2013
Public Health Improvement Plan

Northeast Colorado
Health
Department

Click on the tabs to jump to the information you want, or scroll through the pages individually.

Table of Contents

<u>Acknowledgements</u>

Introduction to PHIP

Welcome!

The Northeast Colorado Health Department's Public Health Improvement Plan (PHIP) is our strategic plan for improving the health and environment for residents across our health district through 2018.

As a requirement of the 2008 Public Health Act all local health agencies were charged with developing their own local public health improvement plan based on a community health assessment and a capacity assessment.

This entire report will break down the planning process we undertook in developing our plan, profile the health status of residents in the northeast region, explain the data collection and methodology used, discuss the conclusions from the data, as well as results from the capacity assessment, and finally, will explain the prioritization of the key issues residents in northeast Colorado face, and identify relevant strategies to address those issues.

NCHD is following the Colorado Health Assessment and Planning System (CHAPS) to assist in the development of our plan. CHAPS is a standard mechanism for assisting local and state health agencies in meeting the assessment and planning requirements of the Public Health Act. The process of assessing, prioritizing, planning and evaluating is laid out

in each phase of the process described on the next page.

This plan is our road map to providing better public health services to the residents of northeast Colorado, addressing issues we know are important based on feedback and statistics, with resources we know are available through our capacity assessments.

We could not have put this information together without the help of our community stakeholders, partners, and the residents we serve, so our thanks goes out to everyone that took the time to make public health a priority and provide input on this process.

Any questions regarding the material found in this plan or the process undertaken for the plan should be directed to Deanna Herbert, NCHD's Public Health Improvement Plan project manager, e-mail deannah@nchd.org, or phone (970) 522-3741 x1257.

Colorado Health Assessment & Planning System (CHAPS)

✔ *Completed* - **Phase I: Plan the Process**
- <u>Develop a timeline</u> (utilized timeline from the scope of work provided by Office of Planning and Partnerships , May, 2012)
- <u>Create a project management team</u> (selected a 12-person team made up of NCHD employees, May, 2012)

✔ *Completed* - **Phase 2: Identify and Engage Stakeholders**
- <u>Clarify goals</u>
- <u>Identify a steering committee</u> (selected a 13-person committee made up of program coordinators and the medical director from NCHD as well as several regional agency directors and other key staff from Baby Bear Hugs, Centennial Mental Health, Rural Solutions, BOCES, and CSU Extension, May 2012)
- <u>Recruit stakeholders</u> (identified key stakeholders/informants from each county representing health, human services, schools, faith based agencies, large employers, foundations, elected officials, fire/ law enforcement, etc. to participate in community meetings, June, 2012)

✔ *Completed* - **Phase 3: Conduct a community health assessment**
- <u>NCHD's community health survey</u> (surveyed community members in each of our six counties, June - August, 2012)
- <u>Key informant meetings</u> (held one meeting in each of our six counties with representation from our identified key stakeholders, July - August, 2012)
- <u>Gather health data</u> (compiled data from Colorado Health Indicators website, as well as data from key informant meetings and NCHD's community health survey, October, 2012)

✔ *Completed* - **Phase 4: Conduct a capacity assessment**
- <u>Completed a capacity assessment</u> (distributed a capacity assessment to key informants and steering committee members covering three key topics that were identified through all of the qualitative and qualitative data that was gathered, December 2012)
- <u>Completed a health burden survey</u> (surveyed steering committee members regarding health burden of each selected topic, January 25 - 31, 2013)

✔ *Completed* - **Prioritize issues with steering committee**
- <u>Discuss capacity and finalize priorities</u> (met with steering committee to share capacity and health burden data and prioritize key issues (February 12, 2013)

✔ *Completed* - **Phase 6: Create a public health improvement plan**

IN PROGRESS - **Phase 7: Implement and monitor the plan**

✔ *Completed* - *Phase 8:* **Inform the statewide plan**

Data collection and analysis

The data collection, analysis and reporting process were managed by the Northeast Colorado Health Department's Public Health Improvement Plan project management team. 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 equal 100 percent.

DATA SOURCES
The majority of the data come from the Colorado Department of Public Health and Environment and are publicly available on their website. They have over 350 validated indicators available on their website at: www.chd.dphe. state.co.us/HealthIndicators/Default.aspx. CDPHE's 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.

In addition, data is also presented from the Northeast Colorado Health Department's Community Health Survey. The survey was designed to assess the health status and health needs of county residents. The survey asked residents about their perceived overall health and included questions about health status, health habits, lifestyle factors, screening rates, and a variety of health and environmental perceptions and concerns. The survey was given during the summer of 2012, and was made available through various means to all residents 18 and over. A total of 495 responses were received across the six counties. This statistical method is known as a convenience sample. The advantages to this method are that data can be gathered quickly, the disadvantage is that the sample may not represent the population as a whole.

Due to the smaller population size of some of our counties, data are often suppressed because fewer people were surveyed and therefore not enough data were collected to generate statistically reliable estimates. Because of that, the data presented in this report is based on a regional level, which includes the counties of Logan, Morgan, Phillips, Sedgwick, Washington and Yuma, rather than county-specific data.
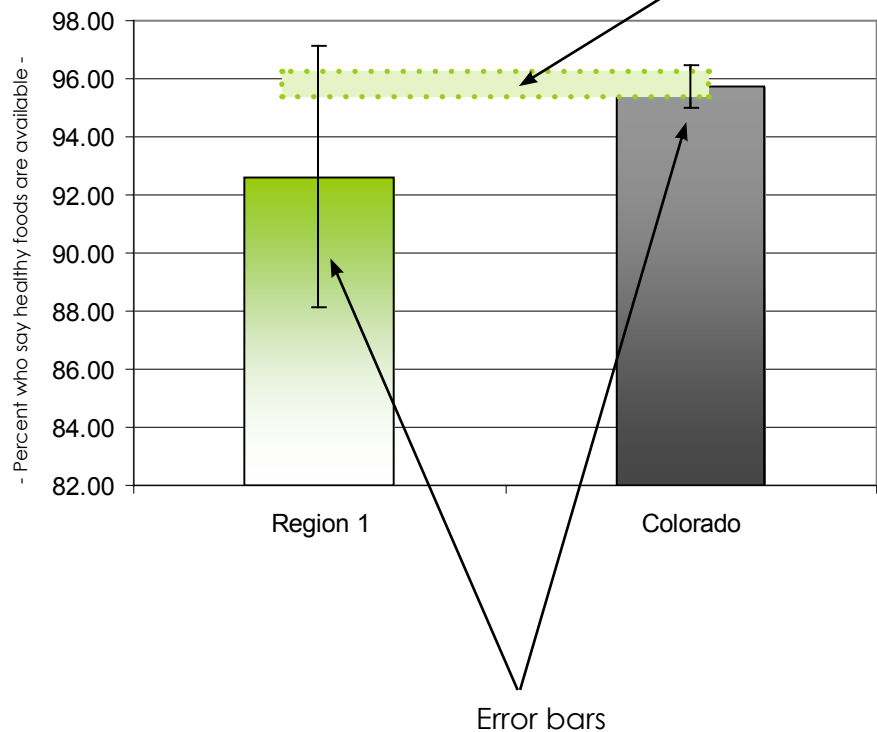
Other data sources include:
- The U.S. Census Bureau, American Community Survey
- Bureau of Labor Statistics
- Environmental Protection Agency
- Colorado Secretary of State
- Colorado Health Institute
- Centers for Disease Control and Prevention

TECHNICAL NOTES

When measurements are calculated from a sample of people within a population, these values are subject to a level of uncertainty or error. This uncertainty can be represented through the use of confidence intervals, which indicates a range of values for which there is a 95 percent probability of containing the true value for the entire population.

In this report, many of the data values presented have a confidence interval, which are noted when making comparisons. Error bars are included on some figures in the report and these represent the upper and lower limits of the confidence interval. When comparing values between groups of a population or across time periods, if confidence intervals overlap, there is no statistically significant difference between the values. If the confidence intervals don't overlap, then there is a statistically significant difference between the measured values. In this report, all values that are statistically significantly different comparisons are indicated with an asterisk.

Even though the regional rate is lower in this graph, the error bars overlap, therefore this data does not represent a statistically significant difference.

Error bars

OTHER STATISTICAL DEFINITIONS

Frequency - the number of times a given value of an observation occurs

Proportion - the number of observations with the characteristic of interest divided by the total sum of observations. It is used to summarize frequencies.

Percentage - a proportion multiplied by 100

Rate - A proportion associated with a multiplier, called the base (e.g. 1,000, 10,000) and computed over a specific period. Crude rates, age-specific rates, age-adjusted rates.

Age-adjusted rates - A rate that has been standardized to the age distribution of a particular population so that it is, in effect, independent of the age distribution of the population it represents. Typically used to compare rates over time or among different geographical areas.
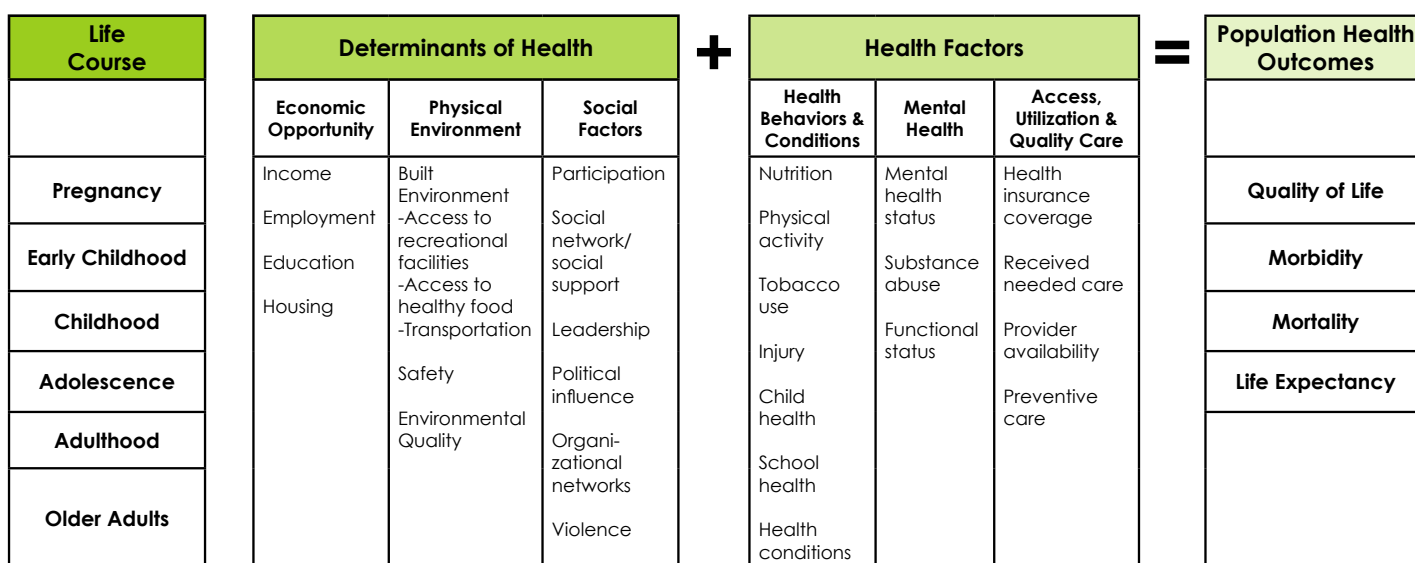
A more detailed document called "Data Definitions" with examples and definitions is available online under the Resources tab on the Colorado Health Indicators website: www.chd.dphe.state.co.us/HealthIndicators/Default.aspx.

The health data in this assessment is presented utilizing the Health Equity Model, shown below.

This model takes into account how populations are impacted differently during the various stages of life by things such as economic oportunity, physical environment, and social factors, plus health behaviors and conditions, mental health, access, utilization and quality of health care.

It then illustrates various population health outcomes such as quality of life, morbidity and mortality.

Life Course	Determinants of Health				Health Factors				Population Health Outcomes
	Economic Opportunity	Physical Environment	Social Factors	**+**	Health Behaviors & Conditions	Mental Health	Access, Utilization & Quality Care	**=**	
Pregnancy	Income	Built Environment -Access to recreational facilities -Access to healthy food -Transportation	Participation		Nutrition	Mental health status	Health insurance coverage		**Quality of Life**
Early Childhood	Employment		Social network/ social support		Physical activity	Substance abuse	Received needed care		**Morbidity**
Childhood	Education		Leadership		Tobacco use	Functional status	Provider availability		**Mortality**
Adolescence	Housing	Safety	Political influence		Injury		Preventive care		**Life Expectancy**
Adulthood		Environmental Quality	Organizational networks		Child health				
Older Adults			Violence		School health				
					Health conditions				

"Inequalities in health status in the U.S. are large, persistent, and increasing. Research documents that poverty, income and wealth inequality, poor quality of life, racism, sex discrimination, and low socioeconomic conditions are the major risk factors for ill health and health inequalities… conditions such as polluted environments, inadequate housing, absence of mass transportation, lack of educational and employment opportunities, and unsafe working conditions are implicated in producing inequitable health outcomes. These systematic, avoidable disadvantages are interconnected, cumulative, intergenerational, and associated with lower capacity for full participation in society….Great social costs arise from these inequities, including threats to economic development, democracy, and the social health of the nation."

-National Association of County and City Health Officials Health and Social Justice Committee. Creating Health Equity Through Social Justice. National Association of County and City Health Officials. Available at http://archive.naccho.org/documents/health-socialjusticepaper5.pdf.

Accessing the health data quickly

Click on the health topic you're interested in to navigate directly to that page.

Community Characteristics

Introduction

Data

Capacity & Prioritization

The Plan!

Table of Contents

Quantitative health data

The Northeast Colorado Health Department has been serving the local public health needs of the six counties on the plains of north-east Colorado since 1948.

With a staff of approximately 40 members, we are the largest geographical health district in the state of Colorado, spanning 9,200 square miles.

Our counties are a mix of rural and frontier and we serve a population of just over 72,000. Our six counties make up Region 1 in the state of Colorado, which is how the majority of the data will be presented in this report.
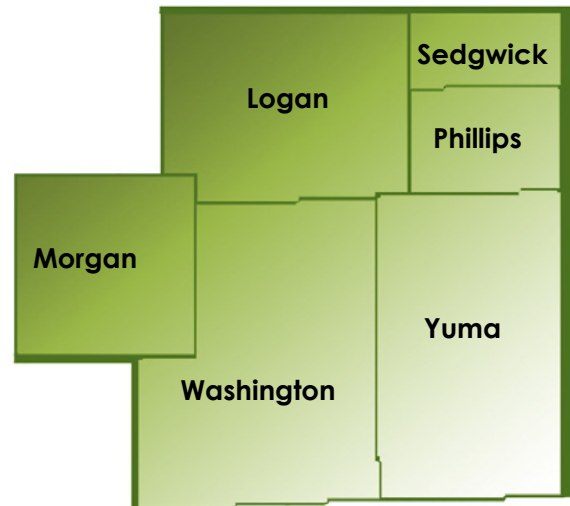
Population forecasts for the Northeast Region

Source: State Demography Office

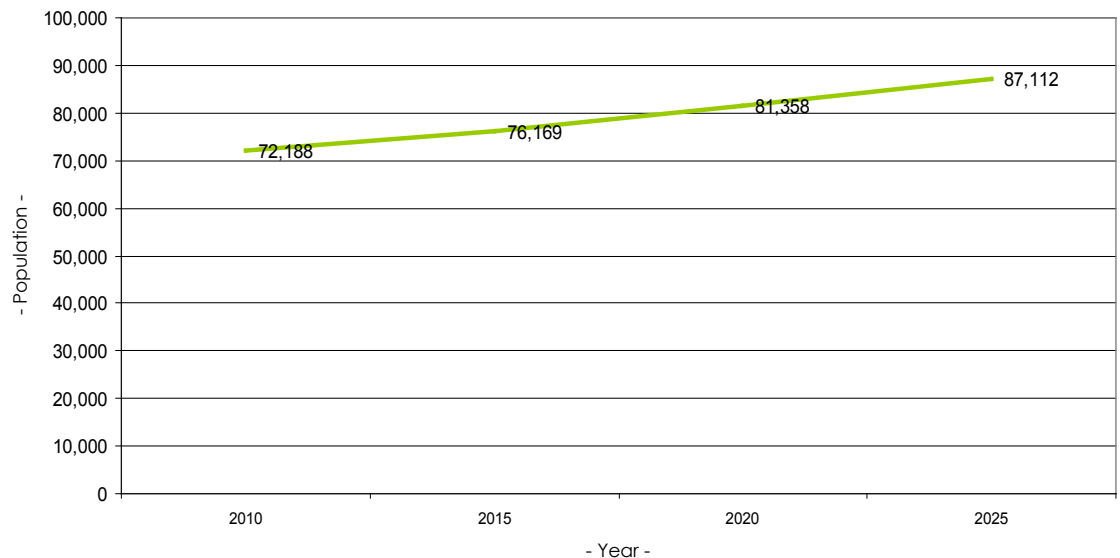## Percent of population by race/ethnicity (2010) Northeast Region

Source: State Demography Office

- ■ White-NonHispanic
- ■ White Hispanic
- ■ Black
- ■ Asian American/Pacific Islander
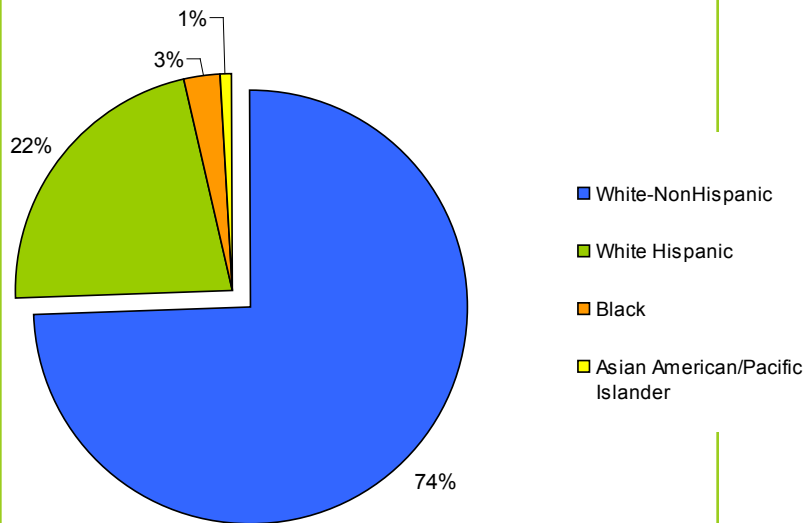
Geography of Hispanic-Latino population (2010) Northeast Region

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Map Key	
	1 - 10%
	10 – 25%%
	25 - 50%
	50 - 75%
	75 - 86%
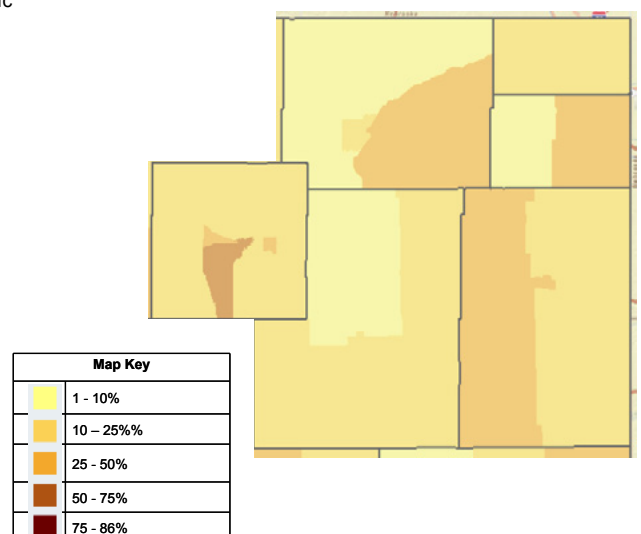
Percent of linguistically isolated households (2006 - 2010)

Source: U.S. Census Bureau, American Community Survey
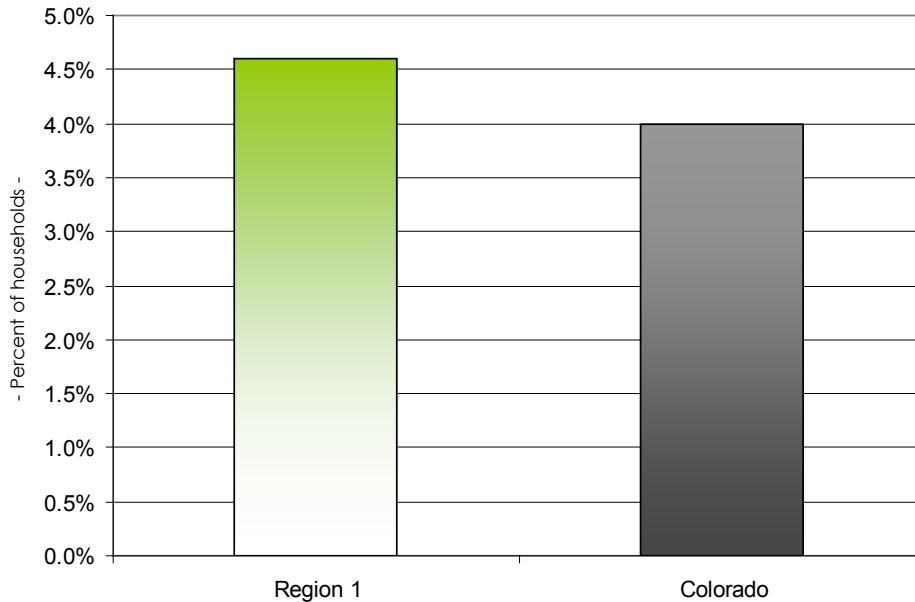
Household Linguistic Isolation is defined by the American Community Survey as one in which all adults had some limitation in communicating English. A household was classifed as "linguistically isolate" if 1) No household member age 14+ years spoke only English AND 2) No household member age 14+ years who spoke another language, spoke English "very well."

