Teller County

2013 Community Health Status Report

&

Public Health Improvement Plan

2013- 2017

Teller County Public Health

From the Public Health Director

We are proud to present you with this report, *The Teller County 2013 Health Status Report and Public Health Improvement Plan,* a comprehensive collection and analysis of data related to the health issues and needs of the residents of Teller County. This report summarizes important health issues that emerged from analyzing a variety of data. These critical health issues will be shared with local leaders and organizations, including government agencies, social service agencies, businesses, healthcare providers, consumers, and other groups that interface with the local public health system to make an impact on the health of Teller County. The information in this report will enable us to more strategically establish priorities, implement strategies, and commit resources to improve the health of our communities.

Health is an issue of concern and action for all of us. We hope the information in this report will reinforce the collaboration that already exists among agencies within the county. We also encourage new collaborations among other agencies that are part of the public health system, between usual competitors, and among funders in order to address the complex health needs of our residents.

Teller County's Community Health Report highlights over 60 public health indicators or data points. Many of these indicators illustrate the strengths and weaknesses of Teller County's public health system, including access to health care, insurance coverage, tobacco use, unsafe sexual practices, substance use, injury prevention, and water and air quality. The intention of this report is to serve as a resource for Teller County's elected officials, public health partners, and the public. In addition, the report will assist the local public health system, partners, and public in the following:

- Planning (determining priorities)
- Implementation (developing programs to address county needs)
- Evaluation (assessing efforts to outcomes and efficient use of resources)

The community health assessment is a systematic process in which data is collected from community members and databases, that reveals public health gaps and strengths within Teller County. The health assessment results are an important reference when attempting to develop strategies to engage communities and address current public health issues. Distributing the findings of Teller County's 2013 Community Health Status Report is an important first step in creating a healthier Teller County. Our community relies on the health and vitality of its members to thrive. Creating and maintaining a healthy community is a team effort in which community members and agencies put forth a vast amount of effort, time, and dedication. To stay involved with the community health assessment process or to review assessment documents, please visit Teller County Public County Health Department's website at http://www.co.teller.co.us/PublicHealth.

Martha Hubbard, RN

Martha Hubbard, RN, BSN
Teller County Public Health Director

Acknowledgements

This report was produced by

The Teller County Public Health Department (TCPH)

Teller County Public Health Department Contributors and Reviewers

Jacqueline Davis, RN, MA, Project Manager and Nurse III
Janice Latendresse, RN, BSN, Data Support
Sady Mounts, TCPH Contractor, Data Support
Martha Hubbard, RN, BSN, Director
Darlyn Miller, RN, BSN, Nurse II
Aaron Doussett, MS, REHS, Environmental Health Officer
Karen Muntzert, Administrative Assistant IV
Kim Halloran, Administrative Assistant II

Community Steering Committee Members

Maria Berger	AspenPointe
Mark Platten	Colorado State University Extension
Sady Mounts	Community Partnership Family Resource Center
Lisa Noble	Gold Belt Communities Build A Generation
Deb Upton	North Teller Build A Generation
Dee Hylton	Peak Vista/Divide Health Center
Lisa Diamond	Pikes Peak Regional Hospital
Mary Barrowman	Prospect Homecare and Hospice
Laureen Murray	RE-1 School District/School-Based Health Center
Misty McMahan	RE-2 School District Nurse
Candy Shoemaker	Southwest Teller County EMS
Sandi Stratton	Teller County Government
Todd Zeller	Woodland Park Community Church
Leni Stevenson	Teller Senior Coalition
Susan McMaster	Medical Officer, Teller County Public Health
Mark Vanoni	Anglo Gold Ashanti (Colorado) Corp.

Table of Contents

Executive Summary……5

Overview of Past Assessments……7

Community Description……8

Social Determinants of Health……8

Physical Environment……9

Health Factors and Behaviors……12

Behavioral Health……15

Access, Utilization, and Quality of Life……17

Population Health Outcomes in Teller County……18

Community Perceptions……22

Colorado's Winnable Battles……23

Healthy People 2020 Objectives……23

The Five-Year Public Health Improvement Plan……25

References……27

Executive Summary

In 2008, the Colorado Public Health Reauthorization Act (the Act), Senate Bill 08-184, was signed into law charging local public health agencies with completing a community assessment once every five years. This assessment, guided by the eight-phase Colorado Health Assessment and Planning System (CHAPS), worked to create a standardized system in which to examine health data, prioritize issues, access capacity, and identify strategies for improving health. The result of the process is a Public Health Improvement Plan (PHIP) for each local agency. The goal of the PHIP is to engage communities in health improvement, increase the availability and quality of public health services, and ultimately improve health outcomes. According to the Act, the local public health improvement plan should examine data about health status and risk factors specific to the local community.

Phase I of the assessment work began in March 2012. Activities included identifying team members, determining the scope of the process, developing a work plan, and setting a timeline for completion. Beginning in April 2012, Phase II of the assessment work began by establishing relevant public health indicators and beginning the compilation of quantitative data from existing, standardized sources as well as the collection of current qualitative data. Teller County Public Health (TCPH) partnered with various county-wide organizations and individuals to collect the data which created the Health Indicator Report.

During Phase III, strategic key leaders and stakeholders from the community were invited to serve as the Community Health Assessment Steering Committee to provide guidance and assistance to the process. The charge of the Steering Committee was to provide guidance and reduce assessment and process duplication. In addition to the Steering Committee, focus groups and key informants were identified. The Steering Committee was integral to reviewing and analyzing the Community Health Indicator Data Report during its monthly meetings.

Teller County's Health Indicator Report data was compared to several similar counties in Colorado. The county comparison was useful to establish best practices, as well as gauge progress in the health indicator areas. Comparisons with counties of similar population and size or geographic proximity could best align local efforts. In other ways, the county comparison can be utilized as a health ranking tool across the state. For this report, Teller County indicators were compared to the indicators from Park, Chaffee, and Lake Counties. This regional data was then compared to state and national levels.

Phase IV began in August 2012 by conducting a capacity assessment. The capacity assessment is the process of measuring the ability of an agency or system to deliver or ensure public health functions and the degree to which the public health system is able to achieve its community health goals. This ability is determined in large part by capacity. A capacity assessment identifies local resources so that the public health improvement plan can be designed to be achievable. It provides a sense of what *can* we do versus what we may *want* to do. The Steering Committee provided the mechanism for identifying resources. Lists of Teller County resources were generated during a Steering Committee meeting of key community leaders.

Phase V took place in September. The results of the capacity assessment were presented to the Steering Committee, along with the health areas of concern that were extracted from the health indicator data. The top eight areas of

concern were: Behavioral Health-Mental Health and Substance Abuse, Tobacco Use, Oral Health, Injury Prevention, Unsafe Sexual Practices and Teen Pregnancy, Injury Prevention, Cancer Prevention, Maternal & Child Health. Steering Committee members, representing their diverse domains, engaged in a collaborative discussion regarding prioritization of need, after which a vote was taken. The top three health issues that raised the highest level of concern were Behavioral Health-Mental Health and Substance Abuse, Cancer Prevention, and Oral Health. After much discussion of the health indicator data, incorporating community observation and experience, Behavioral Health received the majority vote of the Steering Committee, and was chosen as the focus area for the Teller County Public Health Improvement Plan.

Phase VI began in October with the writing of the initial draft of our local Public Health Improvement Plan. Public Health met with AspenPointe, Teller County's designated Medicaid mental health provider. AspenPointe's strategic plan for Teller County has three priorities: access to care, innovative practices, and community relevant services .

Public Health acknowledges that it is not a mental health provider, nor subject expert. Considering AspenPointe's strategic plan, TCPH drafted the Public Health Improvement Plan. It will focus on greater awareness of behavioral health and substance abuse resources, and supports collaborative solutions to long-standing problems.

Using the CHAPS Action Plan template, the five year goal was structured as "Increasing community awareness and improving the coordination of services in mental health/substance abuse resources."

An action plan was created with specific goals set for the first year. Each year the plan will be reviewed, assessed, and adjusted to ensure positive impact.

