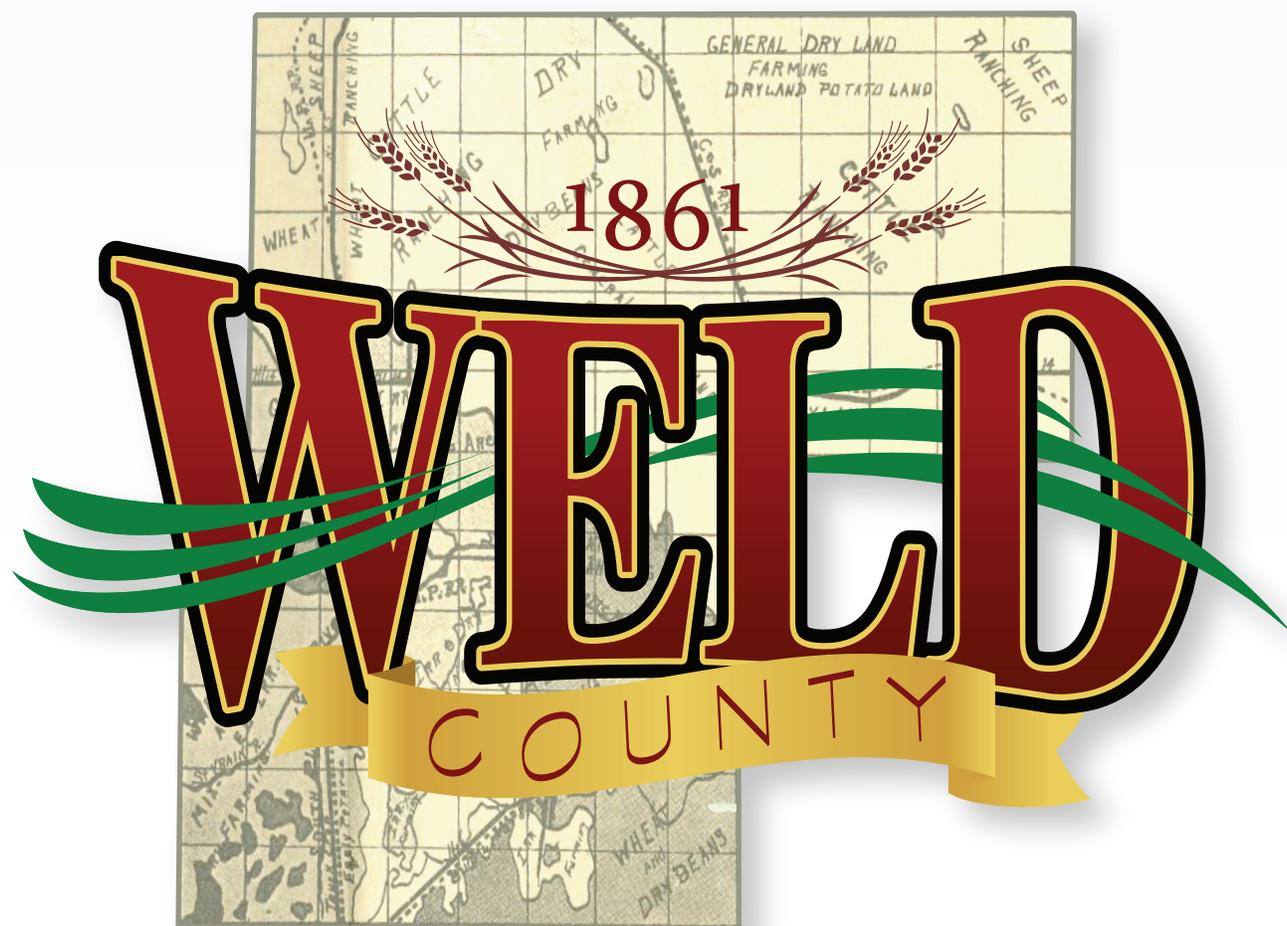


# The 2012 Health Status Report

## Community Health Improvement Plan



*A roadmap for improving Weld County's health.*

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## A Message to the Community

We are proud to present you with this report, *The 2012 Health Status Report and Community Health Improvement Plan, A Roadmap for Improving Weld County's Health* – a comprehensive collection and analysis of data related to the health issues and needs of the residents of Weld 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 Weld 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.

## Weld County Framework for Monitoring Population Health Status

Understanding the health of a population or its subgroups is complex. Substantial improvements in our population's health status have been made over the past thirty years, but there is still much work to be done because there continue to be unexplained differences in health status. Most health experts agree that in addition to individual behavioral factors (e.g., diet, nutrition, physical activity, access to services) there are other social and environmental factors that impact a person's health and, hence, a population's health status (see Figure 1). For example, in addition to individual choice in terms of seeking health services, factors in the social environment such as income or transportation also influence or limit health services.

**Figure 1.** Societal, Environmental, and Individual Influencers on Population Health



The report is organized using a determinant of health framework adapted by a statewide taskforce of public health experts from the World Health Organization's Social Determinants of Health Framework. Determinants of health are factors that encourage life enhancing resources that when distributed across a population can improve that population's life expectancy and quality of life. Most health care and public health work has focused on individual influencing factors but recently the health community has begun to look at other social and environmental factors more closely. For more information on this framework go to <http://www.chd.dphe.state.co.us/HealthIndicators> and look for the Health Equity Model developed by the statewide task force.

*“Community health assessment process is a proven and effective tool in improving the health of a community.” (Institute of Medicine, 1988)*

## About this Report

This report profiles the health status of Weld County residents, including the important socio-economic and environmental factors that play a critical role in determining health status. Data are presented at the county level and in some instances in sub-county regions. A variety of data and data sources were used. To make this report more readable and useful, detailed information about data sources and references were kept to a minimum in the body of the report but information can be found at the end of the report. Most of the data come from the Colorado Department of Public Health and Environment and are publicly available on their web site. They have over 350 validated indicators available on their website at:

<http://www.chd.dphe.state.co.us/HealthIndicators>. Analyses presented in this report were carried out by the staff of the Weld County Department of Public Health and Environment. Four comparison counties are used throughout this report – Boulder, Larimer, Mesa, and Pueblo. An explanation of how these counties were chosen as comparison counties can be found at the end of the report. This report is for public use and may be used without obtaining permission from Weld County. For more information about the report and plan, contact the Weld County Public Information Officer, at [info@weldhealth.org](mailto:info@weldhealth.org) or by phone at: (970) 304-6470.

## Background on Weld County

Weld County incorporates 4,021 square miles within the relatively flat eastern portion of Colorado. The northeastern portions of the county contain the extensive *Pawnee National Grassland* and the *Pawnee Buttes*. Along the western border are low hills that are an indication of the foothills of the Rocky Mountains 30 miles further west. While traditionally rural in nature, due to its proximity to major transit routes and the Denver metro area, many communities in the county have seen rapid population growth and are becoming more urban and suburban in character. The overall population density in the county is 63 persons per square mile which is still quite a bit lower than its neighboring western border counties of Larimer which is 115 persons per square mile and Boulder which is 406 persons per square mile.

### *Weld County Demographic Snapshot*

- 252,825 residents (2010)
- Most residents are White (69%), followed by Latino (27%), Asian (1%), and African American (1%)
- 14% live in poverty (2010)
- 11% of children and 22 % of adults (18-64 yrs) are uninsured
- 3,955 live births annually

Weld County has 26 incorporated and 21 unincorporated towns and municipalities. Greeley is the largest city with 92,889 people or 37% of the population. There are 12 organized school districts in Weld County ranging from the largest, School District Six in Greeley/Evans, to the smaller school districts of Prairie and Pawnee on the eastern plains. Greeley is home to the University of Northern Colorado as well as Aims Community College with a second Aims Campus in Ft Lupton. The county is served by several health care systems including two community-based health centers, and a large network of medical providers. The transit routes in the county include two interstate highways: I-25 (US 87) which runs north and south through western Weld County and I-76 that runs from the south central edge northeastward to the Morgan county border. Other major roads include US 85 and US 34, which intersect near Greeley, and State Highway 14, which runs through Ault. Local bus service is available within Greeley and Evans, but is more limited or nonexistent in other Weld County communities.

# Community Demographics

## Population

In 2010, there were 252,825 people living in Weld County, according to the 2010 U.S. Decennial Census. Most of that population (83.2%) lives in cities and towns. The county's population has grown by 40 percent since the 2000 U.S. Census. Greeley and Evans are home to nearly 111,500 residents. Weld is one of the top ten most heavily populated counties in the state and its growth since the 2000 U.S. Census was only surpassed by one other Colorado county - Douglas. In comparison, Colorado has grown 17 percent overall compared to other states since the year 2000.

Eleven Weld County communities have growth rates higher than the county's growth rate of nearly 40 percent. These include: Firestone (431.8%), Severance (430.2%), Frederick (251.8%), Erie (188.3%), Johnstown (158.4%), Lochbuie (130.7%), Evans (94.8%), Milliken (94.3%), Mead (68.8%), Eaton (62.3%), and Hudson (50.5%) (see Table 1). Greeley's growth rate (20.7%), however, was lower than the county overall but still higher than the state growth rate. Other communities had smaller or negative growth rates.

**Table 1.** Population Growth in Selected Weld County Communities, 2000-2010

	% Growth
Firestone	431.8
Severance	430.2
Frederick	251.8
Erie	188.3
Johnstown	158.4
Lochbuie	130.7
Evans	94.8
Milliken	94.3
Mead	68.8
Eaton	62.3
Hudson	50.5
Countywide	39.7
Greeley	20.7

Source: US Census Bureau

Many communities south of Greeley (and Evans) make up the fastest growing communities in the county, adding over 41,000 new residents since 2000. Greeley, Evans, Firestone, and Erie make up more than 50 percent of the county's growth since 2000 (see Table 2).

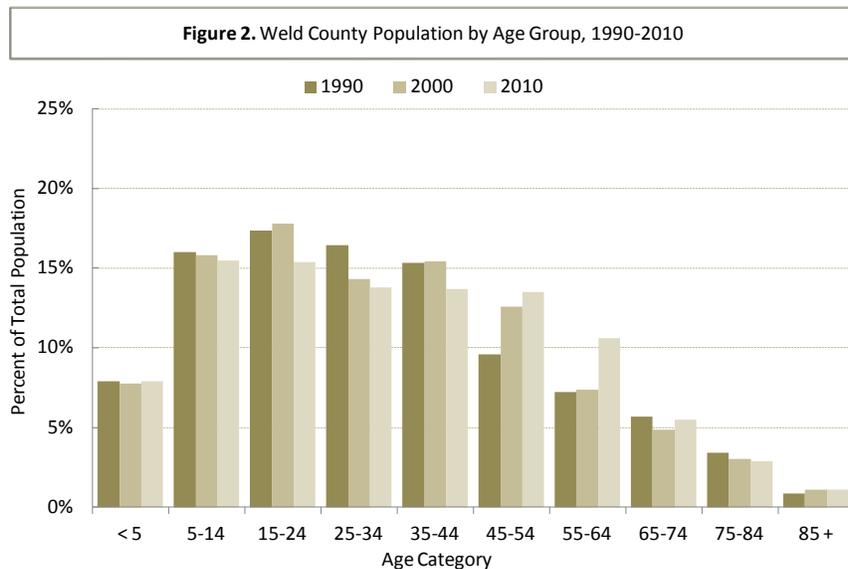
**Table 2.** Number of New Residents in Selected Weld County Communities, 2000 - 2010

	2010 Population	2000 Population	New Residents
Countywide	252,825	180,936	71,889
Firestone	10,147	1,908	8,239
Severance	3,165	597	2,568
Frederick	8,679	2,467	6,212
Erie	18,135	6,291	11,844
Johnstown	9,887	3,827	6,060
Lochbuie	4,726	2,049	2,677
Evans	18,537	9,514	9,023
Milliken	5,610	2,888	2,722
Mead	3,405	2,017	1,388
Eaton	4,365	2,690	1,675
Hudson	2,356	1,565	791
Greeley	92,889	76,930	15,959

Source: U.S. Census Bureau

### Age of Residents

In 2010, the median<sup>1</sup> age in Weld County was 33.1 years, which is younger than the overall Colorado median age of 36.1 years but higher than the median age in Greeley of 29.8 years. The age structure of Weld County's population continues to shift similar to the national pattern, which has shown growth in older age ranges due to aging *baby boomers*. As can be seen in Figure 2, the percentages of the total population in the older age groups (45 to 54, 55 to 64, and 65-74 years) are increasing and the percentages in the younger age groups are decreasing. The most notable increase was found among 55 to 64 year old residents which increased from 7.2 percent in 1990 to 10.6 percent in 2010.



<sup>1</sup> The median is the number in the middle where 50 percent of the values are higher and 50 percent are lower.

## Race and Ethnicity

In 2010, 68.8 percent of Weld County’s residents were white and 27.4 percent were Hispanic/Latino. Weld County had lower percentages of whites (68.8% vs. 70.0%), African Americans (0.7% vs. 3.8%), American Indians (0.4% vs. 0.6%), and Asians/Pacific Islanders (1.2% vs. 2.8%) but had a higher percentage of Hispanics/Latinos (27.4%) than Colorado (20.7%). In comparison to the city of Greeley, Weld County had a higher percentage of whites (68.8% vs. 59.3%) and lower percentage of Hispanics/Latinos (27.4% vs. 36.0%).

**Table 3.** Population Estimates by Race/Ethnicity, 2010

	Total Population	Non-Hispanic						Hispanic origin (of any race)
		White	Black/African American	American Indian & Alaska Native	Asian/Pacific Islander	Some other race	Two or more races	
Colorado	5,029,196	70.0%	3.8%	0.6%	2.8%	0.2%	2.0%	20.7%
Weld	252,825	68.8%	0.7%	0.4%	1.2%	0.1%	1.4%	27.4%
Greeley	92,889	59.3%	1.4%	0.4%	1.4%	0.2%	1.3%	36.0%

Source: U.S. Census Bureau

## Language/Foreign Born/Nativity

In 2010, 81.4 percent (190,957) of Weld County residents 5 years and older reported speaking only English at home. The remaining 18.6 percent of residents (43,528) spoke a language other than English at home. Of these residents, 89.8 percent (39,083) spoke Spanish, 4.4 percent (1,914) spoke a language related to their Asian or Pacific Islander heritage, and the remaining 5.8 percent (2,528) spoke other languages at home. In 2010, 9.5 percent (24,252) Weld County residents were born outside the United States, which is similar to the percentage of foreign born residents living in Colorado overall (9.8%).

## Determinants of Health

Health starts in our homes, schools, workplaces, neighborhoods, and communities. Taking care of ourselves includes eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick. These individual, personal behaviors and choices influence health. Our health is also determined, in part, by: a) access to social and economic opportunities; b) the resources and supports available in our homes, neighborhoods, and communities; c) the quality of our schools; d) the safety of our workplaces; e) the cleanliness of our water, food, and air; and f) the nature of our social interactions and relationships. The conditions in which we live explain in part why some residents are healthier than others.

*“Health care matters to all of us some of the time, public health matters to all of us all of the time.”*

*— C. Everett Koop*

Examples of *social determinants* include:

- Resources to meet daily needs (e.g., safe housing and local food markets)
- Access to educational, economic, and job opportunities
- Social support, networks, and participation
- Exposure to crime, violence, and social disorder

Examples of *physical determinants* include:

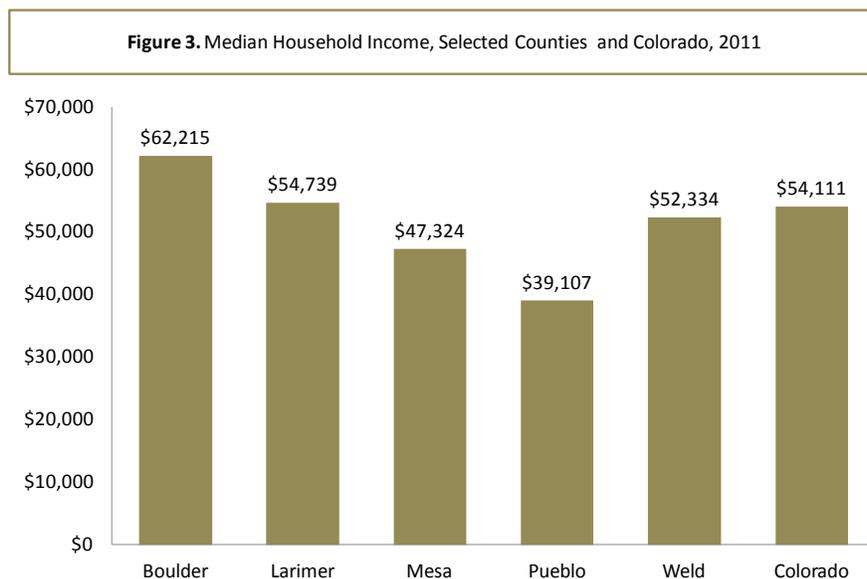
- Community design and neighborhood upkeep
- Transportation - sidewalks, bike lanes, and roads
- Physical barriers, especially for people with disabilities

This next section highlights the economic, physical, and social factors that influence health.