Languages other than English that were primarily spoken* in the home (2006 - 2010)

Source: U.S. Census Bureau, American Community Survey

- Spanish   6.9%
- Chinese   .20%
- African Languages   .60%

*Percent of population that speaks language at home and speaks English less than very well.

Other languages that are spoken in northeast Colorado, but not pervasive enough to make it into regional data include:
- Korean (Logan and Phillips counties)
- Russian (Morgan and Sedg-wick counties)
- German (Phillips County)
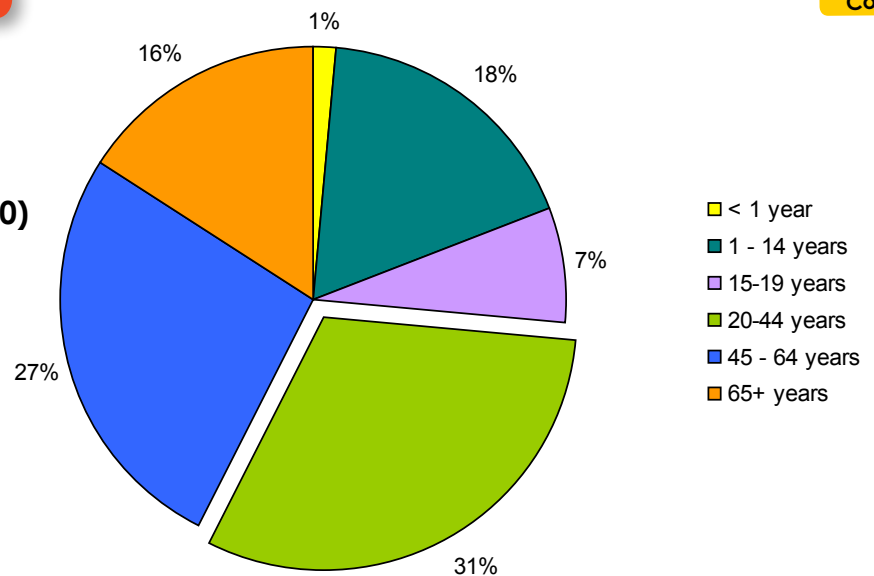- Tagalog (Phillips County)
- French (Sedgwick County)
- Portuguese (Yuma County)

Percent of population by age (2010) Northeast Region
Source: State Demography Office

Legend:
- < 1 year
- 1 - 14 years
- 15-19 years
- 20-44 years
- 45 - 64 years
- 65+ years

Pie chart values: 1%, 18%, 7%, 31%, 27%, 16%

Total population living in gorup quarters (2006 - 2010)
Source: U.S. Census Bureau, American Community Survey

Total northeast Region population living in group quarters.................... 4,943

% of northeast region population living in group quarters 6.8%

% of Colorado population living in group quarters..................0.6%

This includes populations living in places such as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities and workers' dormitories.
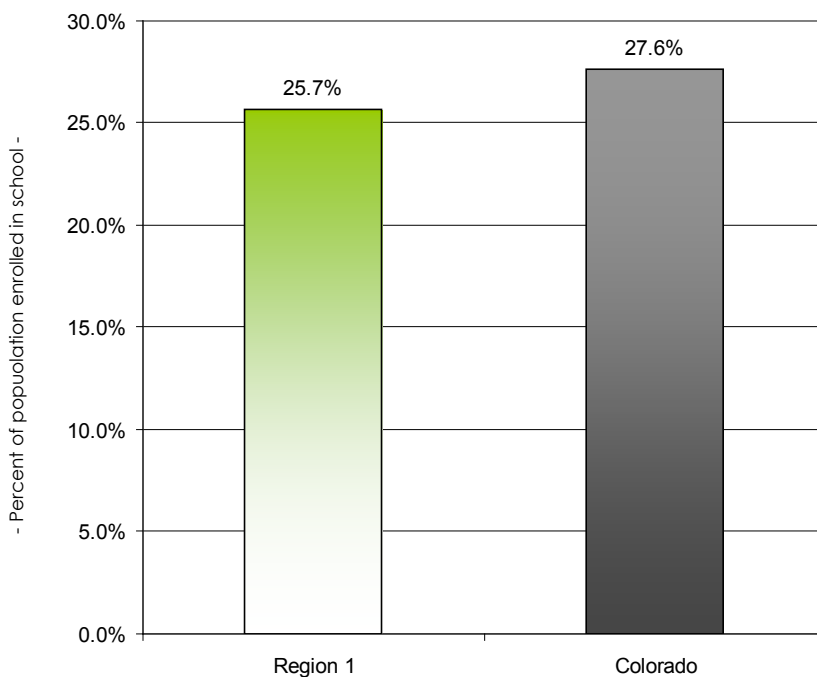
Percent of population enrolled in school (2006 - 2010)
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Bar chart:
- Region 1: 25.7%
- Colorado: 27.6%

Y-axis: - Percent of popuolation enrolled in school -

Introduction

Data

Capacity & Prioritization

The Plan!

SUMMARY

Community Characteristics

Population

Race/Ethnicity

Language

Age

- Total population of the north-east region will slowly rise over the next 15 years

- Hispanics make up the largest part of the minority population

- At least 3 languages (other than English) are present in our region

- Higher percent of linguistically isolated households than the state

- Largest percent of population is aged 20-44 years

- Just over one-quarter of the population in northeast Colo-rado is enrolled in school

Economic Opportunity

Determinants of Health		
Economic Opportunity	**Physical Environment**	**Social Factors**
Income Employment Education Housing	Built Environment -Access to recreational facilities -Access to healthy food - Transporta-tion Safety Environmental Quality	Participation Social network/ social support Leadership Political influence Organiza-tional net-works Violence

Income

Employment

Education

Housing

Percent of families with income below poverty level (2006 - 2010) Northeast Region

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Map Key	
	0-5%
	5-10% (average 9.3%)
	10-25%
	25-83%

Median household income (2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Introduction | **Data** | Capacity & Prioritization | The Plan!
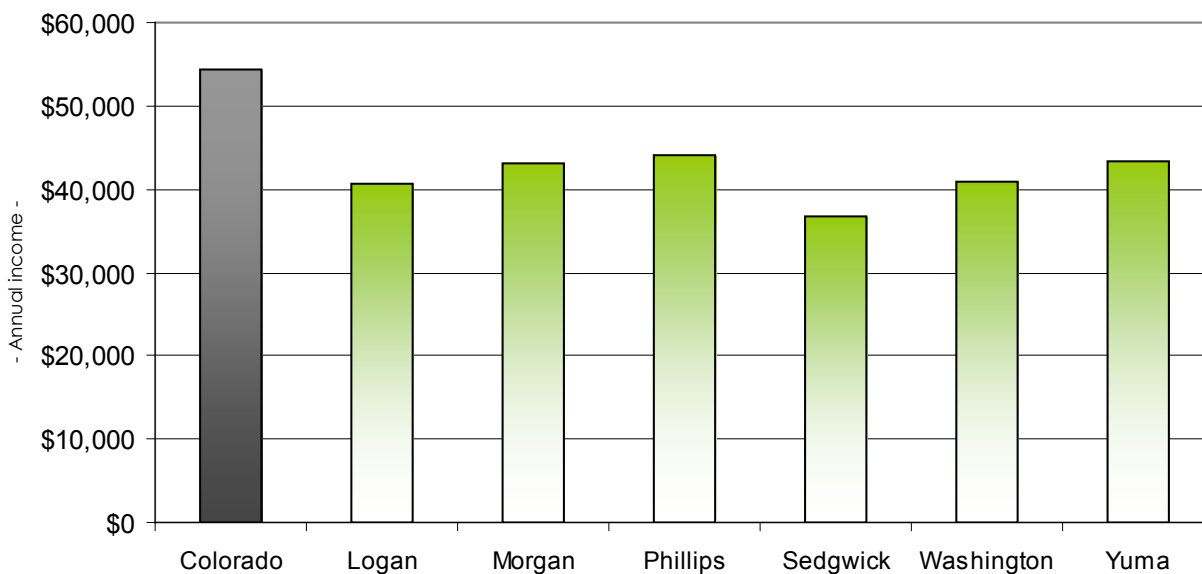
Percent of population below poverty level all ages (2010)
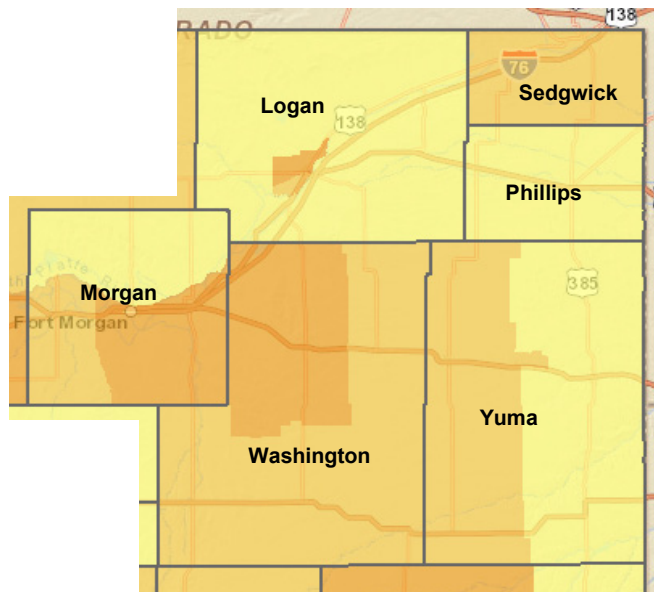
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
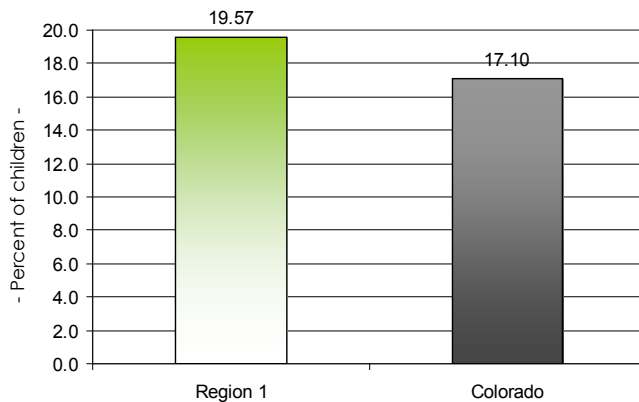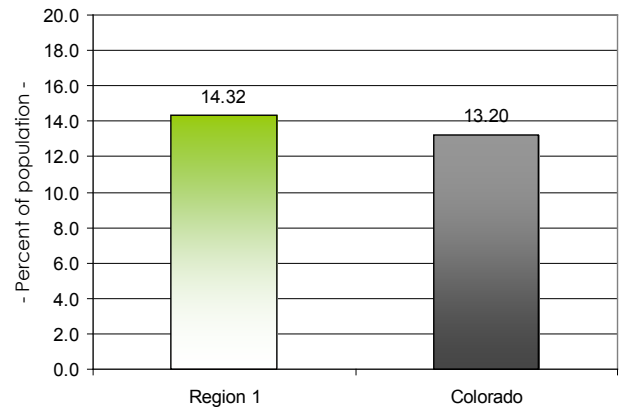
Percent of children <18 below poverty level (2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
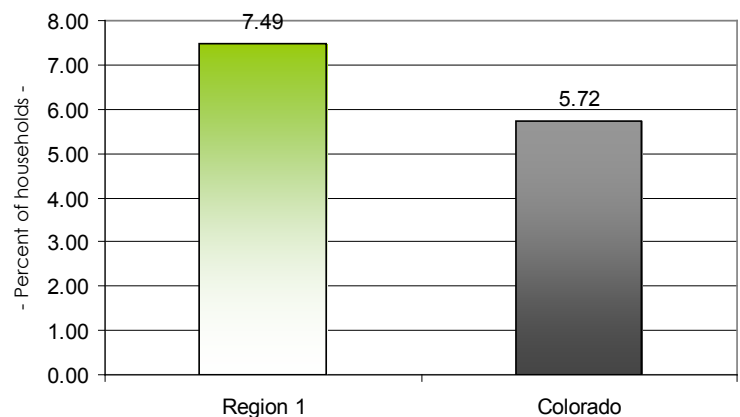
Percent of households that received food stamps in the past 12 months (2006 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
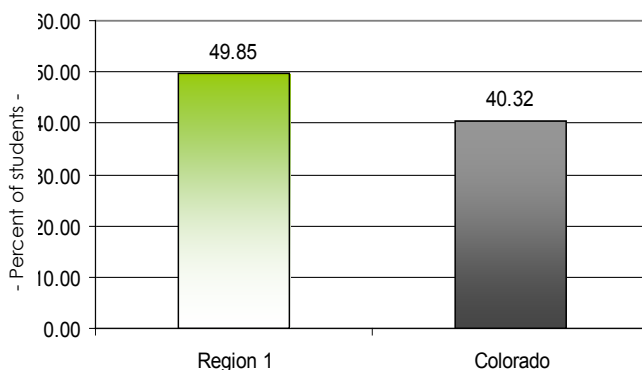
Percent of public school students eligible for free and reduced school lunch (K-12, 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Industry by occupation for the civilian employed population 16 years and over (2006 - 2010) Northeast Region

Source: U.S. Census Bureau, American Community Survey, 5 year estimates

- Agriculture, forestry, fishing and hunting, and mining
- Construction
- Manufacturing
- Wholesale trade
- Retail trade
- Transportation and warehouseing, and utilities
- Information
- Frinance and insurance, and real estate and rental and leasing
- Professional, scientific, and management, and administrative and waste management services
- Educational services, and health care and social assistance
- Arts, entertainment, and recreation, and accommodation and food services
- Other services, except public administration
- Public administration

Unemployment rate (2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
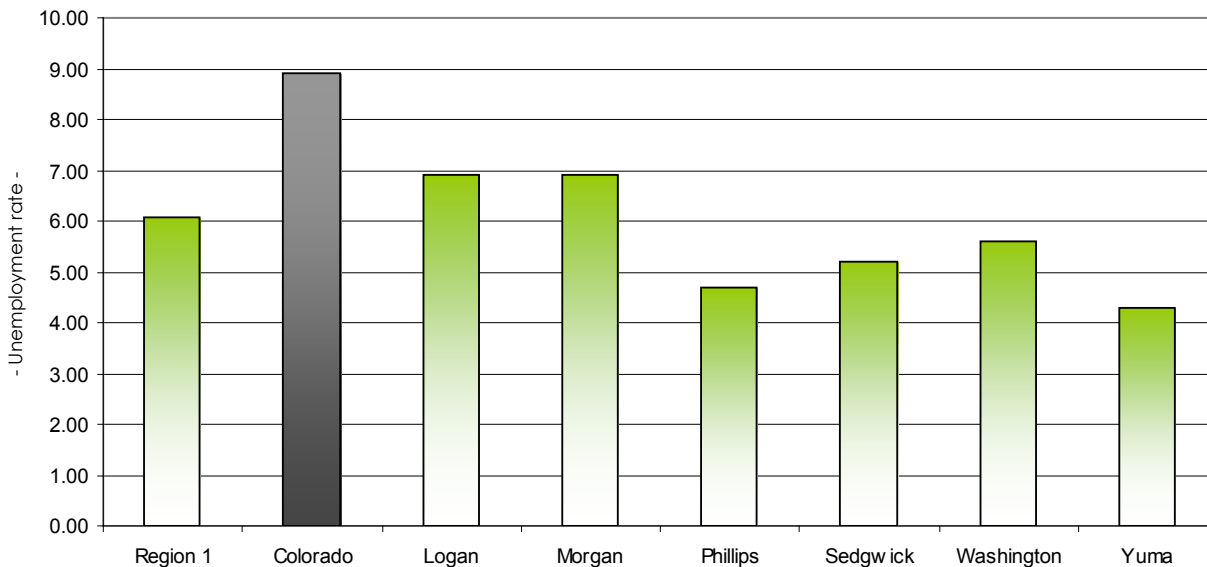
Percent of adult population, 25+ years, by level of education completed (2006 - 2010)
Northeast Region
Source: U.S. Census Bureau, American Community Survey, 5 year estimates
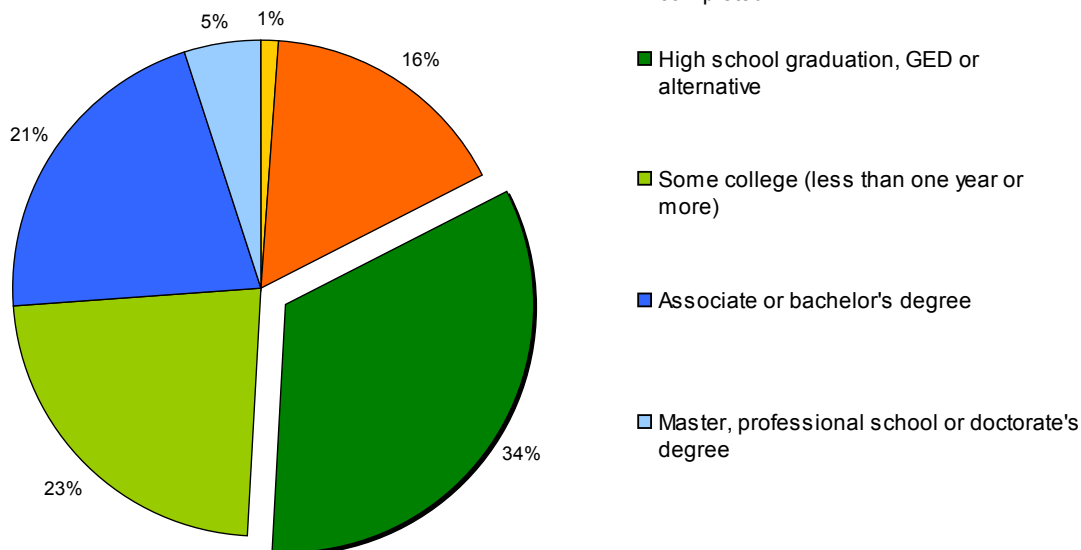
□ No schooling completed

□ Some level of education in grades K-12, but no high school diploma or equivalent completed

□ High school graduation, GED or alternative

□ Some college (less than one year or more)

□ Associate or bachelor's degree

□ Master, professional school or doctorate's degree

5% 1%
16%
21%
34%
23%

4.41

3.08

- Dropout rate -

5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
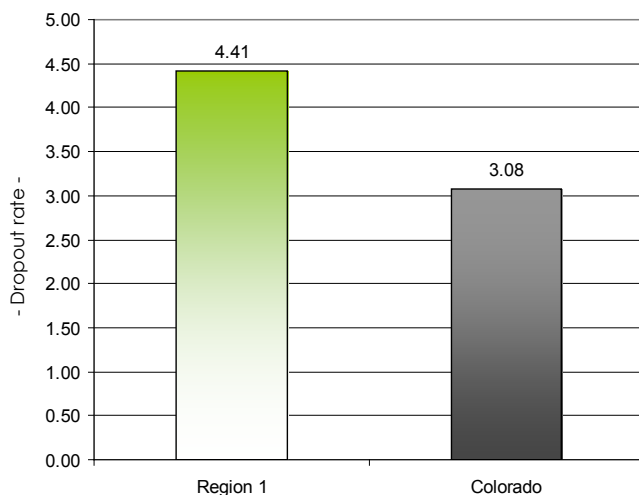
Region 1   Colorado

School dropout rate (2009 - 2010)
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Colorado............... 3.1
Region 4.4
Logan 2.3
Morgan.................. 2.1
Phillips 0.2
Sedgwick............... 15.8
Washginton............ 0.7
Yuma 1.9

High school completion rate (2010)
**Source:** Colorado Health Indicators, Colorado Department of Public Health and Environment

NOTE: Sedgwick County reports large discrepancies in thier data as it reflects students enrolled in online Insights Program, and not just their student population.

