2014–2018

Community Health Improvement Plan
Davis County, Utah

Your Community.

Your Health.

Your Voice.

Acknowledgments

Davis County Community Health Improvement Partners

- 211
- 2nd District Court
- Anytime Fitness
- Borski Farms
- Bountiful Police Department
- Bountiful Communities that Care
- Catholic Community Services
- Clearfield City Aquatic Center
- Clearfield Job Corps
- Communities for Clean Air
- Davis Behavioral Health
- Davis Community Learning Center
- Davis County Community & Economic Development
- Davis County Health Department
- Davis County Trails Committee
- Davis Hospital
- Davis School District
- Family Counseling Services
- Farmington City
- Farmington Trails Committee
- Guardian ad Litem
- Head Start
- Hill Air Force Base
- Hope4Utah
- Intermountain Healthcare
- Juvenile Court
- Lakeview Hospital
- Latter-day Saint (LDS) Family Services
- Layton Communities that Care
- Layton Youth Court
- Logo Concepts
- Management Training Corporation
- Midtown Community Health Center
- National Alliance on Mental Illness (NAMI) of Davis County
- Suicide Survivors
- Tanner Clinic
- United Way
- Utah Department of Health
- Utah Division of Air Quality
- Utah Division of Substance Abuse & Mental Health
- Utah Highway Safety Office
- Utah State Office of Education
- Utah State University (USU) Extension
- Walk, Bike, Plan
- Wasatch Front Regional Council
- Woods Cross Air Quality Committee
- Woods Cross City

We would like to thank the many individuals who gave of their time to contribute to and guide this Davis County Community Health Improvement Plan. Special thanks to the four action group leaders: **Debi Todd**, Davis Behavioral Health, Suicide Prevention; **Tiffany Leishman**, Davis County Health Department, Obesity Prevention; **Brandon Hatch**, Davis Behavioral Health, Access to Behavioral Health Services; and **Dennis Keith**, Davis County Health Department, Air Quality.

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Davis COUNTY
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Executive Summary

In 2013, the Davis County Health Department organized a community health improvement process to identify Davis County's health improvement priorities; mobilize partners to address the priorities; and prepare a community-wide health improvement strategic plan that provides direction for the whole community and not just a single agency. The two guiding principles of the process were 1.) priorities and strategies would be determined based upon the findings of the community health assessment, and 2.) the process would be community driven with significant involvement from a broad set of stakeholders and partners from a variety of community agencies.

On August 29, 2013, a group of more than 50 participants from a variety of sectors in Davis County came together for a half-day planning meeting to discuss health priorities to be included in the county-wide health improvement plan. Prioritization was necessary because of a growing number of health concerns, coupled with scarce resources and conflicting opinions about what is most important. A structured approach to prioritization included establishing criteria and considerations for issue inclusion, and gave focus to issues that have the greatest need for attention or will have the greatest impact on overall health.

The group discussed how focusing on what is most important could empower our community to take action. Participants understood that strategic alignment around the county's greatest health needs and concerns could improve health outcomes in Davis County. The health priorities selected by community partners for Davis County are:

1. **Suicide**
2. **Obesity**
3. **Access to Mental (Behavioral) Health Services**
4. **Air Quality**

Other issues making the top ten include anxiety and depression; substance abuse and access to treatment; health and human services coordination; promotion and education about existing resources and services; and health insurance issues.

Following the vote, four action group leads were identified to lead discussions about the priority health issues. Four groups gathered to brainstorm additional partners needed to address the issue; future group meetings; and existing resources and assets to address the health priority. The groups were tasked with meeting over a several month period to draft an action plan which would include details about how to improve health in Davis County.

Each of the four priority areas are included in this plan with supporting information. The plan includes:

- Reasons why the issue is a priority with applicable data
- Partners involved in developing the plan
- Resources and assets available to support the plan
- Evidence-based strategies to address the issue
- Alignment with state and national priorities
- Organizations with responsibility for each strategy
- A five year outcome goal
- Short and long-term objectives with measurable outcomes
- Legislative priorities
- One page logic model

Executive Summary

Priority 1: The goal of the suicide prevention action plan is to reduce suicide deaths in Davis County to meet the Healthy People 2020 target of 10.2 deaths per 100,000 population. Strategies to meet this goal include promoting public awareness that suicide is a preventable public health problem; improving the ability of service providers to support individuals who are at risk; implementing youth suicide prevention programs; implementing and highlighting prevention programs and resources for members of the workforce; launching and promoting a Davis County survivor support group; and decreasing suicide risk by reducing access to lethal means.

Priority 2: The goal of the obesity action plan is to prevent and reduce obesity in Davis County through environments, policies, and programs that support everyday physical activity and healthy eating choices. This will be accomplished by promoting and supporting school and community physical activity and nutrition programs; increasing access to healthy eating choices; promoting resources to support physical activity and healthy eating; and implementing comprehensive worksite wellness programs.

Priority 3: The goal of the access to behavioral health services action plan is to increase access to behavioral health services in Davis County through promotion of existing resources, new screening and referral tools, increasing effective prevention programs, and better training for helping professionals. This will be achieved by identifying a network of behavioral health providers; providers utilizing anxiety and depression screening tools; using behavioral health referral tools; and implementing community education programs which reduce mental health stigma, help the community respond to signs of mental illnesses, and help those coping with stress and chronic disease.

Priority 4: The goal of the air quality action plan is to increase understanding of air quality conditions throughout Davis County and ensure the public is aware of air pollution issues so that better informed citizens, businesses, and government agencies choose behaviors and policies which result in reduced air pollution and improved air quality. This will be done by improving and increasing air monitoring and ensuring information is publicly available; encouraging and supporting active transportation and use of public transportation; and implementing a community education campaign about lifestyle and behavior choices that reduce air pollution.

These four plans work very well together. The suicide and access to behavioral health services plans both aim to reduce stigma around mental health issues and provide more mental and emotional health resources and support throughout the community. Improved walking and biking trails and other methods of active transportation help reduce obesity and improve air quality. Regular physical activity is an obesity reduction strategy but also has the benefit of improving mental health. All four priorities can be addressed through comprehensive worksite wellness programs and policies. The four groups coordinated to ensure that overlapping areas were streamlined. The groups will continue to work together to coordinate implementation efforts, avoid duplication, and monitor progress.

Local health improvement efforts have a tag line of “Your Community. Your Health. Your Voice.” which helps convey the purpose of the work. Together, community partners have worked on this community health improvement plan which identifies effective programs and policies that will improve health. Collaboration is critical. We all have a stake in creating a healthier community and no single agency can address all the health challenges of the county. Public health partners, local leaders, and citizens can work together to create a healthier place to live, learn, work, and play.

Introduction

Community Health Improvement Plan

The 2014-2018 Davis County Community Health Improvement Plan is a long-term, systematic plan to address issues identified in the 2013 Davis County Community Health Assessment. A community health improvement plan is an important tool in public health to bring community partners together to strategically align to address community health priorities. The community health improvement plan addresses the needs of citizens within Davis County.

The Public Health Accreditation Board (PHAB) is the official accrediting body for public health departments and seeks to advance quality and performance within public health departments. According to PHAB the purpose of a community health improvement plan is:

> "To describe how the health department and the community it serves will work together to improve the health of the population of the jurisdiction that the health department serves. The plan is more comprehensive than the roles and responsibilities of the health department alone, and the plan's development must include participation of a broad set of stakeholders and partners. The planning and implementation process is community-driven. The plan reflects the results of a participatory planning process that includes significant involvement by a variety of community sectors." [1]

The community health improvement plan provides guidance to the health department, its partners, and stakeholders for improving the health of the population within Davis County. Partners can use the community health improvement plan to prioritize existing activities and set new priorities. The plan can lead community agencies to partner in new ways to effectively address health priorities.

Participatory Planning Process

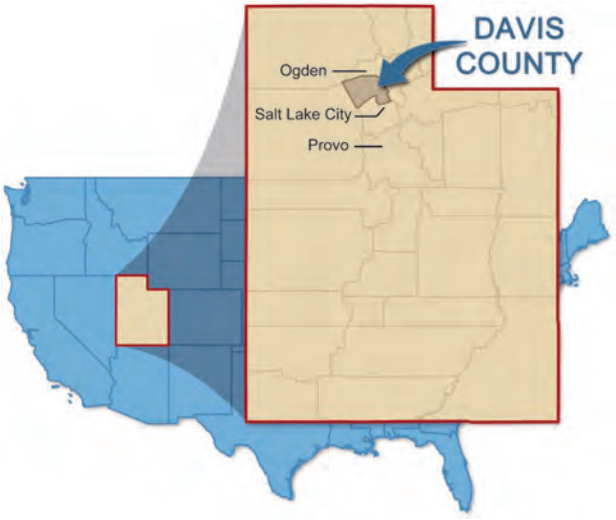
Davis County Health Department (DCHD) recognizes that as the local public health agency it is their unique role to bring together community partners to conduct a comprehensive community health improvement process and develop a community health improvement plan for the population of Davis County. While DCHD is responsible for protecting and promoting the health of the population, it cannot be effective acting alone. DCHD partners with other sectors and organizations to plan and share responsibility for community health improvement. Other community agencies and stakeholders bring valuable perspectives to the planning process and may have access to useful resources. A collaborative planning process fosters a shared sense of ownership and responsibility for the plan's implementation.

Collaboration to address community health priorities provides unique perspectives and additional expertise. Collaboration provides the opportunity to leverage resources, coordinate activities, and employ community assets in new and effective ways. Collaboration includes engagement with community members so that they are participants in the process and feel connected to the decisions made and actions taken. The community health improvement process is a vehicle for developing partnerships and for understanding roles and responsibilities.

County Description

Geography

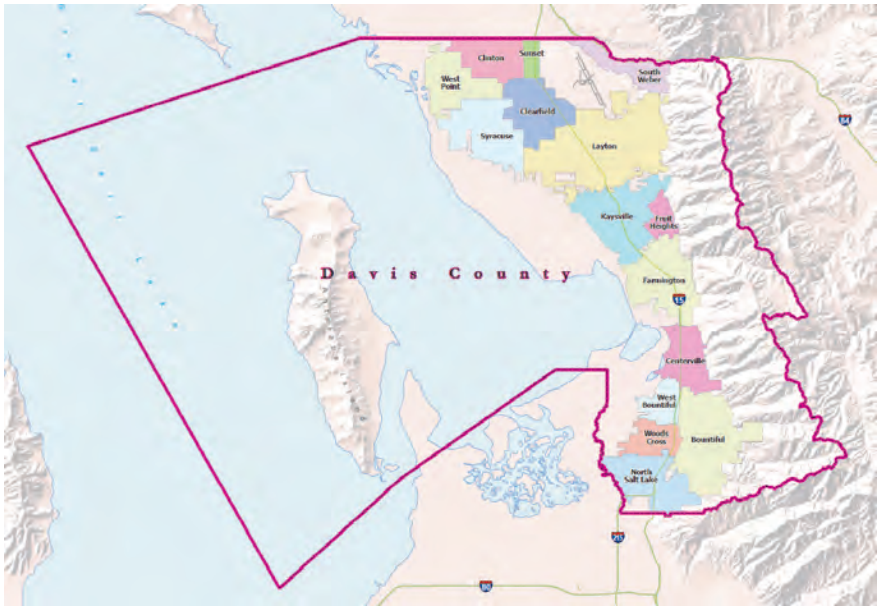
Davis County is a narrow strip of land along Utah's Wasatch Front. It is a suburban community just north of Salt Lake City and south of Weber County/Ogden. To the west is the Great Salt Lake and to the east is the Wasatch Mountain Range. By total land area, Davis County is the smallest county in Utah. 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.

Population Characteristics

Davis County's population estimate for 2012 is 315,809. Approximately 11% of Utah's population lives in Davis County. The county is comprised of 15 incorporated cities.



Davis County has a young population with a median age of 29 years which is also the state average. Utah ranks as the youngest state in the U.S. Ninety percent of the population is considered white, non-Hispanic. Nearly 75% of Davis County residents are members of the Church of Jesus Christ of Latter-day Saints, also know as the LDS church or Mormons. In the last presidential election 80% of registered voters voted for the Republican candidate.

There are two main hospitals in Davis County, but no Level 1 Trauma Center. Hill Air Force Base, the state's largest employer, is located in Davis County. Lagoon, one of the Mountain West's largest amusement parks, is also centrally located in the county. Davis Applied Technology College (DATC) is Davis County's largest institution of higher education and Weber State University operates its Davis campus in Layton.

A detailed description of county demographics, social and economic characteristics, and special populations is available in the community health assessment found at: http://www.daviscountyutah.gov/docs/librariesprovider5/reports-and-assessments/community_health_status_assessment_20130e8d274f13296568a4f7ff140015e574.pdf

Community Health Assessment Highlights

Davis County's comprehensive community health assessment was released during the summer of 2013, showing where the county is doing well and areas where there are opportunities to improve. It is a snapshot in time describing the health of Davis County. The assessment draws on more than 50 sources of local and state data as well as reports from national organizations. Assessment and related improvement efforts have a tag line of "Your Community. Your Health. Your Voice." which helps convey the purpose of the work.

The assessment includes recent statistics for many factors influencing health such as obesity, teen birth rates, disease rates, tobacco and alcohol use, access to physicians and dentists, cost of healthcare, rates of high school graduation and college attendance, rates of childhood poverty, percentage of children living in single parent households, air pollution, access to healthy foods, levels of physical inactivity, access to recreation, and many more.

Davis County is the 6th healthiest county in Utah according to the County Health Rankings. The rankings also show that Davis County is in the top 10% (best) of all counties in the U.S. for some health indicators including premature death, poor/fair health, adult smoking, adult obesity, physical inactivity, motor vehicle crash rate, preventable hospital stays (Medicare enrollees), some college, children in poverty, inadequate social support, and children in single-parent households.

Social and economic factors, also known as social determinants of health, may have more influence on health than other types of health factors. Davis County is more educated, has less unemployment, less poverty, more home owners, more social support, and less violent crime, when compared to Utah and the U.S.

Davis County is also doing well by meeting and exceeding many Healthy People 2020 targets, 10-year national objectives for improving the health of Americans. A few areas where targets are not being met include prostate cancer deaths, poisoning deaths, suicide, *E.Coli* rates, high cholesterol, seatbelt use, sun safety practice, mammograms, colorectal cancer screening, diabetes A1C tests, pneumococcal vaccine (adults), adequate immunizations by kindergarten, and high school graduation (9th grade cohort).

Other indicators where Davis County compares poorly with the national average, state average, or other local health departments include prostate cancer incidence, asthma prevalence, depression, confusion/memory loss, high blood pressure management, rate of primary care and mental health providers, air quality, commuting alone, drinking water violations, and food environment.

In addition to gathering health statistics, the Davis County Health Department has conducted other assessments through interviewing and surveying residents to gather informed opinions about health needs and priorities in the county. Two leading health concerns identified by Davis County residents are air quality and obesity.

While there are many reasons Davis County is a healthy place to live, this assessment shows there is room for improvement. DCHD is not satisfied with being ranked the 6th healthiest county in Utah. By examining health indicators found in the County Health Rankings and assessing other health data and factors, groundwork is being laid for health improvement efforts. The information in the community health assessment can be used to educate and mobilize Davis County residents, develop priorities, advocate for resources, and plan actions to improve the health of the county. A copy of the Davis County Community Health Status Assessment is available online at: http://www.daviscountyutah.gov/reports-and-assessments/community_health_status_assessment.pdf

Methods

Community Health Improvement Models

Davis County Health Department reviewed several models, tools, and resources for guidance in developing a participatory planning processes. The following were incorporated and/or adapted and used in an approach that works for Davis County: Mobilizing for Action through Planning and Partnership (MAPP), County Health Rankings & Roadmaps: Roadmaps to Health Action Center, Healthy People 2020, and the National Association of County and City Health Officials (NACCHO) CHIP Resource Center. With guiding principles from these resources in mind a CHIP work plan was developed outlining the department's action steps. **See Appendix 1.**

Timeline

The Davis County Community Health Assessment (CHA) results were presented to the Davis County Board of Health in May 2013. The completed CHA was printed and distributed throughout the summer. Making the assessment results available to the public and community leaders was necessary to prepare the community to come together to discuss improving the health of the county. On August 2, 2013, an invitation letter was sent by mail to public health partners and community agencies inviting them to be part of the Davis County community health improvement process. Partners were encouraged to attend a half day planning meeting on August 29, 2013 to determine health priorities for Davis County. Following the August meeting, four action groups met at least monthly to identify effective programs and policies for their priority area and to prepare an action plan. In November and December, the four action groups were able to finalize plans and submit them for inclusion in this 2014-2018 Davis County Community Health Improvement Plan.

Participants

Davis County Health Department staff members compiled an extensive list of partners who have worked together on health issues over the years. Staff also identified new potential partners who would have a role, even a non-traditional role, in working toward public health improvement. Public health partners invited included healthcare organizations, elected officials, city and county leaders, education, religious groups, social services, businesses, the media, and community members. It was important to DCHD staff to have a broad and varied audience so that the priority selection process would be less likely to be biased toward one issue or population. Having a good cross-representation of agencies and community members helped ensure a successful outcome in which the health priorities selected are an actual reflection of the most important needs of the community.

Formal invitations to participate in the meeting were sent via mail and email. A copy of the invitation can be found in **Appendix 2.** Follow-up phone calls were also made to key partners. The invitation stated the expectations of participants, which were to:

- Have an understanding of the health needs of the population your agency serves.
- Review the results the Davis County Community Health Status Assessment.
- Commit to attend the entire meeting on August 29th.
- Be willing to participate in priority setting through discussion and vote.
- Be able to discuss effective strategies to address identified priorities.
- Be able to describe the resources and assets your agency can provide to address priorities.
- Be able to express the role your agency can play during implementation of the developed community health improvement plan.

Methods

Participants (cont.)

There were a total of 53 participants representing 31 community agencies who attended the community health improvement planning meeting. A list of names of partners in attendance can be found in **Appendix 3.** The following is a list of agencies represented at the meeting:

- Alzheimer's Association
- Bountiful Communities that Care
- Bountiful Community Food Pantry
- Clearfield City
- Clearfield City Aquatic Center
- Clearfield Job Corps Center
- Davis Applied Technology Center
- Davis Behavioral Health
- Davis Community Learning Center
- Davis County Aging Advisory Board
- Davis County Board of Health
- Davis County Community & Economic Development
- Davis County Health Department
- Davis School District
- Farmington City
- Farmington Trails Committee
- Head Start
- Hill Air Force Base
- Intermountain Healthcare
- Lakeview Hospital
- Layton Communities that Care
- Layton Parks & Recreation
- Logo Concepts
- Management & Training Corporation
- Midtown Community Health Center
- South Davis Community Hospital
- South Davis Metro Fire Agency
- Tanner Clinic
- Utah Department of Transportation
- University of Utah
- Wasatch Front Regional Council

Some other key partners were invited but were not able to attend. They include Davis County Commissioners, LDS Family Services, Davis Hospital, and Davis County Sheriff's Department. Following introductions at the meeting there was a group discussion about who was missing or needed further representation in future gatherings. The following were identified: businesses, pharmaceutical and medical providers, 211, faith-based communities, and consumers.

Methods

Community Health Improvement Planning Meeting

The Davis County Health Improvement Planning meeting was held on Thursday, August 29, from 8:30 am - 1:30 pm at Valley View Golf Course in Layton, Utah. A copy of the agenda is available in **Appendix 4**. Lunch was provided.

A facilitator from the University of Utah was hired to guide group discussions and exercises throughout the day. The slides for the day are available upon request.

The purpose of the meeting was to identify Davis County's health improvement priorities; mobilize partners to address the priorities; and prepare to develop a community-wide health improvement strategic plan which represents a plan for the whole community and not a single agency.

Objectives for the day included: introduce participants to the community health improvement process & plan; review highlights from the community health assessment; provide a list of priority health issues for discussion; consider top health priorities and discuss factors leading to an informed vote; select top Davis County health priorities through structured voting process; and form action groups for future planning and action steps.