A draft of the action plan was presented to the Steering Committee at the last scheduled meeting in January 2013 for their review and input. While public health will be the lead agency, supporting entities are needed to fulfill the proposed plan. Review and discussion ensued after which an invitation was extended to committee members, and/or their host agencies, to attend the initial implementation planning session at TCPH in the late spring/early summer of 2013. This first step of the Public Health Improvement Plan will be to invite stakeholders in Mental Health-Behavioral Health and Substance Abuse to an open discussion, facilitated by Public Health, of the behavioral health and substance abuse needs of Teller County and its residents,.

Overview of Past Assessment

TCPH last conducted a "community health survey" in 2005. Qualitative data was collected using a convenience survey. The five-page survey contained four pages of multiple choice questions and one open-ended comment section. The total number of participants in the Teller County Public Health Survey was 1134. Ages ranged from under 18 to over 80. The majority of respondents lived in Woodland Park. The largest age group of respondents was 40-54.

Surveys were distributed at businesses, senior centers, parking lots, grocery stores, post offices, and at TCPH.

These were the findings of the survey assessment tool used:

The top three factors that respondents considered of highest importance to define a healthy community were:

- Low crime/safe neighborhood (59.4%)
- Good schools (58%)
- Good jobs and healthy economy (45.3%)

The top three factors that participants selected as the greatest health problem in Teller County were:

- Affordable healthcare (44.6%)
- Teen and adult alcohol abuse (both 36.6%)
- Lack of health insurance (28.6%)

The top three environmental health factors that survey participants indicated were of most importance to them were:

- Water quality (56.3%)
- Secondhand smoke (52.5%)
- Septic (35.1%)

This survey was useful in identifying some aspects of perceived health concerns in Teller County. It is unclear if these concerns were based on quantitative or scientific data.

Community Description

Teller County covers a total of 557 square miles. Surrounding counties include El Paso, Douglas, Park, Jefferson, and Fremont. There are five cities included in Teller County. Teller County begins 20 miles west of Colorado Springs and is accessed via State Highway 24 West. It is almost directly in the center of the State of Colorado at elevations ranging from 8,000 feet in Woodland Park to over 14,000 on the back side of Pikes Peak.

Population Description

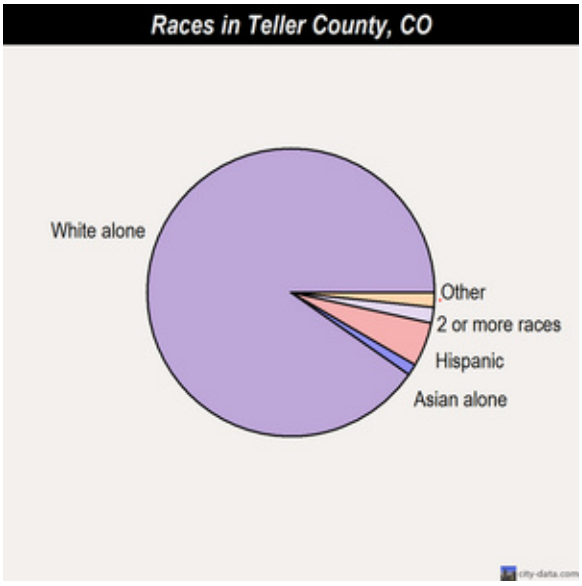
In this section, basic characteristics of Teller County's population are described, including age, gender, and race/ethnicity.

According to the 2010 U. S. Census Bureau, the population estimate in Teller County was 23,350. The population is comprised of 50.9 percent males and 49.1 percent females. (1)

Race/Ethnicity

Races in Teller County, Colorado:

- White Non-Hispanic Alone (90.3%)
- Hispanic or Latino (5.0%)
- Two or more races (1.9%)
- American Indian or Alaska Native (1.4%)
- Asian (0.9%)



Social Determinants of Health

Economic Indicators

Economic indicators impact markets, economic performance, and predictions of future performance. Local economic indicators can include unemployment rates, housing statistics, and more. The estimated unemployment rate for Teller County was 11% in 2010.

Income

Median household income is defined as the combined income of any individual 15 years and over living in the household. According to the US Census Bureau, the estimated

household median income in Teller County was $57,931 from 2007-2011. Teller County's income ranks far lower than the State average and other counties. The January 2011 cost of living index in Teller County was 87.6% (U.S. average is 100).

Free and Reduced Lunch Eligibility

The percentage of students enrolled in free and reduced lunch is often used as an indirect measure of poverty. In Teller County, 34.2 percent of students were eligible for free or reduced lunch in 2011 (2).

Food Stamp Recipients

In Teller County, the average number of food stamp recipients has climbed in the last three years, which is consistent nationwide. Food stamp recipients spend their benefits to buy eligible food in authorized retail food stores. This is likely a result of the economic downturn and higher unemployment rate in Teller County.

Education

Education is universally recognized as one of the most fundamental building blocks for human development and poverty reduction. Over 5,228 students are enrolled in education in Teller County (from pre-school to college/university). A majority of the students are enrolled in elementary and high school. While a small percentage of the population never finished high school in Teller County, many Teller County residents return to school to receive their GED, high school diploma, associates, or bachelors degree at a later date.

Graduation Rate

The high school graduation rate in 2011 was higher in females than in males in all of Colorado in 2011. In Teller County, the graduation rate is 94%. (Colorado is 89%) (3).

Poverty

Poverty is determined by the federal government using income and family size. The 2010 poverty level for Teller County was substantially less at 8.7% compared to the State of Colorado at 13.2%. About 14.3% of these residents are under age 18.

Physical Environment

Built Environment

Built Environment includes all of the physical parts of where we live, work, and play (e.g. homes, buildings, streets, open spaces, and infrastructure). A built environment influences a person's level of physical activity (4).

Access to Recreation

The availability of recreational facilities can influence individuals' and communities' choices to engage in physical activity. Recreational facilities are defined as establishments engaged in operating fitness and recreational sports

activities. There are few formal facilities located in Teller County. There are, however, abundant outdoor hiking trails.

Access to Healthy Foods

Teller County is a rural county. There are 3 supermarkets in the north end, one in the central, and one in the south end of the county. At a rate of 1 healthy outlet for 10,000 residents in 2009, Teller County was rated at 1.8. At the same rate, fast food restaurants ranked 6.2 per 10,000 residents. In 2009, 90.4% of Teller County residents said fresh fruits, vegetables, and other healthful foods (such as whole grain breads or low fat dairy products) were somewhat or very available in their neighborhood (5).

Safety

Conditions in Teller County neighborhoods have major health effects. Social, physical, and economic features of neighborhoods have been linked to general health status, disability, birth outcomes, chronic conditions, health behaviors, death rates, and other risk factors. For example, pollution or crime in neighborhoods can be hazardous to health. They can also severely limit the choices and resources available to individuals. An individual's ability and motivation to exercise can be constrained by living in a neighborhood that lacks safe areas for exercise and where healthy role models are scarce.

Violence and Property Crime Rates

In 2007, Teller County ranked number 31 for violent crimes and number 18 for crimes against property in the state. It ranked number 1,416 and number 647 for violent and property related offenses respectively in the nation (6).

Number of Liquor Stores

The concentration of liquor stores influences the amount of alcohol advertising and access to alcohol in a community. A high density of liquor stores can also contribute to economic and social disintegration. Studies indicate that over-concentration of liquor stores increases the perceived lack of safety and limits workability in the community (7). It is stated that Teller County ranks 39th in the state for excessive drinking being a factor in residents' behavioral health (8).

Gaming/Gambling

According to June 2012 gaming reports, there are currently 13 open casinos in Cripple Creek, Colorado. Twenty-eight percent of "limited" gaming revenues go to historic preservation, making Colorado the leading state in historical preservation spending. (9) Gaming impacts local crime and safety concerns, resulting in increased arrests, drunk driving incidents, domestic violence, drugs, and theft.

Environmental Quality

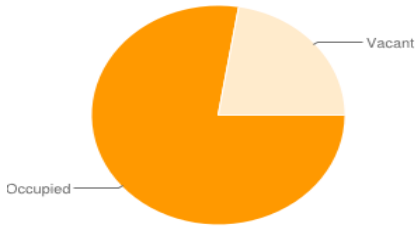
Environmental quality encompasses both indoor and outdoor measures of health, including household hazards, air quality, and water quality. These are important prerequisites for good health. Having safe food and water and maintaining healthy homes and businesses positively impacts health and quality of life (10).