71.27

75.93

- Completion rate -

100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
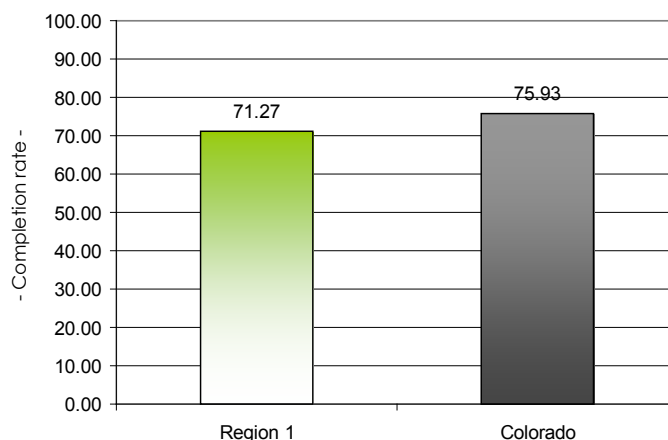
Region 1   Colorado

Housing in the Northeast Region (2006 - 2010)	Northeast Region	Colorado
Percent of housing units that are renter-occupied	29.5	30.2
Percent of housing units that are owner-occupied	70.5	69.8
Percent of occupied housing units with housing costs $\geq$ 30% of household income	8.6	34.6
Percent of renter-occupied housing units with gross rent $\geq$ 30% of household income	28.1	48.0
Percent of owner-occupied housing units with mortgage status $\geq$ 30% of household income	7.2	28.2
Median home value in US dollars for owner-occupied housing units	Logan $119,900 Morgan $136,200 Phillips $111,600 Sedgwick $83,100 Washington $114,300 Yuma $116,200	$236,600

Introduction

Data

Capacity &
Prioritization

The Plan!

Determinants of Health

Table of
Contents

SUMMARY

Economic Opportunity

Income

Employment

Education

Housing

- Highest percent of our populations below poverty level are in Morgan, Washington and Sedgwick counties

- Lower median household income across the region when compared with the state

- Higher percentage of households that receive food stamps, statistically significantly higher in Logan and Sedgwick counties, statistically significantly lower in Yuma County

- Almost half of our students are eligible for free and reduced lunch

- Highest employment industry is education services, and health care and social assistance; followed by agriculture, forestry, fishing and hunting, and mining

- Low unemployment rates when compared to the state

Physical Environment

Determinants of Health		
Economic Opportunity	**Physical Environment**	**Social Factors**
Income Employment Education Housing	Built Environment -Access to recreational facilities -Access to healthy food - Transportation Safety Environmental Quality	Participation Social network/ social support Leadership Political influence Organizational networks Violence

Built environment
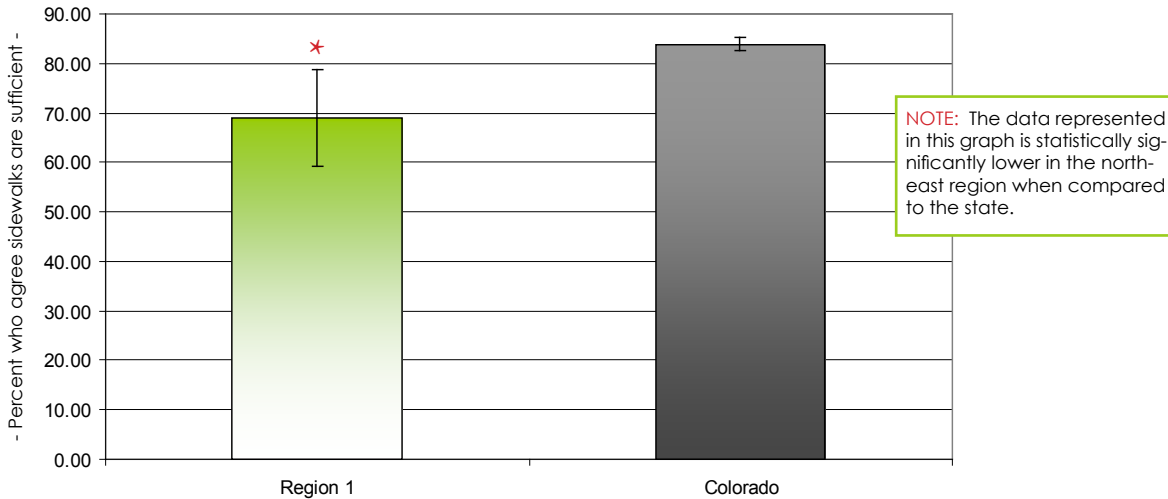   Access to recreational facilities
    Access to healthy food
    Transportation

Safety

Environmental quality

Percent with sidewalks or shoulders of the road in their neighborhood that are sufficient to safely walk, run or bike (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Percent of adults 18+ who agree there are adequate sidewalks in their community (2012)

Source: Northeast Colorado Health Department,
Community Health Survey

Logan 52%
Morgan.................. 60%
Phillips 64%
Sedgwick............... 25%
Washginton............ 39%
Yuma 60%

Percent of adults 18+ who agree or disagree there is adequate room on the shoulders of the roadside to ride a bike in their community (2012)

Source: Northeast Colorado Health Department,
Community Health Survey

10%

40%

50%

- Agree
- Disagree
- Don't know

Percent that have access to public exercise facilities in their neighborhood (2009)
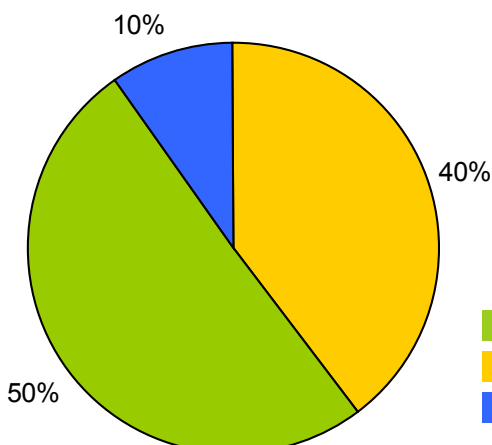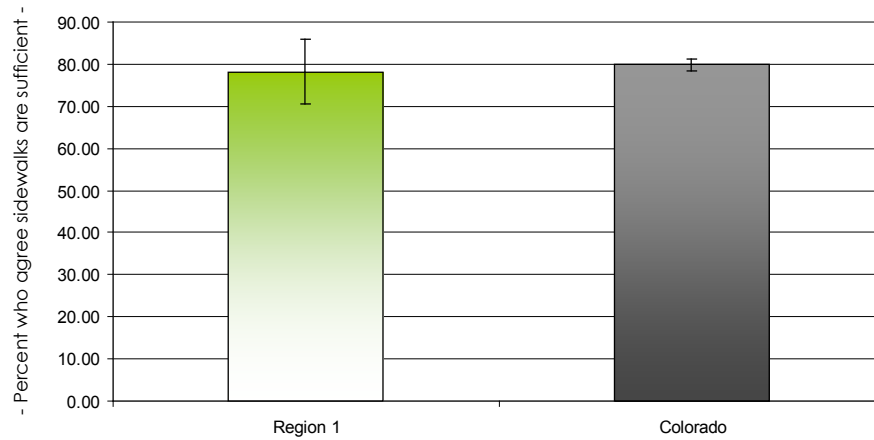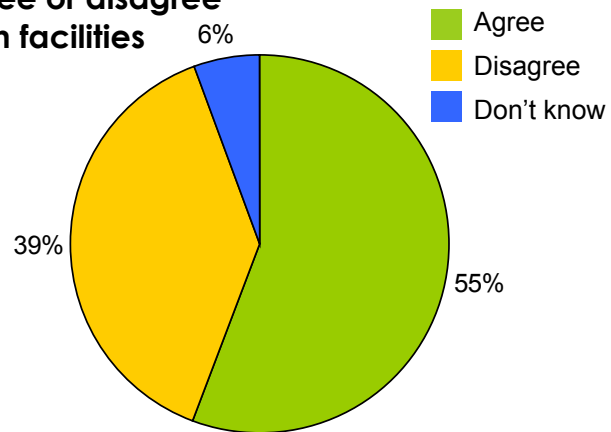
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Percent of adults 18+ who agree or disagree there are adequate recreation facilities in their community (2012)
Source: Northeast Colorado Health Department, Community Health Survey

- Agree
- Disagree
- Don't know

6%
39%
55%

Percent of adults 18+ who agree or disagree their community is too remote to offer adequate choices for them to be active (2012)
Source: Northeast Colorado Health Department, Community Health Survey

10%
29%
61%

- Agree
- Disagree
- Don't know
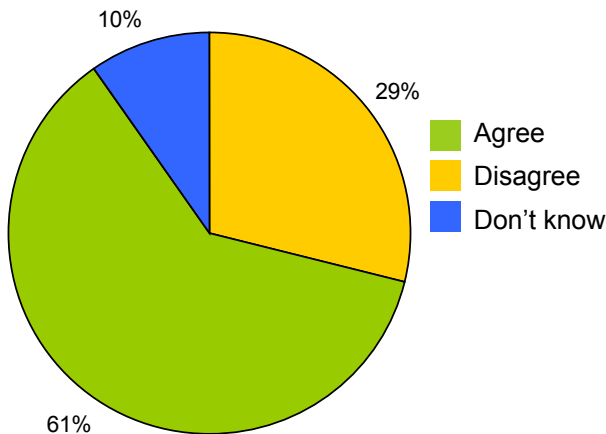
Percent of adults 18+ who are concerned about the availability of recreational opportunities in their community (2012)
Source: Northeast Colorado Health Department, Community Health Survey

6%
35%
59%

- Very or Slightly concerned
- Not concerned
- Don't know
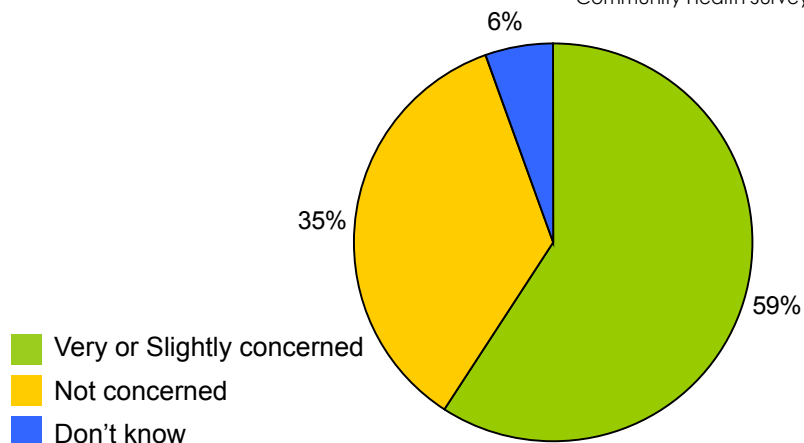
Rate of healthy food outlets per 10,000 residents (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Rate of healthy food outlets -

Region 1	Colorado
2.23	1.06
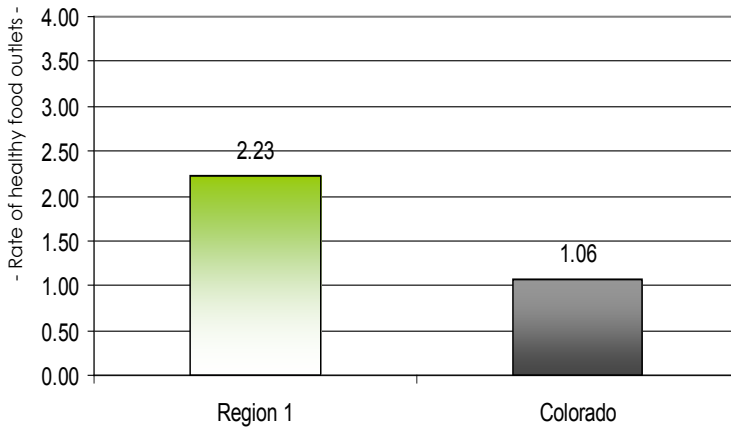
Rate of fast food restaurants per 10,000 residents (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Rate of fast food outlets -

Region 1	Colorado
4.88	7.05
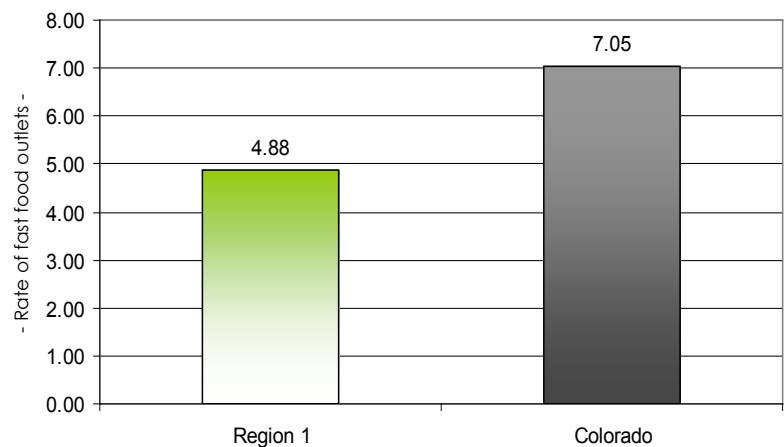
Percent of people who say healthy foods are somewhat or very available in their neighborhood (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Percent who say healthy foods are available -

(Region 1 ≈ 92.6, Colorado ≈ 95.75)
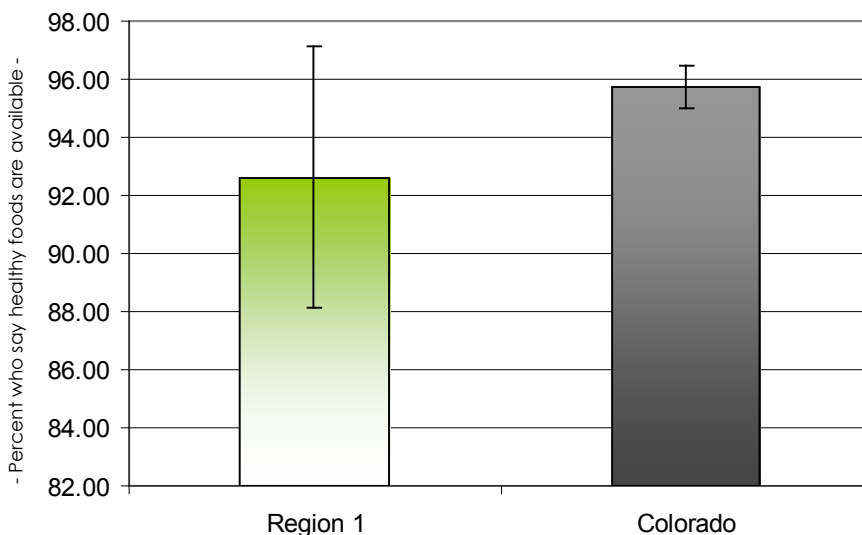
Average number of critical violations per food service inspection (2009 - 2011)

Source: Northeast Colorado Health Department
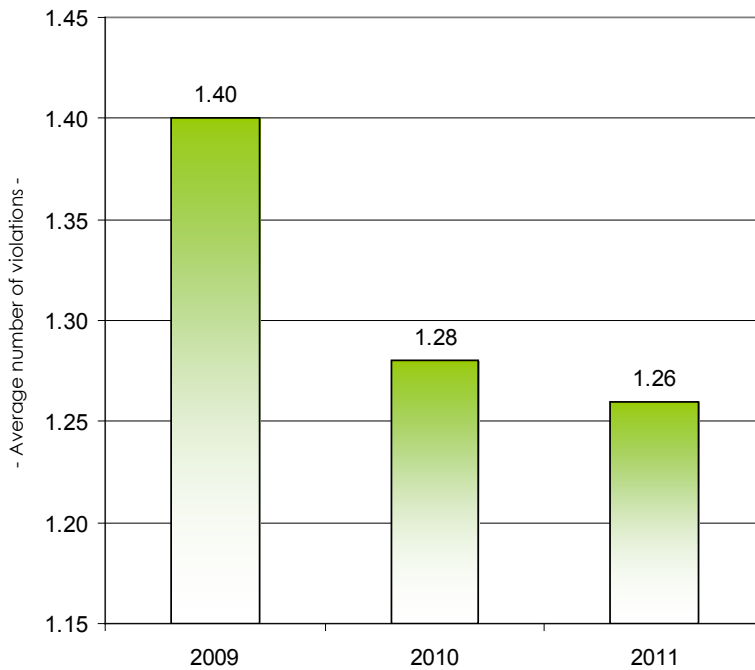
Of the 907 food service inspections completed by NCHD staff in 2011, 4.4% percent of the facilities inspected had three or more critical violations.