Methods

Priority Selection & Voting

A main focus of the Davis County health improvement planning meeting was selecting health priorities to include in the 2014-2018 Davis County Community Health Improvement Plan. Early in the meeting participants were asked to consider, "How can focusing on what's important empower our community to take action?" Participant responses included "With limited resources and financial constraints, we need to focus on what is most important;" "Provides a vision of what we need to look at specifically;" "When you focus on priorities instead of looking at long lists it enables you to feel empowered, gives you additional energy so that you aren't as overwhelmed with everything there is to do;" and "Helps to find common priorities to get buy in from everyone so that we can all move in the same direction." These responses showed a lot of understanding about the need for and benefits of selecting health improvement priorities for Davis County.

Some reasons why prioritization is necessary include a growing number of health concerns, scarce resources, and conflicting opinions about what is most important. Some of the components of a prioritization process are establishing criteria and considerations for issue inclusion, as well as using a structured approach and tested prioritization techniques. Selecting priorities gives focus to issues that have the greatest need for attention or will have the greatest impact on overall health.

After presenting a summary of the Davis County community health assessment, participants were given a health indicator summary list. The health issues on the list were organized according to the County Heath Rankings Model[2] with health outcomes first including mortality and morbidity; and then health factors including behaviors, clinical care, social/economic, and physical environment. Additional infrastructure issues were also included. The list was the starting point for what issues could be voted on and why. The issues on the list were included for one or more of the following reasons: it is a leading cause of mortality and morbidity in Davis County; the public and/or community partners in Davis County perceive it is a priority; it is an indicator where Davis County is worse than other local health departments, Utah, or U.S. averages; and it is an indicator where Davis County is not meeting the Healthy People 2020 target[3]. The Davis County Health Indicators Summary can be found in **Appendix 5.** Participants were also briefly told about priority issues contained in the Utah Statewide Health Improvement Plan and the National Prevention Strategy.

Those in attendance were provided a worksheet with ten questions to help them organize their thoughts about health issues in Davis County and to help them decide which issues deserve priority status. The voting considerations worksheet can be found in **Appendix 6.** The questions were considered individually, discussed at tables, and then some ideas were shared with the whole group.

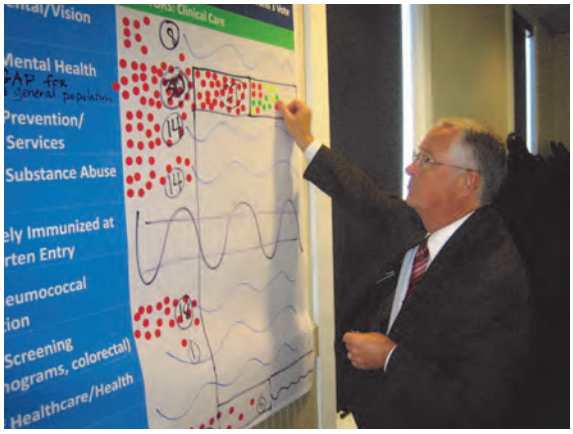
Methods

Priority Selection & Voting (cont.)

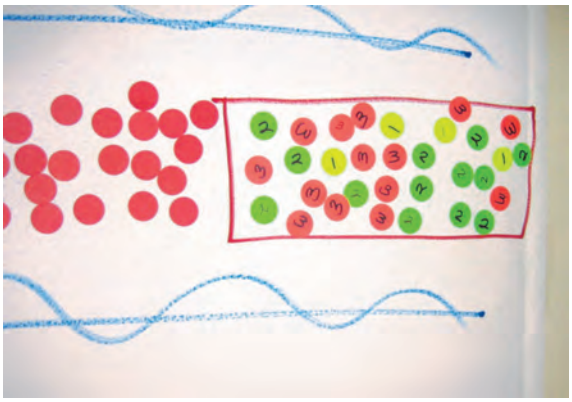
There was time to ask additional questions prior to voting so that voters felt they were making an informed choice. There was discussion about combining issues on the list, for example specific immunization issues were combined into one immunization category and anxiety and depression also became a combined issue. Some suggested additions to the list included drowning, human services collaboration, health insurance, and healthcare case management. Participants were encouraged to prepare to vote based on their professional, informed opinion.

The voting technique was adapted from the National Association of County & City Health Officials (NACCHO) Guide to Prioritization Techniques[4]. A multi-round voting technique also known as dotmocracy, was used to narrow down nearly 50 issues to less than five priority issues. The group voting processes were tested internally prior to using them in the community meeting.

Large posters with all the issues eligible for vote were posted on the walls. All participants were allowed to vote, regardless of the number of participants from their agency. The exception was the Davis County Health Department which cast one vote representing the agency. Participants were given dots to place next to issues they were voting for. The vote was confidential in that dots/votes were not matched to individuals or agencies and participants were encouraged not to discuss any one individual or agency vote. The cumulative group vote was the result that was important.



In round 1, participants could vote for as many health issues as desired (no minimum or maximum number), any and/or all they would consider a priority issue. After the vote the list was condensed to topics that had at least half of participant votes. (i.e. If 40 participants are voting then issues with 20 or more votes make it to the next round.) In round 2, participants were able to vote for up to half of the issues remaining on list. (i.e. If 10 issues remain, then each participant gets 5 votes.) The list was again condensed to topics that had half of participant votes. In round 3, participants voted for their three top priorities. They each had three stickers, 3 points for top priority, 2 points for 2nd priority, and 1 point for 3rd priority. The scores were added up to determine results and final ranking of priorities.



Methods

Davis County Health Improvement Priorities

The Davis County health priorities selected by community partners to be included in the 2014-2018 Davis County Community Health Improvement Plan are:

1. **Suicide**
2. **Obesity**
3. **Access to Mental Health Services**
4. **Air Quality**

There was some discussion about whether to have three or four priorities in the plan and whether to leave air quality out. Some participants expressed concern about our ability to really improve air quality at the local level knowing that there are many state and federal efforts at play. While several voices suggested leaving it out, the overall feeling of the group was that it should be included.

Other leading health issues that were voted in the top 10 include: anxiety/depression, substance abuse and access to treatment; health and human services coordination; promotion/ education about existing resources and services; and health insurance issues.

Action Groups

Following the vote, four action group leads were identified to lead discussions about the priority health issues. Participants chose which of the four action groups to join based on their interest and the mission of their agency. The four groups gathered to brainstorm additional partners needed to address the issue; future meeting dates, times and locations; and resources and assets to address the health priority. The groups were tasked with meeting over a several month period to draft an action plan which would include details about how to improve health in Davis County.

A couple of weeks following the planning meeting the four CHIP action group leads received training to guide them in their new responsibility. A CHIP action group lead packet was developed to support them in their role. The packet and training included information about the timeline; how to run effective, action oriented meetings; how to assess gaps; how to identify effective programs and policies; guidance to align with state and national priorities; and the components of a comprehensive action plan. They were encouraged to document their group process and participation through meeting minutes and attendance lists.

Methods

Community Health Improvement Planning Meeting Evaluation

A participant evaluation was distributed at the end of the day. Those in attendance were asked to rate seven components of the day on a five point Likert scale. Five represented "very satisfied" and one represented "very dissatisfied." A total of 30 completed evaluations were turned in for a response rate of approximately 60%. A few who left early did not receive an evaluation. A copy of the evaluation can be found in **Appendix 7**.

All areas evaluated received an average rating between a four (satisfied) and a five (very satisfied). Some participant responses about the best part of the meeting include: collaboration, discussion, progress, voting, structure, organization, wide range of participants, and workgroups. Evaluation results can be found in **Appendix 8**. Aside from the meeting evaluations, Davis County Health Department staff and administration received a lot of positive feedback about the planning meeting and process.

Components of Davis County Community Health Improvement Plan

The 2014-2018 Davis County Community Health Improvement Plan is a 5-year, coordinated effort to address Davis County's leading public health issues on the basis of the results of the Davis County community health assessment and the Davis County community health improvement process. Some of the benefits of a county-wide CHIP include eliminating redundancy, aligning resources, capitalizing on expertise within community agencies, and working together to identify gaps.

Each of the four CHIP priority areas (suicide, obesity, access to mental health services, and air quality) are included in this plan with supporting information. The plan includes:

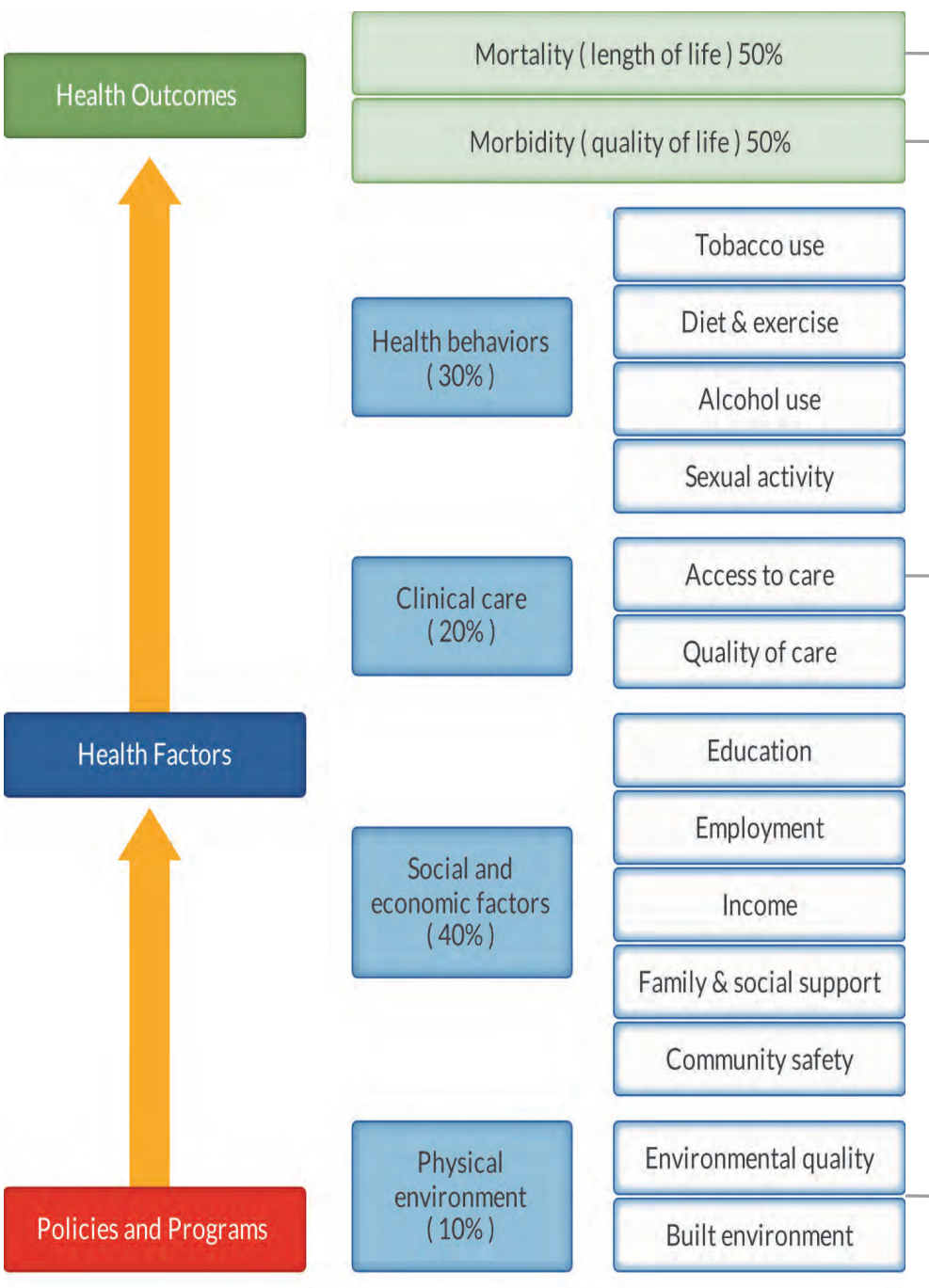
- Reasons why the issue is a priority with applicable data
- Partners involved in developing the plan
- Resources and assets available to support the plan (including already existing coalitions; state and national improvement plans; existing and potential grant funding; and community agencies involved in supporting the work)
- Strategies to address the issues (including evidence base that supports the effectiveness of a particular intervention, activity, policy or program)
- Alignment with state and national priorities
- Organizations with responsibility for each strategy
- A five year outcome goal (provided to convey the vision of the plan and a description of how the community will be different in five years because of planned activities)
- Short and long-term objectives with measurable outcomes
- Legislative priorities
- One page logic model (They are intended to provide the public and community leaders with a simplified and organized outline of the county plan to address each priority issue. Logic models can be found in **Appendix 9**.)

This plan will be used by health and other governmental, education, and human service agencies, in collaboration with community partners, to coordinate efforts and designate resources to address the priorities of suicide, obesity, access to mental health services, and air quality. The ultimate goal of the plan is to improve health in Davis County in a significant way.

Davis County CHA to CHIP Priorities

Community Health Improvement Plan Priorities

County Health Rankings Model



County Health Rankings model ©2012 UWPHI

Top 4 Priorities

#1 Suicide

#2 Obesity

#3 Access to Behavioral Health Services

#4 Air Quality

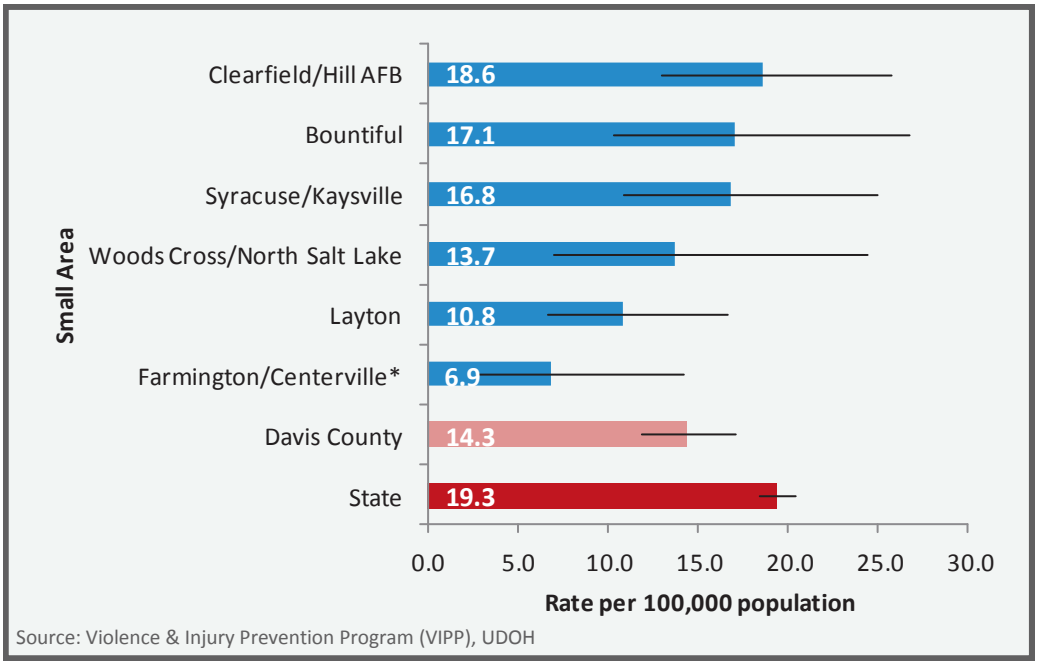
Suicide - Priority 1

Suicide was selected by community partners and leaders as the leading health issue in Davis County. During the Davis County community health improvement planning meeting participants where given a health indicator summary, see **Appendix 5**. Suicide was the only health measure, out of more than fifty, that was shown to be a leading cause of mortality and morbidity; a priority of the public and/or community partners; an indicator where Davis County is worse than the U.S. average; and an indicator where Davis County is not meeting the Healthy People 2020 target.

Suicide is the 9th leading cause of death in the county with 14.3 deaths per 100,000 population. Over the last several years suicide rates in Davis County have ranged from as high as 21 to as low as 10 deaths per 100,000 population. The suicide rate in Utah has seen a steady increase over the last several years from 15 to 21 deaths per 100,000 population.

Suicide rates are available for some small areas in Davis County as shown below. For boundaries and descriptions of the small areas, see the small area data map found in **Appendix 10**.

Graph 1: Suicide Rates in Davis County, 2010-2012* (age adjusted)



Source: Violence & Injury Prevention Program (VIPP), UDOH

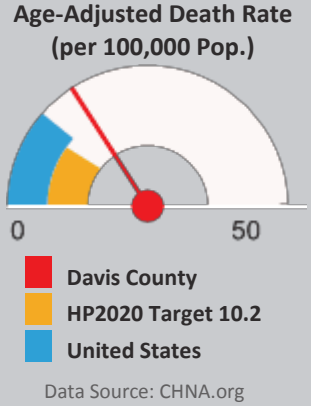
There are no significant statistical differences in suicide rates between most Davis County small areas and the state rate. The exceptions are Layton and Farmington/ Centerville which have significantly lower rates compared to the state rate. Farmington/Centerville has the lowest suicide rate of all small areas in Utah with 6.9 deaths per 100,000 population.

Note: Suicide is listed as the 7th leading cause of death in the 2013 Davis County Community Health Assessment because at the time the most current data available was from 2006-2009.

Suicide

Suicide is an indicator where Davis County & Utah compare poorly with the U.S. & do not meet the Healthy People 2020 target of 10.2 deaths per 100,000 population.

Graph 2: Suicide Comparison Scale



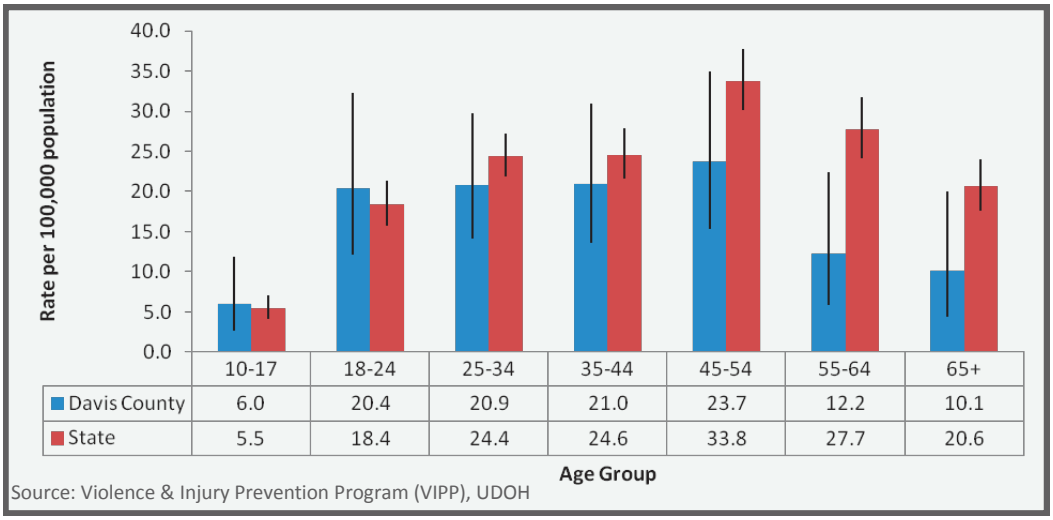
Data Source: CHNA.org

Suicide rates are known to be higher in the western part of the country than in other regions.

Suicide - Priority 1

Persons 45-54 years of age have the highest suicide rate (23.7 per 100,000) in Davis County. This rate is similar across categories from 18-54 years old. Males have a significantly higher suicide rate compared to females in all age groups.

Graph 3: Davis County Suicides by Age Group , 2010-2012 (age adjusted)



	10-17	18-24	25-34	35-44	45-54	55-64	65+
Davis County	6.0	20.4	20.9	21.0	23.7	12.2	10.1
State	5.5	18.4	24.4	24.6	33.8	27.7	20.6

Source: Violence & Injury Prevention Program (VIPP), UDOH

Suicide is the 10th leading cause of hospitalization in Davis County with 8.5 per 10,000 population. Females have a significantly higher suicide emergency department (ED) visit rate compared to males. The average charge per self-inflicted injuries (ED and hospitalizations) in Davis County is $21,063.

Poisoning deaths are also high in Davis County and Utah compared to the nation and the Healthy People 2020 target is not being met. Over the last 10 years, poisoning deaths surpassed the rate of motor vehicle crash deaths in Davis County and Utah. Drugs, in particular prescription pain medications, are responsible for many poisoning deaths. Some of these poisoning deaths are intentional (suicide).

