE

TRAVEL PATTERNS

Active transportation modes are an important part of the transportation system. Everyone is a pedestrian. Transit riders often walk or bike to and from their transit stop. Even those who park and ride have to walk from a parking area to the station and then from the station to their final destination. In Davis County a majority drive, but 7.7% of trips are cycling or pedestrian trips.[4] The percentage of transit users commuting to work in Davis County (2.6%) is larger than the state of Utah (2.0%).[5]

COUNTY TRANSPORTATION PROVIDERS

Utah Transit Authority

TRAVEL MODE SPLIT [4, 5]

	WALK	BIKE	TRANSIT	AUTO	OTHER
OVERALL MODE SHARE					Taxi, Motorcycle, Worked from Home
State of Utah	7.5%	1.8%	1.5%	87.3%	1.0%
Davis County	6.3%	1.4%	1.5%	87.3%	1.0%
WORK COMMUTE MODE SHARE					
State of Utah	3.0%	1.0%	2.0%	88.0%	6.0%
Davis County	1.3%	0.3%	2.6%	89.5%	6.0%

SUPPORTING ACTIVE TRANSPORTATION

State agencies, municipalities, and private partners across Utah are working on Initiatives to elevate active transportation. These efforts guide the development of communities that encourage and support residents to be active for either transportation or recreational purposes.

The Davis County Community Health Improvement Program has focused on improving active transportation options as a strategy to address obesity. Approaches include increasing the number of trails and street bicycle lanes, improving first and last mile connections to transit, and increasing the number of outreach and education materials about active transportation.

PLANS GUIDING DAVIS COUNTY DEVELOPMENT

- Utah's Unified Transportation Plan
- UDOT State Bicycle Plan
- Statewide Transportation Improvement Program
- Wasatch Front Regional Transportation Plan
- Farmington Active Transportation Plan
- Kaysville Active Transportation Plan

***UTAH ACTIVE TRANSPORTATION BENEFITS STUDY (UTAH ATBS)**

The Utah ATBS was created as part of a larger effort to support greater travel choice, preserve environmental quality, and improve public health outcomes through transportation planning in Utah.

URBAN DESIGN 4 HEALTH
www.UD4H.com

[4] American Community Survey, 2010-2014
[5] Utah Travel Household Survey, 2012

ECONOMIC IMPACTS

CONSUMER SPENDING

Commuting or recreational bicycle use, by locals and visitors, makes an important contribution to the local economy.

Overall, 8 bicycling-related businesses operated in Davis County and were involved in manufacturing, sales, rentals, repairing, and tour organization. Some of the smaller businesses were solely focused on bicycles, while others sold equipment and clothing for many other sports. The total annual sales of all businesses are estimated to be nearly $17 million, after including a portion of sales from general sport retail stores. Around 110 people were employed in this sector overall.

Bike dealers were the largest economic contributor and employer of bicycle-related sales, and generated $9 million in sales and employed over 60 people.[6]

ACTIVE TRANSPORTATION-RELATED SALES [6]

$17 Million
in total annual sales of bike-related businesses

$22 Million
Projected costs for recommended bicycle infrastructure in the Farmington Active Transportation Plan [7]

TOURISM AND PARKS SPENDING

Utah was rated Fodor's #1 travel destination for 2016. Visitors are increasingly traveling to Utah to explore the many state and national parks and to engage in activities such as mountain biking on slickrock trails, which brings in additional revenue and creates jobs. While no bike tourism data is available for Davis County, an Arizona Study found that the average bike tourist spends four days at their destination and spend $683. [8]

Davis County provides access to the Great Salt Lake to visitors from across the state. The county hosts a seven-mile causeway to Antelope Island which is home to several free-ranging desert animal species.

DAVIS COUNTY STATE AND NATIONAL PARK ATTRACTIONS

- Antelope Island Park

***UTAH ACTIVE TRANSPORTATION BENEFITS STUDY (UTAH ATBS)**

The Utah ATBS was created as part of a larger effort to support greater travel choice, preserve environmental quality, and improve public health outcomes through transportation planning in Utah.