Percent of food service inspections resulting in voluntary condemnation (2009 - 2011)

Source: Northeast Colorado Health Department
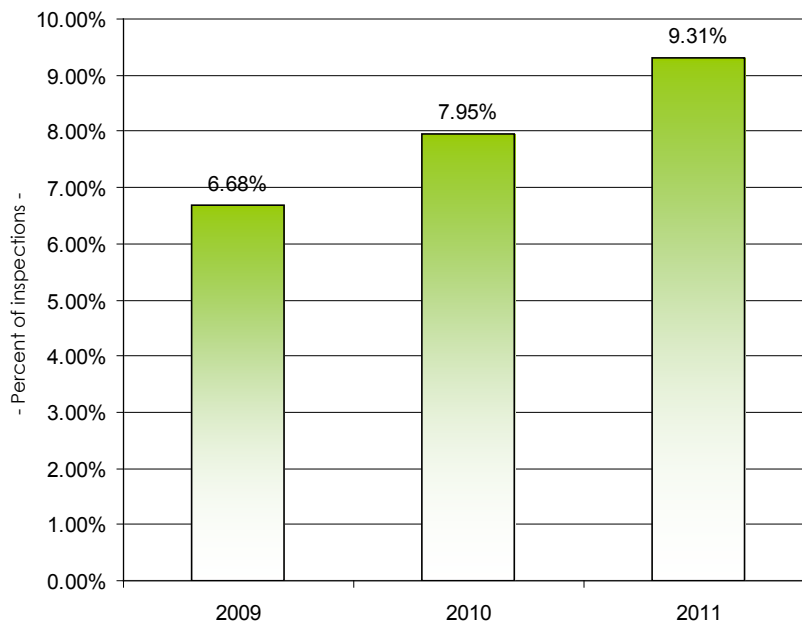
Percent of workers, age 16+, that commute to work by mode of transportation (2006 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Chart data — Percent of workers that commute to work vs. Mode of transportation:

Mode of transportation	Region 1	Colorado
Biking	0.79	1.20
Walking	4.52	3.04
Public Transportation	0.18	3.29
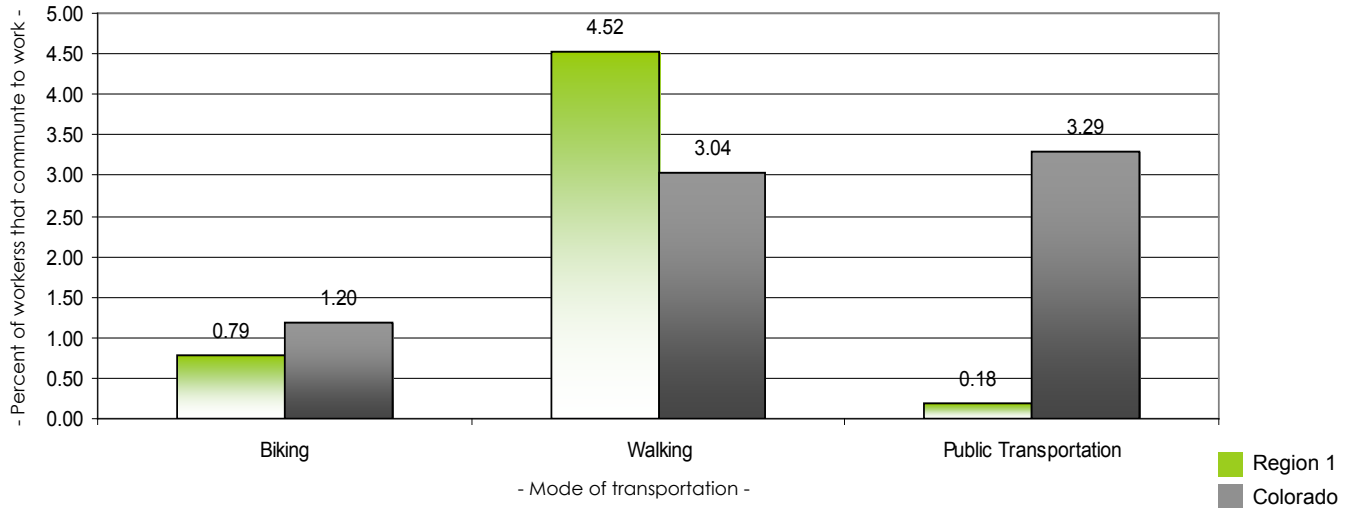
Percent of children that commute to school by biking, walking or skateboarding at least one day a week (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Chart data — Percent of children that commute: Region 1 (~35), State (~30).
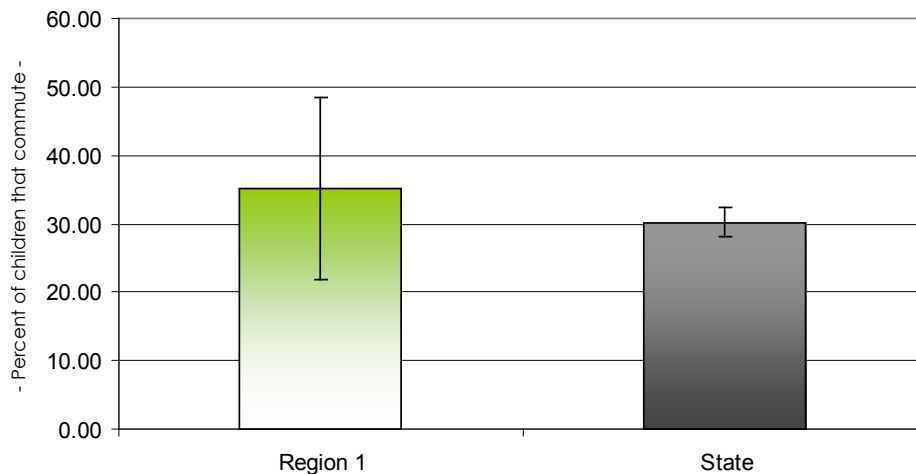
Violent crime rate, per 100,000 population adults, 18+ years, and juveniles, 10 - 17 years, (2010)

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment
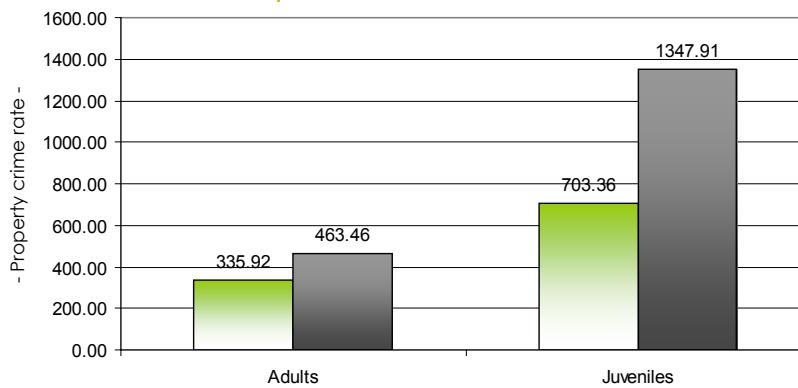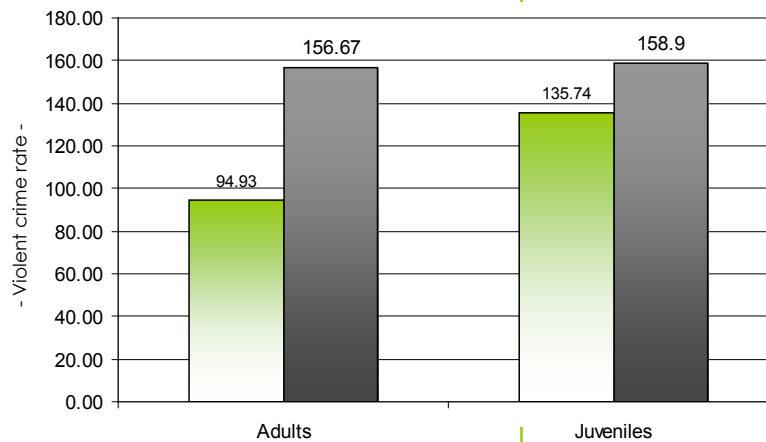
■ Region 1
■ Colorado

Property crime rate, per 100,000 population adults, 18+ years, and juveniles, 10 - 17 years, (2010)

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

■ Region 1
■ Colorado

Percent of parents who feel their child is usually or always safe in their community or neighborhood, (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
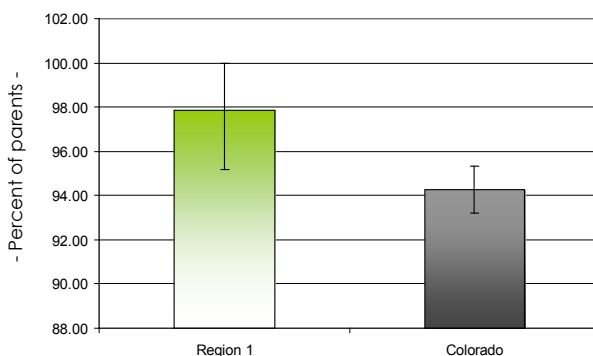
Percent of adults 18+ who are concerned about youth crime or gangs in their community, (2012)

Source: Northeast Colorado Health Department, Community Health Survey

34%

66%

■ Very/Slightly concerned
■ Not concernd/Don't know
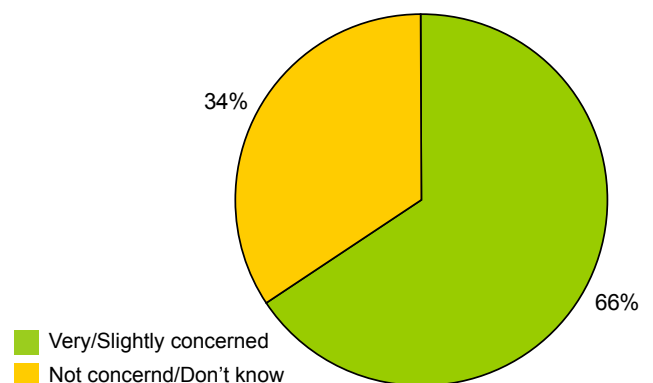
Percent of household radon tests above the EPA recommended action limit (2005 - 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
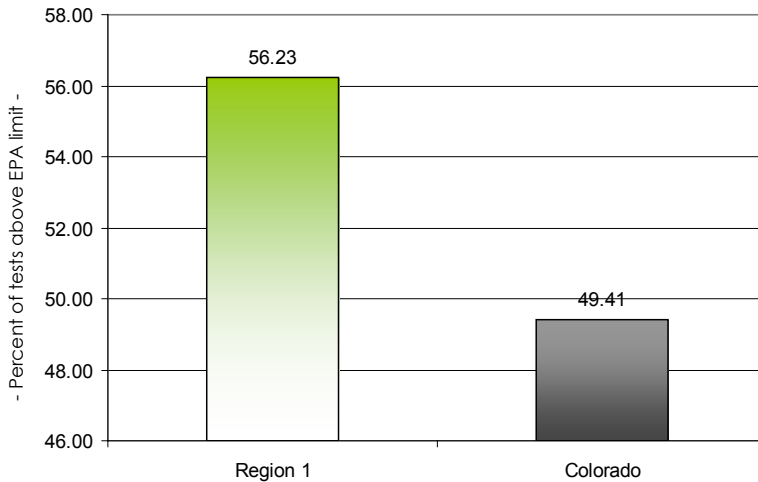
Percent of adults 18+ who think radon is a problem in their community, (2012)

Source: Northeast Colorado Health Department, Community Health Survey

- No problem/don't know
- Major/Minor problem
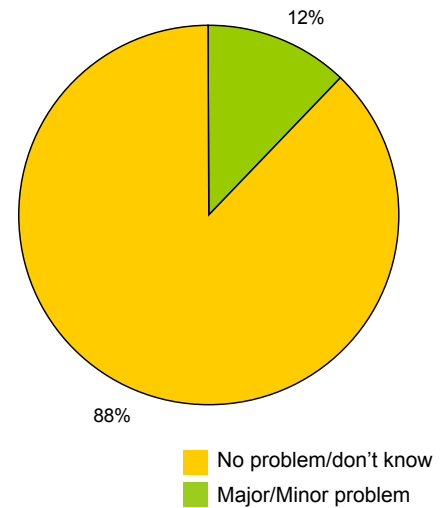
Percent of adults 18+ who think unclean indoor air - mold, lead, asbestos - is a problem in their community, (2012)

Source: Northeast Colorado Health Department, Community Health Survey

- No problem/don't know
- Major/Minor problem
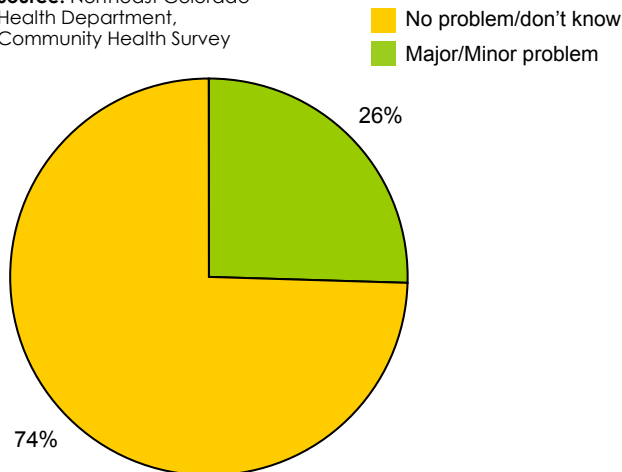
Percent of total housing units built prior to 1960 (2006 - 2010)

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment
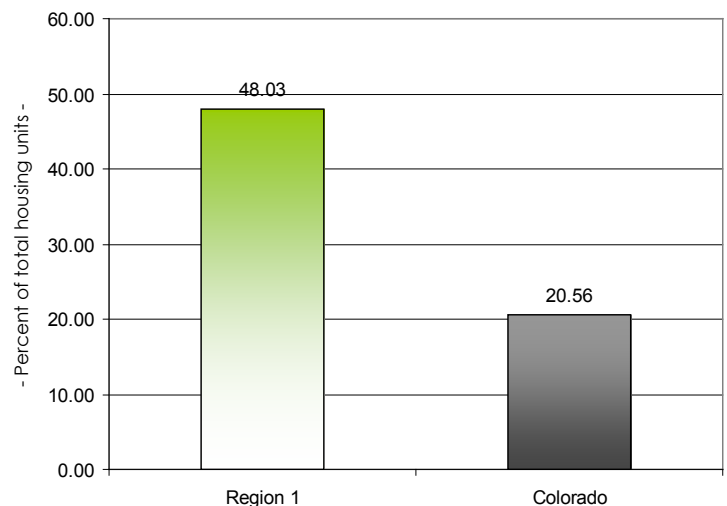
Houses build prior to 1960 are at risk for lead-based paint exposure.

Percent of residents reporting they use a private well (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.
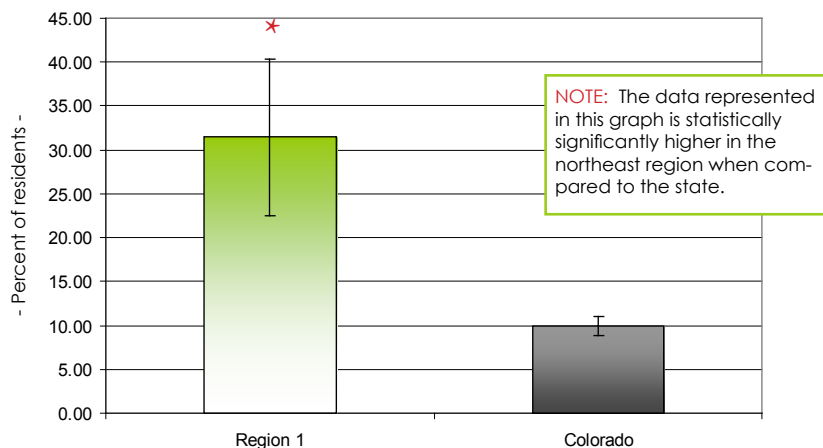
Percent of population who report bottled water as their primary home drinking water source (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
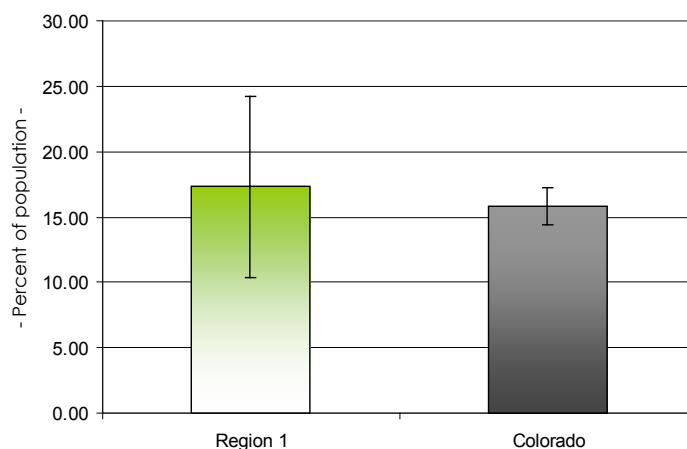
Percent of adults 18+ who think unclean water for drinking is a problem in their community, (2012)

Source: Northeast Colorado Health Department, Community Health Survey

43%

57%

- No problem/don't know
- Major/Minor problem
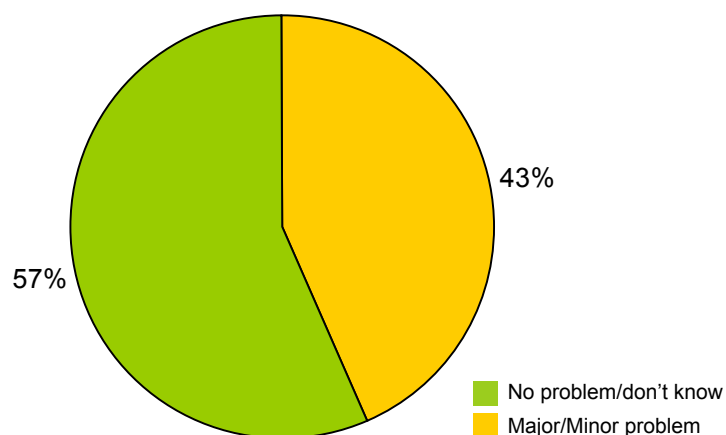
Geographical breakdown by county showing the percent of adults who thought there was a major/minor problem with unclean drinking water.

Logan 72.0%
Morgan................... 27.7%
Phillips 11.3%
Sedgwick................ 25.0%
Washginton............ 14.6%
Yuma 23.6%

Water System Name	County Served	Population Served	Primary Water Source Type	System Status	Water System ID	Health-Based Violations	Achieved Compliance	Contaminant	Years of Violation
Town of Merino	Logan	235	Groundwater	Active	CO0138025	5	0	Uranium (5)	2008, 2009, 2010, 2011
Sage Pointe	Logan	194	Groundwater	Active	CO0138042	1	1	Coliform	2011
City of Sterling	Logan	13,794	Groundwater	Active	CO0138045	12	1(Coliform)	Coliform (1) Uranium (9)	2008, 2009, 2010, 2011, 2012
Morgan County Quality Water	Morgan	6,595	Groundwater	Active	CO0144020	1	1	Coliform	2009
Pagels TP	Logan	300	Groundwater	Active	CO0144025	3	3	Uranium	2008, 2009
Wayward Wind MHP	Morgan	300	Groundwater	Active	CO0144032	9	1(Coliform)	Nitrate (3) Coliform (1) Uranium (5)	2008, 2009, 2010, 2011, 2012
Town of Wiggins	Morgan	1,000	Groundwater	Active	CO0144035	5	0	Nitrate	2010, 2011, 2012
Town of Eckley	Yuma	306	Groundwater	Active	CO0163001	1	1	Coliform	2010
Ramada Inn, Sterling	Logan	150	Groundwater	Active	CO0238425	8	2	Nitrate (8)	2008, 2009, 2010
Reata Petroleum, Sterling	Logan	262	Groundwater	Active	CO0238500	1	1	Nitrate	2011
Wagon Wheel Conoco	Sedgwick	106	Groundwater	Active	CO0258003	8	8	Nitrate (3) Coliform (5)	2009, 2011
Idalia School	Yuma	222	Groundwater	Active	CO0263003	1	0	Nitrate	2012
Gaytan WS	Yuma	46	Groundwater	Active	CO0263299	9	9	Arsenic (5) Coliform (3) Nitrate (1)	2010, 2011
Seedorf	Yuma	53	Groundwater	Active	CO0263705	8	8	Arsenic (8) Nirtrate (2) Coliform (2)	2009, 2010, 2011

Source: Colorado Department of Public Health and Environment, Water Quality Control Division

From Jan. 1, 2008 through present there have been 89 health-based water system violations in the northeast region. Forty-seven of those violations from six different water systems are still open.

Thirty are due to high uranium levels in Sterling, Merino and the Wayward Wind mobile home park. The remaining 15 open violations are due to high nitrate levels in the town of Wiggins, the Wayward Wind and the Ramada Inn.

Determinants of Health

Introduction

Data

Capacity & Prioritization

The Plan!