## ***Economic Opportunity***

### **Household and Household Income**

In 2010, there were an estimated 89,349 households in Weld County. From 2000 to 2010, however, the total number of households grew by 41.3 percent. The current median household income is \$52,334, which is higher than the national median household income of \$50,046, but lower than Colorado’s median household income of \$54,111. The average number of persons per household in Weld County in 2010 was 2.76, which is higher than the national average of 2.58 persons per household and the Colorado average of 2.49, indicating that more people reside within Weld County homes.



Source: U.S. Census Bureau, Small Area Income & Poverty Estimates

## **Poverty**

Poverty is defined by using a set of income thresholds that vary by family size and composition. If a family’s total income is less than the family’s threshold, then that family and every individual in it is considered in poverty. In 2010 the U.S. Census Bureau defined the poverty threshold for a family of four to be \$22,314 and for a family of two adults aged 65 years and over it was \$13,194. In 2010, an estimated 35,454 (14.3%) of the total population in Weld County were living at or below poverty level. The poverty rate is slightly lower than the United States (15.3%) and slightly higher than Colorado (13.2%). In 2010, the percent of Weld County children that live in a family with a total income below the poverty level was 18.5 percent, higher than the 17.1 percent of all children in Colorado and lower than the 21.6 percent of all children living in the United States.

## Employment Status

Currently, the unemployment rate in Weld County is 8.7 percent, which is slightly higher than the 7.7 percent rate for the state of Colorado (November, 2011). The largest major industry sectors where people are employed within the county include: manufacturing (13.5%), education services (11.1%), and health care and social assistance (10%). The largest major occupational groups employed within the county are office and administrative support occupations (21.1%), sales and related occupations (15.6%), and food preparation and service related occupations (12.1%).

In 2010, the non-seasonally adjusted average annual unemployment rate in Weld County was 10.2 percent which was higher than Colorado (8.9%) and the U.S. (9.6%). Weld County's unemployment rate was similar to Mesa and Pueblo counties but still higher than the two neighboring counties of Boulder and Larimer (Table 4).

**Table 4.** Unemployment Rates, 2010

	Annual Unemployment Rate (%)
Boulder	7.1
Larimer	7.4
Mesa	10.6
Pueblo	10.4
Weld	10.2
Colorado	8.9
US	9.6

Source: Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics

## Education

According to the latest Census (2010), Weld County has nearly the same percentage of high school graduates (85.3%) as the United States (85.6%) but a lower percentage of high school graduates than Colorado overall (89.7%).

In 2010, the total school enrollment (prekindergarten to college) in Weld County was 74,391. During the 2009-2010 school years, the dropout rate for Weld County public school students enrolled in grades 7 through 12 was 2.4 percent, which is slightly lower than Colorado's rate of 3.1 percent. The four-year on-time high school completion rate among Weld County students is 74.9 percent which is similar to Colorado's rate of 75.9 percent.

## Homeownership

The homeownership rate in Weld County is 69.5 percent, which is higher than the state rate of 65.5 percent. The median home value<sup>2</sup> in Weld County is \$182,500 which is lower than Colorado where the median home value is \$236,600. The median home value in Greeley is \$165,100. Among renters in Weld County, 46.1 percent of renters spend nearly a third of their monthly income in gross rent costs, which is similar to Colorado's rate of 47.5 percent.

## Food Insecurity

Food is a basic need and important determinant of health. Food insecurity is an involuntary state that means, at times, family members in a household do not have enough food for an active healthy life. People who experience food insecurity are unable to have an adequate diet in terms of quantity and quality. People experiencing food insecurity consume fewer servings of fruits and vegetables, milk products, and vitamin-rich

<sup>2</sup> Median home value is the home price that is exactly in the middle of all the home prices in Weld County and is a better measure of housing than the mean or average.

foods than those living in food-secure homes. There are a variety of ways to gauge food insecurity such as those homes that use food stamps or utilize food bank resources, as explained below.

According to the U.S. Census Bureau, 8,236 Weld households (9.2% of all households) receive food stamps. Most of those households (59.7%) have children under the age of 18 years living in the home. Eighteen percent have one or more people 60 years and older living in the home. Just over half the homes (51%) receiving food stamps have one or more people with a disability living in the home. Among households receiving food stamps, 20.6 percent had no one working in the previous 12 months and the median income in those households was \$19, 133.

Since 2007, the Weld Food Bank estimates that it serves over 20,000 residents in need and distributes millions of pounds of food each year (personal communication, Weld Food Bank Resource Manager). In 2011, eight million pounds of food was distributed. According to the 2010 Weld Community Health Survey, 6.4 percent of the respondents (or about 5,700 households) said they or someone in their household needed and used food bank assistance in the previous twelve months. Another 5.1 percent of respondents said that someone in the household needed but did not use food bank assistance in the previous twelve months. Over the past several years, the demand for emergency food has increased in Weld County. Last year the Weld Food Bank distributed 30,135 emergency food boxes, which was a 6.5 % increase over the prior year.

### ***Physical Environment***

People interact with their physical environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities. A focus on the physical (i.e., built) environment consists of preventing or controlling disease, injury, and disability related to the interactions between people and their environment. Maintaining a healthy physical environment is central to increasing quality of life and years of healthy life. Worldwide, nearly one out of four deaths (and the total disease burden) can be attributed to environmental factors such as: a) exposure to hazardous substances in the air, water, soil, and food, b) natural and technological disasters, c) physical hazards, d) nutritional deficiencies, and e) the built environment. Features of the built environment can impact an individual's health-influencing behaviors, physical activity patterns, social networks, and access to resources.

### **Environmental Quality**

#### ***Air and Water***

Decreasing air pollution is an important part of creating a healthy environment. Weld County air quality is in attainment with the National Ambient Air Quality Standards (NAAQS's) for all EPA air pollutants except for ozone. The elevated ground level ozone concentration and air quality in the southern two-thirds of Weld County is part of the 9-county Denver Metro area where there are primarily respiratory impacts on human health.

Water quality affects the health of people, livestock, wildlife, and the environment. Therefore, everyone has a stake in maintaining and protecting surface and ground water sources. While most Weld County residents get their water from surface water sources, approximately 25,000 – 30,000 residents use ground water as their primary source of consumptive water (Weld County Department of Public Health and Environment). Currently, there are nearly 18,000 constructed and another 3,500 permitted but not constructed ground water wells in Weld County. Types of wells include drinking water, commercial, industrial, monitoring, irrigation, municipal water supplies, stock and wildlife wells (Division of Water Resources, 2011). Between 2006 and 2010, roughly 500 new ground water well permit applications per year were received by the State of Colorado. Weld County

Department of Public Health and Environment's staff are actively involved in monitoring and preserving the county's water sources through involvement in the North Front Range Water Quality Planning Agency and the Big Thompson Watershed Forum among other activities.

### *Healthy Housing*

Most people spend at least half their day inside their homes. Unhealthy housing conditions may seem like cosmetic conditions (e.g., peeling paint that contains lead) or be invisible such as radon gas and lead are a danger to one's health. These potential hazards that can lurk in a home and cause human illness are reported here.

Lead from paint can be dangerous especially to young children and infants. In Weld County, an estimated 18 percent of the total housing units may be at risk for containing lead-based paint because they were built before 1960. This rate is slightly lower than the overall Colorado rate of 21.2 percent but slightly higher than the rate in Boulder (14.9%) and Larimer (13.6%) counties.

Radon is a colorless, odorless, radioactive gas that forms naturally in soil when uranium breaks down in that soil. Radon can seep into our homes through cracks and openings in floors and crawlspaces. Radon gas becomes part of the air we breathe and is known to cause lung cancer. In fact, radon is the second leading contributor to lung cancers in the United States and is the leading cause of lung cancer deaths in non-smokers. In Colorado we have high levels of radon in our soils. EPA maps of the 64 Colorado counties indicates that most counties have average levels greater than 4 picocuries per liter (pCi/L), which is the level recommended for radon mitigation.

Since radon testing is not required in Colorado, information about its prevalence and impact is limited. However, Colorado homeowners are encouraged to buy indoor air test kits to determine if radon levels are high (above 4 pCi/L) in their home. Because testing is voluntary and varies widely from county to county, comparing radon levels in different areas of the state is not an accurate estimate of the prevalence of risk associated with radon gas in Weld County, but is considered a *snapshot* of Weld County's testing rate as baseline for future reference and planning purposes. Between 2005 and 2009, 1029 homes in Weld County were tested for radon and 51.8 percent of the homes tested had radon levels above 4 pCi/L.

## **Crime and Public Safety**

### *Crime*

The Colorado Bureau of Investigation (CBI) collects and publishes crime statistics statewide. Data are based on individuals arrested by a particular agency (e.g., municipal or county police department) and were assigned to the appropriate county. An individual is only counted once based on the most serious offense each time he/she is arrested. Violent crime arrests include arrests for murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime arrests include burglary, larceny-theft, motor vehicle theft including "joy riding", and arson. In order to compare arrests geographically, the number of arrests are divided by the appropriate adult or juvenile total population and then multiplied by 100,000 to obtain a population-based rate.

Weld County's violent crime rates are much lower than the state rates (Table 5). Weld's adult violent crime rate (114.6) is similar to Boulder (116.5) and Larimer (93.4) whereas the juvenile violent crime rate of 117.4 per 100,000 juveniles aged 10 – 17 years is similar to Mesa County's (113.1).

**Table 5.** Adult (18+ years) and Juvenile (10-17 years) Violent Crime Rates per 100,000 Population, 2010

	Adult Violent crime	Juvenile Violent Crime
Boulder	116.5	159.8
Larimer	93.4	133.4
Mesa	130.1	113.1
Pueblo	197.3	171.5
Weld	114.6	117.4
Statewide	156.7	158.9

Source: Colorado Bureau of Investigation

The pattern of property crime rates is somewhat different from the violent crime rates. Weld County's adult property crime rate (485.7) and its juvenile property crime rate (1462.5) are slightly higher than the state's rates of 463.5 and 1347.9, respectively. Adult property crime rates are similar to Boulder and Larimer counties whereas the juvenile property crime rate is similar to the rate in Larimer County.

**Table 6.** Adult and Juvenile Property Crime Rates per 100,000 Population, 2010

	Adult Property crime	Juvenile Property Crime
Boulder	430.5	930.6
Larimer	391.4	1667.5
Mesa	546.3	2096.5
Pueblo	173.1	Not available
Weld	485.7	1462.5
Statewide	463.5	1347.9

Source: Colorado Bureau of Investigation

### *Perceived Safety*

Questions about residents' perceptions of safety were asked in two surveys, the Colorado Child Health Survey and the Weld County Community Health Survey. The former survey asked parents to what extent they felt their child was safe in their community or neighborhood. The Colorado Child Health Survey is a telephone-based survey where randomly selected families with children between the ages of 1 and 14 years old are asked to participate after completing the adult-based Behavior Risk Factor Surveillance Survey. About 1,000 child health surveys are completed annually statewide. To obtain county-level estimates, three years of data are combined and then, if more than 50 responses are obtained within a county for the three year period, data are weighted to obtain those county-level estimates. The Weld County Community Health Survey is a mail-based random sample survey that asked residents to rate their concern about neighborhood safety in their particular city, town, or rural area where they live. In 2010, 3,383 residents completed the Weld County survey. These data were also weighted to reflect the county population as a whole.

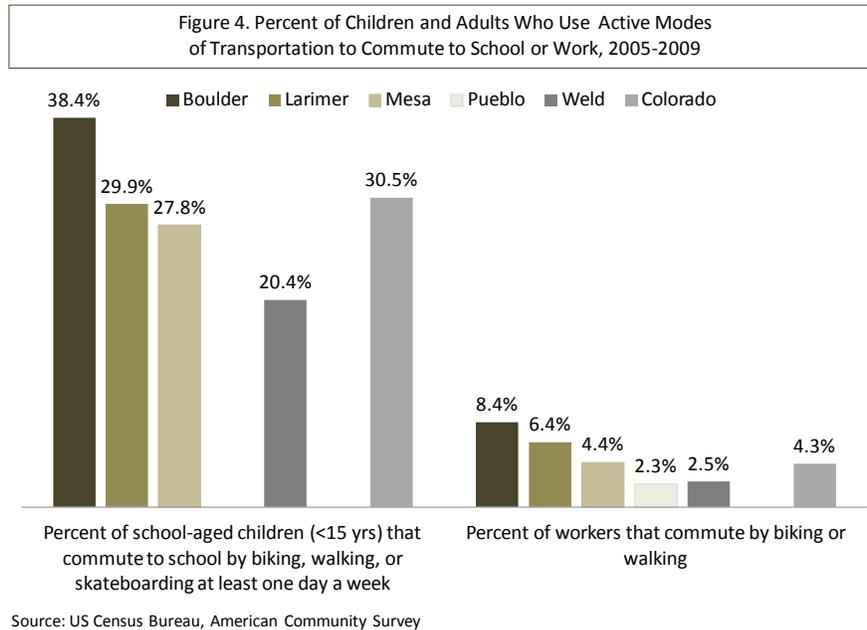
During 2007 to 2009, 96 percent of parents in Weld County said they felt their child was usually or always safe in their community or neighborhood compared to 93 percent of parents who felt this way statewide. Weld County parents' perceptions were similar to Boulder (97%), Larimer (97%), and Mesa (93%) counties. Pueblo County parents' perceptions of their child's safety, however, were much different and lower, with only 86 percent saying they felt their child was usually or always safe in their community/neighborhood.

In 2010, among the 1,436 households with children surveyed, 82 percent of Weld County parents said they were concerned about neighborhood safety in the community in which they live. Parent concerns about neighborhood safety varied by geographic location in the county. Seventy-eight percent of Greeley and Evans parents said they were very or moderately concerned about neighborhood safety compared to 67 percent of parents residing in southeast Weld County communities and 59 percent of parents residing in southwest Weld County who were very or moderately concerned about neighborhood safety in their community. Finally, only 48 percent of parents residing in north Weld County communities were either very or moderately concerned about neighborhood safety.

## Built Environment

Creating health-promoting environments is complex. In Weld County, this is complicated by the geographic size of the county which is so large (4,022 square miles) with a diverse population density mixture of rural and urban areas. In some communities, there may be limited options to use active modes of transportation (i.e., walking or biking) to commute to work or school. Interestingly, the majority of residents (74.9%) say that the sidewalks and shoulders in their neighborhood are sufficient to walk, run, or bicycle but this percentage is lower than what Coloradoans report overall (83.9%).

Only 2.5 percent of Weld adults commute to work by biking or walking compared to 4.3 percent of adults statewide (see Figure 4). More importantly, the proportion of Weld County school-aged children (less than 15 years old) that bike, walk, or skateboard to school is 20.4 percent compared to 38.4 percent in Boulder, 29.9 percent in Larimer, 27.8 percent in Mesa, and 30.5 percent statewide. This limited activity contributes to less physical activity among Weld County residents.



Living in neighborhoods with easy access to grocery stores and services such as libraries, senior centers, and recreation facilities as well as to restaurants and entertainment can make daily life less stressful and more enjoyable for individuals and families.

In Weld County, however, there is less than one healthy food establishment for every 10,000 residents (0.9 per 10,000). A healthy food establishment is defined here as either a grocery store or supermarket with four or more employees or a produce stand or farmer's market. The definition includes delicatessen-type establishments that sell canned and frozen foods, fresh fruits and vegetables, and fresh and prepared meats, fish, and poultry but does not include convenience stores using the North American Industry Classification System and U.S. Census Bureau Business Pattern data. For comparison, the overall rate in Colorado is 1.1 healthy food establishments for every 10,000 residents. Weld County's rate is similar to Larimer (0.9), Mesa (1.0), and Pueblo (0.8) counties, but less than Boulder County's (1.3) rate.

Using the same definition of healthy food establishments but looked at a different way, 52 percent of Weld County's twenty-nine zip codes have a healthy food outlet compared to 59 percent of Colorado's 442 zip codes overall. This rate is similar to Mesa County's rate of 50 percent but lower than Larimer (73%), Boulder (73%), and Pueblo (82%) counties.