6 InfoUSA, 2016
7 Farmington Active Transportation Plan, 2016
8 An Economic Study of Bicycling in Arizona, 2013

ENVIRONMENTAL IMPACTS

AIR QUALITY

Air pollutants like particulate matter ($PM_{2.5}$ and PM_{10}), nitrate oxides (NO_x), sulfur oxides (SOx), volatile organic compounds (VOC) and carbon monoxide (CO) are emitted by both vehicles and industry. Each have been linked with adverse health effects, ranging from increased risk of respiratory symptoms like wheezing and coughing, to risk of hospitalization from more serious conditions like chronic obstructive pulmonary disease (COPD) and asthma. Those who commute using active transportation modes help decrease traffic congestion and increase air quality.

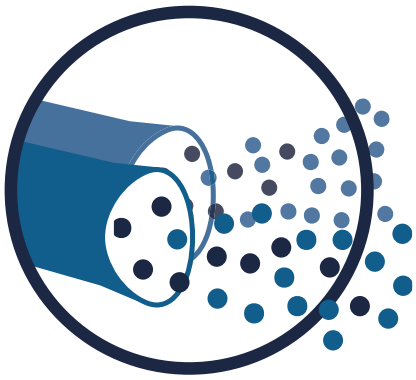
Several counties in Utah often have days that exceed the National Ambient Air Quality Standards (NAAQS) for air pollutants like $PM_{2.5}$ and Ozone. Davis County has the eighth highest average daily concentration of $PM_{2.5}$ in the state of Utah and was out of compliance with National Ambient Air Quality Standards (NAAQS) four days in 2014.[10]

COUNTY AIR POLLUTION LEVELS [9]

Pollutant (tons per year)	State of Utah	Davis County
$PM_{2.5}$	36,929	1,807
NO_x	208,373	9,368
PM_{10}	193,466	7,601
SO_x	28,418	474
VOC	931,729	12,718
CO	787,278	38,462

KEY AIR POLLUTION INDICATORS [10, 11]

ANNUAL AVERAGE DAILY $PM_{2.5}$ DENSITY ($\mu g/m^3$) (2011)



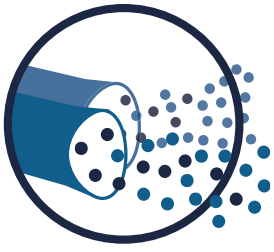
12.0 *EPA NAAQS Benchmark*

11.4 *Utah State*

12.3 Davis County

DAYS OUT OF NAAQS COMPLIANCE (2014)

2 Day that Davis County exceeded NAAQS Ozone levels



4 Days that Davis County exceeded NAAQS $PM_{2.5}$ levels

*UTAH ACTIVE TRANSPORTATION BENEFITS STUDY (UTAH ATBS)

The Utah ATBS was created as part of a larger effort to support greater travel choice, preserve environmental quality, and improve public health outcomes through transportation planning in Utah.

UD4H URBAN DESIGN 4 HEALTH
www.UD4H.com

[9] Utah DAQ Triennial Inventory, 2011
[10] CDC Wonder Environmental Data, 2011
[11] U.S. Environmental Protection Agency Air Quality System, 2014

HEALTH IMPACTS

HEALTH OUTCOMES

Physical activity provides multiple health benefits, including reducing the risk of multiple conditions such as diabetes, obesity, and several cardiovascular and pulmonary diseases. Children, elderly, low-income and non-white populations are at higher risk of these conditions. In Davis County 16% of the population are physically inactive. [12]

Providing active transportation infrastructure to promote active travel modes can reduce Davis County's cost-of-illness (COI) by reducing disease prevalence rates. This would decrease healthcare expenditures and increase worker productivity. For example, a 5% reduction in cases of diabetes would save over $5.2 million annually in direct healthcare costs in Davis County.[15] Opportunities to walk and bike can also help low-income communities and communities of color, who tend to be disproportionately burdened with chronic health conditions, become more active and at less risk for chronic disease.

Walking and biking may increase a traveler's exposure and vulnerability to traffic collisions. In 2014, 81 people were injured in pedestrian crashes, and 4 were killed. For cycling crashes, 61 people were injured with no reported cycling-related deaths.[16] Facilities that focus on the needs of people as well as place in transportation planning, referred to as "Complete Streets", can greatly reduce pedestrian and bicyclist crash risk.