A CDC report on suicide found that Utah had the highest estimated prevalence of suicidal thoughts among adults in the nation.[5] In 2013, 12% of Davis School District students who participated in the Prevention Needs Assessment Survey had considered suicide.[6]

Table 1: 2013 Utah Prevention Needs Assessment Survey Results

Davis School District Grade	6th	8th	10th	12th	Overall
Students Considering Suicide	5.8%	10.9%	18.5%	12.9%	12%

Suicide is an indicator of poor mental health. Some statistics, strategies, and outcomes related to this priority are similar to those addressed in the access to behavioral health services section, priority 3.

Suicide

Suicide is the 9th leading cause of death & 10th leading cause of hospitalization in Davis County.

Davis County residents ages 45-54 have the highest suicide rate.

In 2013, 12% of students surveyed in the Davis School District had considered suicide.

Suicide Prevention Partners

Some community partners involved in developing this plan were existing members of a local coalition called Davis HELPS. Additional partners joined the group in the fall. These are the partner agencies who have contributed to the plan and will be involved in implementation.

Partner Organizations	
Davis Behavioral Health (DBH)	Layton Youth Court
Davis County Health Department (DCHD)	Hill Air Force Base (HAFB)
Intermountain Healthcare	Latter-day Saint (LDS) Family Services
Davis School District (DSD)	Hope4Utah
National Alliance on Mental Illness (NAMI) of Davis County	Davis Hospital
Bountiful Police Department	Lakeview Hospital
Utah Highway Safety Office	Job Corps
2nd District Court	Utah State University (USU) Extension
Juvenile Court	Utah State Office of Education (USOE)
Head Start	Utah Department of Health (UDOH)
Bountiful Communities that Care	Utah Division of Substance Abuse and Mental Health (DSAMH)
Layton Communities that Care	Survivors

Suicide Prevention Resources

Davis HELPS is the lead coalition in Davis County working on suicide prevention and coordinating with other agencies to address the problem throughout the county. Davis Health Education and Law Enforcement ProgramS (HELPS) is a coalition dedicated to making the county a healthy and safe place for families to live, work and play. They meet once a month in Farmington at the Davis School District. Davis Behavioral Health (DBH) provides administrative support to the coalition.

In existence since 2008, the coalition has focused on issues related to youth alcohol use and drunk driving. In June 2013, the coalition asked DCHD to present the findings of the completed Davis County community health assessment. Following the presentation members of the coalition voted on a priority for the upcoming year and suicide was selected. When suicide was also selected as the top health issue at the community health improvement planning meeting in August, it was a perfect fit for Davis HELPS to take the lead on developing an action plan and inviting new partners to participate.

Several other coalitions are addressing suicide in Utah. N.U. HOPE (Hold on. Persuade. Empower.) is the Northern Utah Suicide Prevention Task Force founded in 2007. They primarily serve Weber County but have done some outreach in Davis County. Intermountain Healthcare provides administrative support to the coalition. They meet monthly in Ogden at McKay-Dee Hospital. The Utah Suicide Prevention Coalition is a statewide organization dedicated to preventing suicide, promoting resiliency, and supporting those impacted by suicide. They meet monthly in Salt Lake City at the Division of Substance Abuse and Mental Health (DSAMH). Members of Davis HELPS attend these coalition meetings when possible.

A few community organizations have been working on suicide prevention efforts. Hill Air Force Base has placed a large emphasis on suicide and has professionals throughout their organization working on prevention, early intervention, and postvention. Syracuse city organized a town hall meeting early in 2013 in response to several suicides in their community. Also during the year, Syracuse High and Clearfield High launched the first HOPE Squads (peer-to-peer suicide prevention programs) in Davis County.

There are some small funding sources to address suicide prevention in Davis County. DCHD has some funding from the Utah Department of Health, Violence and Injury Prevention Program (VIPP) that can be used for activities in this plan. NAMI, DBH, and Intermountain Healthcare have contributed funding for HOPE Squads in the county. USU Extension is applying for grants that can address mental and emotional health in high-risk juvenile populations. DSAMH has announced future funding to help local coalitions and agencies carryout town hall meetings around suicide prevention.

Davis HELPS

Davis Health Education and Law Enforcement ProgramS (HELPS) is a coalition dedicated to making our county a healthy and safe place for families to live, work and play.

In existence since 2008, the coalition has focused on issues related to youth alcohol use & drunk driving.

In June 2013, the group voted on a new priority for the coming year. Suicide was chosen as their focus.

Suicide Prevention Resources

Prior to the CHA and CHIP process, suicide had not been a public health focus in Davis County. There were some small, uncoordinated efforts but no local direction or plan existed. However there are many state and national resources to support and guide a local suicide prevention effort and there was no need to start from scratch.

The National Strategy for Suicide Prevention 2012 outlines a national strategy to guide suicide prevention actions. It includes goals and objectives across four strategic directions: wellness and empowerment; prevention services; treatment and support services; and surveillance, research, and evaluation.[7] Preventing Suicide: A Toolkit for High Schools is another useful federal resource that will be used to guide planned activities. It assists high schools and school districts designing and implementing strategies to prevent suicide and promote behavioral health.[8]

The federally-funded Suicide Prevention Resource Center promotes a public health approach to suicide prevention. One resource they provide is the Best Practices Registry (BPR). Its purpose is to disseminate information about best practices that address specific objectives of the National Strategy for Suicide Prevention. QPR (Question, Persuade, and Refer) Gatekeeper Training for Suicide Prevention is an evidence-based program found in the registry that will be used in Davis County. QPR is an educational program designed to teach the warning signs of a suicide crisis and how to respond by following three steps: (1) Question the individual's desire or intent regarding suicide, (2) Persuade the person to seek and accept help, and (3) Refer the person to appropriate resources.[9]

The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) National Registry of Evidence-based Programs & Practices (NREPP) is a searchable online database of mental health and substance abuse interventions. Mental Health First Aid (MHFA) is an evidence-based program found in the registry that will be used in Davis County. MHFA is an adult education program that teaches how to help someone who is developing a mental health problem or experiencing a mental health crisis. Participants learn to identify, understand, and respond to individuals who are experiencing one or more acute mental health crises (suicidal thoughts and/or behavior, acute stress reaction, panic attacks, etc.) or are in the early stages of one or more chronic mental health problems. (i.e., depression, anxiety, substance abuse, etc.).[10]

The Columbia-Suicide Severity Rating Scale (C-SSRS) will also be used in Davis County. It is a proven method to assess suicide risk. The scale is a Joint Commission Best Practice for healthcare settings and the Centers for Disease Control and Prevention (CDC) has adopted the scale definitions for national surveillance. The scale has been successfully implemented across many settings, including schools, college campuses, military, fire departments, the justice system, primary care, and scientific research. No mental health training is required to administer it.[11]

Evidence-based Practices

The federally-funded Suicide Prevention Resource Center promotes a public health approach to suicide prevention.

One resource they provide is the Best Practices Registry (BPR). It is a source of information about evidence-based programs; expert & consensus statements; & programs, practices, & policies whose content has been reviewed according to specific standards.

Suicide Prevention Resources

Some local policies and plans have influenced Davis County's strategies to address suicide. The Utah Suicide Prevention Plan 2013, includes nine goals to reduce the number of people who die as a result of suicide. It was developed by the Utah Suicide Prevention Coalition.[12]

The Utah Prevention by Design, Community Action Plan, 2012 is a plan for enhancing and coordinating local community networks in systematic and evidence-based approaches in the prevention of mental illness and promotion of mental health. After a comprehensive needs assessment process, it was determined that addressing suicide deaths through mental illness prevention and mental health promotion would be the state focus. Community networks are encouraged to conduct local needs assessments and then identify appropriate strategies to prevent suicide in their areas.[13]

Utah House Bill 298 passed in the summer of 2013. It requires school districts to offer an annual parent seminar covering information on substance abuse, bullying, mental health, and internet safety, issues that can be related to teen suicide.[14] Davis School District offered the first two seminars in the south end of the county in the fall of 2013. The north end of the county will have two seminars in the winter of 2014. Davis School District has made suicide prevention a focus in their parent seminars, inviting a leading expert in school suicide prevention to speak to parents.

Partners reviewed strategies outlined in the National Strategy for Suicide Prevention as well as the Utah Suicide Prevention Plan. The Davis County plan closely aligns with state and national plans and includes activities that need to be implemented at a local level. DCHD plays a coordination role to ensure that the strategies and outcomes that overlapped in the suicide and access to behavioral health services action plans are streamlined. Both plans include getting Mental Health First Aid instructors trained and conducting Mental Health First Aid presentations throughout the community.

Suicide is a complicated issue that requires comprehensive solutions. Effective solutions incorporate multiple approaches across many sectors. Effective prevention programs and policies stress the importance of wellness, hope, resiliency, and protective factors. Effective early intervention and postvention programs address risk factors, mental health and substance abuse services, and crisis response for those who are struggling with suicidal behaviors. Effective support programs are also required for those who have been touched by suicide or suicidal behavior. These components are addressed in this plan to address suicide in Davis County.

Utah House Bill 298

Utah House Bill 298 passed in the summer of 2013. It requires school districts to offer an annual parent seminar covering information on substance abuse, bullying, mental health & internet safety.

Davis School District has made suicide prevention a focus in their parent seminars, inviting a leading expert in school suicide prevention to speak to parents.

Suicide Prevention Strategies

Davis County Suicide Prevention Strategies	Evidence Base	Organizations with Responsibility
Promote public awareness that suicide is a preventable public health problem (town hall meetings, social media, websites, media campaign).	National Strategy for Suicide Prevention	Davis HELPS, DBH, DCHD, Layton & Bountiful CTC, DSD, Hill AFB, NUHOPE, USU Extension, NAMI, Job Corps
Improve the ability of service providers (behavioral health, healthcare, first responders, clergy, senior services, etc.) to support individuals who are at risk for suicide through effective prevention, early intervention, and postvention programs (QPR, Mental Health First Aid, suicide screening tools) and by providing referral resources (suicide risk referral and protocol check list).	Best Practices Registry for Suicide Prevention (QPR) National Registry of Evidence-based Programs & Practices (Mental Health First Aid) C-SSRS National Strategy for Suicide Prevention	DBH, NAMI, LDS Family Services, Lakeview/Davis Hospitals, Intermountain Healthcare, DCHD, Job Corps
Develop & promote effective youth suicide prevention programs (Hope Squads, peer to peer programs, prevention curriculum).	Best Practices Registry for Suicide Prevention (peer to peer programs) Hope4Utah	DSD, USOE, Layton & Bountiful CTC, Hope4Utah, USU Extension, DBH, Job Corps
Promote prevention programs/resources to support adults, members of the workforce, and families who are at risk for and/or are affected by suicide (Worksite Wellness Programs, DSD Mental Health Nights, HAFB efforts).	National Registry of Evidence-based Programs & Practices (United States Air Force Suicide Prevention Program) Utah House Bill 298	HAFB, DSD, DCHD, DBH, Davis HELPS
Provide support to individuals affected by suicide deaths & attempts (Davis County suicide survivor support group).	National Strategy for Suicide Prevention	NAMI, OUTreach, HAFB
Promote efforts to decrease the risk of suicides by reducing access to lethal means (drug/medicine take back events and safe storage of firearms).	National Strategy for Suicide Prevention	Davis HELPS, Local Law Enforcement, DBH, DCHD

Suicide Prevention Outcome Goal & Objectives

Outcome Goal

Reduce suicide deaths in Davis County from 14.3 deaths per 100,000 to 10.2* deaths per 100,000 by the year 2020. (*National Healthy People 2020 Target)

Short-term Objectives (1-2 years)

1. Launch and promote Davis County Suicide Survivor Support Group by December 31, 2014.
2. At least 2 Mental Health First Aid Instructors will be trained by December 31, 2014. An additional 2 Mental Health First Aid Instructors will be trained by December 31, 2015.
3. Complete and distribute Davis County suicide risk referral and protocol check list by February 28, 2015.
4. Hold up to 8 town hall meetings throughout the county by December 31, 2015.
5. Increase the number of active trained QPR Gate Keeper instructors in Davis County from 0 in 2013 to 8 by December 31, 2015.
6. One QPR master trainer in Davis County by December 31, 2015.
7. Conduct at least 15 QPR presentations throughout Davis County by December 31, 2015.
8. All Davis School District school counselors will receive QPR training by December 31, 2015.
9. All high schools (8) will be presented with information about effective peer to peer suicide prevention programs by December 31, 2015.
10. Increase the number of peer to peer suicide prevention programs (e.g. Hope Squads) in Davis County high schools from 2 in 2013 to 5 by December 31, 2015.

Long-term Objectives (3-5 years)

1. Promote mental health, emotional wellbeing, suicide prevention and support services in Davis County through a media campaign by December 31, 2016.
2. Conduct 15 Mental Health First Aid presentations throughout Davis County by December 31, 2018.
3. Increase the number of trained helping professionals who are trained to address suicide by December 31, 2018. (2013 workforce survey data can establish baseline.)
4. All junior high schools (11) will be presented with information about effective peer to peer suicide prevention programs by December 31, 2018.
5. All high schools (8) will have a peer to peer suicide prevention program by December 31, 2018.
6. Increase use of suicide screening tools by healthcare professionals, behavioral health providers, schools, and other helping professionals by December 31, 2018.
7. At least 5 employers will address suicide prevention in the workplace through employee wellness programs, employee assistance programs, or other activities by December 31, 2018.
8. Support national and local drug/medicine take back events, at least one per year from 2014-2018.
9. Support statewide efforts to promote safe storage of firearms.

Obesity - Priority 2

Obesity was selected by community partners and leaders as a top health issue in Davis County just behind suicide. In the 2012 Key Informant Survey, obesity and healthy weight were identified as top priorities for children, teens, and adults in Davis County.

The U.S. Surgeon General issued a call to action in 2003 that described a health crisis affecting every state, every city, every community, and every school across our nation. The crisis is obesity. It is the fastest-growing cause of disease and death in America. And it is completely preventable. Since the mid-1970s, the prevalence of overweight and obesity has increased sharply for both adults and children.[15] The dramatic increase in obesity rates has serious implications for the health of Davis County residents today and in the future.

After three decades of increases, adult obesity rates have remained level in Utah for the last several years at 24%. Utah is the seventh least obese state in the nation. Stable rates of adult obesity may show prevention efforts are working but rates still remain very high. Utah's obesity rate for baby boomers, 45-64 year-olds, is 32.3%. Baby boomers aging with obesity-related illnesses will cause a cost crisis for the healthcare system. Overweight/obesity among elementary school students in Utah also remained stable between 2010 and 2012.[16]

Overweight and obese individuals are at increase risk for more than 20 major diseases. Obesity is associated with chronic diseases such as diabetes, hypertension, stroke, heart disease, arthritis, asthma, and some cancers. Obesity is a major risk factor for type 2 diabetes. Type 2 diabetes is often considered a lifestyle disease and is associated with overweight and obesity, physical inactivity, and poor dietary habits. The prevalence of diabetes is dramatically higher in overweight and obese people. Once considered an adult disease, Type 2 diabetes is now also seen in children. Being overweight or obese increases an individual's risk for high cholesterol, hypertension, cardiovascular disease, angina, heart attack, and stroke. There is also an increased risk for certain types of arthritis. Obesity is associated with cancers of the colon, breast, endometrium, kidney, and esophagus.

Health Crisis

The U.S. Surgeon General issued a call to action in 2003 that described a health crisis affecting every state, every city, every community, & every school across our nation. The crisis is obesity.

Obesity is one of the leading causes of preventable death in the U.S.

Obesity - Priority 2

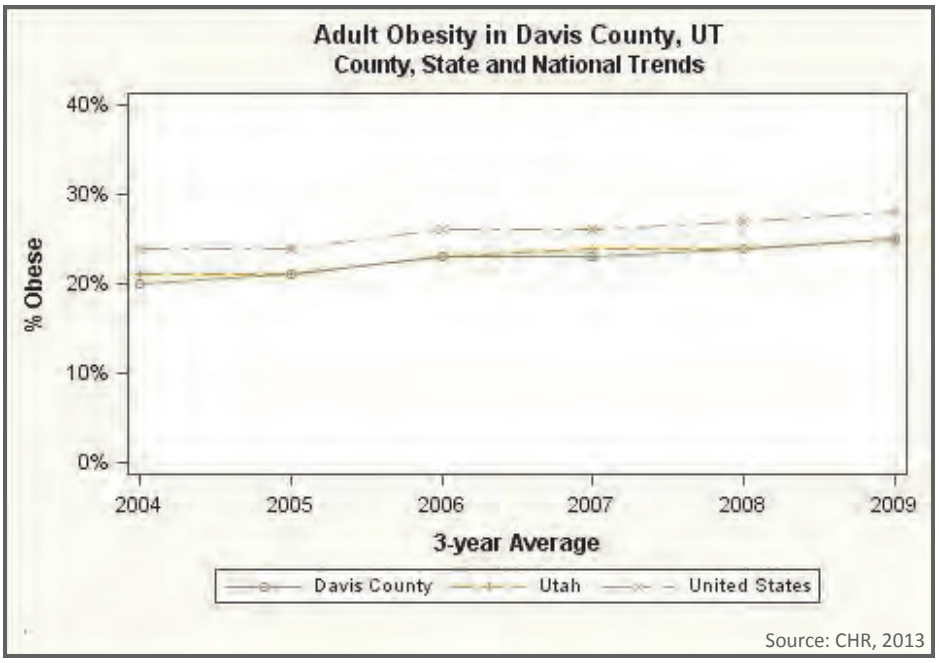
Nearly 25% of adults in Davis County are obese. When adults who are obese are combined with adults who are overweight, more than 63% of adults in Davis County are at an unhealthy weight.

Table 2: Adult Obesity & Overweight Indicators

Adult Obesity & Overweight Prevalence	Davis	Utah	U.S.	Source
Obesity, 18+ (2009–2011)	24.9%	25.1%	27.4%	DCCS, UDOH
Obese or Overweight, 18+ (2011)	63.1%	60.3%	62.9%	IBIS, UDOH

Age-adjusted Average per 100,000 Population

Graph 4: Adult Obesity Trends, Davis County, Utah, U.S.



Davis County is meeting the Healthy People 2020 target (30.5%) for adult obesity, and according to the County Health Rankings is in the top 10% (best) in the nation. Although we compare well, far too many residents are at risk for serious and costly health conditions.

Adult Obesity

25% of adults are obese in Davis County.

Davis County compares well in this category by meeting the Healthy People 2020 target & measures in the top 10% (best) of all counties in the U.S.

Although we compare well, far too many residents are at risk for serious & costly health conditions.

Obesity - Priority 2

Childhood Obesity

A statewide surveillance system is in place to estimate the prevalence of obesity in adolescents. Approximately 5% 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 22.1% compared to the national rate of 31.3%.[17]

Table 3: Childhood Obesity & Overweight Indicators

Obesity & Overweight Prevalence	Davis	Utah	U.S	Source
Adolescent Obesity (2011)	5.1%	7.5%	13.0%	DCCS, UDOH
Childhood Overweight & Obesity, Ages 10-17 (2012)	—	22.1%	31.3%	NSCH
Grade School Obesity, Ages 6-11 (2012)	—	9.4%	18%–21.2%	PANO, UDOH
Childhood Obesity, WIC Clients, Age 5 & Under (2010)	6.1%	7.8%	14.0%	DCHD

Age-adjusted Average per 100,000 Population

Davis County has participated in a statewide height/weight assessment project for elementary school students. First, third, and fifth grade students from randomly selected public elementary schools were weighed and measured to assess the extent of childhood overweight and obesity. A report with the results found that:[18]

- More boys than girls were overweight or obese in every grade.
- The percentage of boys at an unhealthy weight increased dramatically from grade 1 to 5.
- In 2012, 20.8% of elementary school students were at an unhealthy weight.
- In 2012, 9.4% of elementary school students were obese.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight. By 2012, the rate had increased to 21.3%.

The Davis County sample was not large enough to be statistically representative of all public elementary schools in the county, and an estimate for overweight and obesity prevalence in Davis County grade school students is not available at this time.

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

22% of young people ages 10-17 in Utah are overweight/ obese. Compared to other states, Utah is the lowest (best) for this measure.