### ***Social Factors/Environment***

The social environment includes those things that contribute to one's ability to relate to others and is a major determinant of health. The strength of social networks within a community, social stability, recognition of diversity and culture, safety, good working relationships, civic participation, and volunteerism are part of the social environment. A healthy social environment can help individuals or groups reduce or avoid many potential risks to good health. The caring that comes from social networks brings a sense of well-being and seems to act as a buffer against health problems. A social environment that supports people working together on common issues through partnerships is invaluable and contributes to good health.

Over the past several decades, health researchers have found evidence that an individual's social environment or culture as well as their lifestyles and behaviors can influence the incidence of illness in a population. Exactly which social factors influence health is still being studied, but several recommended indicators such as participation, political influence, and violence are summarized here.

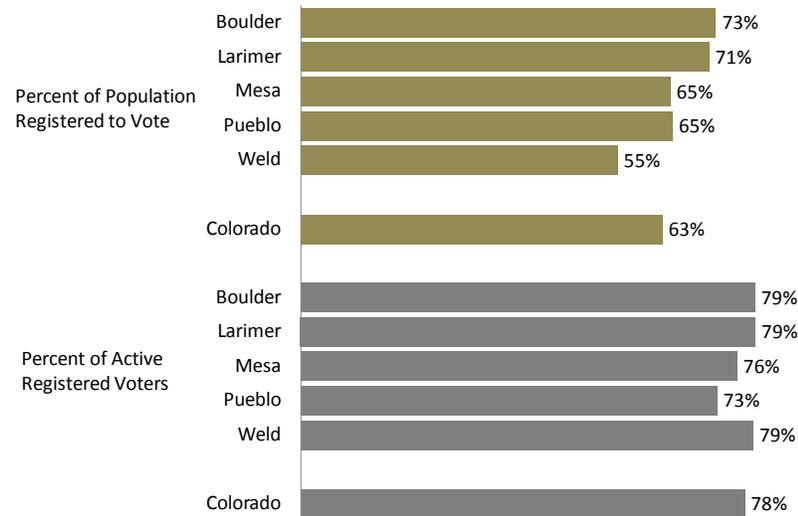
### **Participation**

Participation in one's social environment may include using local facilities such as community libraries. One indicator often used is the percent of residents residing in a library service area that are registered public library borrowers. In Weld County, 51 percent of residents residing in a library service area are registered borrowers. This same indicator for Colorado overall is slightly higher at 58 percent. The neighboring counties of Boulder and Larimer have higher rates of resident library borrowers at 72 and 62 percent respectively. Pueblo County's library borrower rate is also higher than Weld's at 64 percent, whereas Mesa County's rate is slightly lower at 47 percent.

### **Political Influence**

Political participation, sometimes called political influence, is another social well-being indicator. This is often measured by two related indicators: a) the percent of the population that is registered to vote, and b) the percent of active registered voters. In 2009 in Weld County, 55 percent of the population was registered to vote and 79 percent of the registered voters were considered active voters because they either voted or kept their voter registration information up-to-date in recent general elections. The Weld County rate of registered voters is quite a bit lower than the state rate of 63 percent and lower than the four comparison counties shown in Figure 5 (top portion). However, the percent of Weld County registered voters considered to be active is similar (79%) to the state rate (78%) and the four comparison counties.

**Figure 6. Political Participation and Influence, 2009**



Source: Colorado Secretary of State

## Violence

Violence also affects one’s social environment. Violence is widespread in society and is one of the top killers for Americans of all ages. Although many people accept violence as “acts of fate” or “part of life”, most violent-related deaths are predictable and preventable. Violence can have a significant impact on individual well-being by contributing to premature death, disability, poor mental health, high medical costs, and lost productivity. The effects of violence extend beyond the individual victim to family members, friends, coworkers, employers, and communities. Most recently, violence prevention specialists are trying to better understand trends related to bullying, dating violence, and sexual violence among youth as well as elder maltreatment. These two violence indicators and child maltreatment will be discussed here.

Child and elder maltreatment rates are shown in Table 7. Weld County’s child maltreatment rate (7.9 per 1,000) is lower than the state rate (9.1 per 1,000) and similar to Boulder and Larimer counties rates. Weld County’s elder maltreatment rate (587.7 per 100,000) is lower than the state rate (709.8 per 100,000) and the four comparison counties.

**Table 7. Child and Elder Maltreatment Rates, 2009**

	Child maltreatment <sup>1</sup> rate per 1,000 children under 18 years	Elder maltreatment <sup>2</sup> rate per 100,000 population aged 65+ years
Boulder	8.3	613.8
Larimer	7.6	1069.6
Mesa	11.3	1147.6
Pueblo	6.2	1092.2
Weld	7.9	587.7
Statewide	9.1	709.8

Source: Division of Child Welfare

<sup>1</sup>Child maltreatment is defined as any act of physical abuse, neglect, medical neglect, sexual abuse, emotional abuse, or an act or failure to act that presents imminent risk of serious harm to a child and includes only substantiated cases. <sup>2</sup>Elder maltreatment open cases include physical abuse, sexual abuse, self-abuse, and financial exploitation to at-risk adults.

In the fall 2010 Weld Healthy Kids Colorado Survey, the percent of Weld County high school students who reported being bullied (in any way) on school property during the twelve months prior to being surveyed was 19 percent. Sixteen percent said they had been bullied electronically via email, chat rooms, instant messaging, web sites, or texting. Twelve percent reported dating violence (i.e., being hit, slapped, or physically hurt by a boyfriend or girlfriend) during the previous 12 months and 8 percent reported being physically forced to have sexual intercourse when they did not want to.

## **Individual Factors that Influence Health**

The next component of the health determinant framework separates individual factors that influence health into three categories: a) health behaviors and conditions, b) behavioral health (i.e., mental health and substance abuse), and c) health care access, utilization, and quality care.

### ***Health Behaviors and Conditions***

Health behaviors are lifestyle choices that affect an individual's health and can lead to illness, injury, or death. Some of the most common lifestyle choices include: tobacco use, poor nutrition, physical inactivity (lack of exercise), unintentional injuries, and unintended pregnancies. These behaviors are among the leading causes of disease and premature death in the U.S. and Weld County. This section will review data on tobacco use, sexual health, nutrition, physical activity, obesity, and injury. These behaviors are mostly modifiable and could be influenced by preventive public health strategies, such as health education, promotion of healthy lifestyles, routine health screenings, and preventive care.

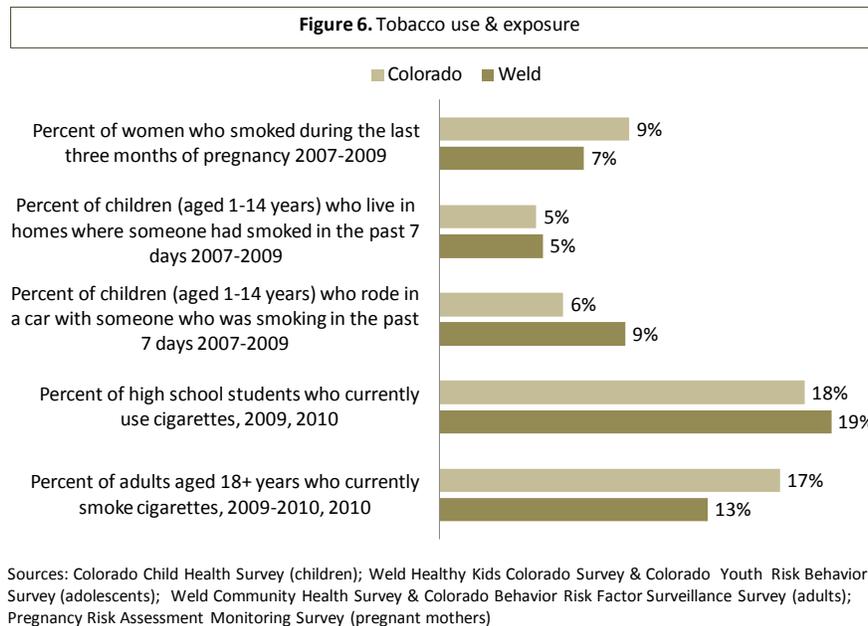
### **Tobacco Use and Exposure**

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses, accounting for approximately one of every five deaths. According to the Centers for Disease Control and Prevention, for every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the United States \$193 billion annually in direct medical expenses and lost productivity.

In 2010, 13 percent of Weld County adults were current smokers compared to 17 percent of adults statewide. Weld's 2010 rate is much lower than previous year estimates which have remained around 18 percent since 2006. Although there may be multiple explanations for this drop in the smoking rate, the most likely explanation is due to the Federal Government's increase in the Federal tobacco excise tax from \$0.61 to \$1.01 per pack which went into effect in April 2009. This effect of the tax increase may have been enhanced by the down economy we have been experiencing since 2008.

The 2010 Weld Healthy Kids Colorado Survey reported that 19 percent of Weld County high school students were current smokers compared to 13 percent by the 2007 Weld Youth Risk Behavior Survey. Both of these surveys included representative samples of Weld County high school students. For comparison, in 2009, the Healthy Kids Colorado Survey reported that 18 percent of all Colorado high school students were current smokers. More male students (22%) smoke than females (15%) and more Hispanic/Latino students (20%) than non-Hispanic White students (18%) smoke. Six percent of students report they are daily smokers. Eighteen percent of male high school students report they currently use chewing tobacco products.

In terms of children’s exposure to cigarette smoke, according to parent reports on the Colorado Child Health Survey, 9 percent of all Weld County children are exposed to cigarette smoke in a car and 5 percent are exposed in their own homes. Based on a representative sample of recent Weld mothers interviewed by phone using the Colorado Pregnancy Risk Assessment Monitoring Survey (i.e., PRAMS), seven percent of mothers said they smoked during the last three months of their pregnancy. Figure 6 compares Weld’s rates with Colorado rates. The rate of children exposed to cigarette smoke in a car is higher than the state rate but the rate of children exposed to cigarette smoke in their home is the same as the state rate.



### Nutrition, Physical Activity, and Body Weight

Good nutrition, physical activity, and a healthy body weight are essential to a person’s overall health and well-being. A healthful diet, regular physical activity, and achieving and maintaining a healthy weight are also important to managing health conditions so they do not worsen over time.

Most Americans, however, do not eat a healthful diet and are not physically active at levels needed to maintain proper health. Nationally, fewer than 1 in 3 adults and an even lower proportion of adolescents eat the recommended amount of vegetables each day. Also, a majority of adults (82%) and adolescents (82%) do not get the recommended amount of physical activity.

Many factors affect a person’s ability to eat a healthful diet, stay physically active, and achieve or maintain a healthy weight. The *built environment* can have an impact on behaviors that influence health. For example, in many communities, there is nowhere to buy affordable or fresh fruit and vegetables, and no safe or appealing place to play or be active. These environmental factors can also be influenced by social and individual factors such as gender, age, race, and ethnicity and education level.

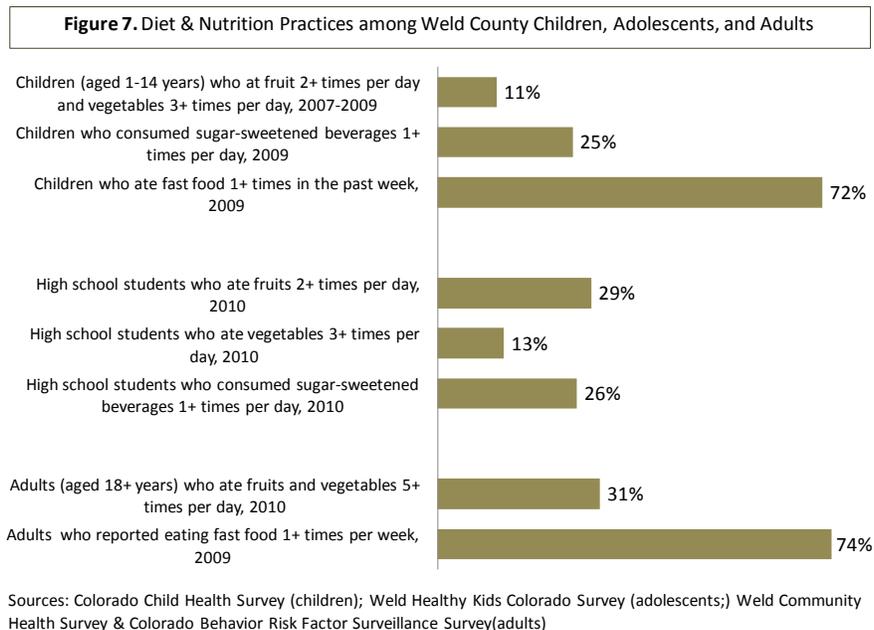
*“In our society, we should be putting more emphasis healthy eating.” (Anonymous community resident, 2010 Weld Community Health Survey)*

## Nutrition

Poor nutrition is a modifiable risk factor that, when improved, can reduce risks for chronic disease and premature death. Consuming at least the recommended amount of fruits and vegetables decreases risk for obesity, especially if fruits and vegetables are substituted for foods that are high in fat and calories.

Based on available data, most Weld County children, adolescents, and adults do not seem to be consuming enough fruits and vegetables to meet the recommended amounts of two or more servings of fruit and three or more servings of vegetables. For children between the ages of one and 14 years, about one out of ten (11%) eat two servings of fruit and three servings of vegetables, according to parent reports. For high school students, 29 percent consume two or more servings of fruit per day and 13 percent consume three or more servings of vegetables per day. Among Weld adults, 31 percent eat the recommended five or more servings of fruits and vegetables per day.

About one out of four children (aged 1- 14 years) and high school students consume at least one sugar-sweetened beverage per day. Nearly three out of four (72% for children and 74% high school students) eat fast food one or more times per week (see Figure 7).



## Physical Activity

There is strong scientific evidence that supports the health benefits of regular physical activity among youth and adults. However, nationwide more than 80 percent of adults do not meet the guidelines for both aerobic and muscle-strengthening activities. Similarly, more than 80 percent of adolescents do not do enough aerobic physical activity to meet the guidelines for youth.

For adults, the benefits of regular physical activity are many. Exercise can lower the risk of early death, coronary heart disease, stroke, high blood pressure, Type 2 diabetes, and other medical conditions. For children and adolescents, physical activity can improve bone health, improve cardio respiratory and muscular fitness, decrease levels of body fat, and reduce symptoms of depression.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers and facilitators of physical activity is important in determining which actions have the best chance to improve levels of physical activity in Weld County. For example, some of the factors positively associated with physical activity include:

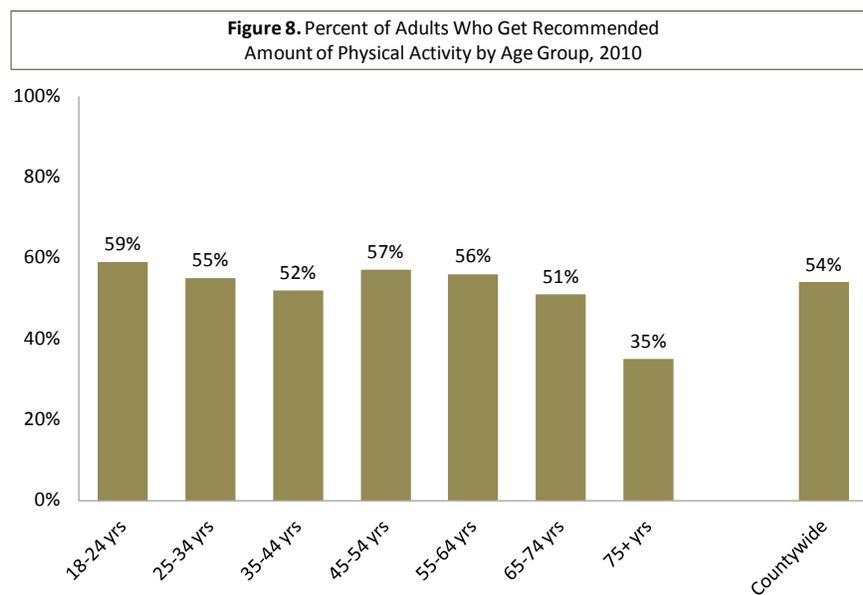
- Enjoyment of exercise
- Personal goals
- Belief in ability to be active (self-efficacy)
- Support of family and friends
- Participation in physical education and/or school sports
- Access to and satisfaction with facilities
- Safe neighborhoods

*“I think Greeley (or Weld County) should connect the town better with attractive bike paths. Connecting the town to the Poudre River Trail or the Sheep Draw Trail would be awesome!” (Anonymous community resident, 2010 Weld Community Health Survey)*

Factors negatively associated with physical activity include:

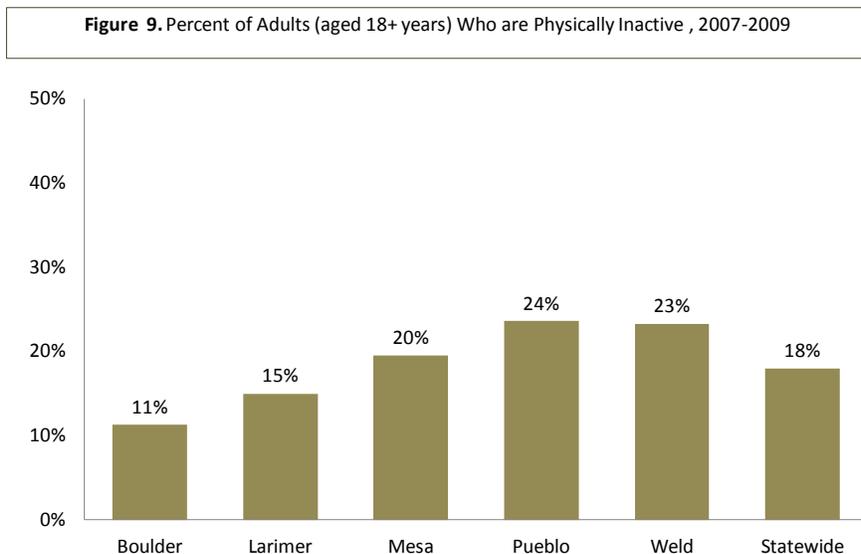
- Advancing age
- Low income
- Lack of time
- Rural residency
- Overweight or obesity
- Being disabled

Unlike the nation, in which only 20 percent of Americans report getting the recommended amount of physical activity, more Weld County residents (54%) get the recommended amount of physical activity. The amount of physical activity achieved by different age groups varies slightly between the ages of 18 and 74 years (see Figure 8).