Housing

For most Americans, a home represents a place of safety, security, and shelter. Given its importance, it is not surprising that factors related to housing have the potential to help or harm our health in major ways. In 2012, home appreciation (depreciation) is -5.80% from the previous year. The median age of Teller County real estate is 20 years. Renters make up 14.49% of Teller County residents (11).

In 2010, there were 12,643 housing units in Teller County, 77.6% of which were occupied (12).

Housing Units: Occupied vs. Vacant



Radon

Radon is a naturally-occurring, odorless, invisible, radioactive gas that is listed as a Class "A" carcinogen. Radon can be found in outdoor air and indoor air of buildings and homes. You cannot see, smell, or taste radon, but it may be a problem in a home. Radon can be found all over the world because it comes from the natural decay or breakdown of uranium and radium in soil, bedrock, rocks, and water. Radon is the second-leading cause of lung cancer deaths in the U.S., and the leading cause of lung cancer deaths among non-smokers. The Environmental Protection Agency (EPA) recommends homes be mitigated if the radon level is 4 pCi/L (pico Curies per Liter) or more. Because there is no known safe level of exposure to radon, EPA also recommends that Americans consider mitigating homes with radon levels 2-4 pCi/L. The Colorado State University Extension office offered free radon tests to the public from 2009-2012. Prior to 2009, there was minimal data available for households in Teller County. In 2009, 888 total households performed the radon test with 71% of these homes having values over the recommended 4 pCi/L. In 2010, 812 homes were tested, with 65% having values over 4 pCi/L. The total number of households in Teller County for these years was 7993.

Water

In 2009, 45.9% of Teller County residents reported that they use a private well and 17.6% of the residents reported that bottled water is their primary home water drinking source. Potential sources of contamination are septic systems, contamination from Highway 67 hazardous waste spills, magnesium chloride used as a road deicer, insecticides used to control forest insect populations, leaking storage tank sites, and low intensity residual land use. Insufficient testing of private source water systems limits generalized county analysis.

Isolated well test results have shown elevated fluoride in western and southern areas of the county. Municipal water source testing for contamination levels of various substances showed no violations. The EPA's enforceable standard for the highest level of fluoride that is allowed in public water supplies is 4.0 milligrams per liter, and is set to protect against risks from exposure to too much fluoride.

Outdoor Air Quality

Particulate matter (PM 2.5) is the term given to the tiny particles directly emitted into the air and particles formed in the air by chemical transformation of gaseous pollutants. The main source of PM 2.5 (ranging from 0-10) are cars and trucks. The higher the number the better the air quality is compared to surrounding areas. These particles can remain in the lungs for a long time and cause damage to lung tissue. The PM 2.5 concentration levels in Teller County range from in Woodland Park being 4.1 to Cripple Creek being 4.2 (13).

Health Factors and Behaviors

A health behavior is described as an "action taken by a person to maintain, attain, or regain good health and to prevent illness" (14). Health behaviors reflect a person's health beliefs. Some common health behaviors are exercising regularly, eating a balanced diet, and receiving necessary vaccinations (15).

Nutrition

Nutrition is essential for growth, development, health, and well-being. Dietary factors are also associated with four of the ten leading causes of death: heart disease, some cancers, stroke, and diabetes. Choosing a high fruit and vegetable diet can improve health outcomes (16).

Eating Fast Food

In Teller County, it was estimated that there are 6.2 fast food restaurants per every 10,000 residents (17). (Colorado per 10,000 is 7.0).

Eating Fruits and Vegetables

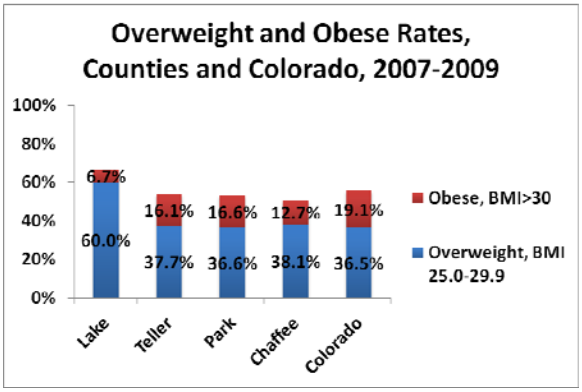
There is a rate of 1.8 healthy food outlets for the residents of Teller County according to the Colorado Department of Public Health and Environment. 90.4% of Teller Country residents say fresh fruits, vegetables, and other healthful foods (such as whole grain breads or low fat dairy products) are somewhat or very available in their neighborhood (18). In Teller County, approximately 40% of the residents reported eating 5 or more fruits and vegetables a day (19).

Obesity

The United States continues to battle the rise in obesity among children, adolescents, and adults. Obesity can be difficult to deal with on a daily basis, but is a major risk factor for other chronic conditions, certain types of cancer, and Type 2 Diabetes. Body mass index (BMI) is a widely used measure of unhealthy (over)weight, as defined by (20):

- A BMI of 25 or greater for adults
- A BMI at or above the 85th BMI-for-age percentile for children and adolescents

Compared to the State of Colorado and the Colorado counties used for comparison in this report, Teller County has among the lowest percentile of obese adults.



Adults Overweight/Obese

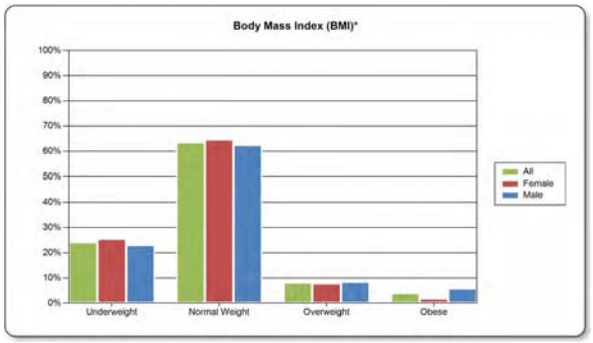
There are many factors contributing to an adult being overweight and, in the United States, the percentage of overweight Americans is steadily increasing. In 2008, medical costs associated with obesity were estimated at $147 billion; the medical costs paid by third-party payers for people who are obese were an average of $1,429 higher than for those of normal weight (21).

Children Overweight/Obese

With obesity on the rise in children ages 2-14, many experts believe that today's generation of

children may be the first to live shorter lives than their parents.

Teller County 2011-2012
Teens Grade 6-12



This report was based on students self-reporting height and weight (22).

Physical Activity

Regular physical activity helps improve overall health and fitness, and reduces the risk for chronic diseases. Physical activity is anything that gets your body moving. According to the 2008 Physical Activity Guidelines for Americans, both adults and children need to do two types of physical activity, like bicycling or dancing, each week to improve health, aerobic capacity, and muscle strengthening (23).

Physically Active Children

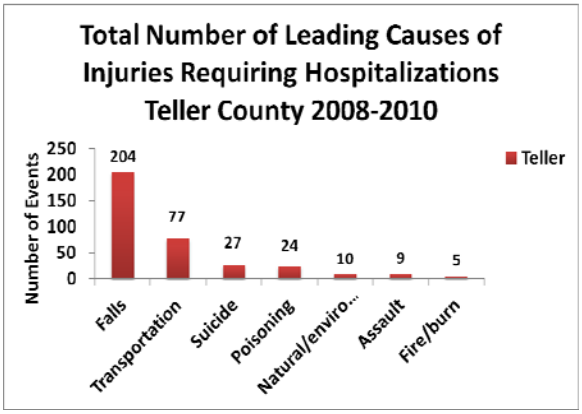
Current physical activity guidelines for children involve at least 60 minutes or more of physical activity each day. Many studies have demonstrated the positive effects of physical education and physical activity on school performance. Several studies have stated that providing increased time for physical activity can lead to better concentration, reduced disruptive behaviors, and higher test scores in reading, math, and writing (24). According to Colorado Department of Education's Coordinated School Health standards, children need to be more physically active throughout the school day to meet the Colorado State Standards.

Leisure Time Physical Activity in Adults

According to the 2009-2010 (Behavior Risk Factor Surveillance System (BRFSS) County report, 80% of Teller County residents participate in leisure time physical activities.