Table of Contents

- 32 -

Environmental Inventory	Northeast Region
Number of EPA-regulated facilities listed in Envirofacts	574
Facilities that produce and release air pollutants	312
Facilities that have reported toxic releases	15
Facilities that have reported hazardous waste activities	147
Potential hazardous waste sites that are part of Superfund that exist	1
Facilities regulated by EPA regulations for radiation and radioactivity	0
Facilities with permits and discharges to waters of the US	150

Source: Environmental Protection Agency, Envirofacts

SUMMARY

Physical Environment

Built environment
   Access to recreational facilities
   Access to healthy food
   Transportation

Safety

Environmental quality

STRENGTHS
- Higher rate of healthy food outlets when compared to the state

- Higher percent of workers commuting by walking

- High percent of parents who feel their children are safe in their neighborhood

CHALLENGES
- A low percent of sufficient sidewalks in neighborhood

- The rate of fast food restaurants is more than twice the rate of healthy food outlets

- Low percent of workers commuting by bike

- Violent and property crime rates among juveniles in Logan County were high, but low in Sedgwick, Washington and Yuma counties

- More than half of the radon tests performed across the region were above the EPA recommended action limit

- Almost half of the housing units across the region were built prior to 1960

- High percent of residents using private wells

Social Factors

Determinants of Health		
Economic Opportunity	**Physical Environment**	**Social Factors**
Income

Employment

Education

Housing | Built Environment
-Access to recreational facilities
-Access to healthy food
- Transportation

Safety

Environmental Quality | Participation

Social network/ social support

Leadership

Political influence

Organizational networks

Violence |

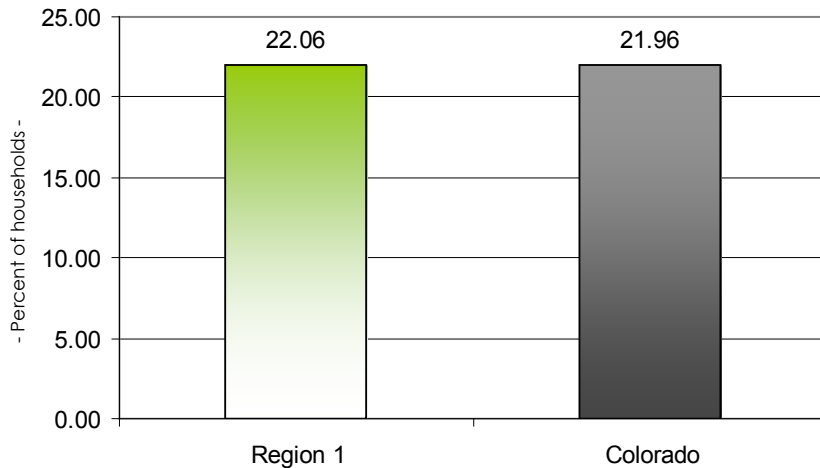Social network/Social support

Leadership

Political influence

Organizational networks

Violence

Percent of household headed by a single adult (2006 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

While there is no statistically significant difference on the regional level for this data, there is one at two of our county levels:

Logan	27.6%
Morgan...................	25.5%
Phillips	11.8%
Sedgwick................	14.4%
Washginton............	14.7%
Yuma	12.5%

Percent of religious congregations per 10,000 population (2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
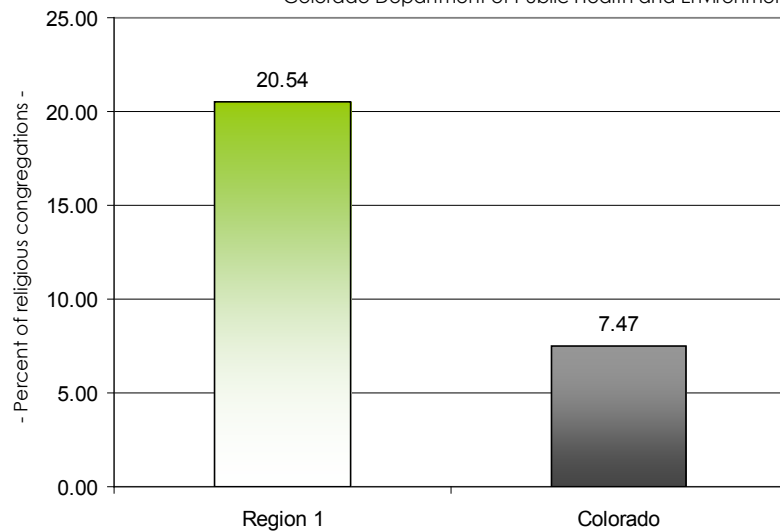
Percent of congregations by religion (2006 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- Evangelical Protestant
- Mainline Protestant
- Roman Catholic
- Latter-day Saint (Mormon)
- Jehovah's Witnesses
- Other religions
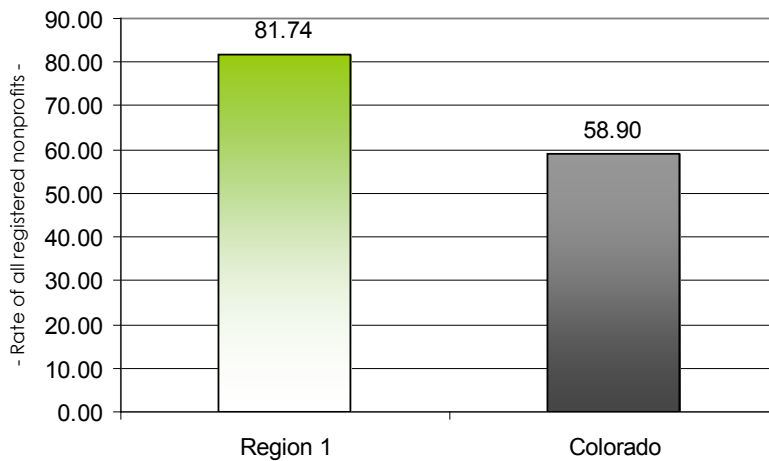
Rate of all registered nonprofits per 10,000 population (2011)
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Region 1: 81.74
Colorado: 58.90

Rate of registered healthcare nonprofits per 10,000 population (2011)
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Region 1: 3.17
Colorado: 1.41
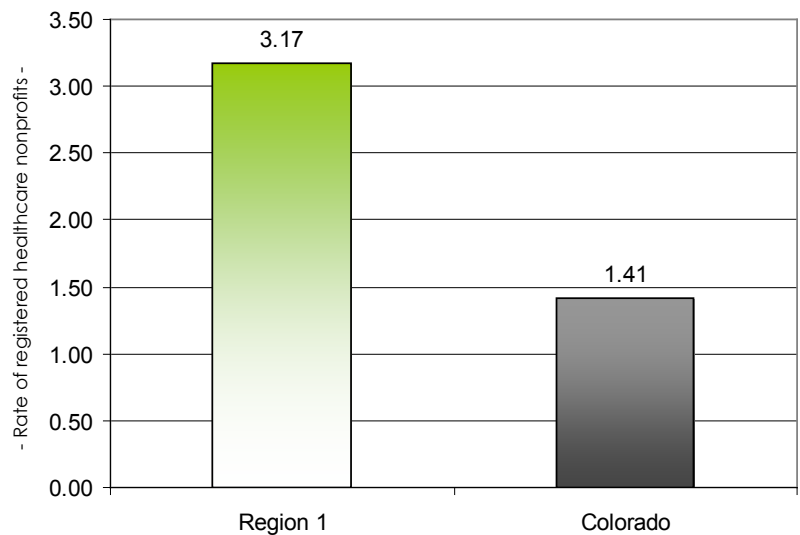
Percent of minority business ownership (2007)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

	Region 1	Colorado
Black-owned firms	0.00	1.70
American Indian and Alaska Native-owned firms	0.00	0.80
Asian-owned firms	0.00	2.30
Native Hawaiian and other Pacific Islander-owned firms	0.00	0.10
Hispanic-owned firms	3.85	6.20
Women-owned firms	16.74	29.20

Introduction | Data | Capacity & Prioritization | The Plan!
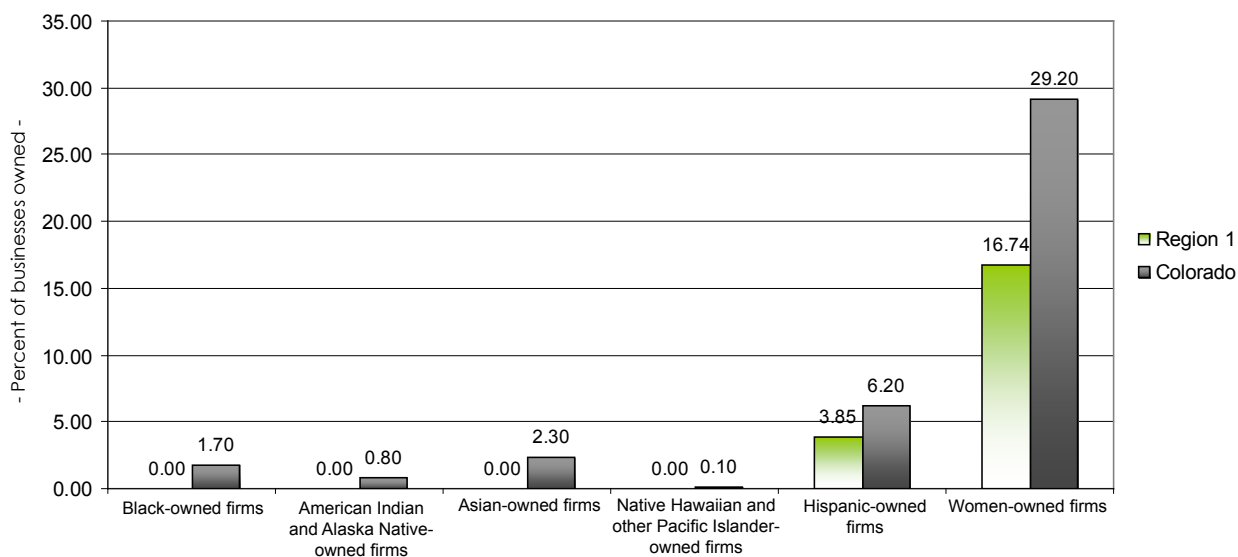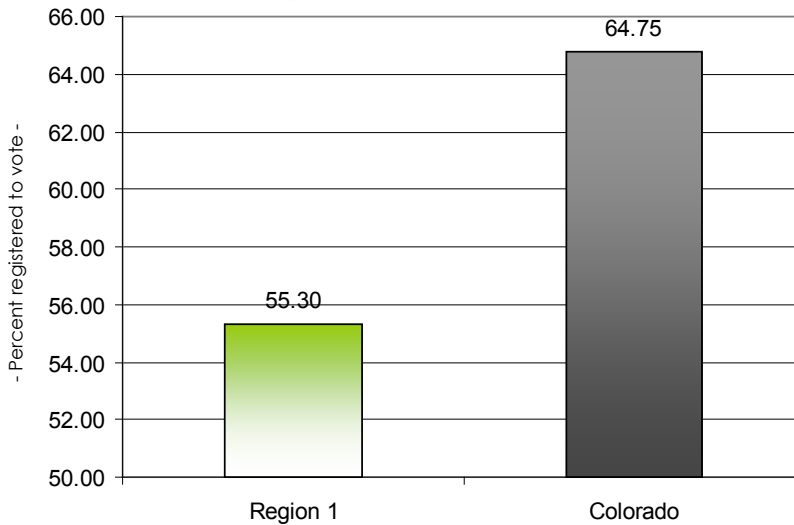
Percent of population registered to vote (2010)

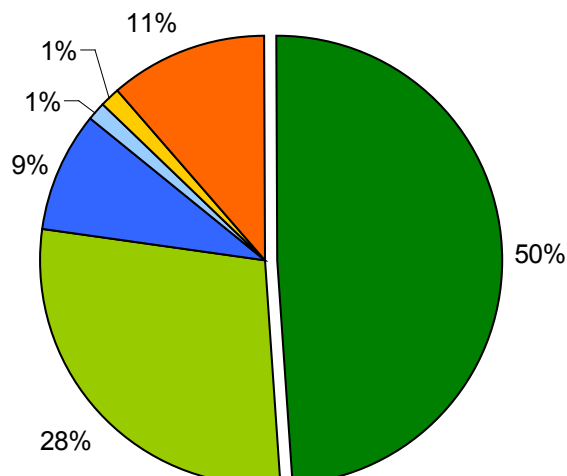**Source:** Colorado Health Indicators, Colorado Department of Public Health and Environment

Percent of active registered voters (2011)

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

Percent of total registered voters by political party affiliation (2011)

Source: Colorado Health Indicators, Colorado Department of Public Health and Environment

- American Constitution
- Democratic
- Green Party
- Libertarian
- Republican
- Unaffiliated
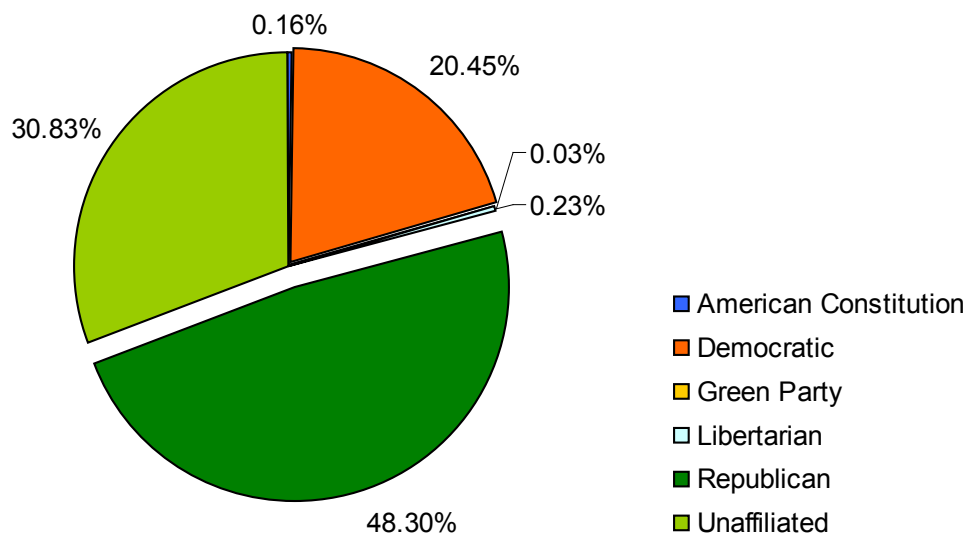
Child maltreatment rate, per 1,000 children age 17 and younger (2010)
Source: Colorado Health Indicators, Colorado Department of Public Health and Environment
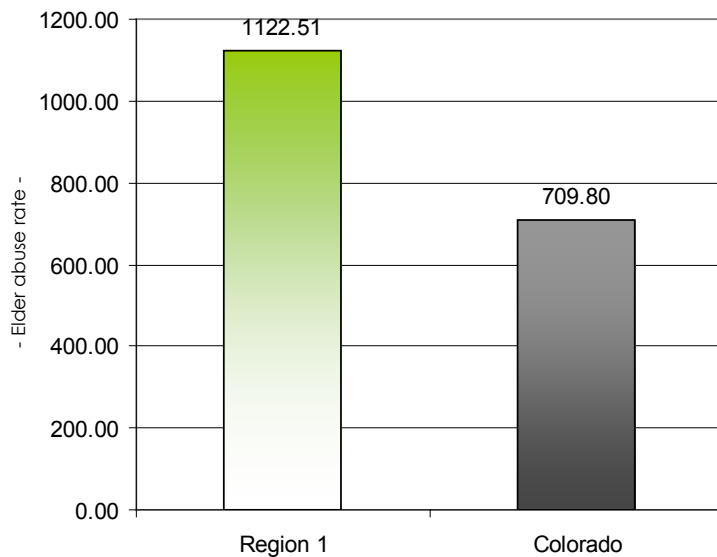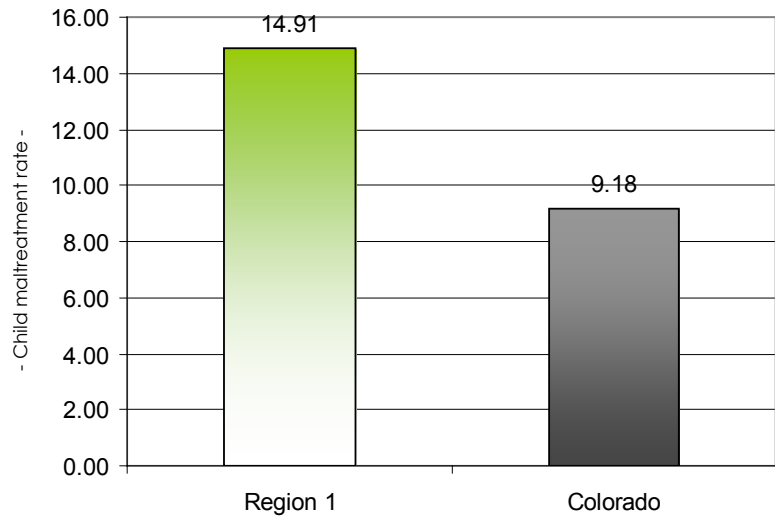
Elder abuse rate, per 1,000 children age 65+ (2010)
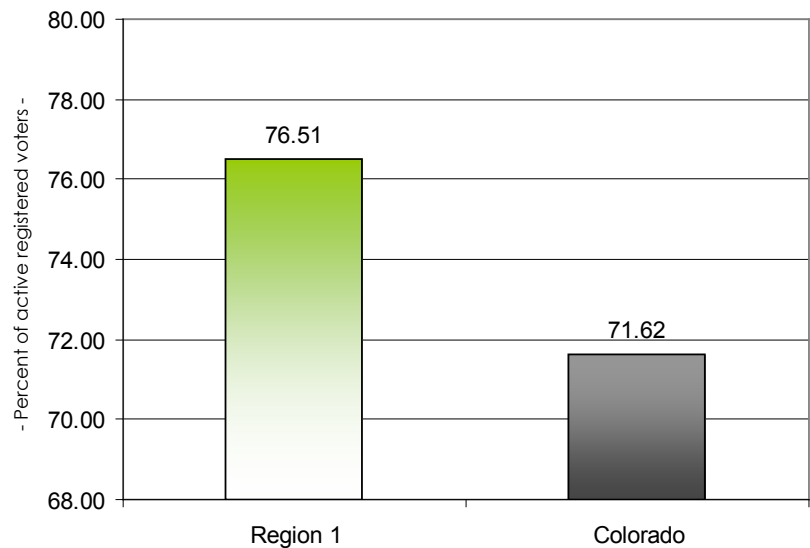**Source:** Colorado Health Indicators, Colorado Department of Public Health and Environment

Percent of adults 18+ who are concerned about child abuse in their community (2012)
Source: Northeast Colorado Health Department, Community Health Survey

Very/Slightly concerned
Not concernd/Don't know
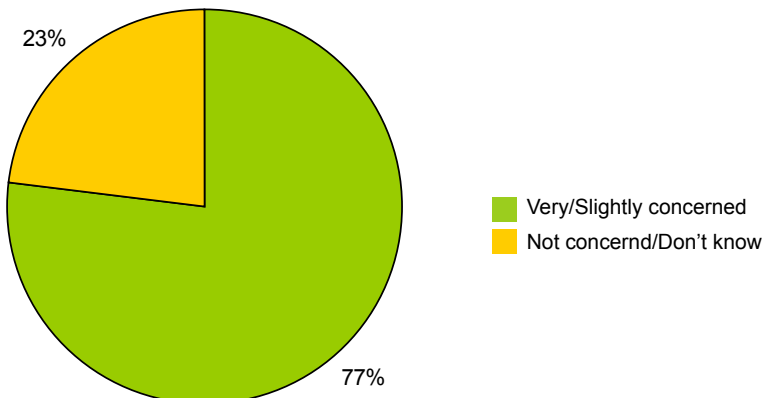
Percent of adults 18+ who are concerned about domestic violence in their community (2012)
Source: Northeast Colorado Health Department, Community Health Survey

Determinants of Health

Introduction

Data

Capacity & Prioritization

The Plan!