Source: 2010 Weld Community Health Survey

On the other hand, about one out of four Weld residents are physically inactive, especially compared to some of our neighboring and peer counties (see Figure 9).



Source: Colorado Behavioral Risk Factor Surveillance Survey

The Physical Activity Guidelines for Americans recommend that children and adolescents participate in at least 60 minutes of physical activity most days of the week, preferably daily. Ensuring children have access to physical activity in school is an important way to meet that goal. School is often the only place children are exposed to regular physical activity and being physically active has been shown to help children achieve in the classroom as well as establish healthy habits they can carry throughout their lives.

Until 2011, Colorado was one of only two states with no physical education or physical activity requirements for schools. In 2011, House Bill 11-1069, Physical Activity Expectation in Schools, was signed into law. The law now requires local school boards to set policies that incorporate physical activity into the school schedule for elementary school students so that these young children receive an average of 30 minutes of physical activity per day.

According to parent reports on the 2009 Colorado Child Health Survey, 48 percent of children statewide between the ages of 5 and 14 years engaged in 60 minutes or more per day of physical activity per week. At the time of this report, there was no information available for Weld County children in this age range. Among high school students, according to the 2010 Weld Healthy Kids Colorado Survey, 22 percent of Weld students said they get 60 minutes or more per day of physical activity, which is a slightly lower rate than for high school students statewide in 2009 (27%). However, over 70 percent of Weld high school students report getting 20 or more minutes of vigorous activity per day at least three days per week.

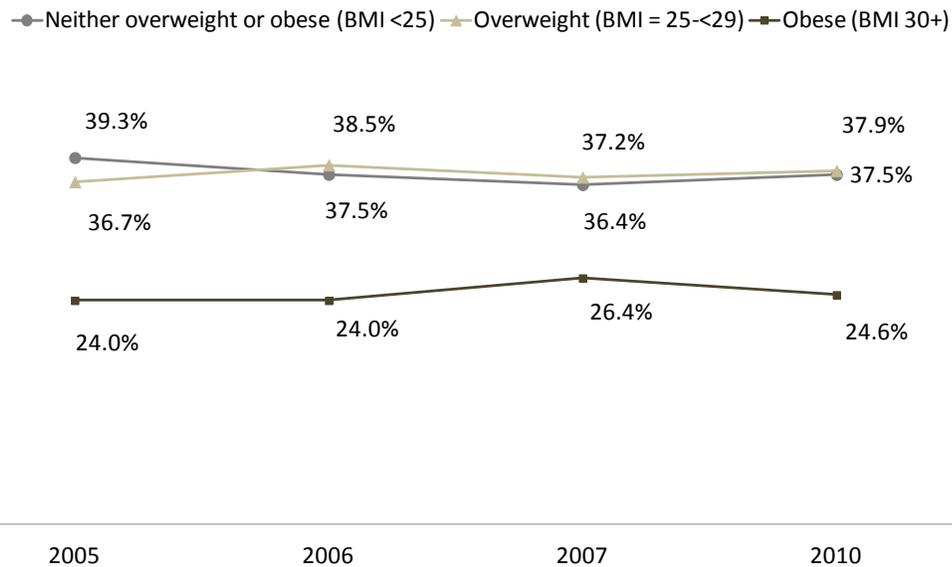
*“We have an obesity issue with kids. But to correct it, parents of kids need to eat healthy so kids can see proper eating habits.”*  
*(Anonymous community resident, Weld 2010 Community Health Survey)*

## Body Weight Status

Body weight is determined by a combination of factors including genetic, metabolic, behavioral, environmental, cultural, and socioeconomic factors. For most people, overweight or obesity is caused by excess calorie consumption and/or physical inactivity. Overweight and obesity are defined as “abnormal or excessive fat accumulation that may impair health” (World Health Organization). A widely used measure of weight status is the Body Mass Index (BMI) because it is a convenient and reliable way to estimate body fatness for most population groups. For people of all ages, BMI is calculated using height and weight, but the definitions of underweight, healthy weight, overweight, and obese for children and adolescents are different from the definitions for adults.

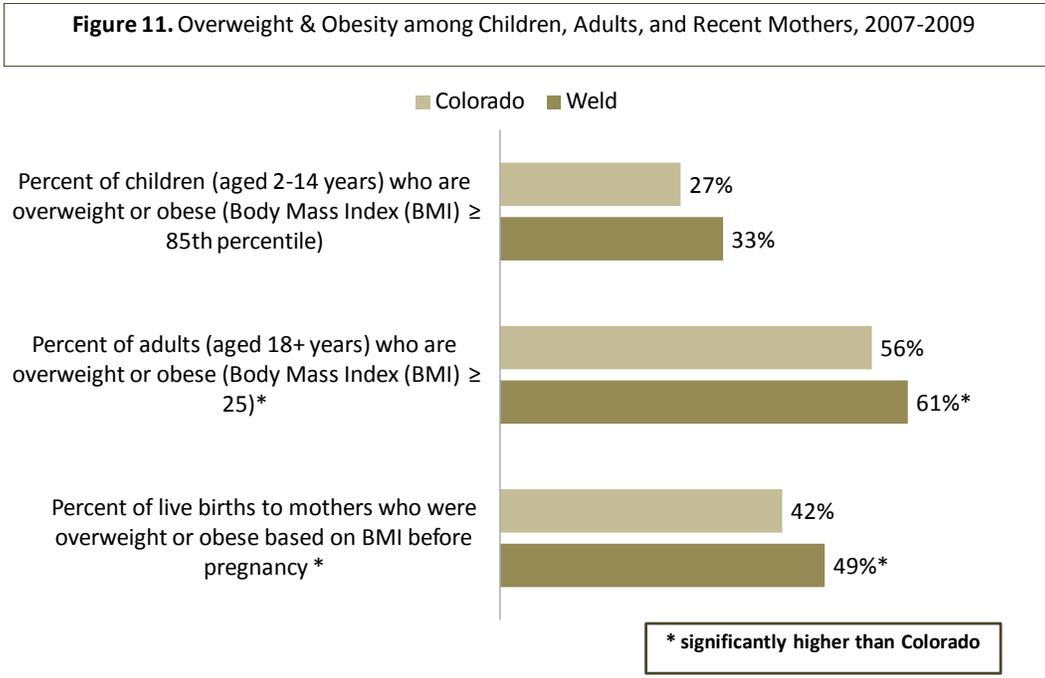
Overweight and obesity have reached epidemic proportions in the U.S including Colorado. Since 1995, the prevalence of obesity in Colorado has nearly doubled. Even though Colorado’s adult obesity rate (19%) is still lower than the national average (25%), Weld County’s rate is not (25%). However, since 2005, Weld County’s adult obesity rate has remained about the same (see Figure 10).

**Figure 10. Weight Status Trend, Weld County, 2005-2010**



Sources: Weld Behavioral Risk Factor Surveillance Survey (2005, 2006);  
Weld Community Health Survey (2007, 2010)

The prevalence of overweight and obesity among Weld children, adults, and recent mothers is significantly higher than Colorado’s rates (see Figure 11). One-third of Weld children, about sixty percent of adults, and nearly half of recent mothers are overweight or obese.

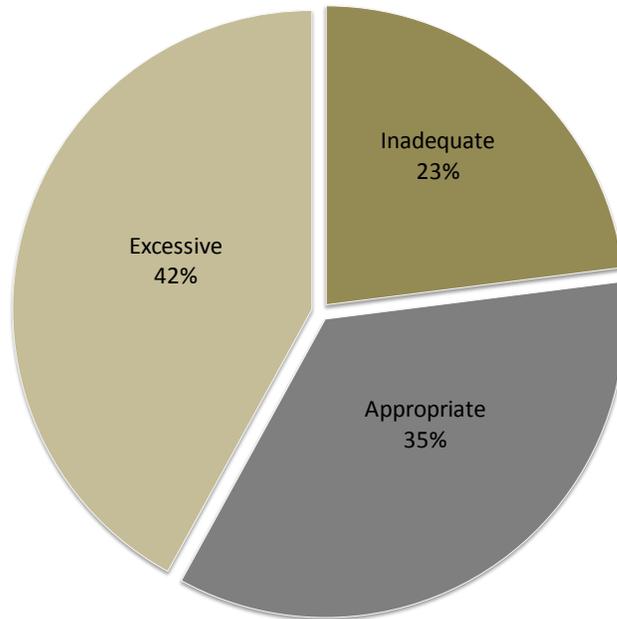


Sources: Colorado Child Health Survey (children); Colorado Behavior Risk Factor Surveillance Survey (adults, recent mothers)

In 1990, the Institute of Medicine developed guidelines for women about weight gain during pregnancy. To meet the recommendations, women need to gain within the weight gain ranges for their body mass index (BMI) category. A woman with a low BMI (< 19.8) should gain 28-40 pounds. A woman with a normal BMI (19.8-26.0) should gain 25-35 pounds and a woman with a high BMI (>26.0) should gain 15-25 pounds. Appropriate (or adequate) weight gain is defined as a gain of the recommended number of pounds. Excessive weight gain is defined as a gain of more than the recommended number of pounds. Inadequate weight gain is defined as a gain of less than the recommended number of pounds.

In Weld County, about one-third (35%) of pregnant women gained an appropriate amount of weight, whereas, 42 percent gained an excessive amount, according to the IOM guidelines. About one out of four (23%) Weld pregnant women did not gain enough weight during their pregnancy (see Figure 12). These percentages are similar to statewide rates which are 34, 42, and 25 percent respectively.

**Figure 12.** Maternal Weight Gain During Pregnancy, 2004-2008, Weld County



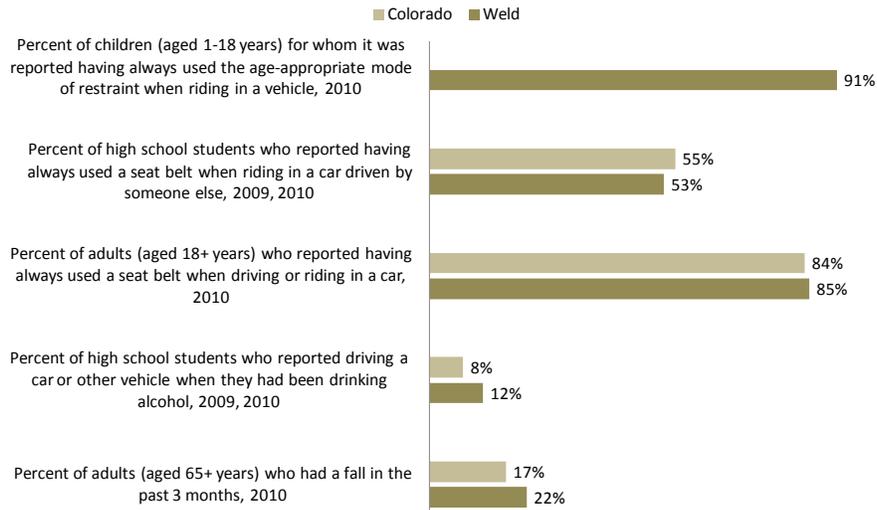
Source: Colorado Pregnancy Risk Assessment Monitoring Survey

### **Injury-related Behaviors**

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. In Weld County, unintentional injuries are the leading cause of death among residents 65 years and younger (see Population Health Outcomes section). Reducing injury improves physical and emotional health. The leading causes of death from unintentional injury include motor-vehicle related injuries, unintended poisoning (see the substance use section for more information), and falls.

In Weld County, 9 out of 10 children always use an age-appropriate motor vehicle restraint (i.e., safety seats, booster seats, or seat belts), according to parent reports. Slightly more than half (53%) of Weld high school students and students statewide said they always use a seatbelt when riding in a car or other vehicle driven by someone else. The percentage of Weld County adults (85%) who always use a seatbelt when riding or driving a car is similar to the statewide rate (84%). Twelve percent of all high school students (drivers and non-drivers), report driving after drinking alcohol compared to 8 percent of all Colorado high school students. Nationwide each year, about one third of adults aged 65 years and older experience a fall. In Weld County, about one out of five adults experienced a fall in the three months prior to be surveyed.

**Figure 13. Injury-related Behaviors**



Sources: Colorado Child Health Survey (children); Weld Healthy Kids Colorado Survey & Colorado Youth Risk Behavior Survey (adolescents); Weld Community Health Survey & Colorado Behavior Risk Factor Surveillance Survey (adults)

### Sexual Health

Healthy reproductive and sexual practices enable people to remain healthy and contribute to their community. Planning and having a healthy pregnancy is critical to the health of women, infants, and families and is also important in preventing teen pregnancy and childbearing.

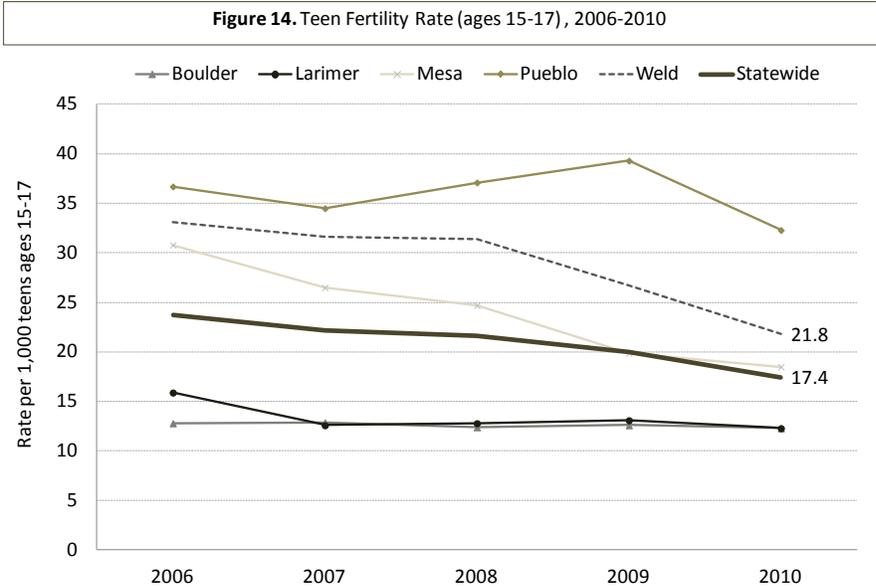
Among sexually active Weld adults, 91 percent report using an effective method of birth control compared to 78 percent of sexually active adults statewide. Effective methods are defined as permanent methods (vasectomy, tubal ligation), hormonal-based methods (pills, shots, implants, etc.), or an intrauterine device (IUD). The percentage of unintended pregnancies in Weld County (37%) is similar to the rate statewide (38%) as is the percentage of high school students that have *never* had sexual intercourse (58% Weld vs. 60% Statewide).