Davis County childhood obesity data is currently not available.

Obesity - Priority 2

Healthy Eating

In Davis County, 34% of adults eat 2 or more servings of fruit per day and only 16.8% eat 3 or more servings of vegetables per day. These rates are just above the state and national averages. 2010 Dietary Guidelines for Americans recommend making half your plate fruits and vegetables. When it comes to fruits and veggies, more matters.

Table 4: Healthy Eating Behavior Indicators

Healthy Eating	Davis	Utah	U.S.	Source
Fruit Consumption, 2 or More Servings (2011)	34.0%	33.8%	30.7%	IBIS, UDOH
Veggie Consumption, 3 or More Servings (2011)	16.8%	16.6%	15.3%	IBIS, UDOH

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.

Table 5: Food Environment Indicators

Food Environment	Davis	Utah	U.S.	Source
Grocery Store Access* (2010)	7.8	13.1	21.8	CHNA.org
WIC-Authorized Food Store Access* (2012)	8.6	11.0	15.6	CHNA.org
Limited Access to Healthy Foods** (2012)	4.0%	5.0%	8.0%	CHR
Fast Food Restaurants (2010)	63.0%	59.0%	45.0%	CHR

*Rate per 100,000 Population **Data should not be compared with prior years due to changes in definition.

There are 7.8 grocery stores per 100,000 population in Davis County, which is lower than the rate for Utah (13.1) and the U.S. (21.8). 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 1 full service grocery store per 10,000 residents. Davis county is below that with .78 per 10,000.

Healthy Eating

In Davis County, 34% of adults eat 2 or more servings of fruit per day & only 16.8% eat 3 or more servings of vegetables per day.

When it comes to fruits & veggies, more matters.

Food Environment cont.

Davis County has 8.6 food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program benefits and that carry designated WIC foods and food categories. This indicator provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors. Davis County has fewer establishments compared to the state and nation.

The proportion of the population who are low income (family income less than 200% FPL) and do not live close (within one mile) to a grocery store is 4% in Davis County and 5% in Utah. This is considered the proportion of the population that has limited access to healthy foods.

In Davis County, 63% of all restaurants are fast-food establishments, which is higher than the state and U.S. This measure does not take into account the types of food served, how much food is consumed, or how many individuals visit the restaurants. The proximity of these restaurants may be close to schools, which could encourage unhealthy eating in children.

Because of these food environment concerns, DCHD is interested in exploring a Retail Food Environment Index (RFEI) measure for Davis County cities and zip codes. A RFEI is calculated by adding the number of fast food restaurant and convenience stores and then dividing that by the number of grocery stores and produce markets. In 2013, a RFEI was calculated for the county's five lowest income/education census tracks. The 5 census tracks comprise the cities of Clearfield and Sunset. The RFEI is 5.57 (39/7). What this number means is that there are 5.57 fast food establishments and convenience stores for every 1 full service grocery store/market. Measures for other cities are in progress. This data needs to be evaluated to see if meaningful baselines can be established, if the measures can be used for comparisons, and if there is an appropriate goal or target value.

Table 6: Retail Food Environment Index

Location	Grocery Stores	Markets	Fast Food Establishments	Convenience Stores	RFEI
Sunset/Clearfield	3.0	4.0	26.0	13	5.57

RFEI research from the California Center for Public Health Advocacy suggests that high RFEI scores can be associated with a higher prevalence of obesity within a community. Lowering the RFEI score could help reduce the burden of obesity among residents. To improve the RFEI score, efforts should be made to encourage the establishment of more healthy food retail (supermarkets, produce stands, and farmers markets) while unhealthy food retail (fast-food restaurants and convenience stores) are decreased or kept constant.

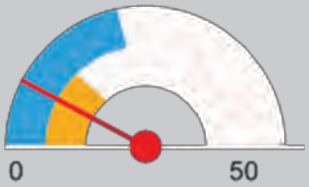
Food Environment

In 3 out of 4 indicators related to food environment, Davis County is worse compared to the state.

There are 7.8 grocery stores per 100,000 residents in the county.

Graph 5: Grocery Store Access Comparison Scale

Establishment Rate (per 100,000 Pop.)



Source: CHNA.org

Obesity - Priority 2

Physical Activity

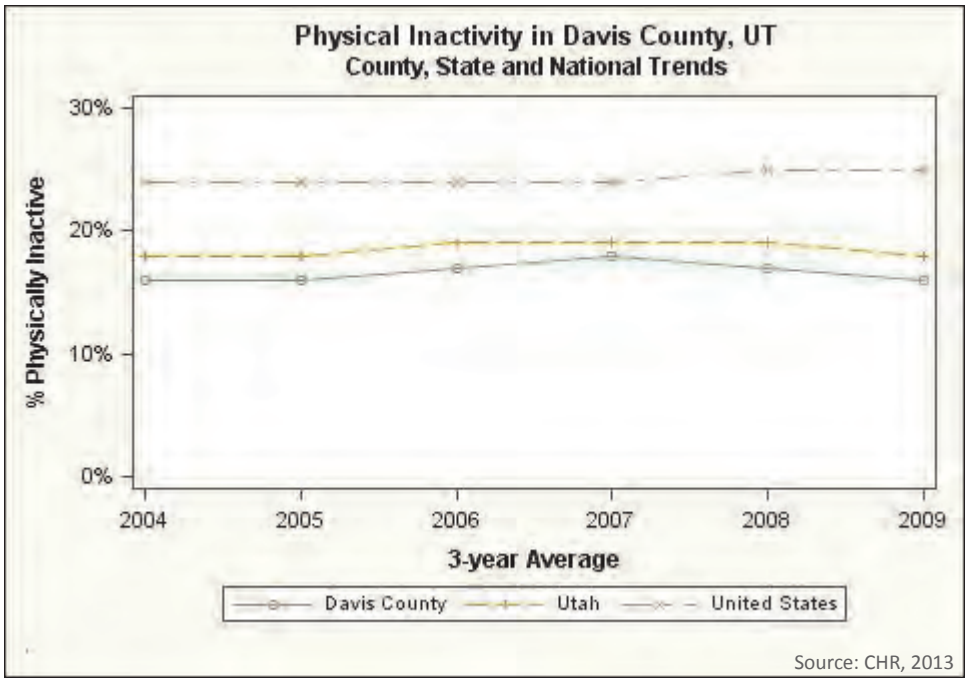
In 2011, 57.7% of adults and 47.2% of high school students in Davis County reported getting the recommended amount of physical activity. To promote and maintain health, adults 18 years and older should accumulate 150 minutes or more each week of moderate-vigorous physical activity. To count towards getting at-least 150 minutes/ week, activity needs to be performed at least 10 continuous minutes at a time. Adults 18 and older should also do muscle-strengthening activities at least twice each week that work all major muscles groups.[15]

Table 7: Physical Activity Indicators

Physical Activity	Davis	Utah	U.S.	Source
Recommended Physical Activity Adults (2011)	57.7%	56.1%	51.4%	DCCS, UDOH
Recommended Physical Activity High Schoolers (2005-2011)	47.2%	48.9%	—	DCCS, UDOH
Physical Inactivity, Ages 20+ (2009)	16.0%	18.0%	25.0%	CHR

An estimated 16% of adults ages 20 and over in Davis County report no leisure time physical activity. According to the County Health Rankings, Davis County is in the top 10% (best) in the nation for this measure.

Graph 6: Physical Inactivity Trends, Davis County, Utah, U.S.



Physical Activity

An estimated 16% of adults ages 20+ in Davis County report no leisure time physical activity.

According to the County Health Rankings, Davis County is in the top 10% (best) in the nation for this measure.

Obesity - Priority 2

Sidewalks & Trails

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. State-wide, 18% of residents report no sidewalks. While most residents have sidewalks, 41% of residents in Davis County would like more sidewalks.[19]

Over the last few years 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. 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.

Table 8: Davis County Trails

Davis County Trails					
City	Bike Lane Miles	Paved Shared Trail Miles	Gold Medal Miles	Hiking Trail Miles	Trail Heads
Bountiful*	4.5	2.5	0	48	7
Centerville*	5	9.7	1	33.3	12
Clearfield*	0	6.76	1	0	6
Clinton*	0	5.5	1	0	0
Farmington*	16.8	60	0	119	36
Fruit Heights*	1.26	3.5	0	13.4	4
Kaysville*	1.7	20.43	1	2	17
Layton*	5.7	8.4	1	13	6
North Salt Lake*	3.5	9.4	0	4.5	3
South Weber*	6	1	0	1	1
Sunset	0	0	1	0	0
Syracuse	1.2	6	0	0	16
West Bountiful*	2.7	7.25	0	0	6
West Point*	0.5	3.6	0	0	3
Woods Cross*	1.5	6.3	0	1	2
Unincorporated	23.7	8	0	74.9	20
County Totals	**74.06**	**158.34**	**6**	**310.10**	**139**

*City records and county records sometimes differed. Indicator represents highest estimate. Source: DCHD, 2013

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)

Sidewalks & Trails

Davis County is known for great sidewalk coverage & excellent hiking trails.

Davis County weaknesses include on-street bike lanes, neighborhood connectivity, unsafe routes to school, no bike or pedestrian paths to shopping & entertainment, few bike racks, & difficulty accessing mass transit on foot or bike.

Sidewalks & Trails cont

While sidewalks and hiking 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; and difficulty accessing public transportation on foot or by bike.

From the 2013 Utah Collaborative Active Transportation Study (UCATS) a walkability index is available to assess walking accessibly to the four FrontRunner stations in Davis County. The index analyzes the distance a person living within one mile of a rail station would need to walk to access that station using existing streets and trails, as compared to a one-mile straight line (as the crow flies). A one-mile distance is used as it is assumed to be the farthest distance someone will walk to access rail transit stations. Comparing the actual walk distance to the "as-the-crow-flies distance" creates a "Walkability Index" that is used to identify areas where it may be difficult for pedestrians to access transit. See table below.[20]

Table 9: Front Runner Station Walkability Index

Davis County FrontRunner Stations	Walkability Index
Worst in State (Draper)	15.7
Clearfield	18.6
Woods Cross	31.5
Farmington	33.8
Layton	40.4
Best in State (Provo Central)	58.8
State Average	34

On average, the Walkability Index of FrontRunner stations in Utah is 34%. Clearfield station is the second to worst in the state. The least accessible stations are usually bound by significant barriers to pedestrian travel like interstates, river/canals or poor street connectivity. The most accessible station in the state is in Provo with an index of 58.8%.

Walkability Index

A walkability index is available to assess walking accessibility to the 4 FrontRunner stations in Davis County.

Walking accessibility to transit stations could be improved, especially in Clearfield.

Obesity Prevention Partners

The DCHD has provided administrative support and leadership for the obesity action group. The group meetings are held in Farmington at the Davis School District. These are the partner agencies who have been part of the obesity action group, have contributed to the plan, and will be involved in implementation.

Partner Organizations	
Davis County Health Department	Borski Farms
Intermountain Healthcare	Farmington Trails Committee
Farmington City	Lakeview Hospital
Clearfield City	Davis School District
Davis County Community & Economic Development	Davis Head Start
Wasatch Front Regional Council	Tanner Clinic
Clearfield Job Corps	Logo Concepts
Walk, Bike, Plan	Davis County Trails Committee
Broadview University Nursing Student	Anytime Fitness
University of Utah Health Education Student	Humana
Hill Air Force Base	

Moving forward, the action group will continue to identify partners necessary to be successful with planned strategies. Additional community partners identified for outreach include: grocery stores, Red Barn Group, local businesses, Department of Agriculture, Utah Department of Transportation, Utah Transit Authority, USU Extension, and religious organizations.

Obesity Prevention Resources

Many national and state organizations are working on reducing obesity in America and in Utah. There are numerous strategic plans, guiding principles, and evidence-based practices to guide Davis County's plan to reduce obesity.

Healthy People 2020

Nutrition, physical activity, and obesity is a category in the Healthy People 2020 (HP2020) Leading Health Indicators. An important benefit of a healthy diet and physical activity is a reduced risk of obesity.[3]

To promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights, HP2020 recommends:

- Consuming a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources;
- Limiting the intake of saturated and *trans* fats, cholesterol, added sugars, sodium (salt), and alcohol;
- Limiting caloric intake to meet caloric needs.

To improve health, fitness, and quality of life through daily physical activity, HP2020 recommends:

- Structural environments, such as the availability of sidewalks, bike lanes, trails, and parks;
- Legislative policies that improve access to facilities that support physical activity;
- Policies that target young children: physical activity in childcare settings, television viewing and computer usage, recess and physical education in public and private elementary schools.

Guide to Community Preventive Services

CDC has identified target areas based on current and emerging evidence that will most likely impact overweight and obesity. Establishing policies and supporting environments that are conducive to eating healthy and being active play a critical role.

The CDC Guide to Community Preventive Services helps communities choose programs and policies to improve health and prevent disease. The site outlines what more than 700 studies reveal about what works in public health to improve the health of the population. Worksite programs are recommended to control weight and reduce obesity. Community-wide campaigns, enhanced school-based physical education, and community-scale urban design and land-use policies are recommended to increase physical activity.[21] Davis County has included these recommended interventions in this plan because they meet the needs of the community.

Guide to Community Preventive Services

The Guide to Community Preventive Services helps communities choose effective programs & policies to improve health & prevent disease.

Davis County has selected several recommended interventions to reduce obesity & increase physical activity in the community.

Obesity Prevention Resources

Utah Statewide Health Improvement Plan

In 2013, there were four priority issues selected for inclusion in the Utah Statewide Health Improvement Plan (SHIP). They are healthy eating, active living, immunizations across the life span; unified and effective public health system; and funding for public health. There are four goal groups working on these priorities. The healthy eating, active living goal group has selected two strategies. Strategy one is to educate schools and school districts about incorporating physical activity for students health and educational benefits. Strategy two is to promote shared healthy family meals. The Davis County obesity action group has incorporated these two strategies into their plan.

Healthy Living Through Environment, Policy & Improved Clinical Care (EPICC) Program

DCHD receives funding from the Utah Department of Health, Healthy Living Through Environment, Policy & Improved Clinical Care (EPICC) Program to address physical activity, nutrition, and obesity. Local initiatives include developing and maintaining a health resource locator; serving on county trails committee; developing a retail food environment index and sharing results; working with healthcare providers to educate on breastfeeding, healthy eating, and physical activity; serving on local breastfeeding coalition; working with childcare providers to adopt physical activity, nutrition and screen time policies; and implementing school health initiatives.

Community Transformation Grant

DCHD also receives funding from the Utah Department of Health through the Community Transformation Grant (CTG). The grant supports and enables communities to identify their leading health problems and design programs that work for them. The CTG program gives communities the opportunity to develop and implement initiatives to prevent chronic diseases, the leading causes of death and disability. All awardees are improving health and wellness with strategies that focus on tobacco-free living; active living and healthy eating; and high-impact quality clinical and other preventive services to prevent and control high blood pressure and high cholesterol.

CTG methods are very similar to the community health assessment and community health improvement processes required for public health accreditation. Although narrower in focus, CTG assessment and prioritization activities have been coordinated so that they go hand-in-hand with broader DCHD assessment and planning efforts.

Utah Leaders for Health is a statewide group organized to fulfill part of the CTG requirement to engage community leaders. The group's mission is to improve the health of Utahns by convening influential individuals to build support, leverage resources, and encourage community engagement. DCHD represents local health departments in Utah on this leadership team.

SHIP

Addressing obesity is one of four priorities in the Utah Statewide Health Improvement Plan.

Davis County will support statewide efforts to increase regular physical activity in schools & promote healthy family meals.

Obesity Prevention Resources

The Utah Nutrition and Physical Activity Plan 2010-2020

The Utah Nutrition and Physical Activity Plan 2010-2020 identifies strategies to promote healthy eating and physical activity in an effort to prevent overweight, obesity, and related chronic diseases. The plan focuses on policy and environmental changes that make the healthy choice the easy choice in Utah.

In community settings, the plan aims to increase the number and quality of active community environments and increase availability and access to healthy food in neighborhoods. In healthcare settings, the plan aims to increase the number of healthcare providers who educate and offer resources to their patients about healthy eating, screen time, physical activity, and breastfeeding. In schools, the plan aims to increase regular physical activity, increase access to and selection of healthy foods, and increase wellness activities for staff and faculty. In worksites, the plan aims to increase the number of businesses that support and promote healthy eating and promote physical activity.[15]

The Utah Bicycle & Pedestrian Master Plan Design Guide

Some policy and environmental changes to increase physical activity and reduce obesity focus on active transportation within the community. Active transportation involves any way an individual can travel to and from desired locations by using the body as the primary means of locomotion such as riding a bike, walking, or skating. It is a systematic approach to give people who use active transportation the same considerations as those using vehicles.

The Utah Bicycle & Pedestrian Master Plan Design Guide has been designed to provide local cities and towns the tools and resources necessary to engage community members, identify goals, and take the steps to make their community's policies and environments active transportation friendly. Bicycle and pedestrian master plans work to increase walking and biking trails; improve connectivity of non-auto paths and trails; and improve active transportation connections to transit. Bicycle and pedestrian master plans increase physical activity by enhancing access to places for activity and increasing land available for physical activity. Bicycling and pedestrian infrastructure improvements promote physical activity and have a positive impact on air quality.[22]

Some activities and outcomes related to active transportation are also addressed in Priority 4, the air quality improvement plan. The two groups coordinated to ensure that overlapping areas were streamlined. The groups will continue to work together to coordinate implementation efforts, avoid duplication, and monitor progress.

Active Transportation

Active transportation is a systematic approach to give people who walk, bike & use mass transit the same considerations as those using vehicles.

Active transportation strategies help reduce obesity & improve air quality. Both are priority health issues in Davis County included in this plan.

Obesity Prevention Resources

SPARK

John J. Ratey, MD, author of SPARK, explores the connection between exercise and the brain's performance. Research shows that even moderate exercise will supercharge mental circuits to beat stress, sharpen thinking, and enhance memory. Physical activity sparks biological changes that encourage brain cells to bind to one another. For the brain to learn, these connections must be made. Research shows that exercise makes people feel better because brain function is at its best.[23]

The Davis School District created an opportunity for students to become "Sparked," by increasing structured physical activity each day to improve learning and decrease behavioral issues. During the 2012-2013 school year, two elementary schools increased physical activity by 25 minutes per student each day. The schools increased physical activity for 15 minutes at the beginning of the school day and 10 minutes at the end. Throughout the year, both schools experienced an overall increase in academic performance, even though a significant amount of instructional time had been decreased. Positive effects of SPARK physical education programs are academic achievement, increased physical activity in students, enjoyment of PE, improved teacher instruction, and sustainability.

Source: Deseret News, 2013

The Davis School District would like to expand this program. The obesity action group will work on identifying and supporting funding opportunities and applications to help the school district with up front funding that is needed to train additional teachers and get this program into more schools.

Grants

A few grants have been identified that may be able to support obesity prevention efforts in Davis County. They include: Select Health: Step Express, Community Development Block Grant, Social Services Block Grant, and the Utah Cancer Control Program.

SPARK

SPARK research shows that increasing regular physical activity in schools leads to benefits such as academic achievement, increased physical activity in students, enjoyment of PE, & improved teacher instruction.

The Davis School District has successfully implemented the program in 2 elementary schools.