Injury

Each year, one in every three adults age 65 and older will fall. Falls can cause moderate to severe injuries, such as hip fractures and head traumas, and can increase the risk of early death. (25). Injury prevention is one of Public Health's 10 winnable battles .



Sexual Health

Sexual Health in Teller County continues to be an issue of concern to public health. Twenty-seven percent of pregnancies resulting in live births were unintended; with 4.9% of the mothers being 15-17 years of age (26). Increased maternal high-risk behaviors, such as smoking and drinking, have been associated with unintended pregnancies as well as higher rates of poor health outcomes for the infant.

Teller County 2011-2012 Grades 9-12

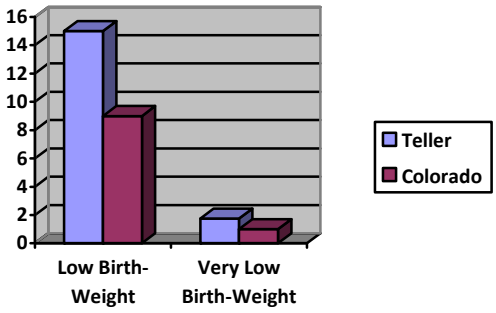
The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?	Never had sex	63%
	No method used	2%
	Birth Control Pills	7%
	Condoms	18%
	Depo-Provera, IUD	3%
	Withdrawal	4%
	Other	1%
	Unsure	1%
Behavior during most recent sexual intercourse	Drank alcohol or used other drugs	24%
	Used a Condom	62%
	No birth control method used	6%

Children born as a result of an unintended pregnancy are at a greater risk for child neglect or abuse and developmental delay. There are correlations between lower education levels and socioeconomic status, which have life-long impacts for both mother and child.

Low Birth-Weight

Babies born weighing less than 5 pounds, 8 ounces (2,500 grams) are considered low birth-weight. These babies are at increased risk for serious health problems such as lasting disabilities, and even death. About 1 in every 12 babies (or 8.3 percent) in the United States is born low birth-weight (27). The state of Colorado has a rate of 9% and Teller County has a rate of 15% for low birth weight babies, both higher than the national average.

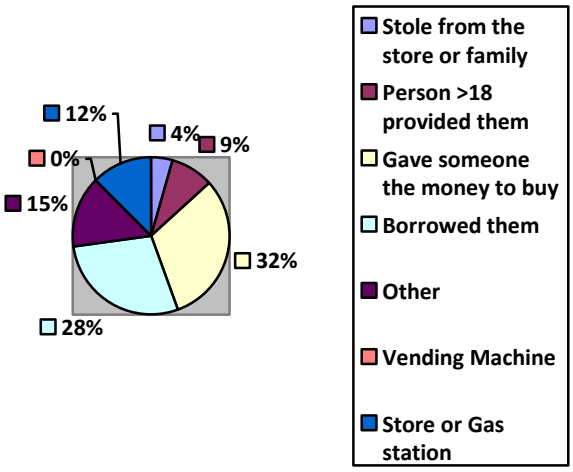
2007-2009



Tobacco

Approximately 20.6% percent of all adults (aged 18 years and older) in the United States smoke cigarettes. Cigarette smoking is one of the leading causes of preventable deaths nationally and accounts for approximately 443,000 deaths or 1 of every 5 deaths in the United States each year (28). Compared to surrounding counties, and the State of Colorado (17.8%), Teller County is exceeding the percentage of smokers at 19.4% percent, with many smokers in the adolescent age group of 13-18. It is illegal for adolescents to purchase tobacco products; nonetheless, adolescents report having easy access. Healthy People 2020 goals are to reduce the number of adult smokers to 12%.

The usual method of acquiring tobacco for this age group is defined in the chart below:



Behavioral Health

Mental Health Status

Mental health is how we think, feel, and act as we cope with life. It also helps determine how we handle stress, relate to others, and make choices. Like physical health, mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental health is often overlooked as a significant public health issue (29).

The mental health status for Teller County from 2008-2010 is as follows:

- Mental Health Diagnosis Hospitalizations (Age-adjusted rate of mental health diagnosed hospitalizations (per 100,000 population) 2007-2009)

Teller County	2872.3
Colorado	2905.1

Suicide

Suicide is the act of taking one's own life voluntarily and intentionally. Suicide is a complex behavior that can often be prevented with early recognition and treatment of mental health problems. Suicide is the 11th leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

- Suicide Diagnosis Hospitalizations(Age-adjusted rate of suicide hospitalizations (per 100,000 population) 2007-2009)

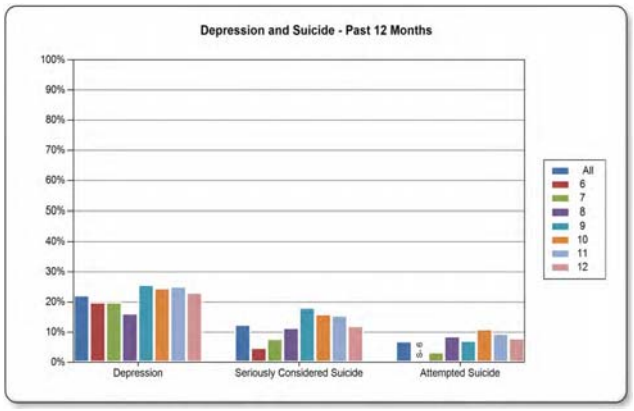
Teller County	30.6
Colorado	57.2

In 2010, suicide ranked 3rd in leading causes of death in Teller county.

Child Behavioral or Mental Health Issues

Childhood and adolescence are marked by dramatic changes in physical, cognitive, and social-emotional skills. Mental health is defined by the achievement of expected developmental, cognitive, social, and emotional milestones as well as satisfying social relationships and effective coping skills (30).

Teller County 2011-2012
Teens Grade 6-12 Mental Health



Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25 percent of all years of life lost to disability and premature mortality.

Substance Use and Abuse

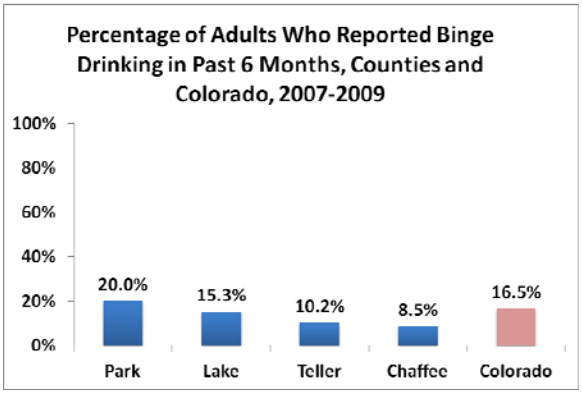
Substance abuse is defined as a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. This is one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations

or a matter of personal choice. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus and/ or acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases
- Domestic violence/Child abuse
- Motor vehicle crashes
- Physical fights
- Crime/Homicide
- Suicide

Binge Drinking

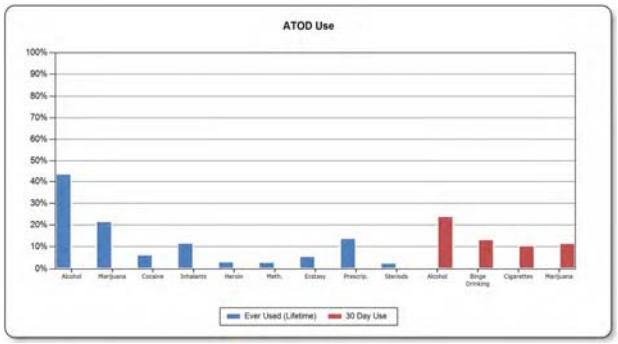
Binge drinking is one of the many recognized indicators of substance abuse. It is defined as consuming five or more alcoholic drinks on one occasion in the past month.



Teller County reported that 10.2% of adults stated that they had participated in binge drinking in the past six months. Males in the age of 45-54 years old were found to be most at risk for this behavior.

Drinking Among Teens

The Healthy Kids Colorado Survey for 2011-2012 conducted by both Teller County Build A Generation coordinators indicated that less than 50% of Teller County teens in 9th to 12th grade had been in contact with alcohol, tobacco or other drugs ever or within the past thirty days.