Table of Contents
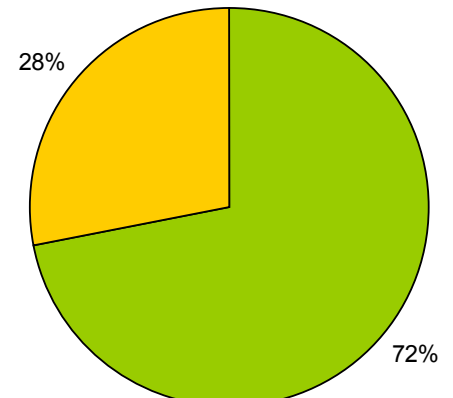
SUMMARY

Social Factors

Social network/Social support

Leadership

Political influence

Organizational networks

Violence

STRENGTHS
- High rate of registered health-care nonprofits

- High rate of religious congregations

CHALLENGES
- A low percentage of registered voters

- High rates of both child maltreatment and elder abuse rates

- Higher rates of households headed by a single adult in Logan and Morgan counties (statistically significant), but not the rest of the region.

Health Behaviors & Conditions

Health Factors		
Health Behaviors & Conditions	**Mental Health**	**Access, Utilization & Quality Care**
Nutrition	Mental health status	Health insurance coverage
Physical activity	Substance abuse	Received needed care
Tobacco use	Functional status	Provider availability
Injury		Preventive care
Child health		
School health		
Health conditions		

Nutrition

Physical activity

Tobacco use

Injury

Child health

Health conditions

Percent of adults 18+ who reported eating fast food one or more times per week (2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
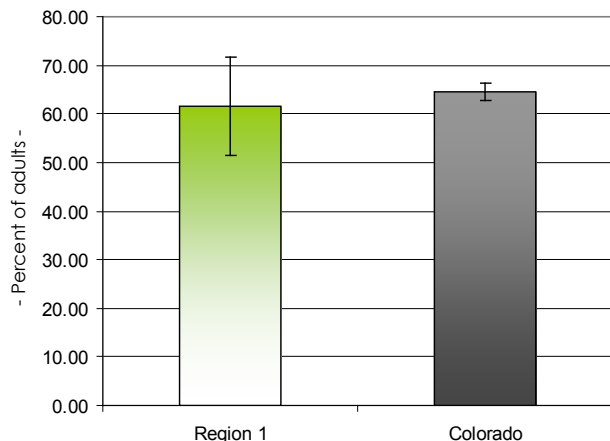
Percent of children 1-14 years who ate fast food one or more times in the past week (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
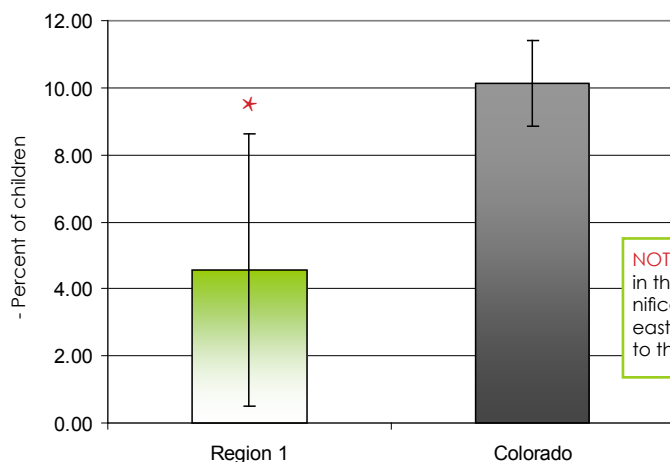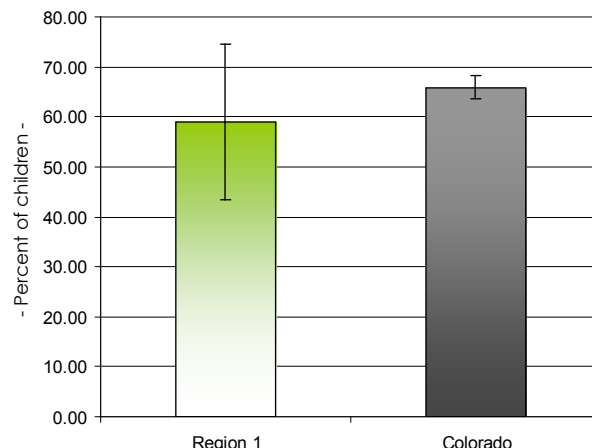
Percent of children 1-14 years who ate fruit 2+ times per day and vegetables 3+ times per day (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Percent of children 1-14 years who consumed sugar-sweetened beverages one or more times per day (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Introduction | **Data** | Capacity & Prioritization | The Plan!
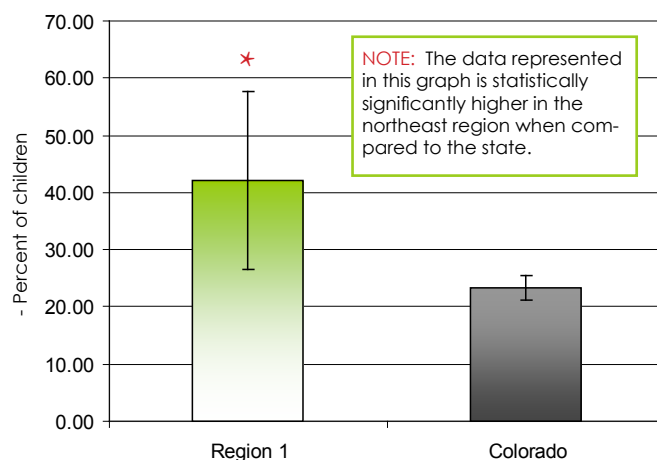
Percent of adults 18+ who get 30+ minutes of moderate activity per day on 5+ days/week or 20+ minutes of vigorous activity per day on 3+ days/week (2007, 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Percent of adults 18+ who are physically inactive (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
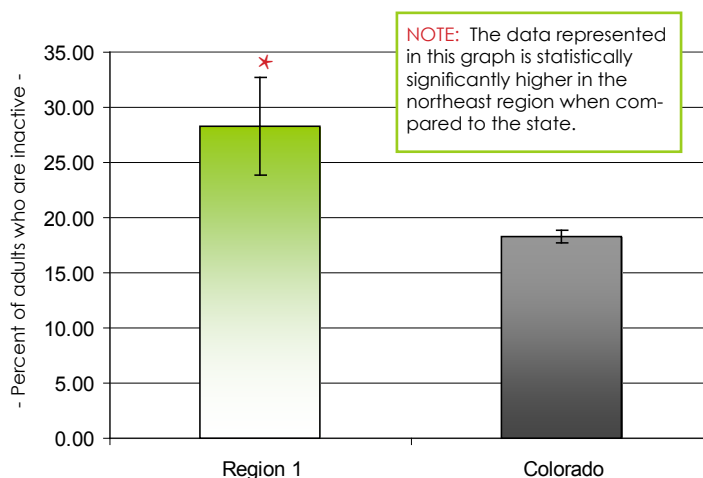
NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Results from NCHD's Community Health Survey showed the following:

- 15.8% of parents with children 17 or younger living in their home were concerned their child spends too much time playing video games or the computer.
- 14.1% of parents with children 17 or younger living in their home were concerned with their child's weight/activity level.
- 81.4% of parents with children 17 or younger living in their home reported their child(ren) get at least one hour of active play per day.

Percent of children, 5-14 years, who were physically active for at least 60 minutes/day for the past 7 days (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Percent of adults 18+ who currently smoke cigarettes (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
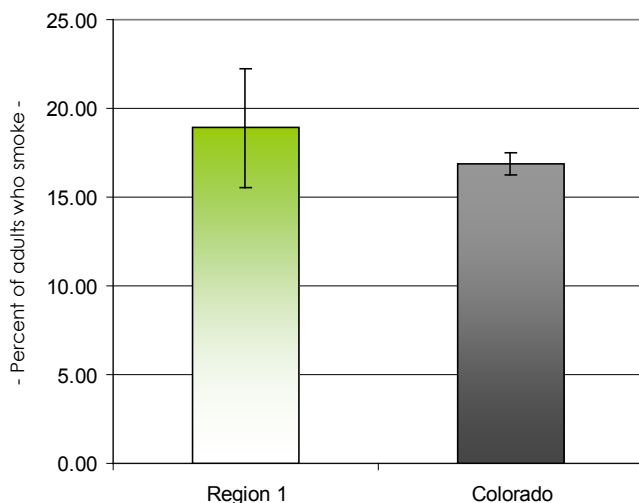
Percent of women who smoked during the last 3 months of pregnancy (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
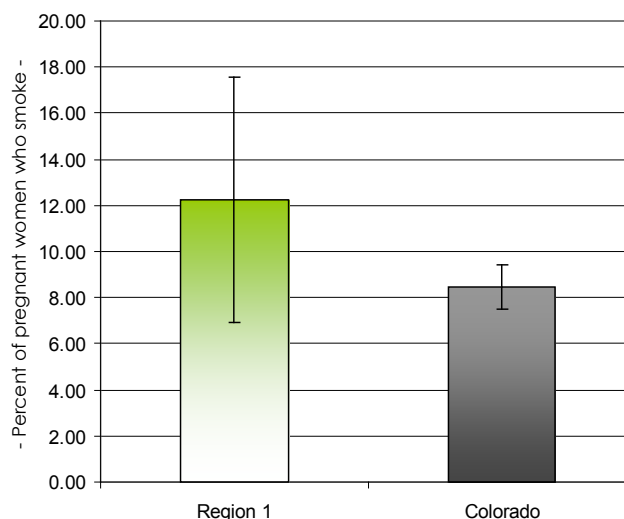
Percent of children, 1-14, who rode in a car with someone in the past 7 days who was smoking (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
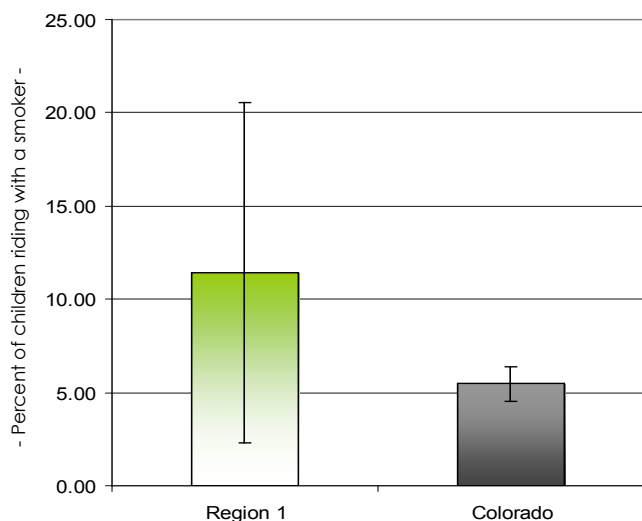
Percent of children, 1-14, who live inhomes where someone had smoked in the past 7 days (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
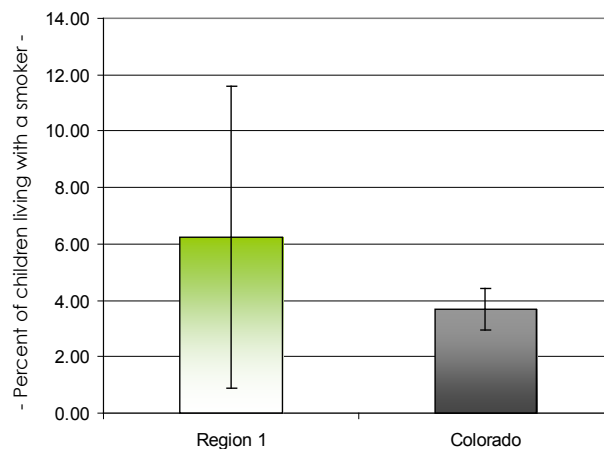
Percent of adults 18+ who reported having always used a seat belt when driving or riding in a car (2008, 2010)

Source: Colorado Health Indicators,
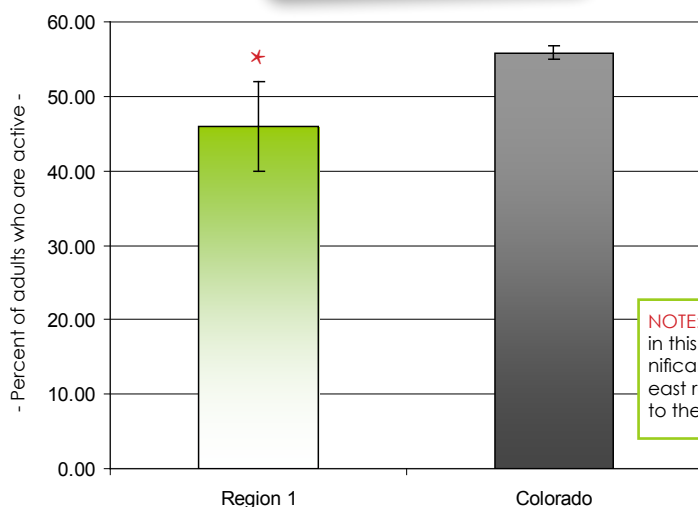Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
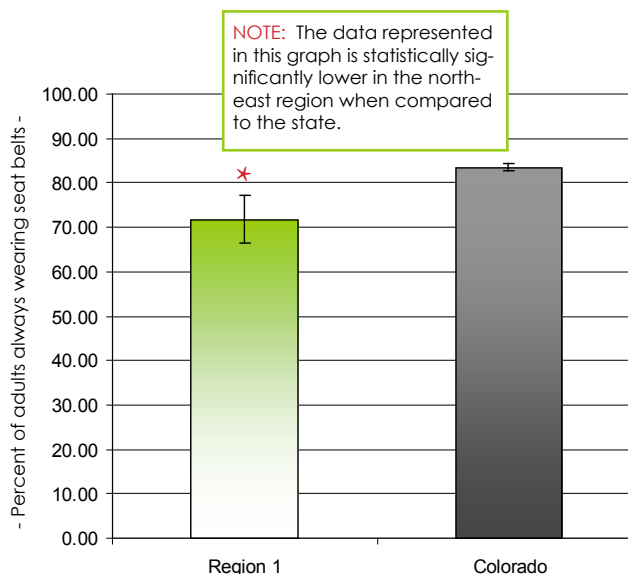

Percent of adults 65+ who had a fall in the past 3 months (2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
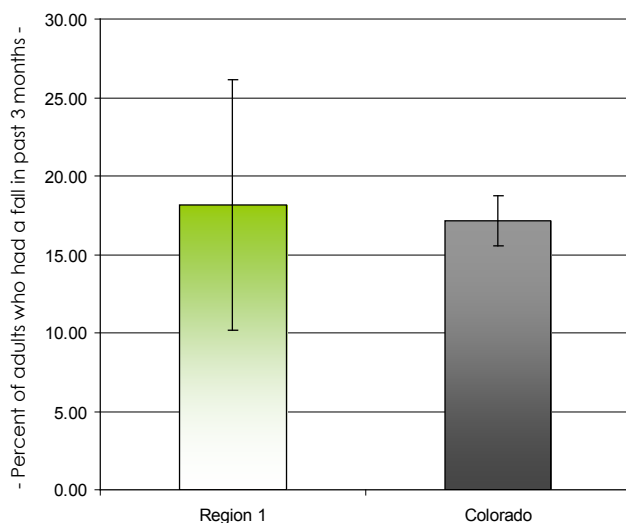
Rate of live births born to women 15-17, per 1,000 women age 15-17 (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
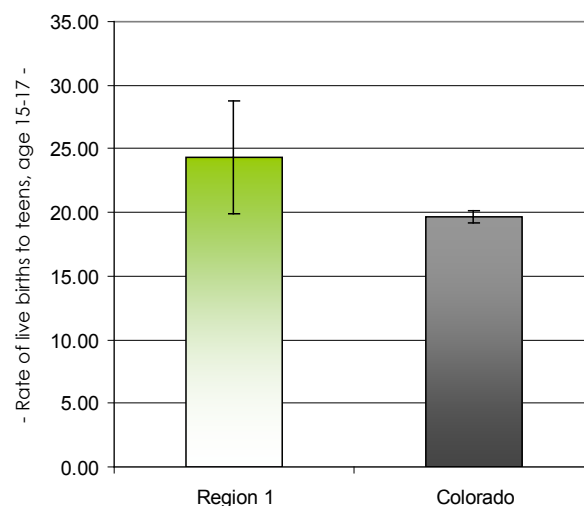
Percent of pregnancies resulting in live births that were unintended (2008 - 2010)

Source: Colorado Health Indicators,
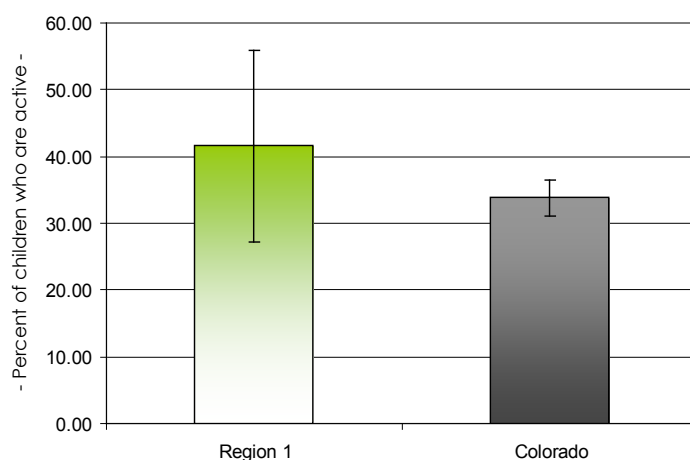Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.
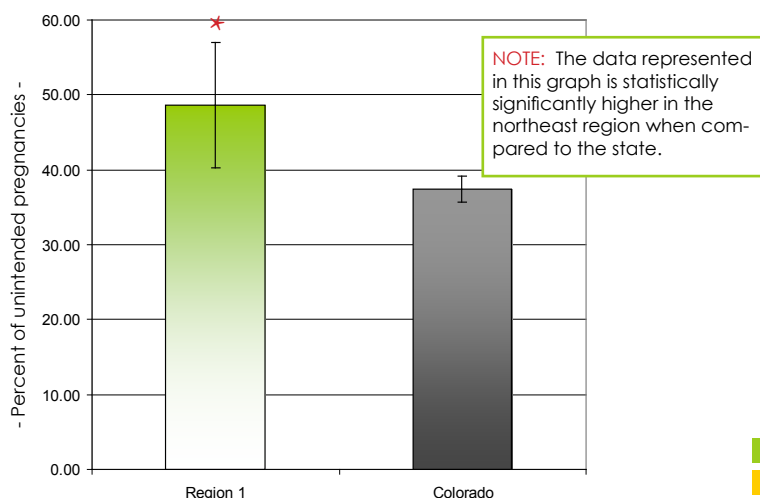
Percent of adults 18+ who reported are concerned about teen sexual activity/pregnancy in their comunity (2012)

Source: Northeast Colorado Health Department,
Community Health Survey

20%

80%

■ Very/Slightly concerned
■ Not concernd/Don't know

- 44 -

Introduction   **Data**   Capacity & Prioritization   The Plan!