Obesity Prevention Strategies

Healthy Eating Strategies	Evidence Base	Organizations with Responsibility
Increase school and community garden programs throughout Davis County.	CDC (Community Gardens) NACCHO Model Practice (Improve Food Environment, Food Landscape) County Health Rankings (School Fruit & Vegetable Garden)	DSD, Parks & Recreation Departments, Religious Organizations, Local Farmers, USU Extension
Increase access to fresh local produce from farmers in the community by promoting Community Supported Agriculture.	CDC (Community Supported Agriculture) County Health Rankings (Community Gardens)	Local Farmers, Resource for community Development (Dept. of Agriculture), DSD, Davis County Community Economic Development
Support state activities to promote healthy family meals.	National Longitudinal Survey of Adolescent Health	DCHD, Religious Organizations, USU Extension, Head Start, WIC

Obesity Prevention Strategies

Physical Activity Strategies	Evidence Base	Organizations with Responsibility
Increase regular physical activity in school children (SPARK, Select Health: Step Express, PE/trails partnerships, etc.).	County Health Rankings (Physically Active Classrooms) Guide to Community Preventive Services (Enhanced School-Based Physical Education) SPARK	DSD, Clearfield City, Select Health
Support & promote community-wide physical activity programs.	The CDC Guide to Strategies to Increase Physical Activity in the Community County Health Rankings (Extracurricular Activities: Physical Activity) Guide to Community Preventive Services (Social Support Interventions in Community Settings	Parks & Recreation Departments, DCHD, Davis County Trails Committee
Promote and improve Safe Routes to School plans which encourage walking and biking to school.	County Health Rankings (Safe Routes To School)	DSD, City Government Officials, Davis County Cities, Walk-Bike-Plan, Farmington Trails Committee
Work with Davis County cities to develop and adopt active transportation master plans using The Utah Bicycle & Pedestrian Master Plan Design Guide.	Guide to Community Preventive Services (Community-Scale Urban Design Land Use Policies) NACCHO Model Practice (City Design) Utah Nutrition and Physical Activity Plan County Health Rankings (Bike/ Pedestrian Master Plans)	City Government Officials, UDOT, UTA, Walk-Bike-Plan, WFRC, Davis County Trails Committee

Obesity Prevention Strategies & Outcome Goal

Obesity Prevention Strategies	Evidence Base	Organizations with Responsibility
Promote and recommend land use policies and zoning regulations supporting physical activity and healthy eating.	CDC (Land Use Planning) NACCHO Model Practice (City Design) County Health Rankings (Zoning Regulations/Land Use Policy/Mix-Use Development) Utah Nutrition and Physical Activity Plan Form Based Code Tax Incentives	Davis Chamber of Legislative Affairs Committee, All Action Group Members, DCHD, Davis County Trails Committee, Farmington City/City Planner Association, WFRC, Walk-Bike-Plan
Promote resources to support physical activity and healthy eating in Davis County (resource locator, social media, websites, printed materials, healthcare provider promotion).	211 (United Way)	DCHD, All Action Group Members, 211 (United Way), Healthcare Providers
Promote comprehensive worksite wellness programs.	Guide to Community Preventive Services (Obesity Prevention and Control: Worksite Programs) NACCHO Model Practice (Worksite Wellness) Utah Nutrition and Physical Activity Plan Worksite Wellness Program Study (Rand Corporation) County Health Rankings (Worksite Obesity Prevention Interventions)	DCHD, DSD, Davis County Chamber of Commerce, Hill Air Force Base

Outcome Goal

Prevent and reduce obesity in Davis County through environments, policies, and programs that support everyday physical activity and healthy eating choices.

Obesity Prevention Short & Long-Term Objectives

Short-term Objectives (1-2 years)

1. Meet with UDOT to discuss UCATS projects by December 31, 2015.
2. At least 2 schools or community agencies will start a garden or healthy eating program by December 31, 2015.
3. The benefits of a comprehensive employee wellness programs will be promoted to 5 worksites in Davis County by December 31, 2015.
4. At least 2 worksites will implement a wellness program by December 31, 2015.
5. One city will develop and/or adopt an active transportation master plan by December 31, 2015.
6. At least 6 Davis School District schools will increase minutes of structured physical activity each day by December 31, 2015.
7. Community supported agriculture will be promoted through 15 venues by December 31, 2015.
8. The Davis County resource locator website will be promoted through 30 government entities, businesses, or community groups by December 31, 2015.
9. The Davis County resource locator website will be promoted through 8 health care agencies by December 31, 2015.
10. The Davis County resource locator website will have been promoted 50 times via social media by December 31, 2015.
11. The Davis County resource locator website will have received 25,000 hits by December 31, 2015.
12. Davis County trails map will be completed and available to the public by December 31, 2015.

Long-term Objectives (3-5 years)

1. Reduce the percentage of adults who are overweight or obese from 63.1% to 57.3% by December 31, 2018.
2. Decrease the percent of inactive Davis County residents from 16% to 15% by December 31, 2018.
3. Develop and implement a system to establish baseline indicators for overweight/obesity for children and adolescents in Davis County by December 31, 2018.
4. Increase on street bicycle lanes from 74.06 miles in 2013 to 222.00 miles by December 31, 2018. (Baseline: Davis County Health Department City Health Policy & Resource Assessment)
5. Increase the number of hiking and/or paved shared-use trails from 468.44 miles to 498.44 miles by December 31, 2018. (Baseline: Davis County Health Department City Health Policy & Resource Assessment)
6. Improve walkability index for at least 2 Front Runner stations in Davis County by December 31, 2018. (Baseline: UCATS Report 2013, Woods Cross, Farmington, Layton, & Clearfield stations.)

Access to Behavioral Health Services - Priority 3

Access to mental health services has been ranked as the third most important health priority in Davis County. Other leading health issues in the county related to mental health include suicide, which was selected as the number one health problem in the county. Community leaders also ranked depression/anxiety and substance use/abuse in the top 10 health issues facing the community. Because of the scope of community needs, the action group focused on the broader term behavioral health to address access to mental heath and substance abuse services.

Providing for and supporting good mental health is a public health issue. Communities prosper when the mental health needs of community members are met. Unaddressed mental health issues can have a negative influence on homelessness, poverty, employment, safety, and the local economy.[24]

Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.[3]

Mental health disorders are the leading cause of disability in the United States, accounting for 25% of all years of life lost to disability and premature mortality. Approximately one in five Americans will have a mental health problem in any given year, yet only a little over one in three people with a mental health problem will receive mental health services.[24]

Mental Health & Public Health

Providing for & supporting good mental health is a public health issue.

Mental health disorders are the leading cause of disability in the U.S., accounting for 25% of all years of life lost to disability & premature mortality.

Mental illnesses affect people's ability to participate in health promoting behaviors.

Access to Behavioral Health Services - Priority 3

According to CDC, an estimated 8,300 adults and 4,000 children have a diagnosable mental illness in Davis County. The percentage of adults and youth needing mental health treatment varies considerably from community to community. Accessibility is based on many factors including location, funding, transportation, etc. Stigma around mental health is another factor why people do not seek services even though a need exists.

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 and substance abuse treatment versus the capacity of the local substance abuse and mental health authority (in this case Davis Behavioral Health) to provide services.

Table 10: Mental Health & Substance Abuse Treatment Needs vs. Capacity

Davis Behavioral Health, Local Substance Abuse & Mental Health Provider Agency	Adults (18+)		Youth (Under Age 18)	
	# Need Treatment	Current Capacity	# Need Treatment	Current Capacity
Mental Health Treatment Needs vs. Clients Served	8,269	2,698	3,984	1,446
Substance Abuse Treatment Needs vs. Treatment Capacity	8,416	842	1,349	89

Source: Division of Substance Abuse & Mental Health Annual Report, 2012

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 currently available.

Davis County is considered a Health Professional Shortage Area (HPSA) according to the Federal Health Resources and Services Administration (HRSA). This designation only takes into consideration psychiatric physicians. The required population-to-psychiatrist ratio for a geographical area mental health HPSA designation is ≥ 30,000:1. Twenty-six out of 29 counties in Utah are designated HPSAs for mental health. The counties that are not mental health HPSAs are Salt Lake, Weber, and Morgan.[25]

Mental Health Treatment Needs

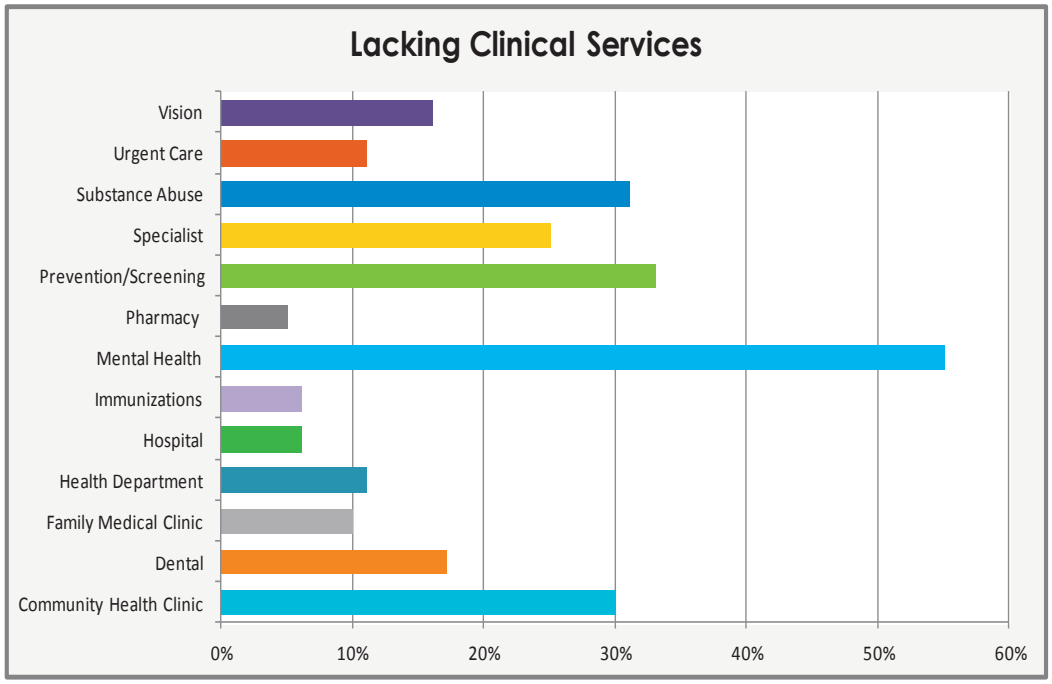
Utah's Annual Substance Abuse & Mental Health report provides data about the publically funded mental health system. The report estimates the unmet need for treatment.

Additional information is needed to better understand access & utilization issues pertaining to mental health & substance abuse treatment in Davis County.

Access to Behavioral Health Services - Priority 3

In 2012, the Davis County Health Department conducted a key informant survey asking residents and community leaders what clinical services are most lacking or difficult to access. The leading answer was mental health services, selected by 55% of respondents. Substance abuse services were selected by 31% of participants.[26]

Graph 7: Lacking Clinical Services in Davis County



Source: DCHD, 2012

Lacking mental health services was a theme that was reinforced throughout survey responses. There is concern about the lack of providers, current capacity of the local mental health authority, lack of insurance coverage for mental health, lack of emergency services for mental health issues, lack of psychiatrists, and necessity to go to Salt Lake or Ogden to access services.

Lacking Clinical Services

Mental health services were identified as the clinical services most lacking & most difficult to access in Davis County, according to the 2012 Key Informant Survey.

Access to Behavioral Health Services - Priority 3

Data from the Behavioral Risk Factor Surveillance System (BRFSS) is used to measure health-related quality of life: the percent of adults reporting poor or fair health, the percent of adults reporting poor mental health, and the average number of physically and mentally unhealthy days reported per month. The percent of adult residents who report 7 or more days when their mental health was not good in the past 30 days was 13.8%. When asked to quantify how many days during the past 30 that their mental health was not good, the average number of days for adults was 3.

Table 11: Health-Related Quality of Life Indicators

Health-Related Quality of Life (2005-2011)	Davis	Utah	National Benchmark*	Source
Poor or Fair Health	10%	13%	10%	CHR
Poor Physical Health Days	3.2	3.4	2.6	CHR
Poor Mental Health (2011)	13.8%	15.8%	—	DCCS, UDOH
Poor Mental Health Days	3	3.2	2.3	CHR

Age-adjusted * 90th percentile; i.e., only 10% are better

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

Table 12: Prevalence of Mental Health Conditions

Mental Health Condition Prevalence	Davis	Utah	U.S.	Source
Depressive Disorder, Doctor Diagnosed*	21.2%	21.9%	16.7%	BRFSS, UDOH
Major Depression*	4.0%	4.2%	4.2%	UDOH
Depressive Symptoms, Adolescents	33.0%	34.5%	—	PNAS
Children with Emotional, Behavioral, or Developmental Conditions, Ages 2–17	—	8.7%	11.3%	NSCH
Confusion/Memory Loss (Age 60+)	16.8%	16.7%	12.7%	BRFSS, UDOH

*Age-adjusted rates

The data shows depressive disorders are high in Davis County and Utah, compared to the U.S. The Utah Depression Surveillance Report shows 4.0% of Davis County residents experience major depression.[27] In 2013, 33% of Davis School District adolescents who participated in the prevention needs assessment survey experienced depressive symptoms. In Davis County, depression, anxiety and suicide are the leading mental and emotional health concerns identified by community partners.

Among Davis Behavioral Health clients, the most common mental health diagnoses are anxiety and mood disorder. See table below.

Table 13: Mental Health Diagnosis, Davis Behavioral Health Clients, 2012

Mental Health Diagnosis: Davis Behavioral Health Clients					
Diagnosis	Adults Served		Diagnosis	Teens Served	
Anxiety	1,332	26.8%	Attention Deficit	647	18.7%
Mood Disorder	1,288	26.0%	Anxiety	606	17.6%
Depression	580	11.7%	Mood Disorder	462	13.4%
Substance Abuse	441	8.9%	Neglect & Abuse	374	10.8%

Source: Division of Substance Abuse & Mental Health Annual Report, 2012

Mental Health Conditions

Incidence & prevalence rates for many mental health conditions are not readily available.

In Davis County, depression, anxiety & suicide are the leading mental/ emotional health concerns identified by community partners.

Access to Behavioral Health Services Partners

Davis Behavioral Health (DBH) provides administrative support and leadership for the access to behavioral health services action group. The group meetings are held in Layton at Davis Behavioral Health. These are the partner agencies who have contributed to the plan and will be involved in implementation.

Partner Organizations	
Davis Behavioral Health	NAMI of Davis County
Davis County Health Department	Family Counseling Services
Davis Community Learning Center	Davis Hospital
Lakeview Hospital	Catholic Community Services
United Way/211	Courts, Guardian ad Litem
Midtown Community Health Center	Layton Communities That Care

Moving forward, the action group will continue to identify partners necessary to be successful with planned strategies. Additional community partners identified for outreach include: Davis School District, substance abuse treatment centers, Intermountain Healthcare, LDS Family Services, private mental health providers, healthcare providers, Hill Air Force Base, employee assistance programs, Family Connection Center, Davis County Jail, and emergency responders.

Access to Behavioral Health Services Resources

The onset of half of all lifetime mental illnesses takes place by age 14, and three-fourths by age 24. Almost 1 in 5 young people have one or more Mental, Emotional or Behavioral Disorders (MEB) that cause some level of impairment within a given year. However, fewer than 20 percent receive mental health services. MEB's are often not diagnosed until multiple problems exist. Adverse childhood experiences and resulting MEBs are often not recognized until a person has dropped out of school, been hospitalized, entered the criminal justice system or died from suicide. During the 2012 Utah Legislative Session, funding was allocated to address this need. Mental health early intervention funding is available to support three evidenced-based services: 1) School-Based Behavioral Health, 2) Family Resource Facilitation with Wraparound to Fidelity, and 3) Mobile Crisis Teams.[28]

Davis Behavioral Health provides mental health and substance abuse treatment to residents of Davis County and received the funding for local early intervention. As a result behavioral health counselors have been placed in nine Davis School District locations: Syracuse High, Mountain High/Canyon, Sunset Jr. High, Wasatch Elementary, Vae View Elementary, Lincoln Elementary, South Clearfield Elementary, Parkside Elementary, and Davis Community Learning Center. Davis Behavioral Health also introduced the Family Resource Facilitation (FRF) program. Facilitators are people that have personal experience with their own (or a family members) mental health issues. They meet with families who are experiencing similar challenges and share their experience and expertise navigating resources that may be available to them. Lastly, a mobile crisis outreach program was started in Davis County. The mobile crisis team can provide home assistance when someone is concerned that a child is at risk for dangerous behaviors, including suicide. It is a 24 hour service.

In 2013, a new partnership was formed between Davis Behavioral Health and the Bountiful and Woods Cross Police Departments to address behavioral health needs in those communities. When a law enforcement officer is involved in a situation involving mental health issues, they call the Davis Behavioral Health Mobile Crisis Team and an on-call trained mental health provider responds to the scene to assist police officers. This service helps prevent unnecessary hospitalization and/or arrest.

These new programs have been found to be very valuable to residents in the county. The access to behavioral health services action group will work to ensure continued funding and expansion of these effective services.

A few funders have been identified that can provide resources to address access to behavioral health. They include: Intermountain Healthcare, Daniels Fund, United Way, and the Utah Division of Substance Abuse and Mental Health.

Early Intervention

During the 2012 Utah Legislative Session funding was allocated to support mental health early intervention in young people.

As a result of this funding Davis County has 3 new evidence-based services: school-based behavioral health, family resource facilitation & a mobile crisis team for youth.

Behavioral Health Services Resources

The Affordable Care Act has expanded mental health coverage in the United States. With implementation of the ACA including mental health parity, more people than ever before will need access to treatment for mental health and addiction services through expanded public and private insurance coverage. Davis County mental health and addictions treatment organizations must be ready to meet the current demand as well as increased demand for these services.

Healthy People 2020 has some objectives to improve mental health through prevention by ensuring access to appropriate, quality mental health services. Some research is available for interventions that improve mental health and mental disorders. Research shows that the prevention of mental, emotional, and behavioral disorders is inherently interdisciplinary and draws on a variety of different strategies.[3]

Mental Health First Aid is summarized in the suicide plan. It is an evidence based program that will be used in Davis County. Helping professionals will be trained to help people with a developing mental illness or in a crisis. This program is expected to reduce the burden on the behavioral health system and also help prevent suicide.

The Utah Prevention by Design, Community Action Plan, 2012 is a plan for enhancing and coordinating local community networks in a systematic way, using evidence-based approaches to prevent mental illness and promote mental health. The plan recommends suicide as the leading mental health priority for local communities, which happens to be addressed as priority 1 in this plan.[13]

The Children's Plan . . .Creating a System that Cares for Utah's Future, 2013 is the Utah Department of Human Services strategic plan which relates to this priority. This plan recommends a system of care approach to service delivery to ensure support for Utah's children, youth and families. Local communities are responsible to assure an appropriate spectrum of services, from early childhood up to adulthood. These services should be strengthened and available to all youth who are or may be at risk for serious mental health conditions. Value is placed on collaboration and prevention/early intervention. Effective service delivery systems collaborate between existing state and local agencies and between public, private and voluntary agencies.[29]

It was challenging to find national and state strategic plans to address improving access to behavioral health services in a local community. Strategies for this priority align with state plans where possible and are based on needs identified by the action group.

Affordable Care Act

The Affordable Care Act (ACA) has expanded mental health coverage in the U.S.

Various provisions of the ACA will require benefit packages that include treatment for mental health & substance use disorder services.

Access to Behavioral Health Strategies

Improve Access to Behavioral Health Services Strategies	Evidence Base	Organizations with Responsibility
Identify a network of behavioral health professionals and develop an online directory which includes mental health and substance use treatment providers and resources in Davis County.	The Children's Plan (Utah's Strategic Plan for System of Care)	DBH, DCHD, NAMI, CHIP Action Group
Promote awareness & use of behavioral health referral tools and resources.	211 (United Way)	211, DCHD, DBH, NAMI, CHIP Action Group
Improve the ability of mental health providers, healthcare providers, first responders, schools, clergy, and other helping professionals to utilize depression and anxiety screening tools.	PH-Q9 GAD-7	NAMI, DBH, Hospitals, Primary Care Clinics, DSD
Promote and implement effective community education programs for youth and adults which: • Reduce mental health stigma • Help the community identify, understand, and respond to signs of mental illnesses and substance use disorders • Help the community cope with stress & chronic disease	SAMHSA National Registry of Evidence-based Programs & Practices (Mental Health First Aid) SAMHSA National Registry of Evidence-based Programs & Practices (Mindfulness-based Stress Reduction) www.HelpYourselfHelpOthers.org	DBH, DSD, NAMI, DCHD, CHIP Action Group

Access to Behavioral Health Outcome Goal & Objectives

Outcome Goal

Increase access to behavioral health services in Davis County through promotion of existing resources, new screening and referral tools, increasing effective prevention programs, and better trained helping professionals.