HEALTH CONDITION PREVALENCE [15, 17]

Condition	Utah State	Utah State COI	Davis County	Davis County Annual COI
Diabetes	6.9%	$1.9B	6.6%	$213M
Adult Overweight + Obesity	58.8%	$7.0B	60.8%	$814M
Asthma	8.9%	$786M	7.1%	$70.2M
COPD	3.9%	$406M	3.7%	$3.8M
Stroke	2.2%	$334M	2.3%	$39.0M
Hypertension	24.9%	$446M	24.4%	$50.2M
Breast Cancer (rate per 100,00)	117.7	$289M	124.5	$35.5M
Colon Cancer (rate per 100,00)	32.0	$112M	33.5	$12.8M

COUNTY DEMOGRAPHIC SNAPSHOT [13, 14]

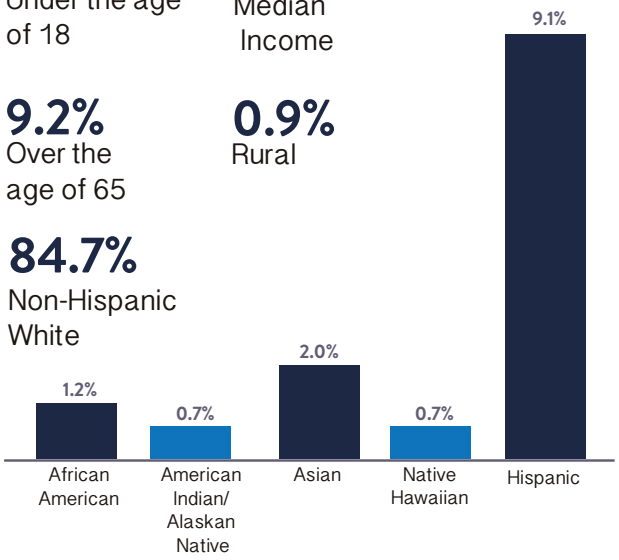
33.5% Under the age of 18

$70,388 Median Income

9.2% Over the age of 65

0.9% Rural

84.7% Non-Hispanic White



Non-White (Including Hispanic) as Percent of Total Population

ACTIVE TRANSPORTATION SAFETY [16]

BICYCLIST CRASHES

Davis County

4.0 Injuries per 10,000

0 Deaths per 10,000

PEDESTRIAN CRASHES

Davis County

2.5 Injuries per 10,000

.12 Deaths per 10,000

*UTAH ACTIVE TRANSPORTATION BENEFITS STUDY (UTAH ATBS)

The Utah ATBS was created as part of a larger effort to support greater travel choice, preserve environmental quality, and improve public health outcomes through transportation planning in Utah.

UD4H URBAN DESIGN 4 HEALTH
www.UD4H.com

[12] County Health Rankings, 2016
[13] Census Population Estimates, 2014
[14] American Community Survey, 2010-2014
[15] UD4H Cost per Case Analysis, 2016
[16] Utah Crash Summary, 2014
[17] Behavioral Risk Factor Surveillance System, 2014