**Table 8.** Indicators of Sexual Health, Weld and Colorado

	Weld	Colorado
Percent of sexually active adults (aged 18-44 years) using an effective method of birth control to prevent pregnancy, 2010	91%	78%
Percent of pregnancies (among women aged 15+ years) resulting in live births that were unintended, 2007-2009	37%	38%
Percent of high school students who have <i>never</i> had sexual intercourse, 2010	58%	60%

Sources: Colorado Behavior Risk Factor Surveillance Survey, Colorado Pregnancy Risk Assessment Monitoring System, Weld Health Kids Colorado Survey

On the other hand, the rate of live births to teen mothers (21.8 per 1,000) in Weld County is higher than the statewide rate (17.4 per 1,000) (see Figure 14). Similar to other neighboring and peer counties (except Pueblo), the rate of teen births in Weld County has decreased steadily since 2006.



Source: Health Statistics Section, Colorado Department of Public Health and Environment

**Mental Well-being and Related Conditions**

Mental and emotional well-being is essential to overall health. Positive mental health enables people to cope with the stresses of life, work more productively, and make meaningful contributions to their communities. Anxiety, depression, and other mental disorders are associated with other behaviors that are considered high risk (e.g., tobacco, alcohol and other drug use) as well as many chronic and acute conditions such as obesity, diabetes, and cardiovascular disease, and premature death.

**Mental Health**

In the 2010 Community Health Survey, 8 percent of adult residents reported 14 or more mentally unhealthy days. Sixteen percent of residents said they currently had depression, anxiety, or some other mental health problem. Among those that did not report an existing mental health problem, another 6 percent of adults reported needing help for emotional and mental health problems within the past year. Weld women report needing help for emotional and mental health problems more than men (19% vs. 12% respectively). Most adult residents who report needing help for emotional/mental problems are between the ages of 18 and 54 years.

Among high school students in Weld County, 29 percent said they felt so sad or hopeless almost every day for two weeks or more in a row such that they stopped doing some usual activities, according to the 2010 Weld Healthy Kids Colorado Survey. Nationally, in 2008, 8.3% of adolescents aged 12-17 experienced at least one major depression episode (being depressed for at least two weeks or a loss of interest or pleasure in daily activities plus other depressive symptoms such as altered sleeping patterns, fatigue, and feelings of worthlessness (SAMHSA, National Survey

*“We need easier access to doctors, therapist, and county resources for teens with mental health needs and we need more public awareness of other options available to access to mental health practitioners.”*  
*(Anonymous community resident, 2010 Weld Community Health Survey)*

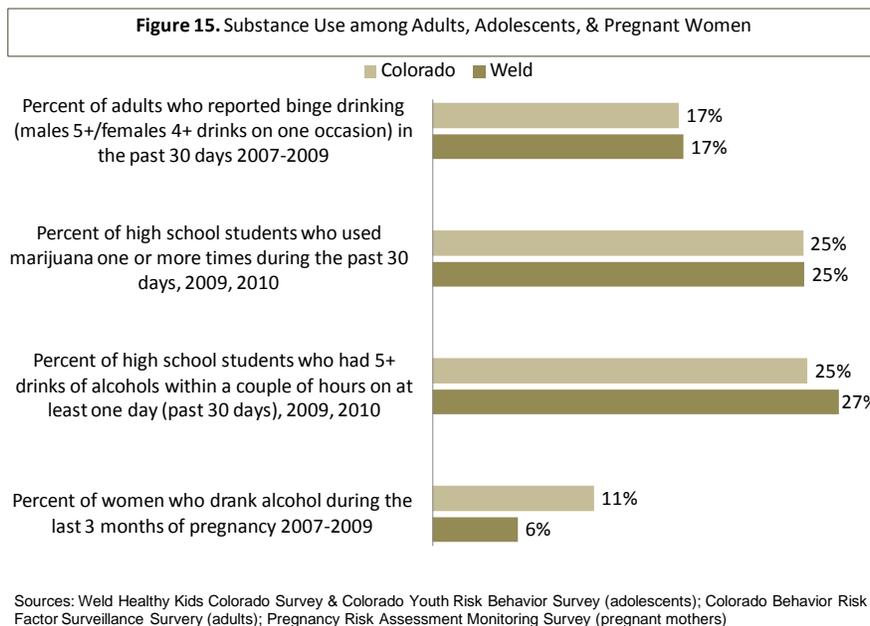
of Drug Use and Health). Among adolescents ages 12-17 who received treatment or counseling for an emotional or behavioral problem (not including alcohol or drug use), depression was the most commonly reported problem (48.6%).

Suicide is the 8<sup>th</sup> leading cause of death in Weld County, 7<sup>th</sup> in Colorado, and the 10<sup>th</sup> leading cause of mortality nationally. Suicide is the 2<sup>nd</sup> leading cause of death for Coloradoans aged 10 – 34. Also, Colorado has the 7<sup>th</sup> highest suicide rate in the country. Seventeen percent of high school students (19% females, 15% males) seriously considered attempting suicide, and 12% of students made a plan how they would do it. Ten percent of students attempted suicide one or more times, and of these attempts, 40% of these resulted in treatment from a medical professional.

### Substance Use

With regard to substance use, Weld County has one of the highest reported percentages (35%) of underage current alcohol use rates, among persons aged 12 to 20, according to the most recent local data available from National Survey on Drug Use and Health. Seventeen percent (see Figure 15) of Weld adults 18+ years reported binge drinking with the 30 days prior to being surveyed and six percent of pregnant women report drinking alcohol during the last three months of their pregnancy.

Among Weld County high school students, 41 percent reported consuming alcohol in the past 30 days and 27 percent binge drank, consuming 5 or more alcoholic beverages per occasion. A higher percentage of Hispanic/Latino (31%) than non-Hispanic white (24%) high school students binge drink. More students believe that students are drinking (78%) or binge drinking (68%) than they actually are, which can contribute to the social norm that it’s OK to drink. Another substance of concern is marijuana. About one out of four Weld high school students are current marijuana users.



## Health Care Access, Utilization, and Quality of Care

Access to comprehensive, quality health care services is important for increasing the quality of a healthy life for every resident in the county. Access to health care as well as limits or lack of health care access impacts: a) overall physical, social, and mental health status, b) prevention of disease and disability, c) identification and treatment of health conditions, d) quality of life, e) preventable death, and f) life expectancy. This section looks at indicators in four broad areas: health insurance coverage, usual source of care, receiving needed care, and preventive care.

### Health Insurance Coverage

Lack of health insurance is a major barrier to obtaining needed and preventive health care. About one in five (19.0%) Weld County residents between 0 and 64 years of age (43,497) are without health insurance for all or part of the year. In comparison, 17 percent of Colorado residents less than 65 years of age do not have health insurance.

Adults between the ages of 18 and 64 make up the majority (82% or 35,795) of the uninsured in Weld County. Nearly 8,000 of the county's children 0 to 17 years are without health insurance for all or some part of the year.

The percentage of uninsured adult residents is similar to the state rate and to Mesa and Pueblo counties but higher than the two neighboring counties of Larimer and Boulder. The percentage of uninsured children in Weld County is the highest among comparable and neighboring counties and similar to the pattern for adults (Table 9).

## Local Findings

- *Over 43,000 residents or about one in five residents have no health insurance.*
- *82% of the uninsured are between 18 and 64 years of age.*

**Table 9.** Percent of Children (0 -17 yrs) and Adults (18 – 64 yrs) without Health Insurance by County

	Uninsured Children 0-17	Uninsured Adults 18- 64
Boulder	8.1%	15.8%
Larimer	8.3%	17.8%
Mesa	10.6%	21.1%
Pueblo	8.8%	21.5%
Weld	11.2%	22.4%
Statewide	9.9%	20.0%

Source: Small Area Health Insurance Estimates, US Census Bureau, 2009

Weld Asian (33%) and Hispanic/Latino residents (25.8%) have higher uninsurance rates than other race/ethnicity groups (see Table 10). In comparison, 37% of Colorado Latinos are uninsured. The rates of uninsurance among men and women in Weld County are similar (17.6% vs. 18.9% respectively).

**Table 10.** Residents 18-64 Years Old without Health Insurance by Race/Ethnicity, 2010

	Percent Uninsured
American Indian or Alaskan Native	*
Asian	33.0%
Black/African American	*
Hispanic/Latino, any race	25.8%
Native Hawaiian or other Pacific Islander	*
White only, not Hispanic	12.5%
Other or Multiracial, not Hispanic	18.4%
Countywide	18.3%

Source: 2010 Weld Community Health Survey

### Usual Source of Care and Received Needed Care

Improving health care services depends in part on ensuring that people have a usual source of care and receive needed medical care. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. In Weld County, more than 3 out of 4 residents (77%) report having one person they think of as their personal doctor or health care provider. This rate is similar to what residents report statewide (79%) but slightly lower than what residents report in Boulder (81%), Larimer (82%), Mesa (84%), and Pueblo (85%) counties.

Improving the well-being of mothers, infants, and children has been a major public health goal for quite some time. Healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Adequate and timely care during pregnancy can also provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children.

The adequacy of prenatal care indicator depicted in Figure 16 is based on two things: a) adequacy of initiation of prenatal care and b) adequacy of received services. In other words, it takes into account how early prenatal care began in the pregnancy and to what extent the appropriate number of prenatal visits for the time period the women received services took place. In Weld County, 60 percent of pregnant women received adequate prenatal care. This rate is similar to the overall rate in Colorado and in Pueblo; however, the rate is lower than Boulder and Larimer county's rates.

#### 2010 Weld Community Health Survey Highlight - Uninsured Adults 18-64 yr by Region

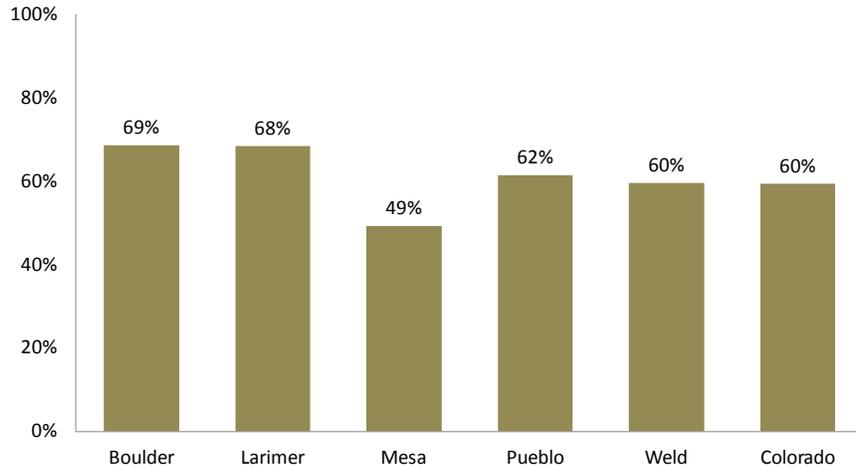
North Weld – 13%

Greeley/Evans – 21%

Southwest – 15%

Southeast – 20%

**Figure 16.** Percent of Pregnant Women who Received Adequate Prenatal Care by Geographic area, 2007-2009

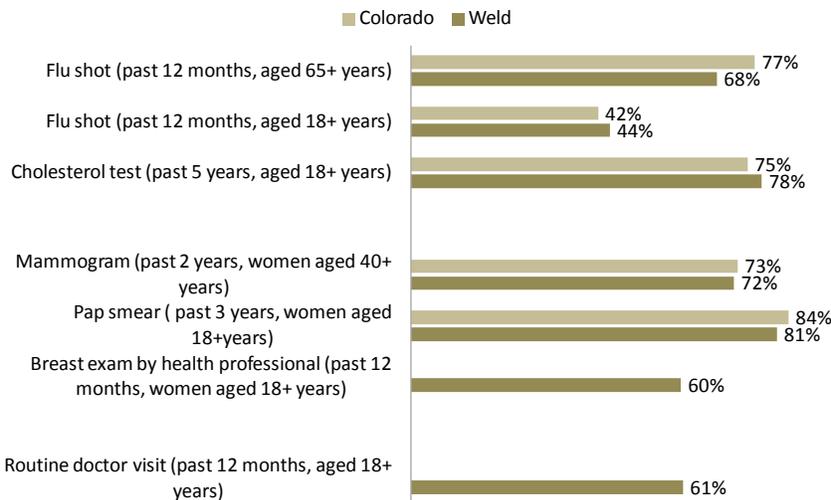


Source: Health Statistics Section, Colorado Department of Public Health and Environment

### Preventative Care

Assessing the use of evidence-based preventative services is another essential community indicator to monitor. Preventative services are those that prevent illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention) and detect a disease at an earlier, and often more treatable, stage (secondary prevention). Several indicators of preventative care use for Weld County and Colorado as a whole are shown in Figure 17. In general, Weld County residents' preventative care service use is similar to residents statewide with one exception. Only 68 percent of Weld residents aged 65 and older said they obtained a recent flu shot compared to 77 percent of all Colorado residents.

**Figure 17.** Preventative Care Services Use, Weld & Colorado



Source: 2010 Weld Community Health Survey (Weld); 2007-2009 Colorado Behavioral Risk Factor Surveillance Survey (Colorado)

# Population Health Outcomes

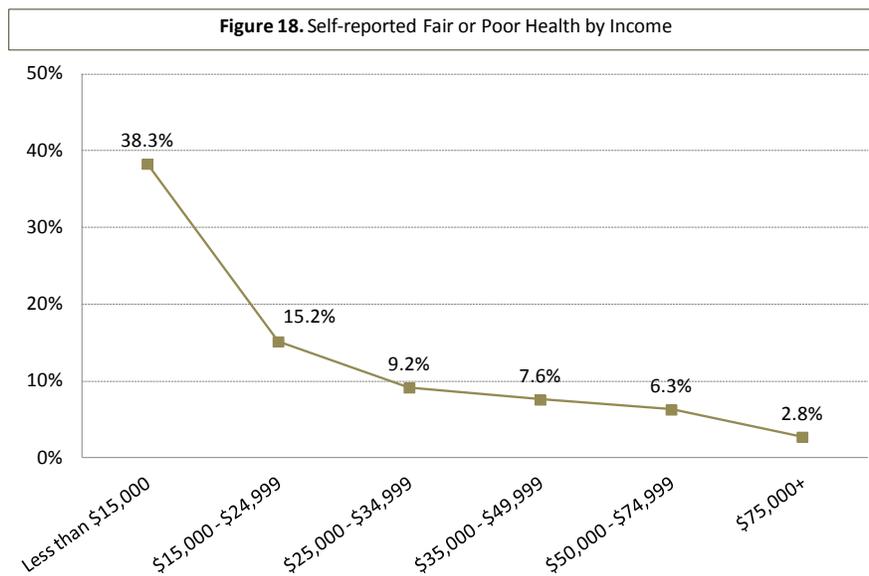
## Quality of Life

### Perception of Health

Perception of health is a self-reported indicator of how an individual sees his or her own general health as excellent, very good, good, fair, or poor. Self-rated health has been found to be a good predictor of mortality above and beyond predictions based on the presence of health problems, disability, and lifestyle risk factors.

In 2010, 10 percent of adults reported their general health status as fair or poor. A higher percentage of residents from Greeley/Evans (12.5%) and Southeast Weld County (11.2%) reported fair or poor general health compared to residents from Southwest Weld (7.2%) and North Weld (7.3%).

More adults living in lower income households report fair or poor health compared to people living in households with higher annual household incomes. In Weld County, 38 percent of adults living in households where the annual household income was less than \$15,000 rated their own health as fair or poor whereas only 3 percent of adults living in households where the household income was \$75,000 or more rated their own health as fair or poor.



Source: 2010 Weld Community Health Survey

The Colorado Child Health Survey asks parents to rate their child's (aged 1 – 14 years) health. Based on parent reports between 2007 and 2009, 4.5 percent of Weld parents reported that their child's health was fair or poor. Statewide, 3.2 percent of parents reported their child's health as being fair or poor. During this time, more parents in Weld reported fair or poor health for their child than Boulder (1.1%), Larimer (1.8%), and Pueblo (1.2%). The percent of parents reporting their child's health as fair or poor in Mesa County was 8 percent.