Short-term Objectives (1-2 years)

1. Identify all Davis County behavioral health providers and assess services offered (hours of operation, specialty services, payment type accepted, crisis services, willingness to participate, etc) by December 31, 2014.
2. Train 2 Davis County instructors in Mental Health First Aid by December 31, 2014.
3. Train 2 Davis County instructors in Mindfulness-based Stress Reduction (MBSR) by December 31, 2014.
4. Develop an online tool or directory for mental health and substance use resources and service providers by March 31, 2015.
5. Train 50 medical providers to use the PH-Q9 and GAD-7 anxiety and depression screening tools and referral process by December 31, 2015.

Long-term Objectives (3-5 years)

1. Promote mental health, emotional well-being and behavioral health services in Davis County through a media campaign by December 31, 2016.
2. Train all school counselors on the PH-Q9 and GAD-7 anxiety and depression screening tools and referral process by December 31, 2017.
3. At least 5 community agencies will implement regular use of anxiety, depression, and trauma screening tools by June 30, 2018.
4. Conduct 15 Mental Health First Aid presentations throughout Davis County by December 31, 2018.
5. At least 5 employers will address and promote mental health and emotional well-being of employees through employee wellness programs, employee assistance programs, or other activities by December 31, 2018.

Air Quality - Priority 4

Air quality was selected by community partners and leaders as the fourth and final health issue to be included in the Davis County Community Health Improvement Plan. Some participants expressed concern about our ability to really improve air quality at the local level knowing that there are many state and federal efforts at play. While some community leaders suggested leaving air quality out of the plan, the overall feeling of the group was that it should be included.

Poor air quality is an issue that has faced Utah and the entire Wasatch Front, including Davis County, for many years. Much of the time air quality is good in Davis County. However, Davis County regularly experiences high levels of air pollution with levels that are among the worst in the nation. Many of the high pollution periods occur in the winter during temperature inversions. Temperature inversions are common in valleys along the Wasatch front.

Air quality is the leading environmental health concern in Davis County, identified in the 2012 Key Informant Survey. In the open-ended response survey, an overwhelming 80% (292) of respondents documented air quality as a main concern. Air pollution was also identified as the leading force working against health in Davis County.[26]

The Utah Economic Development Task Force, organized by the state legislature, made recommendations in 2013 and identified poor air quality as a primary threat to the state's economic development and continued growth. Poor air quality negatively impacts tourism, business recruiting, and employee retention efforts.[30] In the Utah Foundation Quality of Life Index Report published in 2013, Utah residents reported air quality as a leading quality of life issue along with public education and job availability.[31]

Source: DAQ

Air Quality

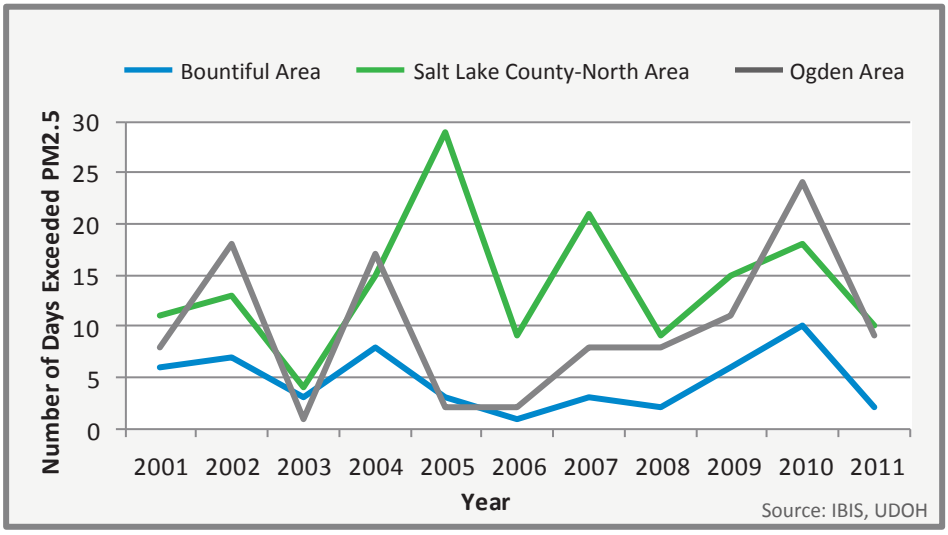
Air pollution was identified as the leading environmental health concern & the leading force working against health in Davis County according to the 2012 Key Informant Survey.

Poor air quality has also been identified as a leading economic development & quality of life issue in Utah.

Air Quality - Priority 4

Particulate matter smaller than 2.5 microns in diameter (PM2.5) is one pollutant that causes the greatest threat to human health. Davis County is located in an Environmental Protection Agency (EPA) nonattainment area for exceeding the 24-hour PM2.5 standard. The Salt Lake City-Ogden-Clearfield, Utah, metropolitan area is ranked 6th most polluted in the U.S. for this measure.[32] The number of PM2.5 days over the standard varies from year to year. Air pollution was particularly bad during the 2012-2013 winter, with 22 unhealthy red air days caused by PM2.5.[33]

Graph 8: PM2.5 Levels Over the National Ambient Air Quality Standard: Bountiful, Salt Lake County-North & Ogden Areas 2001–2011



While PM2.5 gets the most attention, other air pollutants are also of concern. Davis County is an EPA maintenance area for ozone. It is an area that was once designated as nonattainment, and which subsequently demonstrated to the EPA that it will attain and maintain the particulate standard for a period of 10 years. There was an average of eight ozone days over the national standard per year in Bountiful between 2001-2011.

Salt Lake County, on the southern border of Davis County, is a nonattainment area for PM10. This is of particular concern for residents in the southern most cities of North Salt Lake and Woods Cross. Their cities are near gravel pits, refineries, an incinerator, and converging highways and freeways.

Maps of EPA nonattainment and maintenance areas in Utah can be found in **Appendix 11**.

PM2.5

Particulate matter smaller than 2.5 microns in diameter (PM2.5) is one pollutant that causes the greatest threat to human health.

Davis County is in an EPA nonattainment area because of high levels of PM2.5 over a 24-hour standard.

Air Quality Partners

The DCHD has provided administrative support and leadership for the air quality action group. The group meetings are hosted by Woods Cross City, which already has an existing relationship with local refineries, an air quality committee of their own, and close proximity to many residents concerned about air quality. These are the partner agencies who have been part of the air quality action group, have contributed to the plan, and will be involved in implementation.

Partner Organizations
Davis County Health Department
Woods Cross City
Communities for Clean Air
Davis County Community & Economic Development
Wasatch Front Regional Council
Woods Cross Air Quality Committee
Davis County Trails Committee
Utah Division of Air Quality
Walk-Bike-Plan

Even though air quality is a hot topic in Davis County it is somewhat difficult to get community partners to meet and plan for improvement. This is a politically-charged issue that is usually left to federal and state regulators. Local agencies typically do not have resources to address air quality and the issue is often too far removed from a person's regular scope of work to actively engage. Moving forward the action group will continue to identify partners necessary to be successful with planned strategies.

Although it has been a challenge to find local agencies who can be involved in air quality improvement there are many residents that feel this is a priority issue on a personal level. Numerous local and statewide advocacy groups exist which are focused on improving air quality. Citizen advocates include parents, physicians, athletes, scientists, and community leaders. Active groups include: Communities for Clean Air, Woods Cross Air Quality Committee, Utah Mothers For Clean Air, Utah Physicians for a Healthy Environment, Utah Clean Air Partnership, Envision Utah, and HEAL Utah. The air quality action group will stay informed about the activities of these groups and find common ground in our efforts to improve air quality.

Air Quality Advocates

Numerous local & statewide advocacy groups are focused on improving air quality. Citizen advocates include moms, physicians, athletes, scientists, community leaders, etc.

Active groups include: Communities for Clean Air, Woods Cross Air Quality Committee, Utah Mother's For Clean Air, Utah Physicians for a Healthy Environ-ment, Utah Clean Air Partnership, Envision Utah & HEAL Utah.

Air Quality Resources

On December 14, 2009, the EPA identified the Provo, Salt Lake, and Logan Utah/ Idaho areas as not meeting the federal health standard for PM2.5, and directed the state of Utah to find ways to reduce wintertime pollution in those areas. The area involves 7 counties, including Davis. Because of this nonattainment status the state is required to develop a state implementation plan (SIP) to bring PM2.5 levels below the standard.

Potential solutions to Utah's PM2.5 problem have been outlined by the state. Reducing mobile source emissions from vehicles is a priority. Taking mass transit, reducing idling, driving less, and trip chaining are all encouraged as individual actions to lower emissions. Area sources are population-based sources of emissions from general commerce, manufacturing, and home and commercial heating services (food preparation and printing). New rules impacting bakeries, charbroilers, printing/ publishing, painting, degreasing, wood stoves and boilers will work to reduce area source emissions. Point source emission reductions will come from large manufacturers through the installation of additional equipment and controls.[34]

The state has spent several years working to develop a SIP to be approved by the EPA. The Utah Division of Air Quality PM2.5 State Implementation Plan was recently submitted in 2013, but was not approved by EPA because the state is unable to show attainment by 2019. The state is currently reworking the plan.

Also in 2013, Utah Governor Gary Herbert announced the creation of the Clean Air Action Team (CAAT). This group of diverse individuals will gather research, work with the public and recommend practical and effective strategies to improve Utah's air quality.

Although these intensive efforts by the state are still a work in progress, the Davis County air quality action group, Davis County Health Department, and Davis County residents can work to implement strategies at a local level. Informed citizens, businesses, and government agencies can choose behaviors and policies that result in reduced air pollution and improved air quality.

Some potential funding sources for air quality improvement efforts have been identified and include clean air violation fines, UCAIR grants, WFRC congestion mitigation grants, and Community Development Block Grants (CDBG).

PM2.5 State Implementation Plan (SIP)

Because Salt Lake (including Davis County) is in an EPA nonattainment area for PM2.5, Utah is required to develop a state implementation plan (SIP) to bring PM2.5 levels below the national standard.

Utah's SIP submitted in 2013 was not approved by the EPA because the state is unable to show attainment by 2019.

Air Quality Resources

The Air Monitoring Center (AMC) of the Utah Department of Environmental Quality 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 daily air quality, health advisories, winter season wood burn conditions, and summer season ozone action day 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.[35]

The Bountiful/Viewmont location is the only regulatory air monitor in Davis County. Bountiful is centrally located in the southern part of the county. The monitor is specialized to measure PM2.5 every 3 days. The monitor does not measure larger particulates known as PM10. The monitor also measures Ozone and NO_2. To understand air quality across Davis County, air monitor measures from northern Salt Lake County and southern Weber County should also be considered.

Assessing air quality data in Davis County has been very challenging because there is only one air monitoring location and only a limited number of pollutants are measured. Air quality data specific to Davis County is not currently available in real-time and is not available online for health professionals or the public. Davis County air quality data from the AMC is currently combined with Salt Lake for online conditions and forecasts. The top strategy for the air quality action group is to improve and increase air monitoring efforts in local communities and ensure information is publicly available.

Bountiful/Viewmont Air Monitor

Air Monitoring

The Bountiful/ Viewmont location is the only regulatory air monitor in Davis County.

Assessing air quality in Davis County is difficult because of limited monitoring locations, limited number of pollutants measured, and limited access to real-time air quality data.

Air Quality Resources

Vehicles contribute over half of the emissions that lead to formation of fine particulates. In 2011, there was at least 2,508,091,113 Vehicle Miles of Travel (VMT) in Davis County. That is a result of being a suburban community where a high proportion of the population commutes to work in surrounding counties. Almost 80% of the workforce in Davis County drives alone to work. This is higher than the state average of 76%.

Table 14: Travel & Vehicle Emissions Indicators

Travel & Vehicle Emissions	Davis	Source
Commuting Alone (2007-2011)	79%	CHR
Vehicle Miles of Travel/VMT (2011)	2,508,091,113	UDOT
Smoking Vehicles Reported (2011)	56	DCHD
Failed Emissions Tests (2011)	9,783 (5.3%)	DCHD

Vehicles emitting excessive smoke contribute to poor air quality. The DCHD regulates private vehicle-testing sites throughout the county to ensure Davis County vehicles are operating cleanly and efficiently. Getting polluting vehicles repaired or off the road is done in an effort to improve air quality. In 2011, 9,783 vehicles failed an initial emissions test. This represents 5.3% of all vehicles tested.

DCHD also oversees an extensive diesel vehicle-testing program, ensuring diesel vehicles don't exceed 20% opacity (tail pipe emissions). A recent study by the University of Utah was conducted to determine if there was a correlation between opacity and PM2.5 during testing of diesel engines in Davis County. They found that high opacity readings accurately represented high PM emissions and the majority of the PM measured was PM2.5. On average, the vehicles that fail tail pipe emissions opacity tests have more than 4 times the weight of PM2.5 compared to a passing vehicle.[36]

A smoking vehicle education and notification program is available for the public to use to report smoking vehicles. In 2011, 56 smoking vehicles were reported.

Air pollution concentrations are a function of meteorology, geography, and many types of emissions. While meteorology and geography cannot be controlled, emissions can be managed. Emissions reduction is a focus of air quality control strategies for automobiles and industrial facilities.

Vehicle Emissions

Vehicles contribute over half of the emissions that lead to formation of fine particulates.

Davis County has one of the most robust diesel vehicle testing programs in the country.
On average, the vehicles that fail tail pipe emissions opacity tests have more than 4 times the weight of PM2.5 compared to a passing vehicle.

Air Quality Improvement Strategies & Outcome Goal

Air Quality Improvement Strategies	Evidence Base	Organizations with Responsibility
Improve and increase air monitoring efforts to better evaluate air quality in local communities and ensure information is publicly available.	U.S. Environmental Protection Agency Clean Air Act NACCHO Model Practice (Air Monitoring Network)	DCHD, HEAL UTAH, DEQ, Wood Cross Air Quality Committee, CHIP Air Quality Action Group
Promote community plans and use of resources to support active transportation (walking/bicycling) and use of public transportation.	Utah PM2.5 State Implementation Plan Utah Collaborative Active Transportation Study (UCATS) County Health Rankings & Roadmaps (Transit Pass Incentive Programs)	Davis County Community & Economic Development, City Managers/Planners, Wasatch Front Regional Council, DCHD, Davis County Trails Committee, CHIP Obesity Action Group
Community education campaign to inform students, employees, and residents about lifestyle and behavior choices that reduce air pollution.	U.S. Environmental Protection Agency	DCHD, DSD, Communities for Clean Air, CHIP Air Quality Action Group

Outcome Goal
Increase understanding of air quality conditions throughout Davis County and ensure the public is aware of air pollution issues so that better informed citizens, businesses, and government agencies choose behaviors and policies which result in reduced air pollution and improved air quality.

Some of the activities and outcomes in the air quality active transportation strategy are the same as those addressed in priority 2, the obesity plan. The two groups coordinated to ensure that the strategies and outcomes that overlap are streamlined. The groups will continue to work together to coordinate implementation efforts, avoid duplication, and monitor progress.

Air Quality Improvement Short & Long-term Objectives

Short-term Objectives (1-2 years)

1. Increase the number of deployable particulate matter (PM) monitors in Davis County from 0 in 2013 to 12 by December 31, 2015.
2. Increase the number of regulatory air monitoring stations in Davis County from 1 Bountiful) in 2013 to 2 in 2015.
3. Expand number of air pollutants that are measured and reported in Davis County from 3 (PM2.5, Ozone, NO_2) in 2013 to 4 by December 31, 2015.
4. Develop and/or adopt an active transportation master plan in one city by December 31, 2015.
5. Davis County trails map will be completed and available to the public by December 31, 2014.

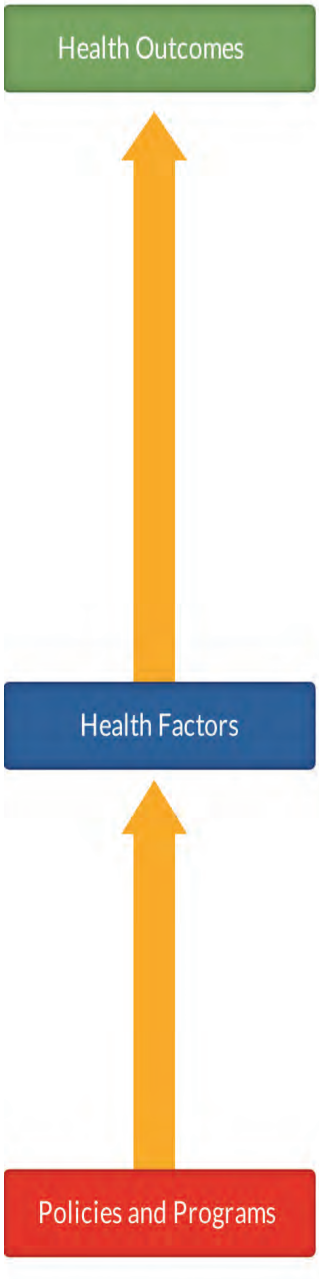
Long-term Objectives (3-5 years)

1. Davis County air monitoring results will be available to the public in real-time by December 31, 2017.
2. Decrease percentage of the Davis County workforce that drives to work alone from 78.8% in 2013 to 76% by December 31, 2018. (Baseline: American Community Survey, 2007-2011)
3. Increase percentage of Davis County residents who use public transportation to commute to work from 2.8% in 2011 to by 3.3 % by December 31, 2018. (Baseline: American Community Survey, 2007-2011)
4. Increase on street bicycle lanes from 74.06 miles in 2013 to 222.00 miles by December 31, 2018. (Baseline: Davis County Health Department City Health Policy & Resource Assessment)
5. Improve walkability index for at least 2 Front Runner stations in Davis County by December 31, 2018. (Baseline: UCATS Report 2013, Woods Cross, Farmington, Layton, & Clearfield stations.)
6. Increase number of no idling policies adopted by business, cities, and other organizations from 1 in 2013 to 3 by December 31, 2018. (Baseline: Davis County Health Department City Health Policy & Resource Assessment)
7. Conduct 15 air quality education presentations throughout Davis County by December 31, 2018.

Davis County CHA to CHIP Outcomes

Community Health Improvement Plan
Measureable Outcomes & Other Expected Results

County Health Rankings Model



County Health Rankings model ©2012 UWPHI

Outcomes

Mortality (length of life) 50%

- Decrease suicide rate
- Decrease years of potential life lost

Morbidity (quality of life) 50%

- Decrease obesity in adults
- Decrease % of overweight adults

Health behaviors (30%)

- Decrease % of inactive adults
- Increase residents who choose active transportation (walking, bicycling & using public transit)
- Increase fruit & veggie consumption
- Decrease residents who commute to work alone
- Decrease residents who idle vehicles

Clinical care (20%)

- Increase helping professionals trained to address anxiety, depression & suicide
- Increase healthcare providers who address obesity in patients
- Increase worksites with comprehensive employee wellness programs
- Online directory to access behavioral health services

Social and economic factors (40%)

- Increase schools with peer-to-peer suicide prevention programs
- Suicide survivor support group
- Increase family meal time
- Reduce mental health stigma

Physical environment (10%)

- Increase access to healthy foods
- Increase connectivity between neighborhoods
- Safer routes to school
- Improved walkability to public transit
- Increase bike lanes
- Increase hiking & paved shared trails
- Improved air quality

Davis County CHIP Legislative Priorities

Legislative Priorities for CHIP Action Groups

#1: SUICIDE

- Family Educational Rights and Privacy Act - FERPA (Ensure it allows for school counselors/personnel to ask about mental health in schools)
- Anonymous state tip line (safe to tell about bullying and suicide)
- Safe storage of fire arms

#2: OBESITY

- Regular physical activity in schools (SPARK program piloted in DSD)
- Land use policies supporting community agriculture and farms

#3: ACCESS TO BEHAVIORAL HEALTH SERVICES

- Continued early intervention funding for behavioral health professionals providing services in schools and in homes
- Funding to provide behavioral health services to unfunded individuals

#4: AIR QUALITY

- Viewmont air monitoring station to provide real-time results available to public online
- Additional regulatory air monitoring station in the south end of the county (increased monitoring for area impacted by fugitive dust, refineries increasing production, increase in diesel trucks delivering raw materials)
- Emission testing programs for diesel vehicles (not just in Davis County)
- Transit pass incentive programs

Community Health Improvement Plan Conclusion

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

Now is the time to move from planning to action. Community partners are starting to implement the strategies and activities outlined in the 2014-2018 Davis County Community Health Improvement Plan. CHIP action groups will continue to meet regularly to maintain the momentum of work and to ensure that selected policies and programs are adopted, implemented, improved, and sustained in order to achieve intended results.