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.
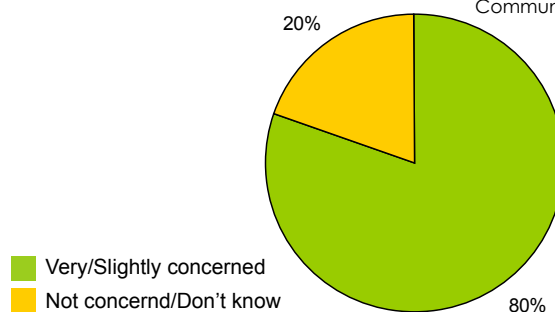
Percent of live births to mothers who were overweight or obese based on BMI before pregnancy (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

(Bar chart: y-axis "- Percent of mothers overweight or obese pre-pregnancy -" from 0.00 to 60.00; Region 1 ≈ 53 with a red asterisk, Colorado ≈ 42)

Percent of live births where mothers gained appropriate amount of weight during pregnancy according to pre-pregnancy BMI (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

(Bar chart: y-axis "- Percent of births where mothers gained appropriate amount of weight -" from 0.00 to 50.00; Region 1 ≈ 30.5 with a red asterisk, Colorado ≈ 33.5)
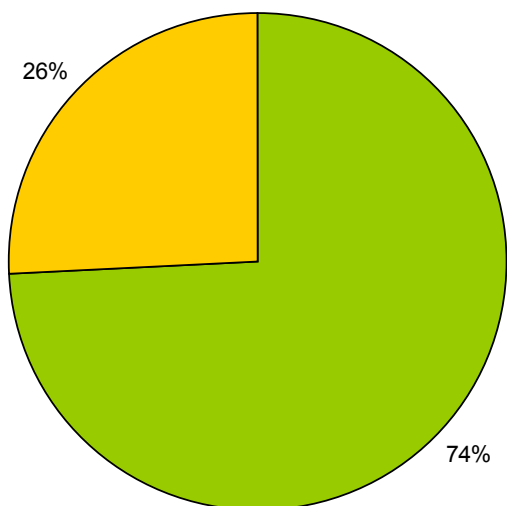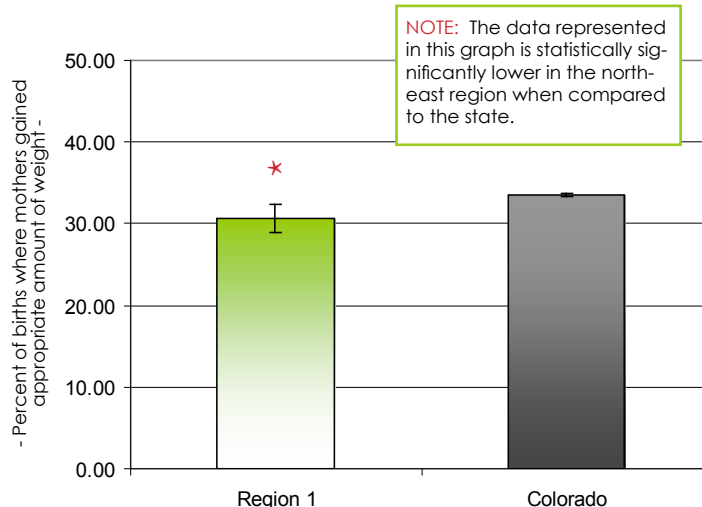
Percent of adults 18+ who reported they are concerned about overweight or obesity in their comunity (2012)
Source: Northeast Colorado Health Department,
Community Health Survey

(Pie chart: 74% Very/Slightly concerned (green), 26% Not concernd/Don't know (yellow))

- Very/Slightly concerned
- Not concernd/Don't know

Percent of adults 18+ who are obese or overweight or obese, as characterized by Body Mass Index (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher for both indicators in the northeast region when compared to the state.

Y-axis: - Percent of adults that are overweight or obese -

Obese (BMI ≥30): Region 1, Colorado
Overweight or Obese (BMI ≥25): Region 1, Colorado
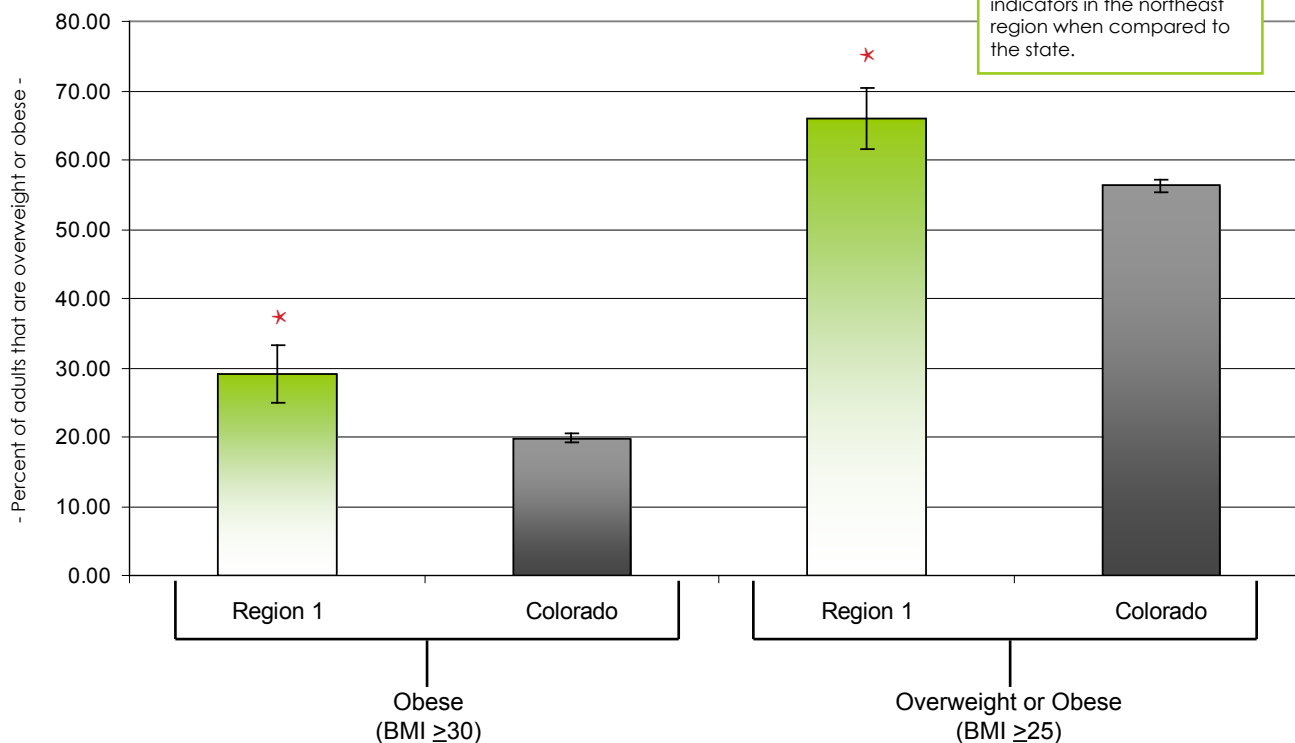
Percent of children, 2-14, who are obese or overweight or obese, as characterized by Body Mass Index (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Y-axis: - Percent of children that are overweight or obese -

Obese (BMI ≥30): Region 1, Colorado
Overweight or Obese (BMI ≥25): Region 1, Colorado

Percent of adults 18+ who have ever had their cholesterol screened and a health care provider told them they had high blood cholesterol (2007, 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
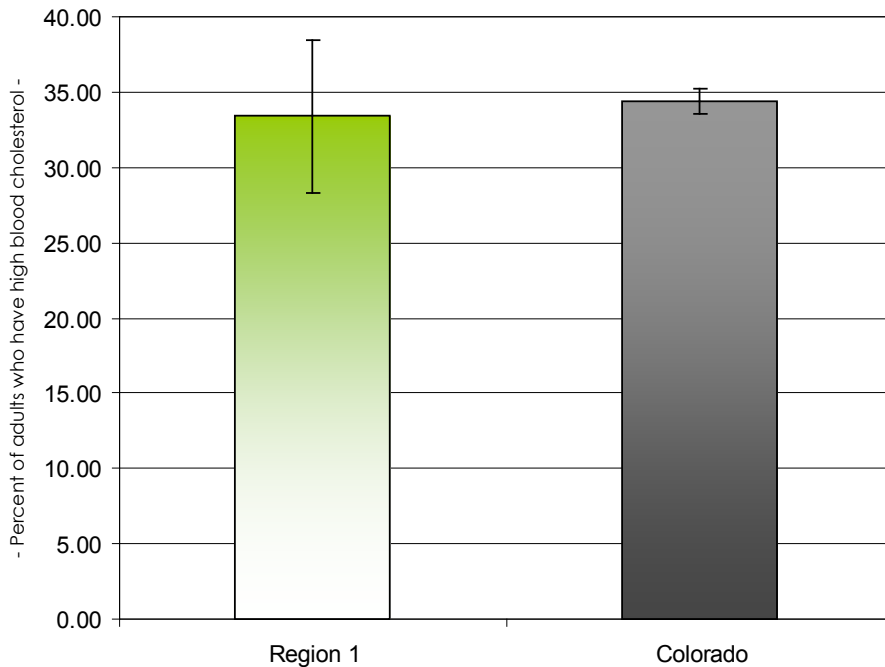
Percent of adults 18+ who have ever been told by a health care provider that they had high blood pressure (2007, 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
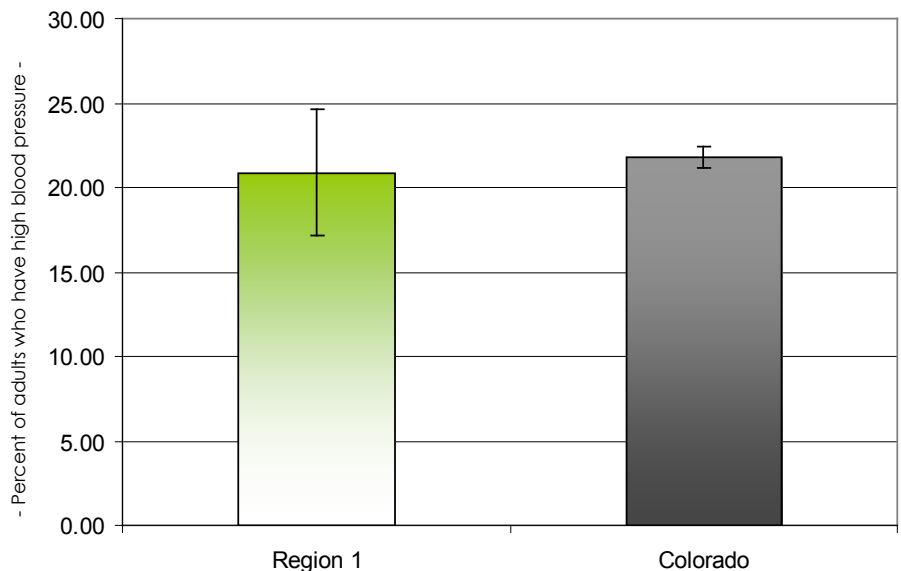
SUMMARY

Health Behaviors & Conditions
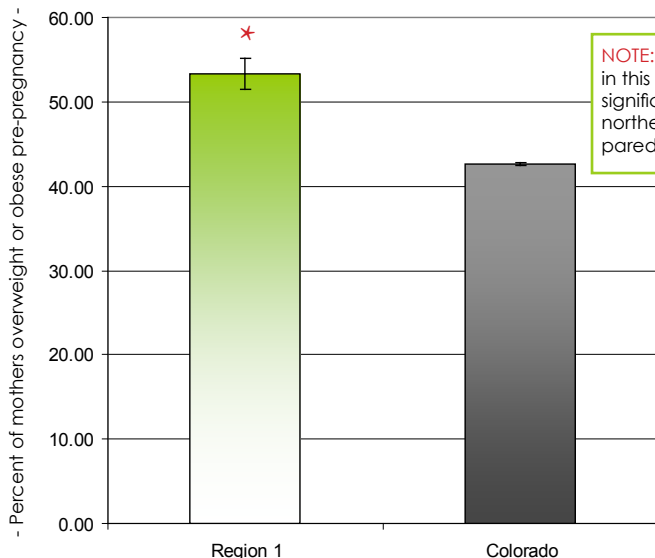
Nutrition

Physical activity

Tobacco use

Injury

Child health

Health conditions

STRENGTHS
- Lower percent of adults with high blood cholesterol

- Higher percent of children who are physically active

- Lower percent of adults and children eating fast food

CHALLENGES
- Only 4.6% of children consumed 5+ servings of fruits or vegetables (statistically significantly lower than the state)

- Higher percent of children consuming sugar-sweetened beverages

- Higher physical inactivity among adults (statistically significant)

- Higher percentage of women smoking during third trimester of pregnancy

- Lower seat belt usage among adults (statistically significant)

- Higher percent of unintended pregnancies (statistically significant)

- Higher percent of mothers who are overweight or obese pre-pregnancy (statistically significant)

- More adults who are overweight or obese (statistically significant)

- More children that are overweight or obese (not statistically significant, but highest in the state)

Mental Health

Health Factors		
Health Behaviors & Conditions	**Mental Health**	**Access, Utilization & Quality Care**
Nutrition	Mental health status	Health insurance coverage
Physical activity	Substance abuse	Received needed care
Tobacco use	Functional status	Provider availability
Injury		Preventive care
Child health		
School health		
Health conditions		

Mental health status

Substance abuse

Functional status

Percent of women who often/ always felt down, depressed, sad or hopeless with birth of new baby (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
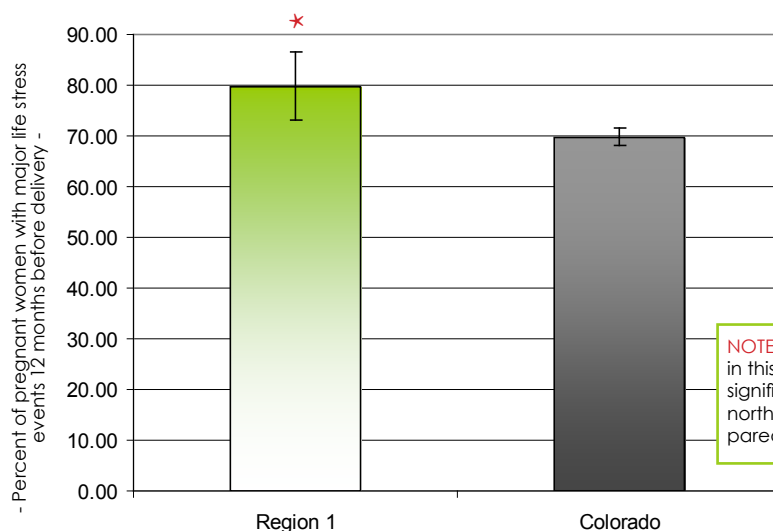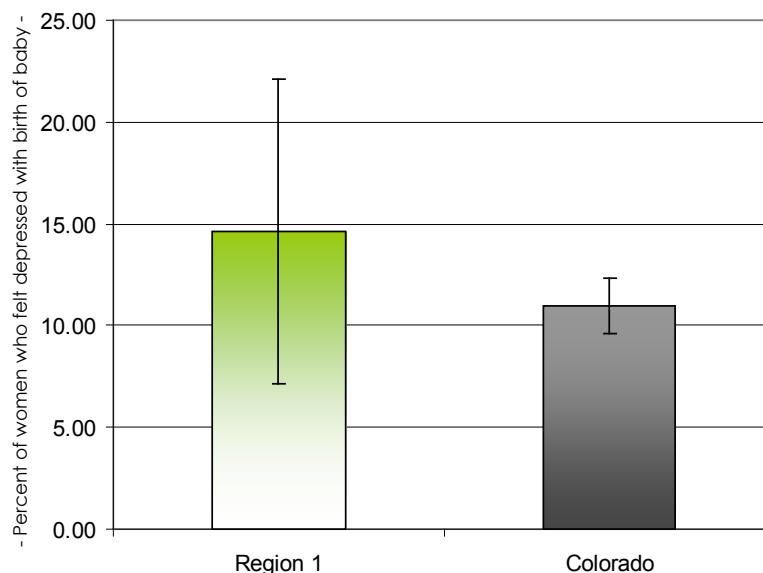
Percent of women who experienced 1 or more major life stress events 12 months before delivery (2008 - 2010)
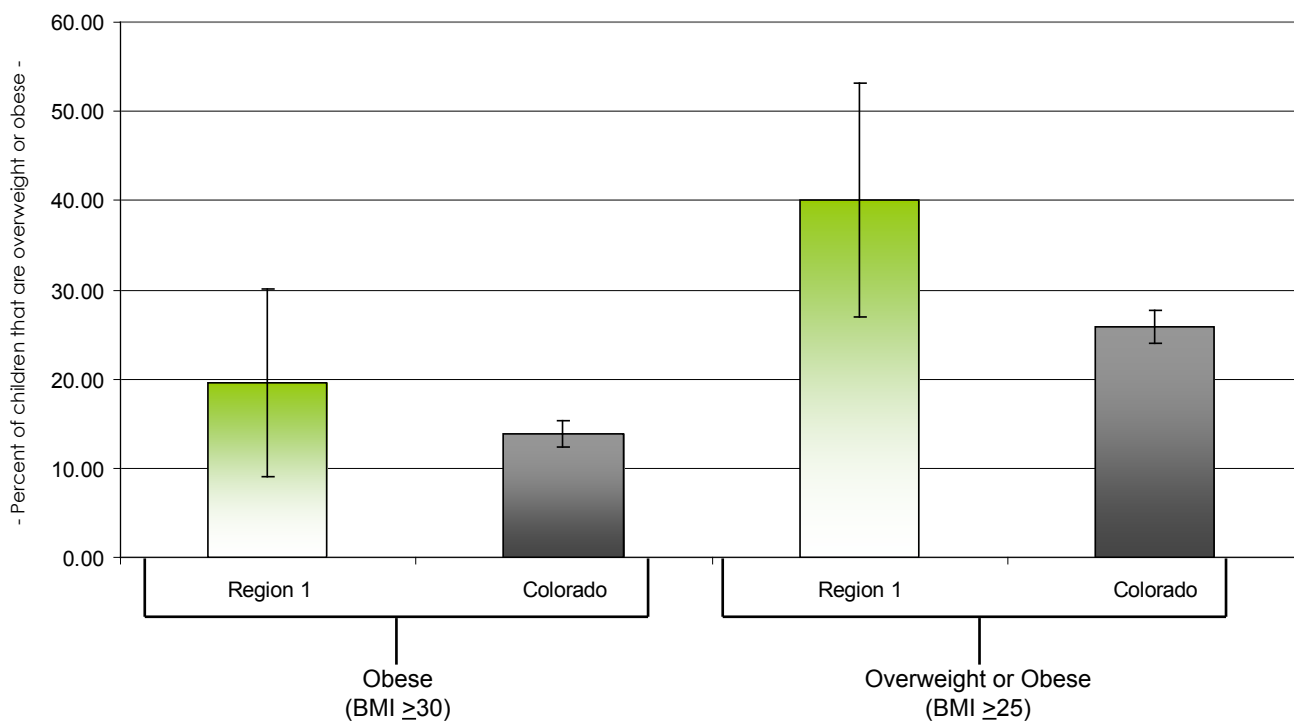
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Age-adjusted rate of mental health diagnosed hospitalizations, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- 50 -
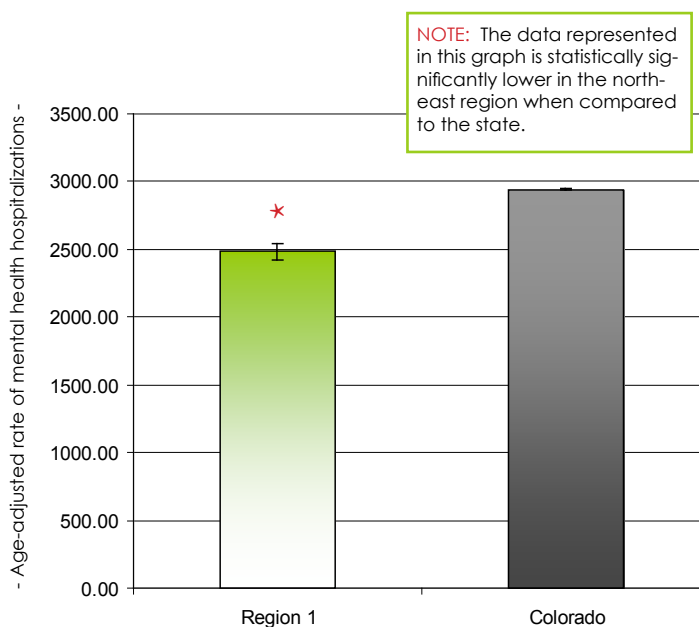
Percent of parents who reported behavioral or mental health problems in children, 1-14 years (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Age-adjusted rate of suicide hospitalizations, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
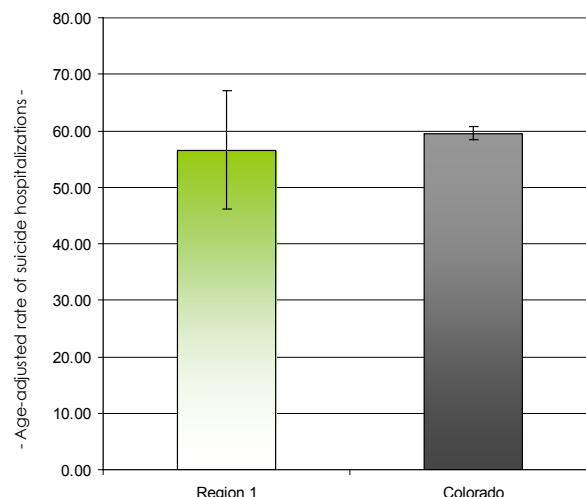
Local mental health admissions (2007 - 2011)

Source: Centennial Mental Health

Categories	2007-2008	2008-2009	2009-2010	2010-2011
Age 17 & under	651	701	754	859
Urgent clients	7	9	7	7
Emergency clients	51	44	64	74
Urgent identified as needing to be seen within 24 hours. Emergency identified as needing to be seen within two hours.				
Age 18 & over	1408	1470	1609	1760
Urgent clients	18	41	33	16
Emergency clients	221	235	262	275

The table at left indicates local admissions to Centennial Mental Health, the largest mental health provider in northeast Colorado.