## Morbidity

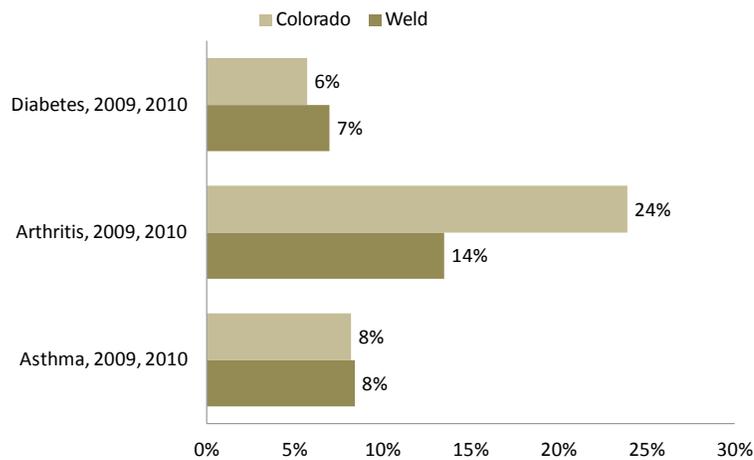
Morbidity refers to the existence of a sickness or disease, disability or poor health due to any cause. There are many health-related indicators of morbidity and their potential risk factors. Four broad areas will be the focus in this section: 1) chronic disease, 2) communicable disease, 3) hospitalizations from heart disease, stroke, and motor vehicles, and 4) oral health.

### Chronic Disease

A chronic disease is one that persists for a long period of time. Most chronic diseases can be controlled with medication and lifestyle changes. Behavioral risk factors such as tobacco use, lack of physical activity, and poor eating habits are major contributors to many chronic diseases. Chronic diseases are some of the most common and costly health problems, but they are also among the most preventable.

Diabetes is a serious lifelong condition that is widely recognized as a leading cause of death and disability. Nearly 2 million new cases of diabetes were diagnosed in people aged 20 years and older in 2010 (National Health Interview Survey). In 2010, 7 percent of adults aged 18 years and older in Weld County reported they had ever been told by a health professional that they have diabetes (Weld Community Health Survey) whereas 6 percent of Colorado adults reported they had diabetes (Colorado Behavior Risk Factor Surveillance Survey). About one out of ten Hispanic/Latino residents (10.6%) reported they had been told they had diabetes compared to one out of seventeen non-Hispanic/Latino residents (5.9%).

Figure 19. Prevalence of Diabetes, Arthritis, and Asthma



Sources: 2010 Weld Community Health Survey, 2009 Colorado Behavior Risk Factor Surveillance Survey

Arthritis is the most common cause of disability in the U.S. In 2010, 14 percent of Weld County adults reported they had ever been diagnosed with arthritis or rheumatism compared to 24 percent of Colorado adults in 2009. Asthma affects people of all ages, but for children it is one of the most common chronic diseases. In 2010, the prevalence of asthma in children is 9.4 percent in the U.S (National Health Interview Survey). According to three years averages from 2007-2009 in Weld County, 9 percent of children aged 1 – 14 years had asthma compared to 8.4 percent of children the same age statewide. In 2010, 8 percent of Weld adults aged 18 years or older reported currently having asthma which is similar to the 2009 state rate.

Cancer is a chronic disease that affects people of all ages, races, and socioeconomic levels. It is the leading cause of death in Weld County (see Mortality section for more information); however, the overall incidence of new cancer diagnoses in Weld County (417.7) is significantly lower than the statewide rate (440.6). The female breast cancer incidence rate (108.3) is also significantly lower than Colorado's (123.0). The prostate cancer incidence rate is lower among Weld County men (146.5) than among Colorado men (160.7). The incidence of lung and bronchus cancer is slightly higher among Weld County residents (53.1) than it is statewide (51.0).

**Table 11.** Age-adjusted Incidence Rates per 100,000 Population for Cancer by Gender, Weld County and Colorado, 2006-2008

	Weld	CO
Cancers, all sites**	417.7	440.6
Male**	479.2	513.5
Female	378.1	393.1
Prostate, male	146.5	160.7
Cervical, female	7.1	6.8
Breast, female **	108.3	123.0
Lung and bronchus	53.1	51.0
Male	66.1	60.3
Female	44.5	45.0

Source: Colorado Central Cancer Registry  
 Note: \*\* significantly lower than Colorado

## Communicable Disease

Communicable diseases are infectious diseases that are transmitted in a variety of ways. Communicable diseases are closely monitored by state and local health departments to identify outbreaks and epidemics. Health departments also provide preventive treatment such as immunization programs to control vaccine-preventable diseases. This section provides data on the five most common communicable diseases in Weld County and compares them to Colorado rates. All rates are crude rates of newly diagnosed cases per 100,000 population. Chlamydia and gonorrhea are the most common communicable diseases in Weld County, followed by campylobacter and salmonella infections. Weld County's incidence rates of campylobacteriosis and salmonellosis are higher than Colorado's rates.

**Table 12.** Top Five Communicable Diseases in Weld County, 2007-2009

	Weld	Weld Rate Compared to Colorado's	Colorado
Chlamydial infection (15-29 year olds)	1136.0	Lower	1514.7
Gonococcal infection (15-29 year olds)	96.9	Lower	234.4
Campylobacteriosis	33.3	<b>Higher</b>	15.6
Salmonellosis	16.6	<b>Higher</b>	12.6
Hepatitis B (chronic)	5.9	Lower	11.4

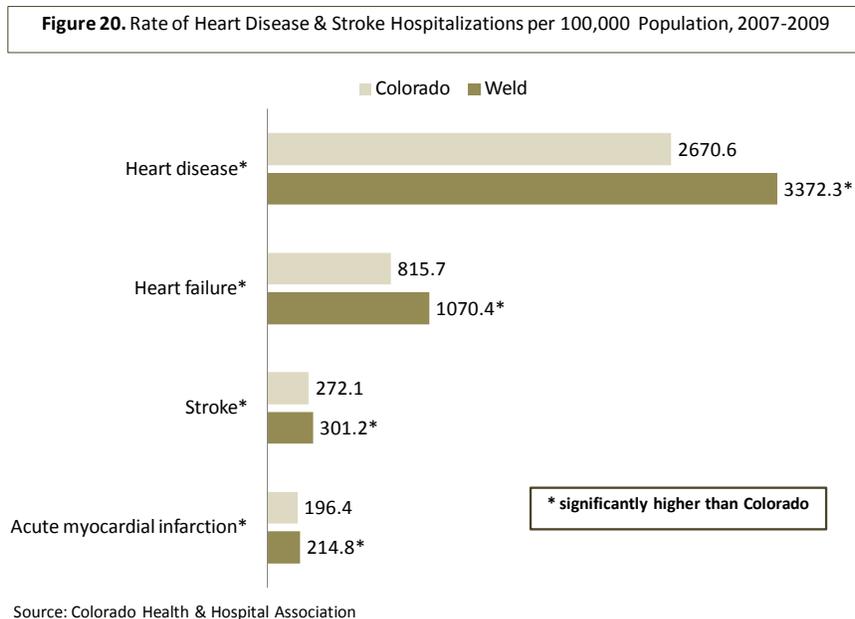
Source: Colorado Division of Disease Control and Environmental Epidemiology

The increase in life expectancy during the 20th century is largely due to improvements in child survival, which is mainly related to reductions in deaths from infectious disease. These reductions are largely due to immunization. Immunizations are given to children and adults to protect them against serious infectious diseases in order to prevent illness, disability, and death. Vaccines protect against disease by inducing immunity or strengthening an individual's immune system. Vaccines not only protect the immunized person, but the community as well. According to the most recent data (2008) compiled by the Colorado Department of Public Health and Environment, 75 percent of young children (through age five) have received some or all of their required immunizations, which is a somewhat lower rate than among all children statewide (81%). In terms of adult immunizations, 80 percent of adults in Weld County aged 65 and older have had a pneumonia shot, which is higher than in Colorado (73%) and the national benchmark of 60 percent. About two out of three Weld County adults aged 65 and older (68%) had a flu shot in the past 12 months compared to 74 percent of similar aged adults statewide.

## Hospitalizations

### Heart Disease and Stroke

Weld County's hospitalization rates per 100,000 population for heart disease, heart failure, stroke, and acute myocardial infarction are significantly higher than statewide rates. The rates here are age-adjusted and reflect rate of the appropriate ICD-9-CM diagnosis code for each disease requiring at least a 1-day in hospital admission. The rates include fatal and non-fatal hospitalizations for heart disease and stroke.



### Motor Vehicle Accidents

Between 2007 and 2009, Weld County's rate of motor vehicle accident hospitalizations per 100,000 population is 102.3 and is significantly higher than the statewide rate of 88.7. The rate is age-adjusted and includes non-fatal and fatal hospitalizations involving Weld County residents. Weld County's rate is significantly higher than Boulder (62.7) and Larimer (79.5) counties but is lower than Mesa and Pueblo County's rates which are both 133.3.

## **Oral Health**

Oral health is an essential part of staying healthy. Good oral health allows a person to speak, smile, taste, chew, and swallow among other things. Poor oral health has serious consequences. Oral diseases range from dental caries to oral cancers. They cause pain and disability for millions of Americans and the impact of these diseases does not necessarily stop at the mouth and teeth. Researchers studying oral health are starting to find links between oral disease (especially gum disease) and some chronic diseases.

Dental disease, including untreated cavities, is one of the most common chronic diseases among children, even more common than asthma. Good oral health is essential to positive self-esteem, school readiness, good nutrition, and overall well-being for everyone. Between 2007 and 2009, according to parent reports, 11 percent of Weld County children (aged 1 – 14 year) had teeth in fair or poor condition compared to 9.9 percent of children statewide. A 2006-2007 survey of young children in third grade found that 71.7 percent of Weld third graders had experienced a cavity, filling, or missing tooth compared to only 57 percent of children that age statewide. Access and use of oral health services is also important. Slightly more than half (52%) of Weld County children on Medicaid received dental services in the past year compared to 46 percent statewide.

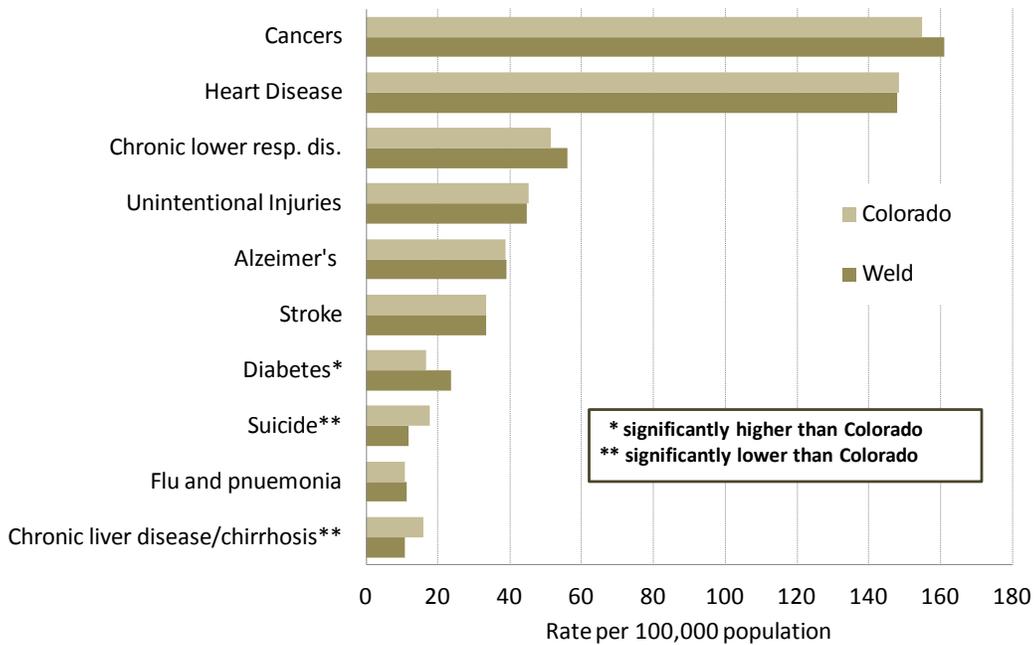
In 2008, a little over one-third (35%) of Weld adult residents reported losing a tooth or having gum disease compared to 15 percent of adult residents statewide. More recently, fifty-nine percent of adult residents reported having seen a dentist for a dental exam or teeth cleaning with the previous year (Weld County Community Health Survey, 2010). The most recent statewide comparison data found that 67 percent of Coloradoans reported seeing a dentist within the previous year for an exam or cleaning (Colorado Behavior Risk Factor Surveillance System, 2008).

## ***Mortality***

Mortality refers to the rate of deaths that occur in a population. Rates reported in this section are per 100,000 residents and are age-adjusted. Cancer and heart disease are the most common causes of death in Weld County as they are statewide. Between 2007 and 2009, there were 3,964 deaths among Weld County residents. This means that on average 1,321 residents died each year. Weld County's age-adjusted death rate (692.9 per 100,000) from all causes was lower than Colorado's age-adjusted rate (715.5 per 100,000).

The leading causes of death are those that account for the greatest number of deaths. In Figure 21, the leading causes of death are ranked according to number of deaths and provide an overall picture of the overall burden of deaths from specific causes. The ten leading causes of death in Weld County account for 76 percent of the total number of deaths. Five chronic diseases - cancer, heart disease, chronic lower respiratory disease, stroke (i.e., cerebrovascular disease) and diabetes, account for nearly 60 percent of all the deaths.

**Figure 21. Top Ten Leading Causes of Death, 2007-2009**

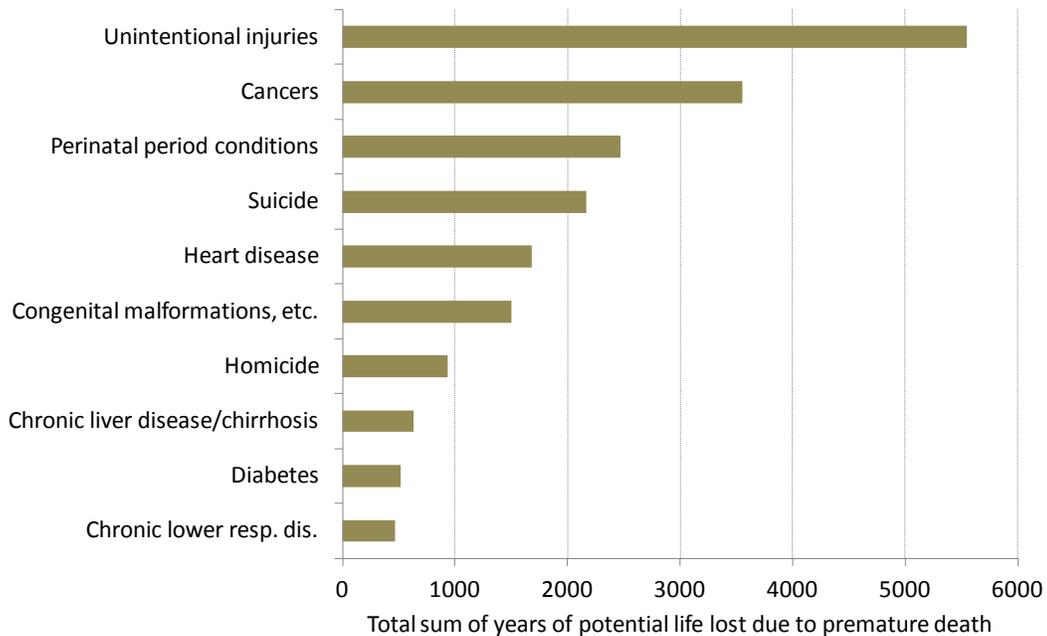


Source: Health Statistics Section, Colorado Department of Public Health and Environment

Years of potential life lost (YPLL) is a measure of premature death that highlights the burden of loss among younger aged people. In contrast, all cause and leading cause death rates are dominated by causes of death common among mostly older aged groups. By weighting deaths occurring at younger ages more heavily than those occurring at older ages, a more accurate picture of premature mortality can be examined. The measure of YPLL used here represents the numbers of years of life lost due to death before age 65 among Weld County residents, summed over all under 65 age groups. It is important to look at these deaths because some of these deaths may be avoidable and others may be subject to intervention programming such as early detection and screening programs that can reduce premature mortality. In addition, a reduction in premature death is also desirable from a social or economic standpoint.