Moving forward, it is important to determine if any additional support or resources are needed for each strategy. Action groups will also examine who is at the table and see if anyone else needs to be added to the mix of partners working on pieces of the action plan. Involved agencies will have to identify next steps to address issues. Groups may brainstorm potential opposition and try to understand concerns. Messages will be framed in a way that respects different perspectives.

During implementation, strategies will be evaluated to determine if they are working as intended. Davis County Health Department will be monitoring key measures to find if actions are making a difference and to demonstrate progress. Annual progress will be documented and a yearly progress report will be made available to partners and the public.

To avoid apathy, it is critical to keep in touch with key stakeholders and the public. Community successes will be celebrated and the efforts of all those who are contributing to success will be formally and informally recognized. Davis County's health improvement story and lessons learned will be shared within the county and with other communities.

Bringing the community together to write a community health improvement plan is an important step to improve health in Davis County. More importantly the community is moving from planning to action so that effective policies and programs can lead to changes that will have a lasting impact on health.

Take Action Cycle

The County Health Rankings & Roadmaps Action Center provides tools to help groups working together to create healthier communities.

Tools are available to support all phases of the take action cycle.

Source: CHR, 2013

Appendix

1 CHIP Work Plan

Davis County Health Department Community Health Improvement Process & Plan	**Work Plan 2013-2014**
1. Document Community Health Improvement Planning Process (Community Outreach Planner: COP)	Timeline: June - November
• List individuals involved & titles	
• Meeting Minutes	
• Inclusion of CHA (indicators/data sets)	
• Identified Issues & Themes	
• Identified Assets & Resources	
2. Hold a collaborative community meeting to determine CHIP priorities	August
• Pick a date	July
• Prepare invitations (COP)	July
• Extend invitations (COP & Health Officer)	July -August
• Prepare presentation materials – CHA summary, Healthy People 2020, National Prevention Strategy, State SHIP, CTG priorities, etc., voting materials (COP)	
• Participant List/RSVP (COP)	
• Food Arrangements (COP)	
• Determine DCHD staff to be present	
• Request workgroup participants for priority areas	
• Determine if formal health collaborative/board/coalition/commission is needed.	TBD
• Direction for name, operating procedures, etc.	TBD
3. Prepare Action Plans for Priority Areas (Action Group Leads, COP)	August –November
• Hold meeting with workgroups	
• Assess what is currently being done	
• Select effective policies & programs	
• Link to applicable health outcome and health factor indicators in the CHA	
• Link to applicable state & national priorities	
• Develop improvement strategies, measureable objectives & performance measures with timelines	
• Determine agencies/personnel responsible for actions	
• Draft action plan	October – December
• Submit for review	
4. Prepare Community Health Improvement Plan	January, 2014
• Compile priority area action plans (COP)	
• Ensure alignment with State & National Priorities (COP)	
• Provide draft copy for partners to review (COP)	
• Provide CHIP to BOH for approval (Lewis, COP)	February, 2014
• Add to DCHD website (COP)	February, 2014
5. Implement Community Health Improvement Plan (All)	2014-2018
6. Evaluation Reports on Implementation Progress CHIP (Workgroup Leads, COP)	Annually
7. Revise CHIP based on Evaluation Results (Workgroup Leads, COP)	As needed

2 CHIP Planning Meeting Invitation

Davis COUNTY

Health Department

22 South State Street, Clearfield Utah 84015 - P.O. Box 618 - Farmington Utah 84025
Telephone: (801) 525-5000 – Fax: (801) 525-5151

Administration
Lewis R. Garrett, M.P.H
Director of Health

Family Health & Senior Services
Sally Kershisnik, R.N., M.P.A., M.S.N.
Division Director

Environmental Health Services
Davis Spence, B.S., M.B.A.
Division Director

Communicable Disease & Epidemiology Services
Brian Hatch, B.S., M.P.H.
Division Director

August 2, 2013

Dear Public Health Partner,

The Davis County Health Department would like to invite your organization to participate in the Davis County Community Health Improvement Process. This process will result in a community-wide strategic health improvement plan with the ultimate goal of improving health in Davis County.

Improving health outcomes will require strong collaboration between Davis County public health partners including healthcare organizations, elected officials, city and county leaders, education, religious groups, social services, businesses, the media, and community members. Your agency is an important public health partner and can provide valuable perspective during the health improvement process and at an upcoming prioritization and planning meeting. We request that you send at least one person to represent your agency at this important half day meeting.

Thursday, August 29, 2013
8:30 a.m. - 1:30 p.m.
Valley View Golf Course
2501 East Gentile, Layton
Lunch will be served.

Participants who attend the meeting should:

- Have an understanding of the health needs of the population your agency serves.
- Review the results of a recent Davis County Community Health Status Assessment found at this link: http://www.co.davis.ut.us/health/featured_items/Community_Health_Status_Assessment_2013.pdf
- Commit to attend the entire meeting on August 29th.
- Be willing to participate in priority setting through discussion and vote.
- Be able to discuss effective strategies to address identified priorities.
- Be able to describe the resources and assets your agency can provide to address priorities.
- Be able to express the role your agency can play during implementation of the developed community health improvement plan.

Together we will determine health priorities for Davis County, identify effective programs and policies that will improve health, and prepare a county-wide health improvement plan in an effort to make Davis County the healthiest county in Utah. Public health partners, local leaders, and citizens can work together to create a healthier place to live, learn, work and play.

Those who plan to attend should RSVP to Isa Perry at 801-525-5212 or isa@daviscountyutah.gov by August 22, 2013 so we can get an accurate count for lunch. Please feel free contact her with any questions or concerns.

I look forward to our opportunity to work together and the potential to improve the health of Davis County residents in a significant way.

Lewis Garrett, Health Officer
Davis County Health Department

3 CHIP Planning Meeting Participants

Agency	Participant
Alzheimer's Association	Laura Kierstead
Bountiful Communities that Care	Catherine Holbrook
Bountiful Community Food Pantry	Lorna Koci
Clearfield City & Board of Health	Mayor Don Wood
Clearfield City Aquatic Center	Donna Russell
Clearfield City Aquatic Center	Pat Bergseng
Clearfield Job Corps.	Sheryl Cheek
Clearfield Job Corps.	Jackie Snell
DATC & Board of Health	Brent Petersen
Davis Behavioral Health	Debi Todd
Davis Behavioral Health	Brandon Hatch
Davis Community Learning Center	Merri Ann Perkins
Davis County Board of Health	Ann Benson
Davis County Community & Economic Development	Marlin Eldred
Davis County Community & Economic Development	Barry Burton
Davis County Community & Economic Development	Annette Hanson
Davis County Health Department	Isa Perry
Davis County Health Department	Dave Spence

Agency	Participant
Davis County Health Department	Brian Hatch
Davis County Health Department	Lewis Garrett
Davis County Health Department	Ivy Melton-Sales
Davis County Health Department	Tiffany Leishman
Davis County Health Department	Sally Kershisnik
Davis County Health Department	Wendy Garcia
Davis County Health Department	Bob Ballew
Davis County Health Department	Diana Reich
Davis County Health Department	Dennis Keith
Davis School District	Brad Christensen
Davis School District & Board of Health	Scott Zigich
Davis School District	Casey Layton
Farmington City	Dave Petersen
Farmington Trails Committee	George Chipman
Head Start	Mark Dewsnup
Head Start	Christine Ipsen
Hill Air Force Base	Maj Chris Eastburn
Hill Air Force Base	MSgt Adrian Conder

3 CHIP Planning Meeting Participants

Agency	Participant
Intermountain Healthcare	Kristy Jones
Intermountain Healthcare	Chris Dallin
Lakeview Hospital	Tiffany Burnett
Lakeview Hospital	Katie Flores
Layton Communities that Care	Karlene Kidman
Layton Parks & Recreation	David Price
Logo Concepts	Cherie Darrohn
Management & Training Corporation	Kim Penman
Midtown Community Health Center	Lisa Nichols
South Davis Community Hospital	Lisa Pearson
South Davis Metro Fire Agency	Jeff Bassett
Tanner Clinic	Nathan Dalling
UDOT	Jesse O. Glidden
University of Utah	Sarah Willardson
University of Utah	Sharon Talboys
Wasatch Front Regional Council	Julia Reynolds

4 CHIP Planning Meeting Agenda

Davis County Community Health Improvement Planning Meeting
Thursday, August 29th, 2013
8:30 a.m. - 1:30 p.m.
Valley View Golf Course, Layton, Utah

Agenda

8:30 Welcome & Introductions

9:00 Introduction to Community Health Improvement Process & Plan

9:15 Community Health Assessment Summary & Results

10:10 Break

10:20 Discuss Priority Health Issue List

10:40 Discuss Voting Criteria/Considerations

11:30 Priority Selection by Vote

12:00 Lunch

12:30 Action Group Discussions

Your Community.

Your Health.

Your Voice.

Davis COUNTY
Connects.You.

5 Davis County Health Indicator Summary

Davis County Health Indicator Summary	Leading Cause of Mortality/ Morbidity	Public Opinion Surveys	Worse than State or National Average	Not Meeting HP2020 Target
HEALTH OUTCOMES: Mortality & Morbidity				
Alzheimer's	X		—	—
Anxiety	X	X	—	—
Asthma		X	X	—
Autism (Davis County rate not available, using Utah rate as proxy)		X	X	—
Cancer Deaths/Incidence	X	X		
Confusion/Memory Loss			X	—
Dental Caries (Davis County rate not available, using Utah rate as proxy)			—	X
Depression	X	X	X	—
Diabetes	X	X		
E.Coli			X	X
High Blood Cholesterol (Dr. diagnosed)	X		X	X
Heart Disease Deaths/Incidence	X	X		
Influenza	X	X		—
Obesity	X	X		
Pertussis		X	X	—
Poisoning Deaths	X		X	X
Prostate Cancer Deaths/Incidence			X	X
Respiratory Disease Deaths/Incidence	X			—
STDs (Chlamydia)	X	X		—
Stroke Deaths/Incidence	X			
Suicide	X	X	X	X
Unintentional Injury Deaths	X			

— No comparable HP2020 target or no state/national comparison available.

Davis County Health Indicator Summary	Leading Cause of Mortality/ Morbidity	Public Opinion Surveys	Worse than State or National Average	Not Meeting HP2020 Target
HEALTH FACTORS: Behaviors				
Breastfeeding (ever breastfed—WIC only)			X	—
Commute Alone			X	—
High Blood Pressure Management			X	X
Seatbelt Use			X	X
Substance Abuse/Use		X	X*	—
Sun Safety Practice			X	X
Vaccination (Adult & Childhood)		X		
Youth Alcohol Use		X	X**	
HEALTH FACTORS: Clinical Care				
Access to Dental/Vision Insurance		X	—	—
Access to Mental Health Services		X	X	—
Access to Prevention/Screening Services		X	—	—
Access to Substance Abuse Services		X	—	—
Adequately Immunized at Kindergarten Entry			X	X
Adult Pneumococcal Vaccination				X
Cancer Screening (mammograms, colorectal)			X	X
Cost of Healthcare/Health Insurance		X		—
Diabetes A1C Tests				X

*Non-medical use of prescription painkillers in Utah **Utah youth binge drinking higher than nation

— No comparable HP2020 target or no state/national comparison available.

Davis County Health Indicator Summary	Leading Cause of Mortality/ Morbidity	Public Opinion Surveys	Worse than State or National Average	Not Meeting HP2020 Target
HEALTH FACTORS: Social/Economic				
High School Graduation (9th Grade Cohort)				X
HEALTH FACTORS: Physical Environment				
Air Quality		X	X	—
Bike Lanes		X	—	—
Food Environment (grocery store access, WIC authorized stores, % of fast food restaurants)		X	X	—
Drinking Water		X	X	—
INFASTRUCTURE				
Health Collaborative		X	—	—
Public Health System Assessment		X	—	—
Promotion/Education About Existing Resources & Services		X	—	—

— No comparable HP2020 target or no state/national comparison available.

6 Voting Considerations Worksheet

Voting Considerations (Your Professional/Informed Opinion)

Questions to Consider	Health Issues Meeting this Criteria
What issues are most serious and/or urgent? (can't be ignored)	
Which issues affect the most individuals?	
What issues have high community demand?	
What issues if focused on are likely to impact others positively as well? (2 birds with 1 stone)	
Which issues have proven strategies/solutions?	
What issues if addressed provide the most return on investment?	
What issues have resources available to address the problem?	
What issues can be improved and/or addressed quickly or simply? (low hanging fruit)	
What issues have political will to address them?	
Which issues, if focused on, would improve our county health ranking?	

7 CHIP Planning Meeting Evaluation

Participant Evaluation

Please tell us how satisfied or dissatisfied you were with the following (circle your response):

	Very Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
1. Overall Content & Process	**5**	**4**	**3**	**2**	**1**
2. Materials Provided	**5**	**4**	**3**	**2**	**1**
3. Community Health Status Assessment Results Presentation	**5**	**4**	**3**	**2**	**1**
4. Prioritization & Voting Process	**5**	**4**	**3**	**2**	**1**
5. Facilitator	**5**	**4**	**3**	**2**	**1**
6. Meeting Location & Facility	**5**	**4**	**3**	**2**	**1**
7. Lunch	**5**	**4**	**3**	**2**	**1**

8. Did you feel the length of the meeting was: too long too short just right

9. What was the best part of today's meeting?

10. What was the worst part of today's meeting?

11. Do you have any concerns about the outcome of today's vote?

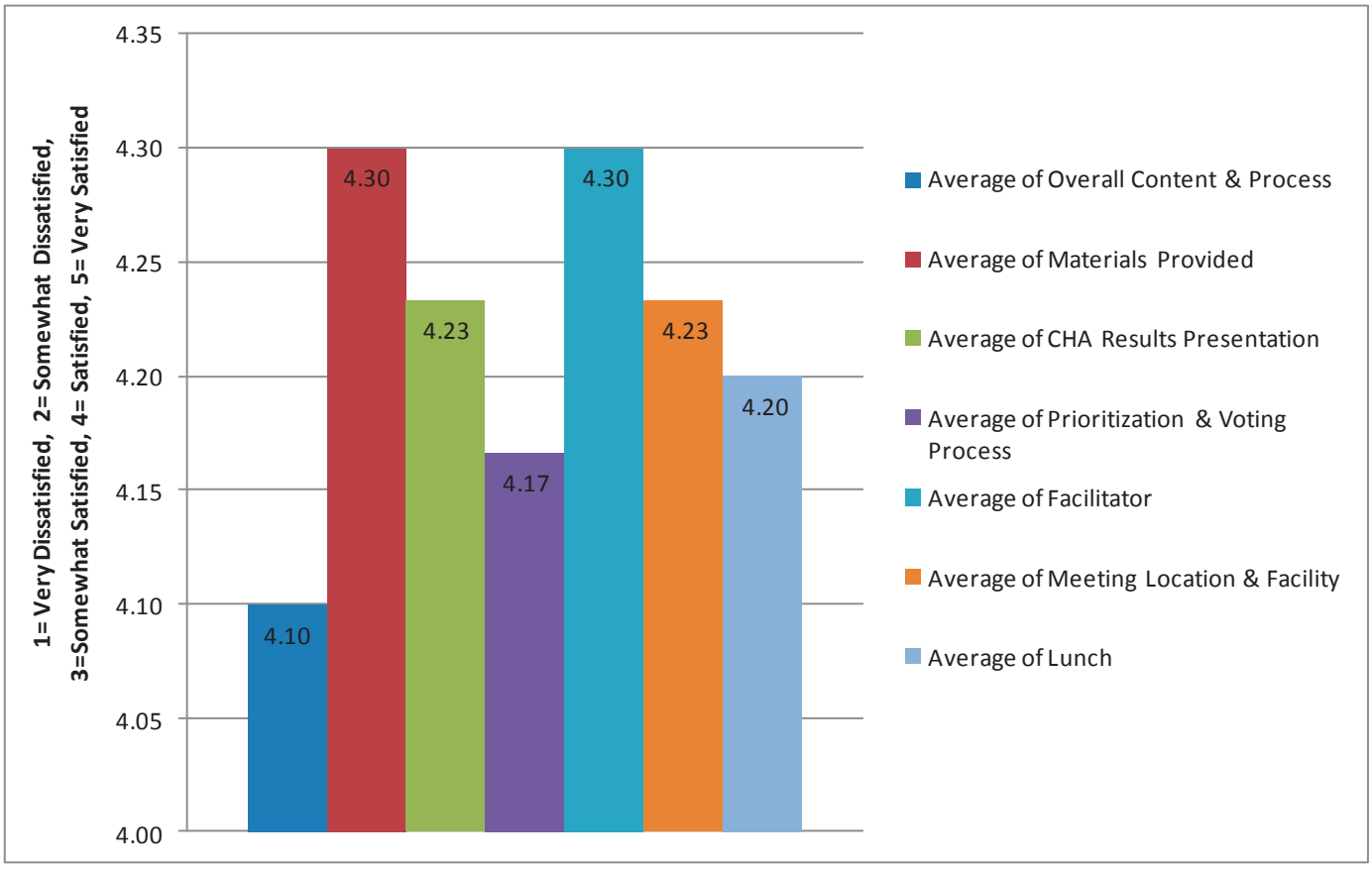
12. Do have any suggestions for improving future meetings with community partners?

13. Any other comments?

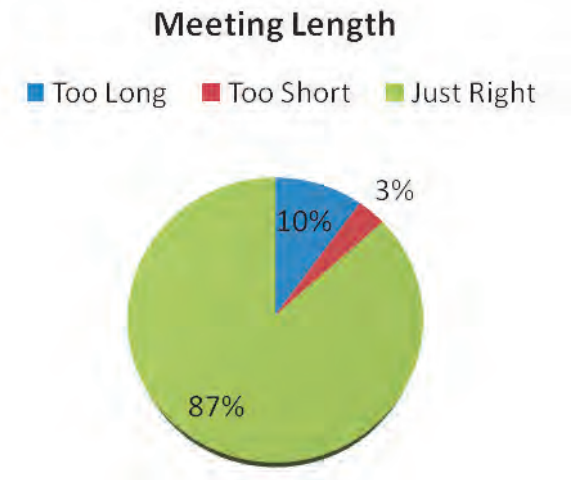
Thank You

Davis County Community Health Improvement Planning Meeting
August 29, 2013
Evaluation Results

Of the 49 stakeholders (excludes facilitators and presenters) who participated in the meeting, 30 completed evaluation forms, for a response rate of 61%. A few who left early did not receive an evaluation.



Three respondents ranked most areas as 1, very dissatisfied or 2, somewhat satisfied. However their written comments didn't match their ranking. Their comments included: “no downside,” “well done,” and “keep the course,” A few participants may have thought scale was in reverse order.



8 CHIP Planning Meeting Evaluation Results

Evaluation Question Summary

What was the best part of today's meeting?

- Workgroups;
- Getting CHIP going;
- Collaboration with stake holders;
- Reviewing the findings of the health assessment, narrowing down main issues;
- Data, partnerships, and networking;
- Voting process;
- Getting together as a group;
- We actually made progress with the collaboration as well as being so focused and well run;
- Results and meeting moved along at good pace;
- The collaboration process;
- The interaction and discussion;
- Overview of current state and breakout session;
- Good structure, stayed on track, good voting process;
- Community involvement;
- Being able to hear from many different organizations on various issues;
- Wide range of participants – focused process;
- Information I received from the facilitators;
- Bringing personal experience awareness;
- Pulling so many different agencies/specialties together in one location.

What was the worst part of today's meeting?

- Lunch;
- So many issues and information overwhelming;
- Introductions were too long;
- A lot of info, was like drinking from a fire hose;
- Room too cold;
- Voting process;
- Intermittent microphone;
- Lack of structure for going forward. Having on-going materials might have been helpful;
- Hard to absorb all the data;
- Making the decision on what to prioritize;
- Only had time to discuss problems not solutions.

Do you have any concerns about the outcome of today's vote?