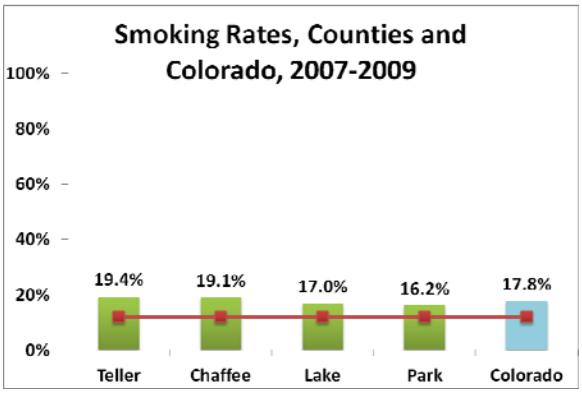


ATOD = Alcohol, tobacco, other drugs

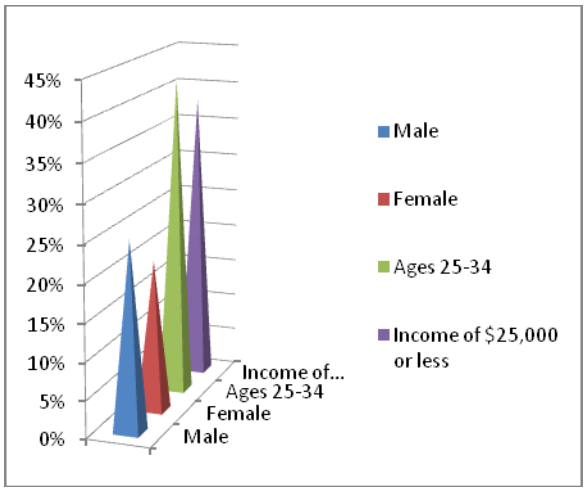
The "Ever Used (Lifetime)" section of the chart shows the percentage of students who reported using a substance at least once in their lives. The "30-day Use" section shows the percentage of students who reported using a substance at least once in the past 30 days. The questions regarding lifetime use of cocaine, heroin, and steroids are only asked on the high school version of the survey.

Smoking

The impact of smoking on those with behavioral health concerns cannot be underestimated. Smoking rates of those with behavioral health disorders, which include psychiatric disorders and substance abuse disorders, are two to four times higher than that of the general population. Teller County is just above the average for the whole state of Colorado.



Many variables were used to analyze who, when, and why Teller County residents smoke. The following graph reflects the highest averages among Teller County residents.



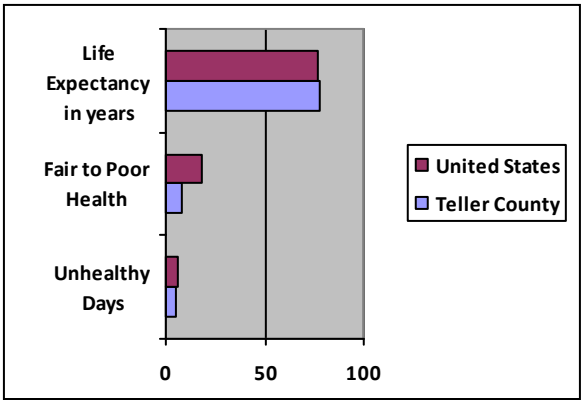
Access, Utilization, and Quality of Life

Quality of Life

There are many factors that contribute to a person's level of health and quality of life. These levels are quite different than those of the standards of living. Many people tend to compare the two. Teller County is below the United States data in the following:

- The average number of unhealthy days in the past month in Teller County is 4.9The average number of unhealthy days in the past month in the United States is 6.0
- The percent of adults who report fair or poor health in Teller County is 7.6%
- The percent of adults who report fair or poor health in the United States is 17.1%.

Perceived general health is a widely used measure of general health and it is one of the methods governments use to assess the positive aspects of health (31). Teller County is well below the average in both of these sections.



The lack of insurance coverage across the nation will always be an issue. The federal government estimates that over 45 million people without health coverage.
Colorado state initiatives like the Colorado Collaborative Care Program are seeking to provide a local response to health care reform with access to Medicaid.

The population of Teller County children under the age of 18 is approximately 5000.

Access to Care

Lack of Healthcare Coverage/Insurance for 2009	Teller County	Colorado
The percent of children (aged 0-18 years) eligible but not enrolled in Medicaid 2009	7.3%	13.3%
The percent of children (aged 0-18 years) eligible but not enrolled in CHP+ 2009	40.5%	37.2%
The percent of working-age adults (19-64 years) eligible but not enrolled in Medicaid 2009	23.2%	28.0%
The number of children (less than 19 years old) without health insurance coverage 2009	474	132,676
The number of adults (aged 18-64 years) without health insurance coverage 2009	2,142	637,357

In 2011, 18 out of 11,284 of the practicing Physicians in the State of Colorado practiced in Teller County. There are 15 active licensed Nurse Practitioners, 12 active licensed Physicians Assistants, and 13 active licensed Dentists operating in the Teller County area. There are a community health center, a school based health center, and several private providers accepting Medicaid in Teller County.

Population Health Outcomes in Teller County

Morbidity

Morbidity is described as a diseased state or symptom (i.e., Type II Diabetes, cancer, asthma, cardiovascular disease, sexually transmitted infections and many others). Although medical technologies and medications are available to improve quality of life, morbidity may actually worsen if a person has a chronic disease.

Cancer

Cancer is the general name for more than 100 different types of diseases that can affect a human body. These cells grow out of control in the body and, if left untreated, can cause serious illness and even death.

	Teller County	Colorado
Age-adjusted incidence rate of invasive cancer (all sites combined)(per 100,000 population) 2006-2008	524.8	440.6
Age –adjusted incidence rate of invasive breast cancer among females (per 100,000 females) 2006-2008	159	123
Age-adjusted incidence rate of colorectal cancer (per 100,000 population) 2006-2008	22.6	40.8
Age-adjusted incidence rate of lung and bronchus cancer (per 100,000 population) 2006-2008	41.5	51
Age-adjusted incidence rate of invasive melanoma (skin cancer)(per 100,000 population) 2006-2008	42.4	21.9
Age-adjusted incidence rate of prostate cancer among males (per 100,000) 2006-2008	204.6	160.7

In Teller County, breast cancer and prostate cancer are among the highest rate cancers. In addition, with Teller County's high altitude, melanoma skin cancer rates are also a concern.

Asthma

Asthma is a chronic lung disease that usually begins in childhood, but anyone can be affected. It inflames and narrows the airways, and causes recurring periods of wheezing, chest tightness, shortness of breath, and coughing. In the United States over 22 million people are known to have asthma with most being children (34). Percent of adults (aged 18+ years) that have been told by a health care provider that they currently have asthma 2008-2010 is 8.5 % for the State of Colorado and 10% for Teller County.

Diabetes

Diabetes, often referred to by doctors as *Diabetes Mellitus*, describes a group of metabolic diseases in which the person has high blood glucose (blood sugar), either because insulin production is inadequate, or because the body's cells do not respond properly to insulin, or both. There are three types of this disease: Type I, Type II, and Gestational Diabetes. Type II Diabetes is the most common type with obesity as one of the leading contributors in people who are diagnosed with Type II Diabetes. In the State of Colorado, from 2000-2010, the obesity rates have almost doubled from less than 10% to over 20% (35). Percent of adults (aged 18+ years) with diabetes 2008-2010 is 5.9% for the State of Colorado and 6.4% for Teller County.

Tuberculosis (TB)

TB is caused by a bacterium called *Mycobacterium Tuberculosis*, which usually attacks the lungs. Tuberculosis (TB) is second only to HIV/AIDS as the greatest killer worldwide due to a single infectious agent.

In 2011, 8.7 million people fell ill with TB and 1.4 million died from TB

From 2002 thru 2011, Teller County had only one case of tuberculosis reported in 2009.

Influenza Hospitalizations

Influenza (aka the "flu") is a seasonal illness caused by a virus. Flu is spread through sneezing, coughing, or hand-to-mouth contact after touching a surface with the virus on it. Seasonal influenza is widely associated with a large number of hospitalizations.