Between 2007 and 2009, the total number of years of potential life lost from premature deaths among residents under age 65 years was 23, 824 years. The ten leading causes of premature death accounted for 82 percent of the total years of life lost. In Weld County, the largest contributor to years of potential life lost was unintentional injury accounting for 23 percent of years of life lost, followed by cancers and then perinatal period conditions. Perinatal period conditions are deaths that occur near the time of birth (28 weeks of gestation to one week after birth). One out of ten premature deaths are from perinatal period conditions which include such conditions as low birth weight, infection, and asphyxia and include stillbirths and respiratory distress. Here, four chronic diseases - cancer, heart disease, chronic lower respiratory disease, and diabetes - account for 26 percent of premature deaths.

**Figure 22.** Leading Causes of Premature Death among Weld Residents ≤ 65 years, 2007-2009



Source: Health Statistics Section, Colorado Department of Public Health and Environment

### Fetal and Infant Death

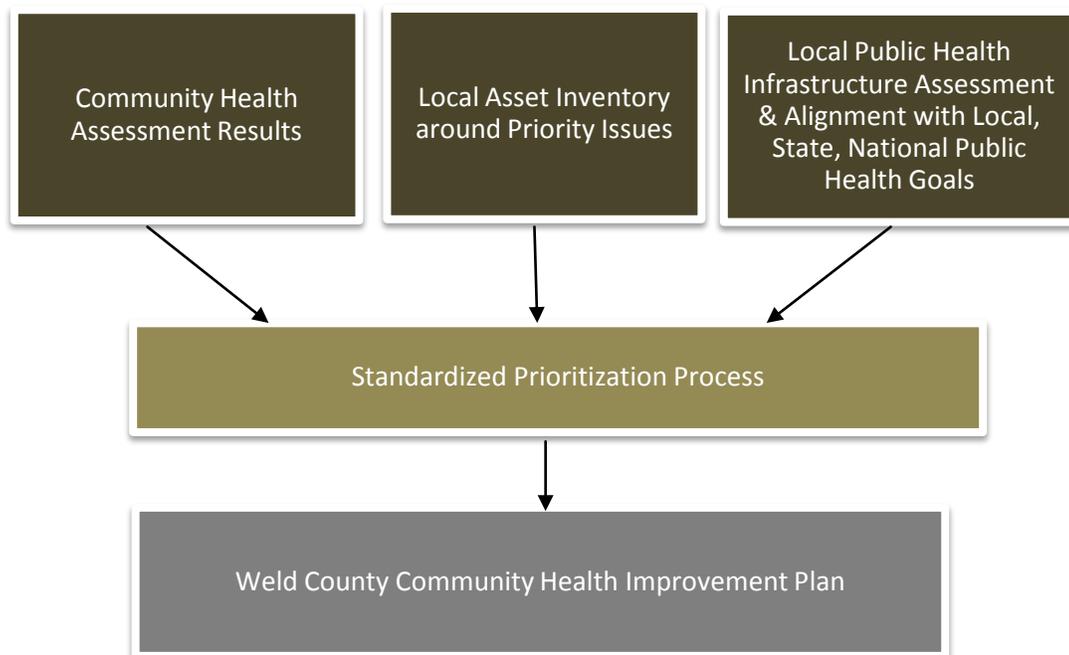
Fetal and infant mortality are measures of a community’s social and economic well-being, as well as its overall health. Fetal and infant mortality reflect a range of factors such as medical issues, the ability of health care systems to respond to the needs of women and infants, environmental factors, and social issues such as poverty, education and culture. Infant and fetal mortality also indicate something about women’s lives such as their lifestyle and relationships, and the stress they experience. Fetal mortality is a significant public health issue that is often overlooked. Infant and fetal mortality taken together provide a more complete picture of perinatal health in a community.

Infant deaths are deaths to infants under one year of age whereas a fetal death means death prior to birth irrespective of the duration of pregnancy. There were 113 infant deaths in Weld County between 2006 and 2010 – an average of 23 per year (Source: Health Statistics Section, Colorado Department of Public Health and Environment). The infant mortality rate for the county is 5.7 per 1,000 live births. In Weld County, the greatest number of infant deaths occurs among Latinos (66) and White residents (45). Between 2006 and 2010 there were 92 fetal deaths (20+ weeks gestation) in Weld County – an average of about 18 per year. The fetal mortality rate for the county is 4.6 per 1,000 live births and fetal deaths. There were similar numbers of fetal deaths occurs among Latinos (42) and White residents (43). Sixty four percent of infant deaths fall into two main categories of cause of death: 1) conditions originating in the perinatal period, and 2) congenital malformations, deformations, and chromosomal abnormalities.

## Community Assessment Process

Community health assessment is a process and is ongoing. It involves getting community input in identifying problems, setting priorities, developing action plans, measuring progress, deciding whether the actions are effective, modifying the actions if necessary, and eventually re-evaluating the community's problems and priorities. The process developed in Weld County was drawn from the National Association of City and County Health Officials' (NACCHO) Mobilizing for Action through Planning and Partnerships (MAPP) process as well as other health-related strategic planning processes. The process in Weld County is depicted in Figure 23.

**Figure 23.** Diagram of the Improvement Plan Process



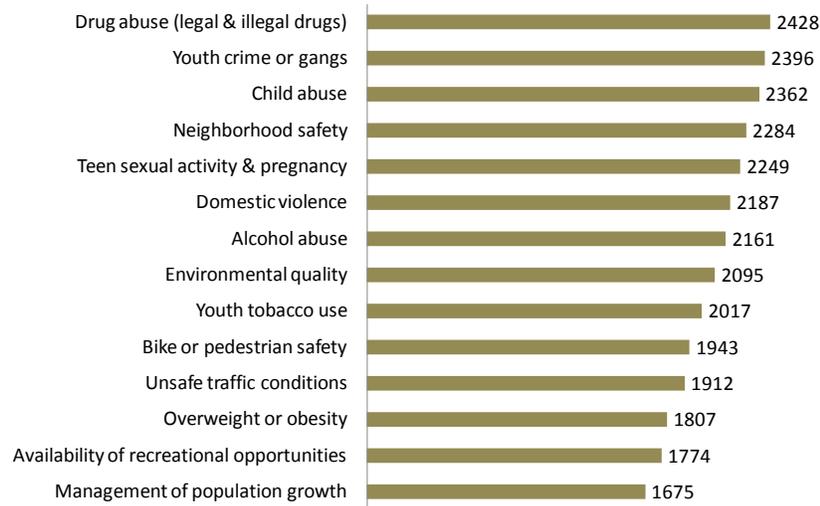
## Community Input

In addition to the data just described, other data were gathered and analyzed from residents, key public health stakeholders and partners, and from public health department staff.

### Resident Input

The 2010 Weld Community Health Survey asked residents to rate how concerned they were about certain pre-determined health-related community. Figure 24 highlights the response to this multiple response question. The numbers represent how many respondents out of 3,383 who returned a survey said they were very or moderately concerned about the issue. A very high percentage of respondents (92%) said they were very or moderately concerned about at least one of the issues listed in Figure 25. The top five concerns were drug abuse (72%), youth crime and gangs (71%), child abuse (70%), neighborhood safety (68%), and teen sexuality (67%). Still significant, but to a lesser extent, over half of respondents were very or moderately concerned about obesity (53%), available of recreation opportunities (52%), and population growth (50%).

**Figure 24.** Number of Respondents (N=3,383) Who Were Very to Moderately Concerned About Health-related Community Issues



Source: 2010 Weld Community Health Survey

When asked if there was anything else to tell the health department, some residents chose to write a comment. A total of 575 residents (17%) made comments. Some residents made only one comment about one issue but many residents mentioned multiple topics in their comments. Weld County Department of Public Health and Environment staff reviewed the comments and classified them into 48 different themes. The top health, environment, and other community issue themes are shown in Figure 25 below.

**Figure 25.** Main Themes from Survey Respondent Open-Ended Comments

Top Ten Health Themes (n=371)	Top Five Environment Issues (n=94)	Top Five Other Issues (n=269)
<ul style="list-style-type: none"> <li>• Health care</li> <li>• Insurance/Medicaid/Medicare</li> <li>• Recreation/physical activity</li> <li>• Teen sex</li> <li>• Food/eating habits</li> <li>• Doctors/clinics/hospitals</li> <li>• Dental/oral health</li> <li>• Tobacco/alcohol/drugs</li> <li>• Mental health/depression /substance use</li> <li>• Obesity</li> </ul>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Mosquitoes</li> <li>• Mining/uranium/oil/gas</li> <li>• Clean air</li> <li>• Farm/agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Income/Employment</li> <li>• Government/Taxes</li> <li>• Schools/Education</li> <li>• Traffic, poor roads, crashes</li> <li>• Crime/Safety/Gangs</li> </ul>

Source: 2010 Weld Community Health Survey

### Local Asset Inventory around Potential Health Priority Areas

The community assessment included an inventory of 30 local organizations identifying local assets around the potential priority issues. Information on the type (e.g., screening, medical services, education, referral, etc.) and quantity of assets (e.g., capital, people, and funding) was obtained along with information about the people they served in the areas of child health, adolescent health, mental health, and chronic disease risk

factor reduction. In each health issue area information pertaining to health care access and disparities were also assessed. Organizations were asked to quantify this information for the year 2010. The results outlined in Table 13 give a picture of what resources were dedicated to the potential health priority areas in 2010 by the 12 organizations that completed this part of the inventory. The tally of total funds represents minimum estimates rather than complete estimates because some organizations did not complete the inventory. In terms of primary staffing, *at least* 203.2 full time equivalent (FTE) staff worked in the mental health area, 111.9 staff worked in child health, 51.7 staff worked in adolescent health, and 39.6 staff worked in chronic disease risk factor reduction. In terms of total funds being dedicated in the community to each health issue area, it appears more funds were spent in child health (\$17.3 million) and mental health (\$15.9 million) than in adolescent (\$6.5 million) or chronic disease risk factor reduction (\$6.2 million). Looking at total funding as it relates to the specific target population, nearly \$400 dollars is spent in the community on child health issues for every child living in the county between the ages of 0 and 10 years. About \$250 is spent on adolescent health issues for every adolescent between the ages of 11 and 17 years; \$63 is spent on mental health issues for every resident living in the county; and about \$25 is spent on chronic disease risk reduction for every resident living in the county.

*“There is confusion about getting to the correct source of care. Many times clients just go to the ER instead. Also, costs are exorbitant for many middle income families.” (Faith Community Services Fund spokesperson)*

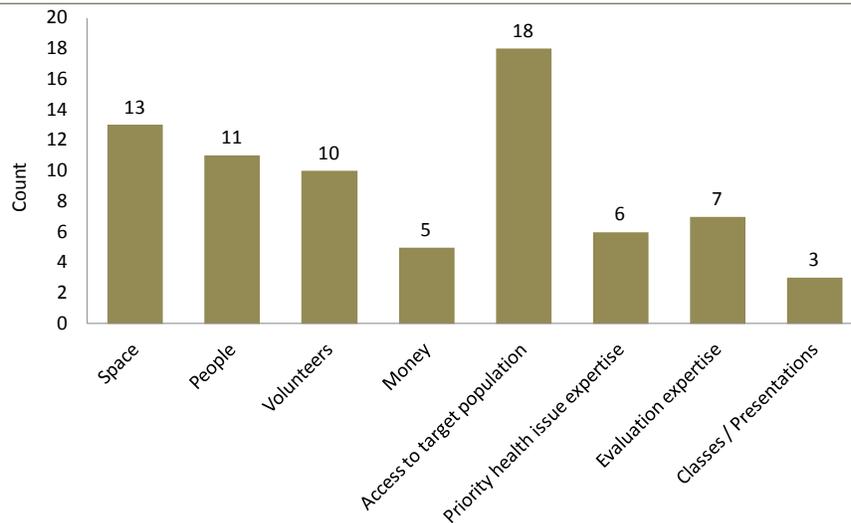
**Table 13.** Summary of Weld County assets around potential health priority areas, 2010

	Primary staff FTE*	Support staff FTE	Volunteer FTE	Total funds in millions, 2010	Dollars spent per target pop.	Number of org. responses* *
Child health (0-10 yrs)	111.89	112.38	27.5	\$17.3	\$387.84	12
Adolescent health (11- 17 yrs)	51.65	16.83	37.5	\$6.5	\$251.99	12
Mental health (All ages)	203.2	65.4	31	\$15.9	\$62.89	7
Chronic disease risk reduction (All ages)	39.55	43.88	1.4	\$6.2	\$24.52	12

Notes: \*FTE means full-time equivalent. \*\*For a complete list of organizations who participated in the inventory see acknowledgements on page 46

Twenty organizations responded to a question about what assets they may be able to offer in the potential health priority areas. Many organizations (18) said they could offer access to the population of interest, space (13), people (11), or volunteers (10). Five organizations said they could possibly offer funding and seven said they could possibly offer evaluation expertise (see Figure 26).

**Figure 26.** Responses to Question: "What assets can your organization offer to help improve our community's health around any of the priority health issues?"



Source: 2011 Weld Community Assets Inventory

### Local Public Health Agency Assessment

Weld County's public health agency, Weld County Department of Public Health and Environment (WCDPHE), was established in 1938, and is the second organized health department in Colorado. The health department has five divisions to serve the public: Administration and Vital Records, Emergency Preparedness, Environmental Health, Health Communication, Education and Planning, and the Public Health Services Division. The department offers a full range of public health services in Weld County. WCDPHE is a department of Weld County government. The Board of Weld County Commissioners is made up of five elected officials that serve as the policy makers for Weld County government. The health department receives approximately one third of its funds from the county, one third from state and federal funds and one third from fees for services. The health department budget for 2011 was \$8,101,406.00.

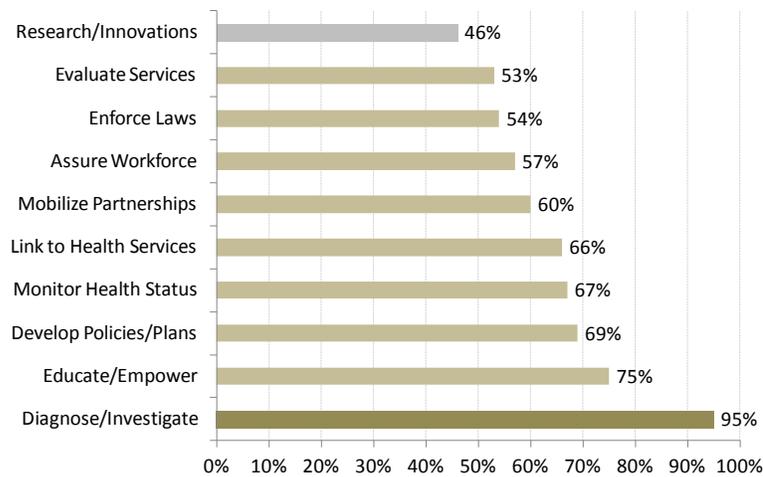
In February 2011, WCDPHE public health managers completed the *Local Public Health System Performance Assessment*, which is part a three-tiered assessment, developed by the National Public Health Performance Standards Program (NPHPSP). The NPHPSP is made up of the following seven national partners:

- Centers for Disease Control and Prevention, Office of Chief of Public Health Practice (CDC/OCPHP)
- American Public Health Association (APHA)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Network of Public Health Institutes (NNPHI)
- Public Health Foundation (PHF)

The NPHPSP assessment is intended to help answer the questions: "What are the activities and capacities of our public health system?" and "How well are we providing the Essential Public Health Services in our jurisdiction?" The purpose is to stimulate a dialogue that results in identifying strengths and weaknesses and determine opportunities for growth and improvement. The agency self-assessment questionnaire is based on the ten essential public health services and several associated model standards for each essential service. Using the responses to the assessment questions, a weighted scoring process generates two levels of scores: a set of scores for each related model standard and a set of scores for each essential service, plus an overall score.

A score between 75 and 100 percent indicates optimal activity in the given area, between 50 and 75 percent indicates significant activity, between 25 and 50 percent indicates moderate activity, and between 1 and 25 percent indicates minimal activity. A score of zero indicates no activity in that area.

**Figure 27.** Rank Ordered Performance Scores for Each Essential Service by Level of Activity, Weld County 2011



Source: 2011 Local Public Health System Performance Assessment

Although WCDPHE had conducted strategic planning and community health assessments in the past, this was the first time Weld County Health conducted an agency self-assessment. A summary of the results can be found in Figure 27. Local public health managers gave the health department the highest ratings, resulting in an optimal activity ranking, in the area of diagnosing and investigating health problems and health hazards in the community. The remaining nine essential services, except for essential service ten, which is to research for new insights and innovative solutions to health problems, were also rated highly. These areas received a ranking that reflects significant activity is taking place in those areas. The results were shared internally and with the community-based steering group and are being used for quality improvement and agency strategic planning purposes in 2012.