- State alignment and outcomes overwhelming DHD resources;
- We may have missed some important priorities with the narrowing down;
- Not sure we should be giving the short shift to air quality;
- Concerned that drivers of groups that we ended with swayed everyone's decision regarding issues;
- Surprised air quality wasn't 1 or 2;
- Yes, I think it was a little biased by who was in the room—but that is okay;
- Too few "important" areas.

Evaluation Question Summary cont.

Do you have suggestions for improving future meetings with community partners?

- Keep the course;
- When voting it would be helpful to know what programs are already in place for issues and how effective they are;
- Get a couple more politicians;
- Need more community partners.

Any other comments?

- Well Done;
- It was awesome;
- Good job, big process;
- I was glad to be invited and feel like there will be some good outcomes;
- Action groups should be longer;
- Very worthwhile, thank you;
- Great start;
- Very well organized;
- Meeting was long but necessarily so;
- Good planning meeting;
- I love the opportunities.

9 CHIP Priorities Logic Models

2014 Davis County Suicide Prevention Logic Model

Situation

1. Suicide is the 9th leading cause of death in Davis County with 14.3 deaths per 100,000 population (age adjusted).
2. Suicide is the 10th leading cause of hospitalization in Davis County with 8.5 per 10,000 population (age adjusted).
3. Persons 45-54 years of age have the highest suicide rate (23.7 per 100,000) in Davis County.

   Source: Violence & Injury Prevention Program, Utah Department of Health, 2010-2012
4. In Davis County 12% of secondary students had considered suicide.

   Source: Prevention Needs Assessment Survey, 2013
5. Suicide has been identified as the #1 health priority in Davis County by community partners & leaders.

   Source: Community Health Improvement Planning Meeting, 2013

Inputs

- Davis Helps (Lead Coalition)
- N.U. HOPE (Northern Utah Suicide Coalition)
- Utah Suicide Prevention Coalition & State Suicide Prevention Plan, 2013
- Utah Prevention by Design, Community Action Plan, 2012
- National Strategy for Suicide Prevention, 2012
- Grants: VIPP, NAMI, DBH, USU Extension, DSAMH, Intermountain Healthcare
- Community Partners: Davis Behavioral Health (DBH), Davis County Health Department (DCHD), Intermountain Healthcare, Davis School District (DSD), NAMI, Law Enforcement/ EMS, Hill AFB, LDS Family Services, Hope4Utah, Cities, Syracuse High School, Clearfield High School, Davis Hospital, Lakeview Hospital, Job Corps, USU Extension, Bountiful & Layton CTC, Utah State Office of Education (USOE), OUTreach Resource Center, Juvenile Court, Survivors

Strategies/Activities

- Promote public awareness that suicide is a preventable public health problem. (town hall meetings, social media, websites, etc.)
- Improve the ability of service providers (behavioral health, healthcare, first responders, clergy, senior services, etc.) to support individuals who are at risk for suicide through effective prevention, early intervention and postvention programs and by providing referral resources.
- Develop & promote effective youth suicide prevention programs (Hope Squads, prevention curriculum, Love is Louder)
- Promote prevention programs/resources to support adults, members of the workforce & families who are at risk for and/or are affected by suicide. (DSD Mental Health Nights, Worksite Wellness Programs, HAFB efforts)
- Provide support to individuals affected by suicide deaths & attempts. (Davis County survivor support group)
- Promote efforts to decrease the risk of suicides by reducing access to lethal means.

Short-term Outcomes

- Town hall meetings
- QPR Master Trainer in Davis County
- QPR Gate Keeper Instructors
- Trained Mental Health First Aid instructors
- Complete & distribute suicide risk referral & protocol check list
- Peer-to-peer suicide prevention programs in secondary schools
- School counselors trained in QPR
- QPR presentations through the community
- Launch & promote Davis County Suicide Survivor Support Group

Long-term Outcomes

- Promote mental health, emotional wellbeing, suicide prevention & support services through a media campaign
- Mental Health First Aid presentations throughout Davis County
- Increase # of helping professionals trained to address suicide
- Increase use of suicide screening tools
- Increase # of employers who address suicide, mental health & emotional well being with employees
- Support national & local drug/medicine take back events
- Support statewide efforts to promote safe storage of firearms

Outcome Goal

Reduce suicide deaths in Davis County from 14.3 deaths per 100,000 to 10.2* deaths per 100,000 by the year 2020.

(*National Healthy People 2020 Target)

2014 Davis County Obesity Prevention Logic Model

Situation

1. Obesity rates have been rising over the last decade & obesity is one of the leading causes of preventable death in the U.S.
2. 25% of adults in Davis County are obese.
3. Davis County is meeting the Healthy People 2020 target for adult obesity, and according to the County Health Rankings is in the top 10% (best) in the nation. Although we compare well, far too many residents are at risk for serious & costly health conditions.
4. 63% of adults in Davis County are at an unhealthy weight.
5. Approximately 5% of adolescents (grades 8-12) are obese in Davis County.
6. Statewide 20.8% of elementary-aged children were at an unhealthy weight; of which, 9.4% were obese. A Davis County rate is not currently available.

Inputs

- CHIP Obesity Action Group
- State Health Improvement Plan
- Utah Leaders for Health
- Healthy Living Through Environment, Policy & Improved Clinical Care (EPICC) Program
- Grants: Community Transformation Grant (CTG), EPICC Grant, Select Health: Step Express
- Community Partners: Davis County Health Department, Walk-Bike-Plan, Davis School District, Tanner Clinic, Davis County Community Economic Development, Davis Head Start, Lakeview Hospital, Wasatch Front Regional Council, Local Farmers, Grocery Stores, South Davis Metro Fire, Clearfield Job Corps, Farmington City, Clearfield City Aquatic Center, Hill Air Force Base, Intermountain Healthcare, Davis County Trails Committee, Farmington Trails Committee, Red Barn Group, Local Businesses, Dept of Agriculture, McKay Dee Hospital, LiVe Well, Select Health. UDOT, UTA, USU Extension, Religious Organizations

Strategies/Activities

- Increase regular physical activity (physical activity in schools/SPARK, active transportation/bike lanes/ Bike & Pedestrian Design Guide/LiVe Well Weigh To Health)
- Improve healthy eating choices (school gardens/ summer recreation programs, healthy family meals, community supported agriculture, community gardens, land-use policies, LiVe Well Weigh To Health)
- Promote resources to support physical activity & healthy eating (resource locator, social media, healthcare provider outreach, websites, printed materials)
- Promote comprehensive worksite wellness programs

Short-term Outcomes

- Increase the number of school/community gardens
- Promote benefits of wellness programs to Davis County employers
- Increase worksites with comprehensive wellness programs
- Increase communities with active transportation policies & plans
- Increase structured physical activity each day in Davis County schools
- Promote community supported agriculture
- Promote resource locator through multiple media avenues (print, social, website, etc.)
- Provide healthcare providers with information/ referral tools for physical activity and healthy eating resources in Davis County
- Davis County Trails Committee map available for public use

Long-term Outcomes

- Reduce the percentage of adults who are overweight or obese
- Decrease the percent of inactive Davis County residents
- Establish baseline overweight/obesity indicators for children and adolescents in Davis County
- Increase miles of on-street bicycle lanes
- Increase miles of hiking and paved shared-use trails
- Improve walkability index for FrontRunner stations in Davis County

Outcome Goal

Prevent and reduce obesity in Davis County through environments, policies, and programs that support everyday physical activity and healthy eating choices.

2014 Davis County Access to Behavioral Health Services Logic Model

Situation

1. Mental health disorders are the leading cause of disability in the U.S., accounting for 25% of all years of life lost to disability & premature mortality.
2. Community leaders & members of the public have expressed concern about lack of mental health services & difficultly in accessing them in Davis County.
3. Other leading health issues in the community include suicide, which was selected as the #1 health problem in the county. Depression/anxiety & substance use/abuse have also been identified as leading health concerns in the community.
4. Additional info is needed to better understand access & utilization issues related to mental health & substance abuse services in the county.
5. Davis County is considered a Health Professional Shortage Area (HPSA) for mental health. (psychiatry)
6. Utah's Annual Substance Abuse & Mental Health report estimates an unmet need for treatment in Davis County.
7. Multiple factors effect access to mental health services including stigma, location, transportation, funding, etc.

Inputs

- Access to Behavioral Health Services CHIP Action Group
- Davis Behavioral Health (publically-funded behavioral health provider)
- Affordable Care Act Expanding Mental Health Coverage
- Grants: Intermountain Healthcare, Daniels Fund, United Way, DSAMH
- Community Partners: Davis Behavioral Health, Davis County Health Department, NAMI, Davis Community Learning Center, United Way, 211, Davis School District, Davis Hospital, Lakeview Hospital, Substance Abuse Treatment Centers, Intermountain Healthcare, Midtown Community Health Center, Catholic Community Services, LDS Family Services, Layton Communities that Care, Private Mental Health Providers, Healthcare Providers, Hill Air Force Base, Employee Assistance & Worksite Wellness Programs, Family Counseling Services, Family Connection Center, Courts/ Justice System, Davis County Jail, EMS

Strategies/Activities

- Identify a network of behavioral health professionals and develop an online directory which includes mental health and substance use treatment providers & resources in Davis County.
- Promote awareness & use of behavioral health referral tools and resources.
- Improve the ability of mental health providers, healthcare providers, first responders, schools, clergy, and other helping professionals to utilize depression and anxiety screening tools.
- Promote and implement effective community education programs for youth & adults which: reduce mental health stigma; help the community identify, understand, and respond to signs of mental illnesses and substance use disorders; and help the community cope with stress & chronic disease.

Short-term Outcomes

- Identify Davis County behavioral health providers
- Develop online tool/ directory for Davis County behavioral health resources & service providers
- Increase number of trained Mental Health First Aid Instructors in Davis County
- Increase number of trained Mindfulness-based Stress Reduction (MBSR) instructors in Davis County
- Medical providers trained to use PH-Q9 & GAD-7 anxiety/depression screening & referral tools

Long-term Outcomes

- Promote mental health, emotional well-being, and behavioral health services in Davis County through media campaign
- School counselors trained to use anxiety/depression screening & referral tools
- Increase number of community agencies that regularly use anxiety/ depression screening & referral tools
- Mental Health First Aid trainings offered throughout the county
- Increase number of worksites which promote mental & emotional well-being of employees

Outcome Goal

Increase access to behavioral health services in Davis County through promotion of existing resources, new screening and referral tools, increasing effective prevention programs, and better trained helping professionals.

2014 Davis County Air Quality Logic Model

Situation

1. Davis County is located in an Environmental Protection Agency (EPA) nonattainment area for exceeding the 24-hour PM2.5 standard.
2. Salt Lake City-Ogden-Clearfield, Utah, metropolitan area is ranked 6th most polluted in the U.S. for short-term particle pollution.
3. Davis County is an EPA maintenance area for ozone.
4. Salt Lake County, on the southern border of Davis County, is a nonattainment area for PM10.
5. The Bountiful/Viewmont location is the only air monitor in Davis County.
6. Air pollution was identified as the leading environmental health concern & the leading force working against health in Davis County.
7. Temperature inversions are common in valleys along the Wasatch front.

Inputs

- CHIP Air Quality Action Group
- Utah PM2.5 State Implementation Plan (SIP)
- Air quality advocacy groups
- Grant/Funding: Clean Air Violation Fines, UCAIR, WFRC Congestion Mitigation, CDBG
- Community Partners: Davis County Health Department, Davis County Community Economic Development, Communities for Clean Air, Woods Cross City, Woods Cross Air Quality Committee, Wasatch Front Regional Council, City Leaders, Local Refineries, Businesses, Walk-Bike-Plan, UTA, UDOT, Davis County Trails Committee, Utah Division of Air Quality (DAQ), Davis School District, HEAL Utah, Utah Mother's For Clean Air, Utah Physicians for a Healthy Environment, Utah Clean Air Partnership

Strategies/Activities

- Improve and increase air monitoring to better evaluate air quality and air pollution in local communities and ensure information is publicly available
- Promote resources and plans which support active transportation (walking/bicycling) & use of public transportation
- Community education campaign to inform students, employees and residents about lifestyle and behavior choices that reduce air pollution

Short-term Outcomes

- Increase air monitoring locations in Davis County
- Expand types of air pollutants that are measured
- Increase communities with active transportation policies & plans
- Davis County trails map available to the public

Long-term Outcomes

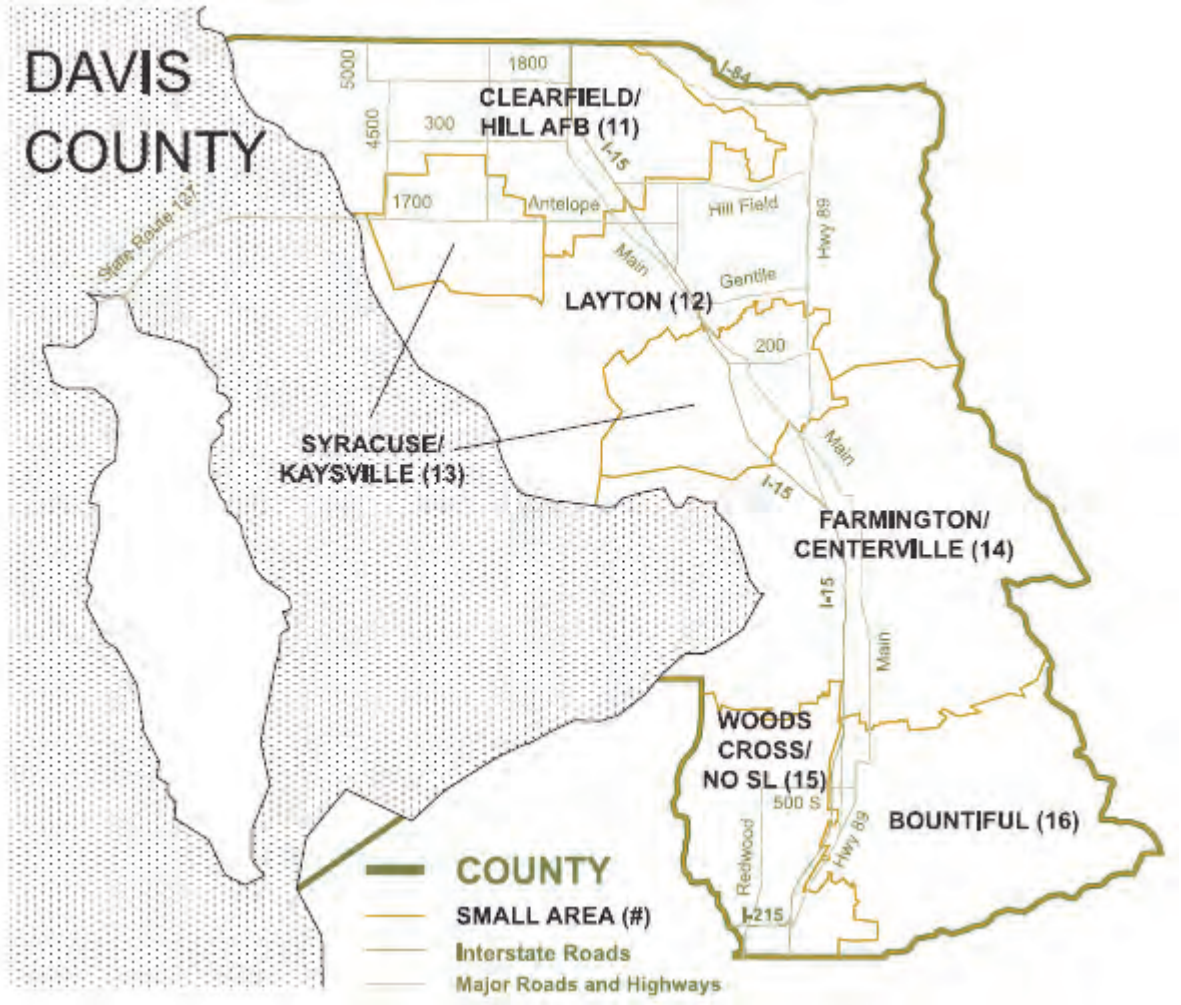
- Air monitor results available to public in real-time
- Decrease % of people who commute alone
- Increase % of population using public transit to commute to work
- Increase on-street bicycle lane mileage
- Improve walkability index for FrontRunner stations in Davis County
- Increase # of no idling policies in Davis County
- Air quality presentations throughout Davis County

Outcome Goal

Increase understanding of air quality conditions throughout Davis County and ensure the public is aware of air pollution issues so that better informed citizens, businesses, and government agencies choose behaviors and policies which result in reduced air pollution and improved air quality.

10 Small Area Data Map

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.



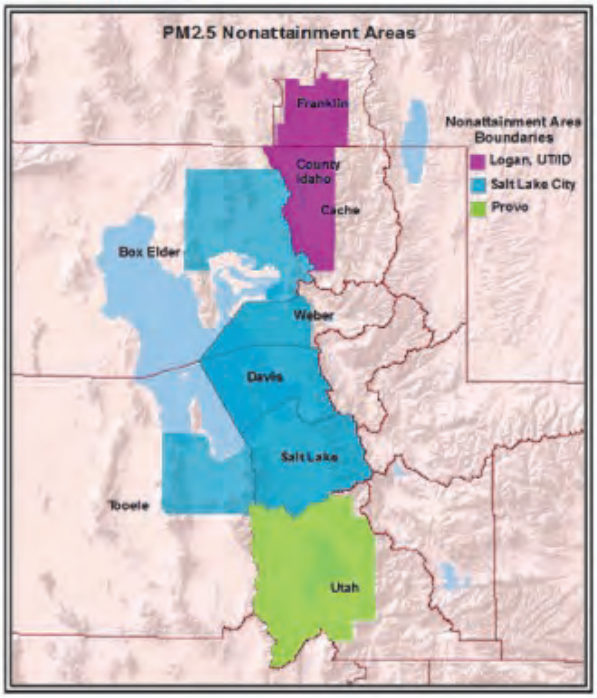
#	Small Area	Zip Codes
11	Clearfield/Hill AFB	84015, 84016, 84056
12	Layton	84040, 84041, 84405*
13	Syracuse/Kaysville	84037, 84075
14	Farmington/Centerville	84025, 84014
15	Woods Cross/North Salt Lake	84087, 84054
16	Bountiful	84010, 84011

* South Weber Only

11 Air Quality, Utah Nonattainment & Maintenance Area Maps

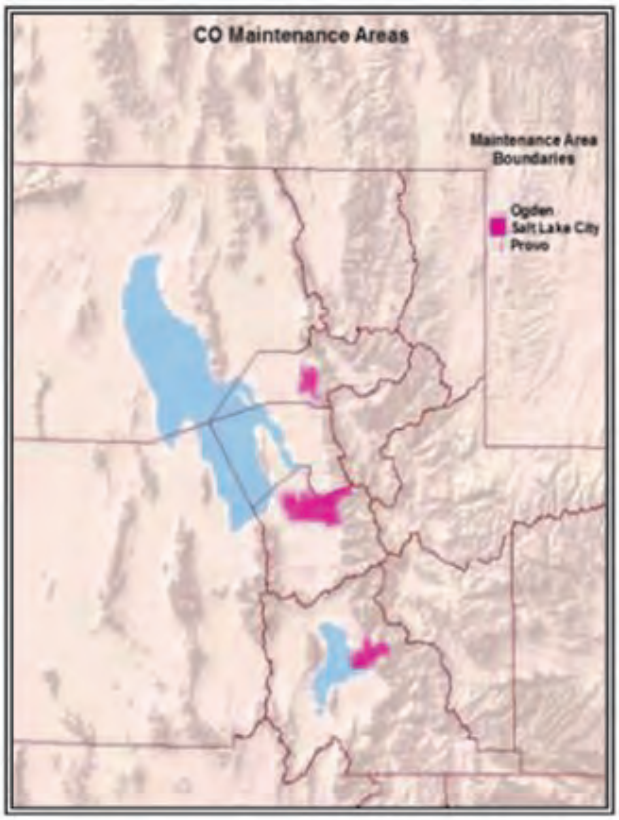
(Updated January 2013)

Utah Nonattainment Areas



11 Air Quality, Utah Nonattainment & Maintenance Area Maps

Utah Maintenance Areas



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