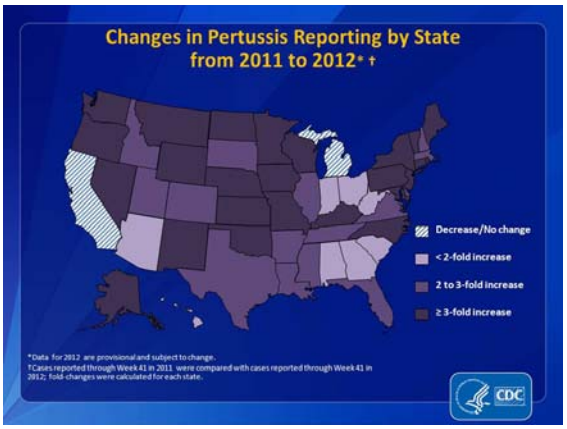
The rate of influenza hospitalizations in people aged 65+ years old (per 100,000 population aged 65+ years) 2007-2009 is:

Teller County	55.8
Colorado	73.6

Given the substantial health impact of seasonal influenza, every year there is a public health initiative to promote vaccination of all age groups. It is particularly important to protect those at increased risk for influenza complications, such as infants, immune-compromised individuals, and those over 65 years *of age (36).*

Pertussis

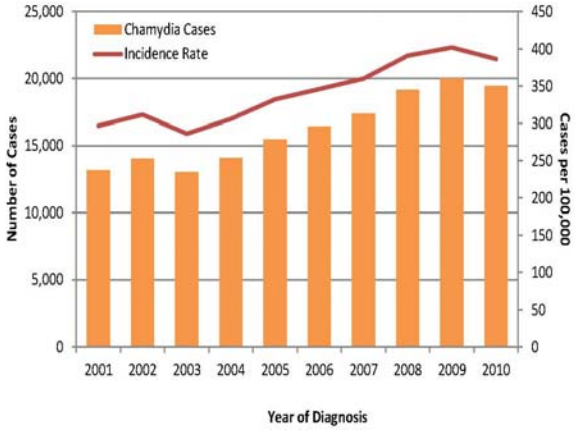
Pertussis (whooping cough) is a highly contagious disease caused by a type of bacteria called *Bordetella Pertussis*. Among vaccine-preventable diseases, pertussis is one of the most commonly occurring ones in the United States, with rates continually rising. Immunization calls for a series of vaccine given to children beginning at 2 months through age 11-13 years old, with an adult booster for those who have not had one. Immunity to pertussis wanes over time so booster doses of the vaccine are necessary, even for people who have had the disease in the past.



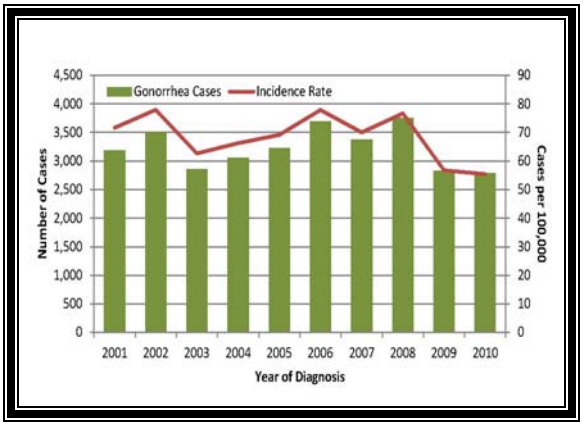
Chlamydia and Gonorrhea

Chlamydia is the most commonly reported Sexually Transmitted Infection (STI) in Colorado. In 2010, there were 19,447 cases diagnosed for a statewide crude incidence rate of 387 per 100,000 persons.

The marked difference in case rates between males and females is primarily a product of increased screening in women's reproductive health care settings. To a lesser degree, this difference also reflects the natural history of Chlamydia infections. Males may be less susceptible to infection, are not generally symptomatic, and are less likely to access health services. The result is that Chlamydia infections among males remain largely undiagnosed, untreated, and unreported.

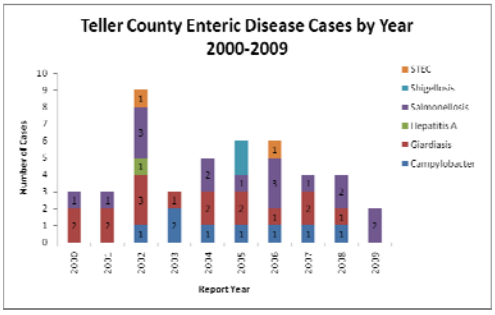


Gonorrhea remains the second most commonly reported STI in Colorado with 2,787 cases reported in 2010, yielding a rate of 55 per 100,000 people. There was a slight decrease in reported gonorrhea cases in 2010 compared to 2009 when 2,823 cases were reported for a rate of 56 per 100,000 people. Females account for 54 percent of gonorrhea diagnoses. Among 15-19 year olds, the gonorrhea rate for females, 305 per 100,000, is nearly three times greater than the rate for males, 110 per 100,000.



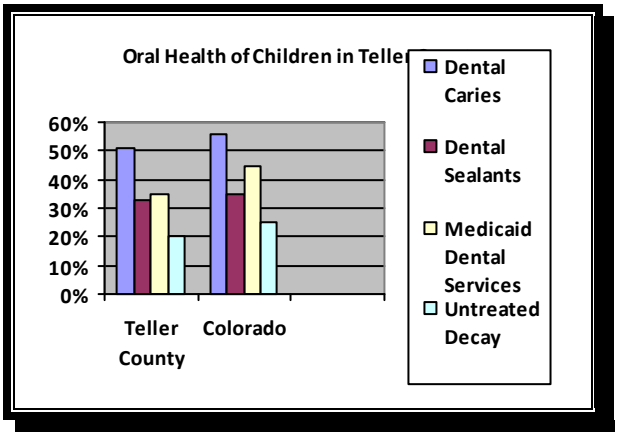
Foodborne Outbreaks

A foodborne disease is caused by consuming contaminated food or beverages. The most commonly recognized foodborne infections are those caused by the bacteria *Campylobacter*, *Salmonella, and E. coli*. The average annual number of reported cases of enteric disease in Teller County is 3, with a range of 2-9. Giardiasis and Salmonellosis make up 71% of all reported enteric disease from 2000-2009.



Oral Health

The importance of good oral health is paramount to a healthy lifestyle. Bad oral hygiene can affect a child's speech, self-esteem and overall health. If a child has a toothache they may not be able to concentrate. The relationship between oral health and general health is often overlooked. The estimated percentage of children in grade 3 with a history of dental caries in Teller County was just over 50 percent during the 2006-2007 school year. Unfortunately, in 2008, 48.8% percent of Teller County residents reported that they had lost teeth due to decay or periodontal disease compared to the Colorado rate of 35.9% percent.



Mortality

Mortality is the number of deaths that occur at a specific time, in a specific group, or from a specific cause. Mortality is distinct from morbidity, which means illness or diseased state (37).

Eight Leading Causes of Death

Leading causes of death differ somewhat by age, sex, and race. Nationally, heart disease is the leading cause of death. In Teller County, malignant neoplasms, or invasive cancers, are the leading cause of death.

Rank	Cause of Death in Colorado
1	Malignant Neoplasms (Invasive Cancers)
2	Heart Disease
3	Suicide
4	Chronic Lower Respiratory Disease
5	Unintentional Injuries
6	Alzheimer's Disease
7	Septicemia
8	Cerebrovascular Diseases

Life Expectancy

Life expectancy has dramatically increased over the last few centuries of human history. These changes are largely the result of improvements in public health, medicine, and nutrition. The greatest improvements have been made in the richest parts of the world, but the same effects are now spreading to other parts of the world as their economies and infrastructure improve (38). Life expectancy can rise or fall due to problems like famine, war, disease, and poor health. The higher the life expectancy, the better "shape" a country, county, or town is in. Teller County's average life expectancy is 78.2 years of age, which is slightly better than the average life expectancy in the United States at 76.5 years of age (39).

Community Perceptions

Qualitative data is data which helps to define issues, concerns, and strengths from a personal perspective; it typically involves opinions. To elicit this type of data, Teller County Public Health met with four focus groups and completed four key informant interviews with four identified community stakeholders. The focus groups were School District RE-1 Wellness Committee, School District RE-2 Wellness Committee, the Teller Resource Group, and the general public polled at the 2012 health fair. The key informant interviews were conducted at True Life Medicine, Ideal Family Healthcare, Cripple Creek Penrose Urgent Care, and the Community of Caring.