#11: Senior Health Profile

2015 Senior Health Profile
Davis County Health Department

Davis COUNTY

Senior Health (65+)	Davis	Utah
Demographics (2015)		
Ages 65+	31,398	307,867
Percentage of Population 65+	9.3%	10.3%
Live Alone	31.9%	36.6
Responsible For Grandchildren	8.3%	7.9%
Received Food Stamps/SNAP in past 12 months 60+	16.7%	23.9%
Employment Rate, Ages 65-74	17.2%	17.2%
Health Status (2014-2015)		
Good Physical Health (less than 7 poor days)	78.3%	78.2%
Good Mental Health (less than 7 poor days)*	92.7%	90.4%
Body Mass Index (BMI) less than 25 (normal)	29.7%	33.8%
BMI 25+ (overweight or obese)	70.3%	66.2%
Prevalence of Asthma	10.4%	9.0%
Prevalence of Arthritis	50.4%	50.3%
Limited Activities Due to Arthritis or Joint Symptoms	20.4%	24.7%
Prevalence of High Blood Pressure	64.2%	56.8%
Prevalence of High Cholesterol (2013,2015)	50.0%	49.6%
Prevalence of Diabetes	18.7%	20.2%
Prevalence of Depressive Disorder	15.1%	17.4%
With Disability (2011-2013)	35.3%	34.9%
Confusion/Memory Loss 60+ (2011)	16.8%	16.7%
Alzheimer's Disease Related Death (per 100,000 population)	256.83	242.82
Falls (Hospital Encounters per 10,000 population) (2014)	114.21	116.08
Health Behaviors (2014-2015)		
Current Cigarette Smoking*	5.0%	4.8%
Chronic Drinking*	Suppressed	2.4%
Conducted Recommended Aerobic and Muscle Strengthening (2013,2015)	20.4%	19.7%
Current Alcohol Use	13.0%	19.0%
Daily Fruit Consumption- 2 or more (2013,2015)	31.6%	34.3%
Daily Vegetable Consumption- 3 or more (2013,2015)	14.5%	16.0%
Physical Inactivity (no leisure activity)	23.5%	25.6%
Practiced Sun Safety (2013)	83.3%	78.5%
Access to Healthcare (2014-2015)		
Healthcare Coverage (do not have insurance)	Suppressed	1.4%
Routine Medical Checkup (within past 12 months)	77.3%	80.7%
Routine Dental Healthcare (within past 12 months) (2014)	78.0%	71.0%
Screening & Prevention Services (2014-2015)		
Cholesterol Screening (within past 5 years) (2013,215)*	93.2%	92.1%
Clinical Breast Examination (in past 2 years)	60.7%	60.1%
Influenza Vaccination (within past 12 months)	60.2%	58.4%
Mammography (in past 2 years) (2013-2014)*	73.6%	70.9%
Pap Test (in past 3 years) (2014)	39.1%	48.8%
Pneumococcal Vaccination (ever had)†	71.6%	69.9%
Sigmoidoscopy or Colonoscopy (ever had)	86.4%	82.5%
Communicable Disease (2015)		
Campylobacteriosis (per 100,000 population)	15.9	15.3
Cryptosporidiosis (per 100,000 population)	15.9	8.0
Influenza-associated Hospitalization (per 100,000 population)	149.7	124.0
Pertussis (per 100,000 population)	15.9	5.7
Salmonellosis (per 100,000 population)	15.9	16.3
Streptococcal Disease (per 100,000 population)	98.7	89.3

Notes:
Data from Utah's Indicator-Based Information System (IBIS) for Public Health, Census Bureau, CDC, the Davis County Department Division of Communicable Disease and Epidemiology, and the University of Utah Policy Institute.
*Use caution in interpreting, the estimate has a coefficient of variation >30% and thus may not be reliable
† Not meeting HP2020 Target of 90%.
Supressed: the observed number of events is very small and not appropriate for publication

Strengths:

- 78.3% with self proclaimed health status of good or excellent
- More routine dental care compared to the state
- Davis County residents' life expectancy is 81 years, longer than the state at 80.1 and the U.S. at 78.8
- Over the next 50 years, life expectancy is projected to increase 4.5 years for women and 7.1 years for men

Challenges:

- Not meeting Healthy People 2020 target of 90% for Pneumococcal Vaccination
- Higher rate of confusion/ memory loss (age 60+) than U.S. rate of 12.7%
- Davis County residents ages 65+ are projected to increase from 10.2% to 21.3% by 2065
- Davis County residents ages 85+ are projected to increase from 2,391 people in 2013 to 22,420 in 2060
- As the senior population increases, more residents will be living with obesity and related chronic conditions, placing a heavy burden on the healthcare system