## Strategic Priority Issues

Weld County’s initial local issues of concern were not only chosen based on information gathered during the community health and local capacity assessments but also with consideration of national and state goals. Weld County’s initial issues of concern are aligned with Colorado’s 10 Winnable Battles, which are key public health and environmental issues where it is expected progress can be made over the next several years. Weld County selected its top two priority issues (discussed more below) because they provide the greatest opportunities for ensuring the health of all of residents. Many of Weld 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. Weld County’s local issues of concern along with Colorado’s winnable battles and the CDC’s Winnable Battles are displayed in Figure 28.

**Figure 28.** CDC and Colorado Winnable Battles, Weld Local Issues of Concern

CDC-National Winnable Battles	CO – State Winnable Battles	Weld – Local Issues of Concern
<ul style="list-style-type: none"> <li>• Food Safety</li> <li>• Global Immunization</li> <li>• Healthcare-associated Infections</li> <li>• HIV in the U.S.</li> <li>• Lymphatic Filariasis in the Americas (vector is the mosquito)</li> <li>• Motor Vehicle Injuries</li> <li>• Nutrition, Physical Activity and Obesity</li> <li>• Mother-to-Child Transmission of HIV/AIDS Globally</li> <li>• Teen Pregnancy</li> <li>• Tobacco</li> </ul>	<ul style="list-style-type: none"> <li>• Clean Air</li> <li>• Clean Water</li> <li>• Infectious Disease Prevention</li> <li>• Injury Prevention</li> <li>• Mental Health and Substance Abuse</li> <li>• Obesity</li> <li>• Oral Health</li> <li>• Safe Food</li> <li>• Tobacco</li> <li>• Unintended Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>• Infant Health</li> <li>• Motor Vehicle Safety for Teens</li> <li>• Mental Health &amp; Substance Abuse**</li> <li>• Nutrition, Physical Activity, and Obesity**</li> <li>• Teen Pregnancy</li> <li>• Tobacco</li> </ul> <p>** indicates priority focus areas</p>

Weld County’s top priorities were 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, and c) there are organizations, resources, and local champions that can move the issue forward.

In May 2011, after four months of gathering, reviewing, and discussing local data related to the six priority issues, the oversight committee engaged in a best practice priority setting process using a pre-determined standardized criterion with an anonymous electronic voting system. The identified issues were once again briefly reviewed and a facilitated group discussion resulted in the twenty agency participants voting on the importance of the issue (based on the data and separately on the individual’s expert opinion) and the ability and capacity of the community to impact each health priority. The multidimensional results were instantly tallied, presented, and discussed further. The group then made a final decision to focus on the top two priority issues based on the ranking of scores for each health priority in the areas of ability, capacity, importance, and overall importance. In The results are summarized in Table 14 and 15.

**Table 14.** Multidimensional Rating of Six Potential Priority Health Issues

	Ability	Capacity	Importance	Average of all 3	Ranking
Nutrition, physical activity, and obesity	3.9	3.8	4.6	4.10	1
Mental health & substance abuse	3.8	3.4	4.4	3.87	2
Teen pregnancy	3.1	3.4	4.0	3.50	
Teen motor vehicle safety	3.1	3.8	3.4	3.43	
Tobacco use	3.4	3.1	3.4	3.30	
Infant health	3.2	3.4	3.3	3.30	

**Table 15.** Overall Importance Rating of Six Potential Priority Health Issues

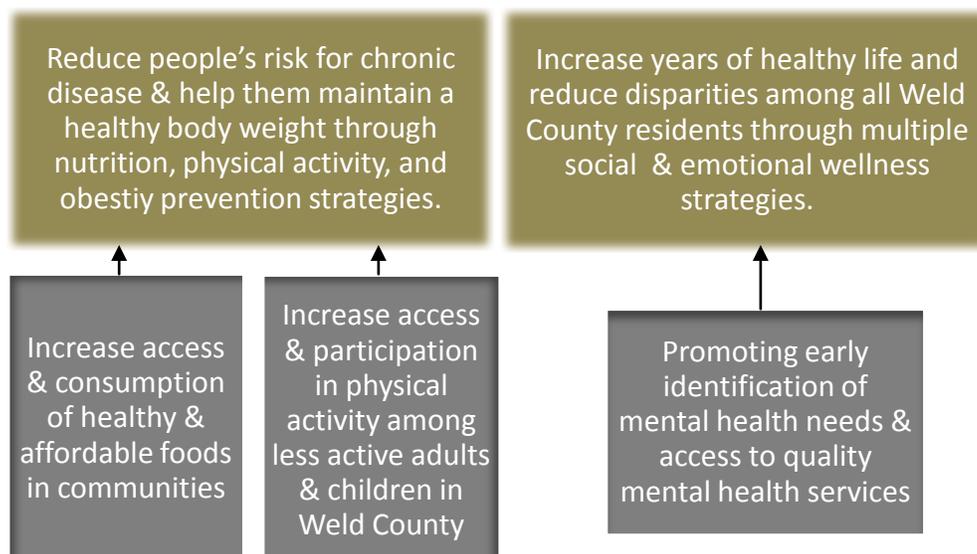
	Importance Count	Top two rankings
Nutrition, physical activity, and obesity	17	1
Mental health & substance abuse	10	2
Infant health	5	
Teen motor vehicle safety	2	
Tobacco use	2	
Teen pregnancy	2	
<b>TOTAL</b>	<b>38</b>	

## The Five-Year Countywide Action Plan

The Weld County Five-year Community Health Improvement Plan was developed in partnership with the agencies that serve the greater public health system in Weld County. The Weld 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.

The North Colorado Health Alliance (NCHA) served as the steering committee for the development of the plan and will guide the implementation process through 2016 (and beyond). NCHA is a 501(c)(3) nonprofit incorporated to improve access and quality of health care and prevention services for the underserved and uninsured populations in Weld County. Members include Banner Health and North Colorado Medical Center, North Colorado Family Physicians, North Colorado Medical Center Foundation, North Range Behavioral Health, Weld County School District Six, Aims Community College, University of Northern Colorado, United Way of Weld County, Sunrise Community Health Centers, Board of Weld County Commissioners, Weld County Human Services and the Weld County Department of Public Health and Environment. Other major contributors were the Community Foundation, Kaiser Permanente, Catholic Charities of Northern Colorado, and Senator Mark Udall’s office.

**Figure 29.** Weld County Community Health Improvement Plan  
Long-term Outcomes and Five Year Goals



The process of identifying our priority health issues included a series of meetings throughout 2011 with our public health partners and members of the community. Data from the 2010 Community Health Survey and other state and national sources were reviewed and discussed; a resource capacity assessment was completed by thirty agencies serving the public health in Weld County; and guest experts attended meetings to share information on the opportunities and barriers to improving public health in Weld County. Through a process of electronic voting, two focus areas for the 5-year plan were identified and action plans developed from six broad areas of concern mentioned previously.

Although the county five-year action plan will focus on two priorities issues: 1) nutrition, physical activity, and obesity, and 2) mental health and substance abuse, individual organizations, coalitions, and programs will each maintain their focus on the other priority health issues in addition to contributing resources and people power toward the priority issues. The detailed action plan can be found on the web at [www.weldhealth.org](http://www.weldhealth.org) Figures 29 and 30 (see next page) outlines the goals, long-term outcomes, and strategies that were identified by the committee as steps to be taken over the next five years.

## Conclusion

Everyone knows that reports alone are not enough. They are only shorthand for what we put forward as a community to highlight our priorities for the future. Where we live and work is a critical factor that determines whether we end up healthy or not. When people do not have access to a healthy environment or opportunities to make healthier choices, it undermines their health and lowers their quality of life. Many residents in our area are struggling to be healthy because of the economy. Promoting and maintaining health means addressing community health and local public systems that people interact with such as markets with healthy foods, transportation, and schools that promote health through good nutrition and physical education requirements. When these structures (and others) are in place they make it possible for us to maintain our health and quality of life. Weld County is a wonderful place. It can become an even healthier place by leaders and citizens coming together to effect the changes laid out in our local community health improvement plan.

*“The key to mapping our way to a healthier community is to attain and maintain a stronger, more well connected local public health system.” (Anonymous stakeholder)*

## For More Information

The 2011 Weld County Health Assessment and Community Health Improvement Plan as well as more data are available on the Weld County Department of Public Health and Environment’s website at [www.weldhealth.org](http://www.weldhealth.org). If you have additional questions, WCDPHE staff is available to discuss the information in this report. Contact Cindy Kronauge at (970) 304-6470 or [ckronauge@co.weld.co.us](mailto:ckronauge@co.weld.co.us).

## Healthy Affordable Food Access

- Increase availability of healthy foods in existing establishments
- Improve the nutrition quality of the local food supply
- Support economic development of local/regional farm to table efforts
- Improve the variety of healthy food options that are affordable for people living on lower incomes
- Align organizational and programmatic nutrition standards and policies with the latest Dietary Guidelines for Americans
- Help residents recognize and make healthy food and beverage choices

## Access & Participation in Physical Activity

- Encourage community design and development that supports physical activity
- Promote school and early learning center policies and programs that increase physical activity
- Facilitate access to safe, accessible, and affordable places for physical activity
- Support workplace policies and programs that increase physical activity
- Assess basic health status (blood pressure, cholesterol, BMI) including physical activity levels and provide education, counseling, and referrals

## Early Identification & Access to Mental Health Care

- Implement USPSTF recommendations for screening and referrals for adults and adolescents (ages 12-18 yrs)
- Public awareness and health education campaigns (for all ages) that reduce stigma associated with mental health (and substance abuse) services
- Integrate needs identification into health care, social service, community, work-sites, schools, faith-based organizations, 211, etc. for youth and adults
- Promote stress identification and prevention at work-sites
- Increase Medicaid enrollments for eligible families and children in need

**Figure 30.** Local Priority Strategies to Achieve Goals

## Methodology

The data collection, analysis, and reporting process were managed by Weld County Department of Public Health and Environment's Health Communication, Education, and Planning Division. Since some data are based on information collected from other sources, timeliness and detail were sometimes limited. The most recent data available with the greatest level of detail at the time of publication are presented. Where appropriate, data have been age-adjusted to account for age differences between compared population groups. Percentages have been rounded and, therefore, may not always sum to 100 percent. Different categories are used when referring to race and ethnicity. White, Black and Asian are racial classifications. Hispanic is an ethnic category, not a racial category; therefore, Hispanics may fall into any of the racial categories. For this report, the racial terms "White", "Black/African American", "Asian/Pacific Islander", and "American Indian/Alaska Native" refer to individuals that do not consider themselves of the ethnic category "Hispanic." The "Other" racial category includes Native Hawaiian as well as multiracial and unknown racial categories.

For much of the general narrative accompanying local data, we relied heavily on similar reports and summaries within the public domain on the internet such as Healthy People 2020 at <http://www.healthypeople.gov>, the National Prevention Strategy Report at <http://www.healthcare.gov/prevention/nphpphc/strategy/report.pdf>, and the Colorado Department of Public Health and Environment website.

## Data Sources Used in the This Report

- Data charts and tables identified the original data source; however, most of the data actually come from the Colorado Department of Public Health and Environment and are publicly available on their web site. They have over 350 validated indicators available on their website at: <http://www.chd.dphe.state.co.us/HealthIndicators> Colorado Department of Public Health and Environment Colorado Health Indicator Data website includes county, regional, and state level data. The data are part of Colorado's Health Assessment and Planning System (CHAPS), a standard process created to help local public health agencies and their local partners meet new assessment and planning requirements.
- The Weld County Community Health Survey: Beginning in 2007, Weld County Department of Public Health and Environment conducts a community survey every three years to assess the health status and health needs of county residents. The questionnaire asked residents about their perceived overall health and included questions about health status, health habits, lifestyle factors, screening rates, insurance coverage, and a variety of health-related perceptions and concerns. The 2010 survey was an eight-page, 53-question survey sent to a statistically representative sample of people living in Weld County. Residents aged 18 and older were chosen at random from a comprehensive list of households that included residents in single-family dwelling units (including mobile home parks), multi-family dwelling units (including senior housing), and general delivery P.O. boxes located within the county. A total of 3,383 residents completed the survey. The overall response rate was 42%. Survey responses were weighted to the 2009 American Community Survey one-year estimates for Weld County (US Census) by age, gender, and race/ethnicity. The margin of error for county estimates is plus or minus 1-2 percent and for regional estimates is plus or minus 3-5 percent.

- The 2011 Weld Community Assets and Capacity Assessment around Potential Priorities was developed by Weld County Department of Public Health and Environment staff and is available upon request by contacting the Data Analyst at (970) 304-6470 or [info@weldhealth.org](mailto:info@weldhealth.org)
- The 2011 Local Public Agency Self-Assessment Tool developed by National Public Health Performance Standards Program (NPHPSP) is a tool to help state and local health agencies improve and to prepare for eventual accreditation. For more information go to: <http://www.cdc.gov/nphpsp>
- Other data sources include:
  - The U.S. Census Bureau – [www.factfinder2.census.gov](http://www.factfinder2.census.gov)
  - Weld Behavioral Risk Factor Surveillance Survey – information about this survey is available from the Data Analyst at Weld County Department of Public Health and Environment
  - Weld Healthy Kids Colorado Survey – a countywide probability-based survey of middle and high school students administered by OMNI Research, Denver, Colorado on behalf of the Weld County Prevention Partnership.
  - Input about concerns and barriers to health and ideas and priorities to improve the health of the community was gathered from over 3,000 residents (as part of the Weld Community Health Survey) and over 30 local agencies through community meetings.

## Explanation of Peer County Selection Process

Data in this report compares Weld County health data to state data or to peer or neighboring county data. Four counties are considered to be peer or neighboring counties because they have similar population size, poverty, or age structure (Table 16).

**Table 16.** Population Size, Poverty, and Age Structure of Weld and Five Peer Counties. 2010

	Boulder	Larimer	Mesa	Pueblo	Weld
Population	294,567	299,630	146,723	159,063	252,825
Population per square mile	406	115	44	67	63
Persons below poverty level	13.6%	13.6%	14.7%	19.6%	14.3%
Children in poverty	13.8%	13.0%	18.0%	25.8%	18.5%
Persons under 18 years old	21.3%	21.4%	23.5%	24.5%	27.8%
Persons 65 years old and over	10.0%	11.9%	14.9%	15.3%	9.6%

Source: U.S. Census Bureau, Decennial Census and Small Area Income and Poverty Estimates

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### **Steering Committee:**

North Colorado Health Alliance:

North Colorado Medical Center, North Range Behavioral Health, Sunrise Community Health Center, United Way of Weld County, University of Northern Colorado College of Health and Human Sciences, Weld County Department of Public Health and Environment, Weld County Board of Commissioners.

### **Other Partners:**

Catholic Charities, Community Foundation, Colorado Department of Public Health and Environment, City of Greeley Community Development, CSU Extension, High Plains Library District, Kaiser Permanente, SAVA, Senator Mark Udall's office, Weld County Prevention Partners, Weld County School District Six, Weld County Department of Human Services and Social Services, Weld County Food Bank, and Weld County Prevention Partners.

Thanks to the agencies that completed the Weld County Community Assets Inventory:

- Catholic Charities of Weld County
- CDI Head Start of Weld County
- City of Greeley, Community Development Program
- The Community Foundation of Greeley and Weld County
- Colorado Expanded Food and Nutrition Education Program (EFNEP) of Weld County, part of Colorado State University Extension Services
- Drive Smart Weld County
- Faith Community Service Fund
- High Plains Library District
- North Colorado Health Alliance
- North Colorado Medical Center - Cancer Institute
- North Colorado Medical Center - Cardiovascular
- North Colorado Medical Center- Banner Health Wellness
- North Colorado Medical Center-Behavioral Health
- North Range Behavioral Health
- Sunrise Monfort Family Clinic
- The Sexual Assault Victim Advocate Center
- Weld County Tobacco-Free Coalition
- United Way of Weld County

- University of Northern Colorado, Fitness and Wellness Program
- University of Northern Colorado, Realizing Our Communities Program
- Weld County Department of Human Services, Children, Youth, and Family Services
- Weld County Department of Human Services, Area Agency of Aging
- Weld County Department of Public Health and Environment, Public Health Services Division
- Weld County Prevention Partners
- Weld County Department of Public Health and Environment, Health Communication, Education and Planning Division
- Weld County Government, Safety and Wellness Program
- Weld County School District 6
- Weld County Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
- Weld Food Bank

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