Focus groups and key informants were given surveys and then engaged in discussions regarding community perception of health issues. This resulted in the recording of opinions which were then ranked by majority response. A total of 54 surveys were distributed in the focus groups and key informant interviews combined. These survey questions were designed to support the State of Colorado's Winnable Battles campaign.

In addition to this qualitative data collection, the Steering Committee provided valuable, diverse community input for the data collection phase of the assessment process. Steering Committee members were selected based on their ability to influence systems, provide a voice for underserved communities, and/or champion priorities.

The charge of the Steering Committee was to:

- Identify areas where better information is needed on health disparities, quality of health care, and the occurrence and severity of disparities in the population.
- Provide a basis for local public health planning and give the Public Health Department the opportunity to interact with key community leaders, organizations, and residents about health priorities and concerns.
- Promote partnerships in health initiatives. This qualitative data was used to supplement the quantitative data to help define health issues and concerns from a community perspective.

Colorado's Winnable Battles

Teller County's initial local issues of concern were chosen based on information gathered during the community health and local capacity assessments with consideration of national and state health improvement goals.

Teller County's health concerns are aligned with Colorado State's 10 Winnable Battles Public Health Improvement Plan. These key public health and environmental issues were chosen because it was expected that progress could be made over the next several years in the State in these health areas.

Teller County selected its top priority issue because it provided the greatest opportunities for ensuring the health of all of its residents. Many of Teller County's initial issues of concern also aligned with the Centers for Disease Control and Prevention's (CDC) Winnable Battles and the Office of the Surgeon General's National Prevention Strategy.

Healthy People 2020 Objectives

The Healthy People 2020 project is science-based and focused on improving the health of all Americans. For many years, Healthy People 2020 has established benchmarks and monitored progress over time in order to:

- encourage collaborations across sectors,
- guide individuals toward making informed health decisions, and
- measure the impact of prevention activities.

The following are the details of Healthy People 2020 Objectives related to indicators presented in Teller County's 2012 Status Report. Over the next five years, the Teller County Public Health Department will evaluate successful attainment of Healthy People 2020 targets in alignment with the local health improvement initiative.

Mental Health and Substance Abuse

The goal of the Healthy People 2020 initiative is to improve mental health through prevention and by ensuring access to appropriate, quality mental health services. The Healthy People 2020 goal for Substance Abuse is to reduce substance abuse to protect the health, safety, and quality of life for all, especially children. TCPH will strive to obtain these goals at the local level using the Colorado Health Assessment Planning System, or CHAPS process.

Utilizing partnerships with other Teller County agencies, TCPH will work to improve coordination and collaboration for mental health and substance abuse services in the county. These efforts will include, but not be limited to, better screening and identification of need, better referral practices, and increased awareness and access to care.

Teller County's health concerns along with Colorado's Winnable Battles and the CDC's Winnable Battles are displayed below

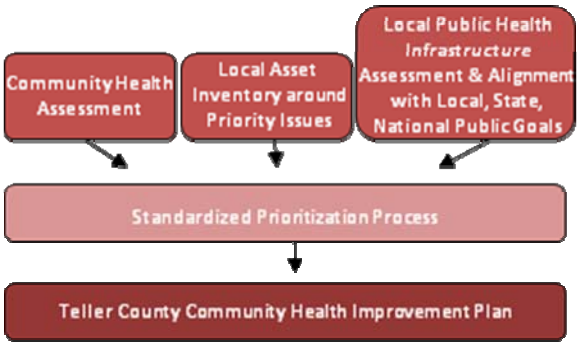
CDC- National Winnable Battles	CO- State Winnable Battles	Teller County- Local Issues of Concern
Food Safety	Clean Air	Maternal Child Health
Global Immunization	Clean Water	
Healthcare- associated infections	Infectious Disease Prevention	Cancer Prevention
Motor Vehicle Injuries	Injury Prevention	Injury Prevention
Lymphatic Filariasis in the Americas (vector is the mosquito)	Mental Health and Substance Abuse	Mental Health and Substance Abuse** **Indicates Teller County priority focus area
Nutrition, Physical Activity and Obesity	Obesity	Obesity
HIV in the U.S.	Oral Health	Oral Health
Mother-to-Child Transmission of HIV/AIDS Globally	Safe Food	
Tobacco	Tobacco	Tobacco
Teen Pregnancy Prevention	Unintended Pregnancy	Teen Pregnancy Prevention & Unsafe Sexual Practices

The Five-Year Public Health Improvement Plan

The Teller County Five-year Community Health Improvement Plan was developed in partnership with the agencies that serve the greater public health system in Teller County. The Teller County Plan was developed using the process and guidelines outlined in the Colorado Public Health Improvement Plan – from Act to Action, and the Public Health Act of 2008 passed by the Colorado Legislature. CHAPS stands for Colorado's Health Assessment and Planning System, and it provides a standard mechanism for assisting local public health agencies and the Colorado Department of Public Health and Environment in meeting assessment and planning requirements of the Public Health Act of 2008 (C.R.S. 25-1-501 et seq.).

The Act requires that state and local Public Health Improvement Plans (PHIPs) be developed based on a community health assessment and capacity assessment every five years. These processes are included in CHAPS, each with its own phase. The Act also requires that state and local public health improvement plans be in alignment with one another. Therefore, the current statewide public health improvement plan will provide development of the new local public health plans, which will then inform the development of the next statewide public health improvement plan within each five year planning cycle.

Improvement Plan Process



Teller County's top priority area was chosen for three reasons:

a) Local data showed that many people are affected or at risk of mortality, morbidity, or disability because of the issue.

b) Our local capacity assessment indicates we have the ability to impact these issues due to the community's readiness and the availability of evidence-based strategies and best practice programming locally.

c) There are organizations, resources, and local champions that can move the issue forward.

In September 2012, after four months of gathering, reviewing, and discussing local data related to the top eight areas of concern, the Steering Committee engaged in discussion and a voting process to determine which area of concern would be prioritized as the focus area, considering the ability and capacity of the community to impact the health priority. For the purposes of this report, behavioral health is considered the overarching health indicator for

the mental health and substance continuum. Although the quantitative health indicator data was limited in the comprehensive field of mental health and substance abuse, the community leaders on the Steering Committee identified a qualitative need for increased awareness of behavioral health/substance abuse concerns, better utilization of available resources, and increased identification of behavioral health/substance use issues in Teller County. Simply speaking, behavioral health and substance abuse were believed to be under-addressed needs in our community. It was acknowledged that further research and discussion would be necessary to determine the specific behavioral health/substance abuse needs of the community.

Therefore, the first step of the Public Health Improvement Plan will be to invite stakeholders in mental health and substance abuse to TCPH for an open discussion and strategic planning session to identify and address the mental health and substance abuse needs of Teller County residents. TCPH will consult with AspenPointe, who provides behavioral health services in Teller County, Build A Generation, who provides substance use prevention programs to adolescents in the county, and Peak Vista, through the Divide clinic and school-based health center, as a federally-qualified health center providing services to the uninsured and under-insured population of Teller County. TCPH will continue to monitor federal and state level efforts in mental health and substance abuse in order to align both state and local health initiatives.

Summary of Strategic Priorities

The Teller County Public Health Department (TCPH), along with the Community Health Assessment Steering Committee, present a comprehensive community based plan for improving the health of Teller County residents. The community assessment process, known as CHAPS, involved substantial and significant input from community partners and committee members alike. The Public Health Improvement Plan (PHIP) is designed to be utilized by county agencies, community organizations, healthcare providers and facilities, and leaders to facilitate positive change in Teller County.

Teller County Public Health's Improvement Plan (PHIP) aligns with current state and national health priorities. The two priority health concerns identified by the community assessment process and Steering Committee evaluation are both included in the U.S. Department of Health and Human Services Healthy People 2020 campaign, the Center for Disease Control's (CDC) National Prevention Strategy, and the Affordable Care Act's thrust toward integrated health care. Behavioral Health and Substance Abuse also aligns with the Colorado State Department of Public Health and Environment's 10 Winnable Battles campaign, and Colorado Governor Hickenlooper's mental health & prescription drug misuse improvement plans.