#12: Adolescent Health Profile

Davis County Health Department
Adolescent Health Profile, 2017

	Davis	Utah
Demographics (2016)		
Ages 10-19	56,624	479,148
Percent of Population Ages 10-19	17.2%	16.3%
Below Poverty Level	7.2%	11.7%
Uninsured	4.6%	8.7%
Children Participating in Free/Reduced Price Lunch (2014-2015)	23%	37%
Lifestyles (2013)		
Physical Activity (met recommended activity guidelines)	14.1%	17.6%
Obesity (BMI greater than the 95th percentile for age and sex)	5.7%	9.0%
Family Meals (≥1 meal with their family on ≥5 days in the past week)	62.6%	61.1%
Tanning (used a tanning device past 12 months)	8.4%	7.7%
Seat Belt Use (always, most of the time, or sometime use)	94.6%	93.8%
Teenage Driver Crashes, % of all crashes (2016)	24.0%	21.1%
Exposed to Smoking at Home	9.6%	16.4%
Secondhand Smoke Exposure Outside of Home	19.9%	23.2%
Disability (2017)	5.8%	4.9%
Birth Rate of Female Ages 15-19 per 1,000 population (2015)	13.37	17.77
Chronic Disease (2013)		
Current Asthma	10.4%	12.0%
Missed School Due to Asthma (≥ 1 day in the last year)	12.4%	16.2%
Diabetes	1.1%	1.1%
Substance Use (2017)		
Cigarette Smoking (past 30 days)	2.8%	3.9%
E-Cigarette/Vaping (past 30 days)	8.9%	5.8%
Alcohol use (past 30 days)	5.1%	7.6%
Marijuana Use (past 30 days)	4.0%	6.1%
Prescription Drug Abuse (past 30 days)	2.5%	2.6%
Technology (2013)		
Screen Time (≤2 hours using computers for non school activities)	60.8%	57.2%
Electronic Bullying	22.8%	25.5%
Driver Talking on Cell Phone	82.1%	79.7%
Driver Texting	61.5%	61.3%
Mental and Emotional Health (2017)		
Disconnected Youth (% ages 16-24 who are not working or in school)	12%	12%
Feeling Sad or Hopeless (almost everyday for two weeks)	26%	24.9%
High Need for Mental Health Treatment	19.4%	18.0%
Depressive Symptoms	39.6%	38.4%
Self-Harm (during last months 12 did something to purposely hurt self)	15.4%	14.7%
Bullied at School (during last 12 months)	25.0%	21.7%
Suicide Ideation (during last 12 months seriously consider)	17.4%	16.0%
Suicide Plan (during last 12 months)	13.8%	12.5%
Suicide Attempts (during last 12 months)	7.0%	7.1%
Vaccine Preventable Diseases (2011-2013)		
Children Adequately Immunized at 7th Grade Entry (2011)	94.1%	92.7%
Chicken Pox (per 100,000 population)	31.93	30.48
Hep B Chronic & Perinatal (per 100,000 population)	1.49	2.22
Hospitalized Influenza (per 100,000 population)	22.66	26.34
Pertussis (per 100,000 population)	52.67	78.02
Sexually Transmitted Infections (2011-2013)		
Chlamydia (per 100,000 population)	73.73	89.57
Gonorrhea (per 100,000 population)	2.08	2.21
Other Infectious Diseases (2011-2013)		
Campylobacteriosis (per 100,000 population)	5.06	13.78
Streptococcal Disease (per 100,000 population)	15.21	18.10

Strengths:

- Some of the lowest alcohol, tobacco and other drug (ATOD) use rates in the nation

Challenges:

- Suicide ideation, plan and attempts have been trending up each year for all grades.
- There has been a 136% increase in suicides among Utah youth aged 10-17 from 2011 to 2015, compared to an increase of 23.5% nationally.
- 20% of students have high need for mental health treatment.
- Priority risk factors include: low commitment to school, depressive symptoms, academic failure.
- The most commonly used substance is e-cigarettes/ vaping followed by alcohol.
- Of students who use alcohol 40% used at home with parent permission.
- Perceived use of ATODs is much higher than actual use.
- Sexting issues are requiring considerable response by Davis School District. Sexting questions should be added to student health and risk prevention survey.

Data from Utah's Indicator-Based Information System (IBIS) for Public Health, Student Health and Risk Prevention—Prevention Needs Assessment Survey Results, Census Bureau, Highway Safety, CDC, County Health Rankings, and the Davis County Health Department, Communicable Disease and Epidemiology.