The U.S. Department of Health & Human Service, a Federal agency, initiated Healthy People 2020 to provide science-based, 10-year national objectives for improving the health of all Americans. Healthy People 2020 established benchmarks and monitors progress over time in order to 1) Encourage collaborations across communities and sectors; 2) Empower individuals toward making informed health decisions; and 3) Measure the impact of prevention activities. One of Healthy People 2020's goals in the areas of "Mental Health and Mental Disorders," MHMD, (objective number 11) is to "Improve mental health through prevention by ensuring access to appropriate, quality mental health services." It includes specific treatment expansion objective MHMD-11.1 described as increasing the proportion of primary care physicians who screen adults aged 19 and older for depression during office visits and MHMD 11.2, described as "increase the proportion of primary care physicians who screen youth aged 12 and older for depression during office visits."

Also, at the national level, the National Prevention Council, a component of the CDC, issued its National Prevention Strategy in June 2012 outlining its prevention goals. The National Prevention Council, called for by the Affordable Care Act, provides coordination and leadership at the federal level regarding prevention, wellness, and health promotion practices. The National Prevention Council comprises 17 Federal departments that are incorporating prevention in their activities. Their action plan demonstrates how these departments are implementing prevention efforts, in line with their respective missions, to achieve the National Prevention Strategy Goal of mental and emotional well-being. Towards this goal, objective 4 is described as "Promoting early identification of mental health needs and access to quality services."

On March 23, 2010, President Obama signed the Affordable Care Act (ACA) into law. The ACA puts in place comprehensive health insurance reforms that will roll out over four years and beyond. Effective January 1, 2013, the ACA improved preventive health coverage to include alcohol misuse screening and counseling for adults, depression screening for adults, depression screening for adolescents, and alcohol and drug use assessments for adolescents.

The ACA is designed to improve service integration and coordination for physical primary care and mental health care, as well as to provide billing options facilitating integrated health care practice. The ACA aims to educate primary care providers about the co-morbid medical and psychological conditions that so often occur, but thus far, have not been well coordinated.

At the state level, the Colorado Department of Public Health and Environment (CDPHE) has identified 10 health-related issues known as the 10 Winnable Battles Campaign. One of the focus areas of the campaign is mental health and substance abuse. Current focus in this winnable battle is centered on Prescription Drug misuse, adult depression, postpartum depression, and screening for depression in adolescents. Colorado currently has the second-worst rate of pain pill abuse in the U.S. according to the 2011 National Survey on Drug Use and Health. In addition, a 2011 Youth Risk Behavior Survey conducted in Colorado revealed that 29.2% of 12th graders had taken a prescription medication without a doctor's prescription. Lastly, during two National Take-Back initiative events in 2012, hosted by the U.S. Drug Enforcement Administration and local law enforcement agencies, Coloradoans turned in more than 30,000 pounds of unused medications.

Colorado was one of seven states funded by the National Governors' Association to develop a strategic plan to reduce prescription drug misuse in Colorado. Governor Hickenlooper is working with CDPHE to develop strategic options to reduce misuse and abuse, one focus being the collection and safe disposal of unused prescription drugs.

In addition at the state level, in December 2012, Governor Hickenlooper introduced a plan to redesign and strengthen Colorado's mental health services and support system in response to the recent Colorado mass shooting. Five key strategies being discussed are 1) provide the right services to the people at the right time; 2) enhance Colorado's crisis response system; 3) expand hospital capacity; 4) enhance community care and; 5) build a trauma-informed culture of care. The goal of this initiative is to help ensure Colorado has the capacity and quality of mental health supports, services, and resources to meet the needs of all Coloradoans, thereby keeping communities safer for everyone.

Action Plans

The following action plans detail the initial steps that will be taken by TCPH over the next 5

years. Implementation of the strategies listed in the action plan will not succeed without the continued involvement of its community stakeholders. Further identification and implementation of strategies will require ongoing partnerships to address each priority area and set measurable goals. The implementation of select strategies will be monitored annually by TCPH. Emerging health needs may require the re-alignment of resources. Adaptability will be necessary to ensure positive impact on the health of Teller County residents.

Teller County Public Health is committed to its mission of preventing disease, and protecting and promoting the health of its citizens.

References

1. 2010 United States Census Bureau
2. Colorado Department of Public Health and Environment, Indicators. Available from, www.cdphe.org
3. Bureau of Labor Statistics Sept. 2011, Regional Economic Information System, Bureau of Economic Analysis Sept. 2011, U.S. Census Bureau, Sept. 2011
4. Colorado Department of Public Health and Environment. 2008/2010.
5. Colorado Department of Public Health and Environment. Colorado Health Information Dataset: 2008-2010
6. Colorado Department of Public Health and Environment, Health Statistics, Centers for Disease Control and Prevention
7. Colorado Department of Public Health and Environment, Health Statistics, Centers for Disease Control and Prevention
8. Colorado Department of Public Health and Environment, Health Statistics, Centers for Disease Control and Prevention
9. Cripple Creek Colorado. Gambling and Casinos. Available from, www.visitcripplecreek.com/casinos
10. Centers for Disease Control and Prevention (CDC). Indoor Environmental Quality. Available from, www.cdc.gov/niosh/topics/indoorenv
11. Colorado Department of Public Health and Environment, Indicators. Available from, www.cdphe.org
12. Colorado Department of Public Health and Environment, Indicators. Available from, www.cdphe.org
13. Colorado Department of Public Health and Environment/Air Pollution Control Division. 2009 Data
14. Mosby's Medical Dictionary. Health Behavior. Available from, www.medical-dictionary.thefreedictionary.com
15. The National Bureau of Economic Research. Trends in Health Behaviors and Health Outcomes. Available from, www.nber.org/aginghealth/spring07
16. CDC. Indoor Environmental Quality. Available from, www.cdc.gov/niosh/topics/indoorenv
17. Colorado Department of Public Health and Environment, 2008/2010.
18. Colorado Department of Public Health and Environment, 2008/2010.
19. Colorado Health Information Database, CDPHE
20. Centers for Disease Control and Prevention, Adult Obesity Facts. Available from, www.cdc.gov/adultobesityfacts
21. Centers for Disease Control and Prevention, Adult Obesity Facts. Available from, www.cdc.gov/adultobesityfacts

22. Healthy Kids Colorado Survey, 2011-2012.
23. Centers for Disease Control and Prevention (CDC). Physical Activity. Available from, www.cdc.gov/physicalactivity
24. Sacher, 2005
25. Centers for Disease Control and Prevention (CDC). Injury and Violence Prevention and Control. Available from, www.cdc.gov/injury/index.html
26. Colorado Department of Public Health and Environment. Available from, www.ColoradoHealth Indicators/sexualhealth.com
27. March of Dimes. Low Birth Weight. Available from, www.marchofdimes.com/medicalresources.lowbirthweight
28. Centers for Disease Control and Prevention (CDC) Tobacco. Available from, www.cdc.gov/tobacco
29. Medline Plus. Mental Health. Available from, www.vsearch.nlm.nih.gov
30. United States Public Health Service. Mental Health: A Report of the Surgeon General. Available from, www.surgeongeneral.gov/library/mentalhealth/toc.htm
31. European Union Public Health Information Systems. Perceived Health. Available from, www.euphix.org
32. Robert Woods Johnson Foundation. Cover the Uninsured. Available from, www.rwjf.org/files/publications/books/2006/chapter_03.pdf
33. Youth Risk Behavior Surveillance Survey. 2005, 2007, 2009 for Teller County. Available from, www.cdc.gov/healthyyouth/data
34. National Heart, Lung, and Blood Institute/NIH. What is Asthma? Available from, www.nhlbi.nih.gov/health/dci/diseases
35. Medical News Today. All About Diabetes. Available from, www.medicalnewstoday.com/info/diabetes
36. Thompson WW, Shay DK, Weintraub E, et. Al. (September 2004). Influenza Associated Hospitalizations in the United States 1979 through 2000-2001 Respiratory Seasons. JAMA; 292, No. 11
37. Merraim Webster Online Dictionary. Mortality. Available from, www.merriam-webster.com/dictionary/mortality
38. Word IQ. Life Expectancy- Definition. Available from, www.wordiq.com/definition/life_expectancy
39. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System. 2000-2006, Murray, et.al., Plos Medicine 2006 vol. 3, No. 9, e260.