From 2007 - 2001 there has been a 32% increase in clients 17 and under and a 25% increase in clients 18 and over. In addition there has been a 45% increase in Emergency clients 17 and younger and a 24% increase in Emergency clients 18 and over.

Percent of adults 18+ who are concerned about mental illness or emotional issues in their community (2012)

Source: Northeast Colorado Health Department, Community Health Survey

30%

70%

☐ Very/Slightly concerned
☐ No problem/Don't know
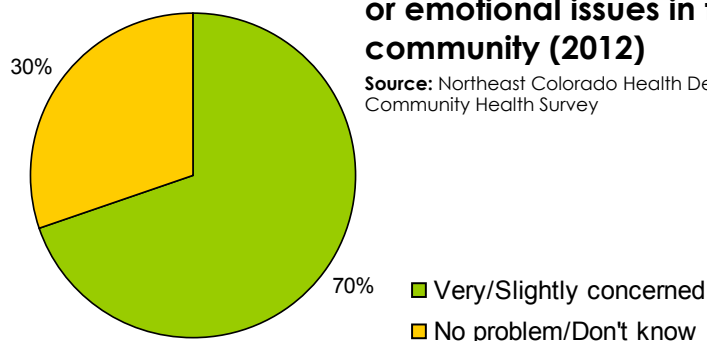
Results from NCHD's Community Health Survey showed that 15.2% of parents with children 17 or younger living in their home, are concerned about their child's mental health/depression/mood swings.

Percent of women who drank alcohol during the last 3 months of pregnancy (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
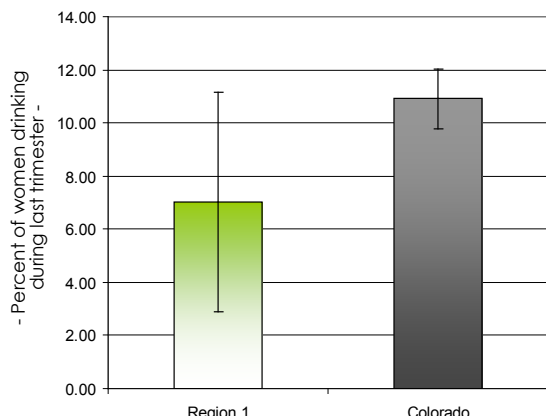
Percent of adults who reported binge drinking, males 5+/females 4+ drinks on one occasion, in the past 30 days (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
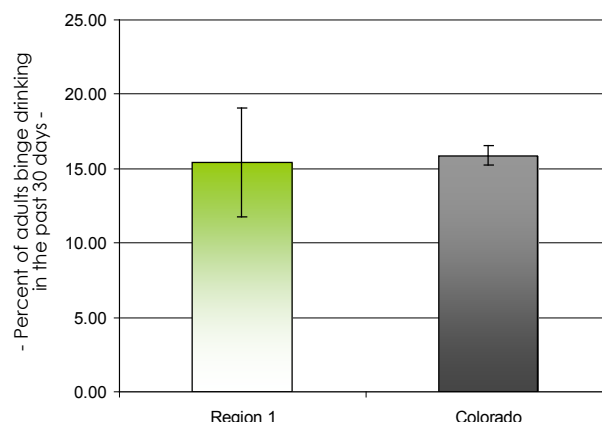
Age-adjusted mortality rate for unintentional poisoning deaths (2006 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
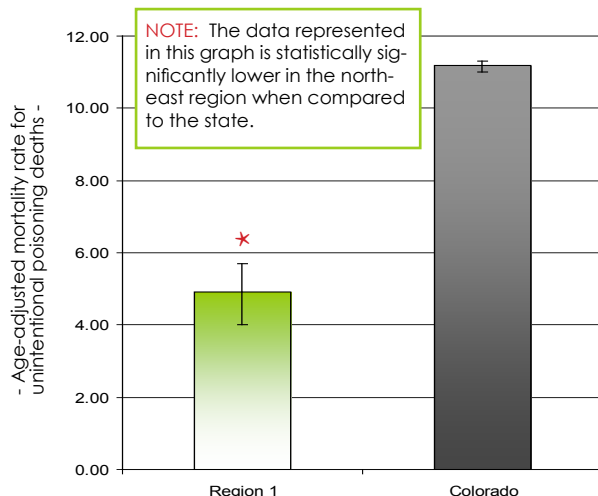
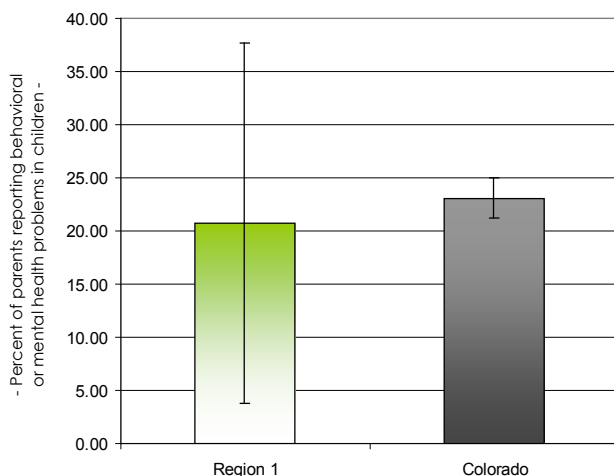## Age-adjusted unintentional poisoning hospitalization rate (2006 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
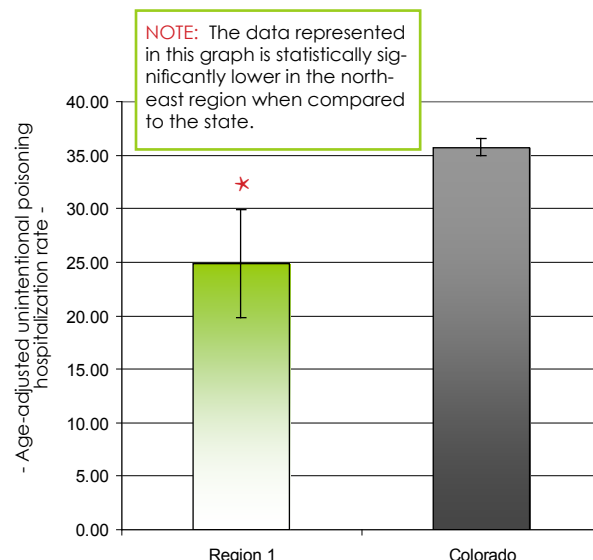

Percent of adults 18+ who are concerned about alcohol abuse in their community (2012)

Source: Source: Northeast Colorado Health Department, Community Health Survey

- 23%
- 77%

Legend:
- ■ Very/Slightly concerned
- ■ No problem/Don't know
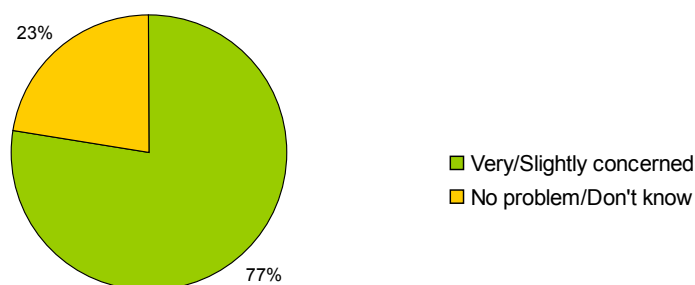
Percent of adults 18+ who are concerned about drug abuse (legal & illegal) in their community (2012)

Source: Source: Northeast Colorado Health Department, Community Health Survey

- 17%
- 83%
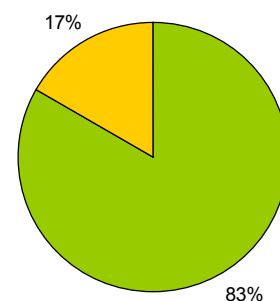
Percent of adults reporting their general health was fair or poor (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Morgan County was the only county where the data was statistically significantly higher on a county level for this data. Below is the geographical breakdown:

Logan 15.7%
Morgan.................... 26.5%
Phillips 17.6%
Sedgwick................ N/A
Washginton............ 12.6%
Yuma 16.5%

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.
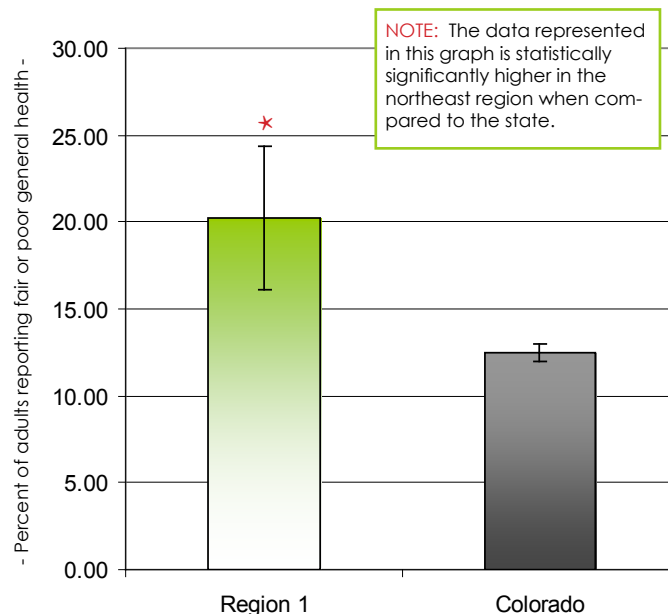
Average number of days, in the past 30, experienced by adults when their physical or mental health was not good (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- Physical Health not good
- Mental Health not good
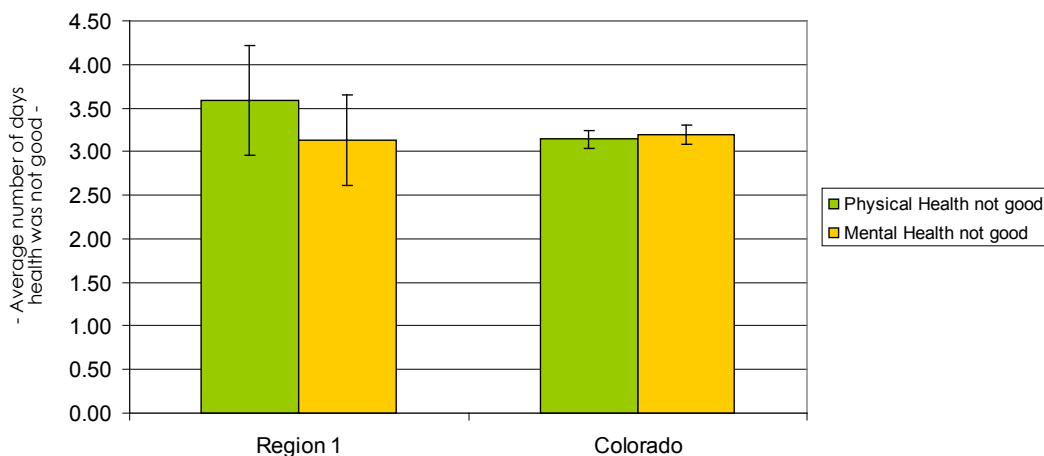
Average number of days, in the past 30, experienced by adults of poor physical or mental health that kept them from doing usual activities (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- All adults, age 18+
- Adults age 65+
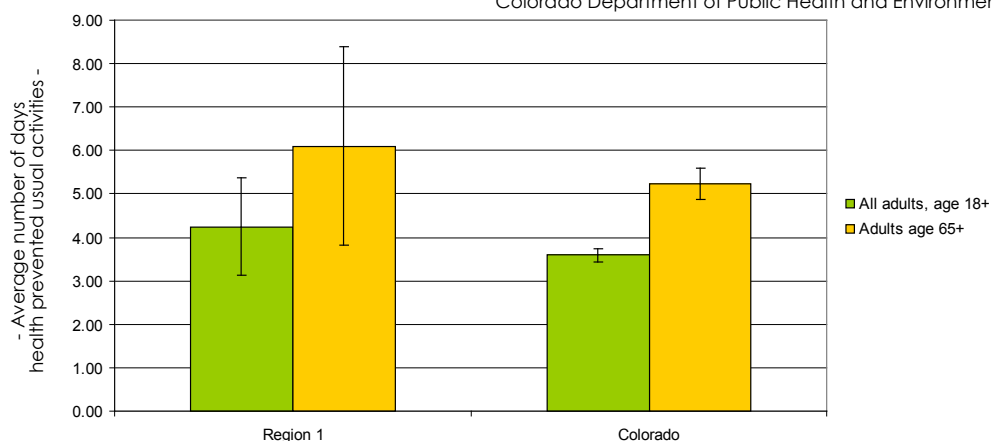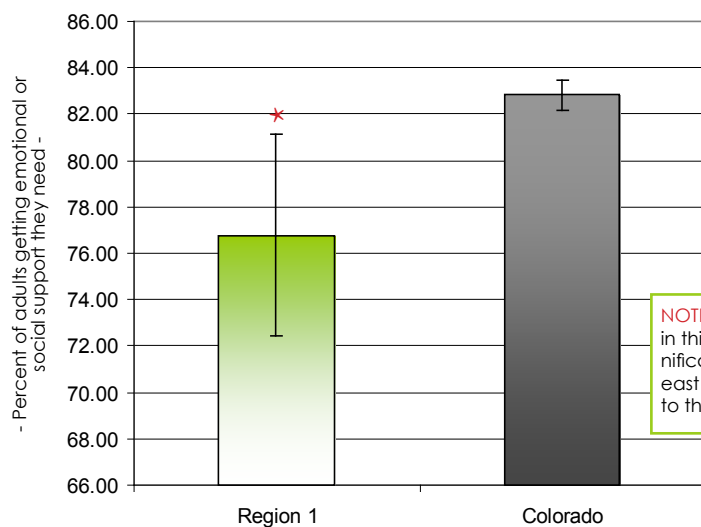
Percent of adults who usually or always get the emotional or social support they need (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Percent of adults who are satisfied or very satisfied with their life in general (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
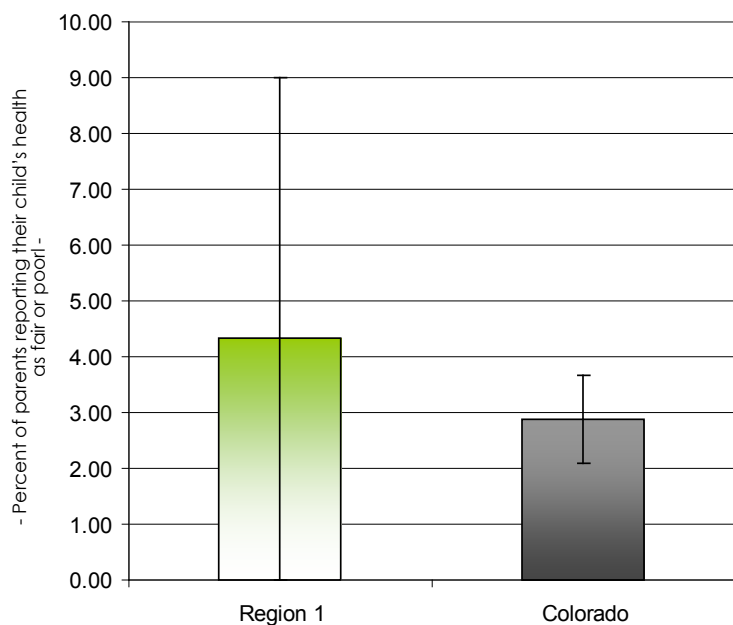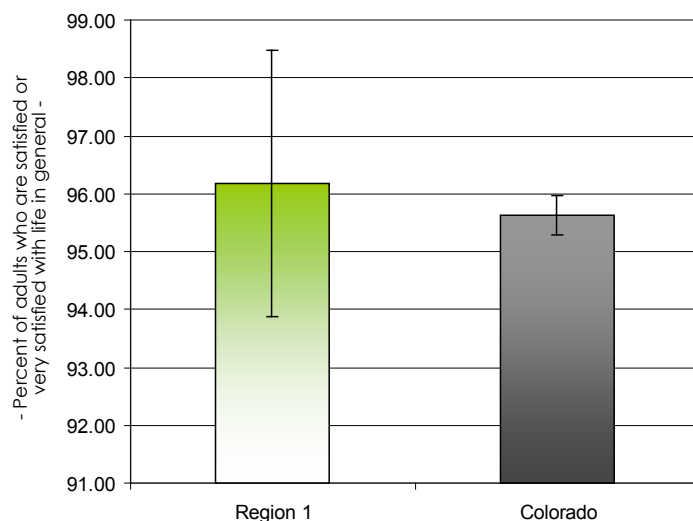
Percent of parents of children 1-14 who reported their child's general health was fair or poor (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

SUMMARY

Mental Health

Mental health status

Substance abuse

Functional status

STRENGTHS
- Lower mental health hospitalization rate (statistically significant)

- Lower suicide hospitalization rate

- Lower mortality rate for unintentional poisoning deaths (statistically significant)

- Lower unintentional poisoning hospitalization rate (statistically significant)

CHALLENGES
- Higher percent of adults reporting fair or poor health (statistically significant)

- Lower percent of adults who usually or always get the emotional or social support needed (statistically significant)

- Increase in percent of admissions and emergency care for clients of all age groups

Access, Utilization & Quality Care

Health Factors		
Health Behaviors & Conditions	**Mental Health**	**Access, Utilization & Quality Care**
Nutrition Physical activity Tobacco use Injury Child health School health Health conditions	Mental health status Substance abuse Functional status	Health insurance coverage Received needed care Provider availability Preventive care

Health insurance coverage

Received needed care

Provider availability

Preventive care

Health Insurance Coverage (2006 - 2010)	Northeast Region	Colorado
The number of children (age 0 - 18 years) eligible but not enrolled in Medicaid	650	39,550
The percent of children (age 0 -18 years) eligible but not enrolled in Medicaid	12.92%	13.3%
The number of children (age 0 - 18 years) eligible but not enrolled in CHP+	981	38,887
The percent of children (age 0 - 18 years) eligible but not enrolled in CHP+	42.39%	37.2%
The number of working-age adults (19-64 years) eligible but not enrolled in Medicaid	371	26,906
The percent of working-age adults (19-64 years) eligible but not enrolled in Medicaid	25.64%	28.0%
The number of children (less than 19 years) without health insurance coverage	2,955	132,676
The number of adults (age 18-64 years) without health insurance coverage	10,922	637,357

Source: Colorado Health Institute

Percent of mothers that had health care professionals talk to them about postpartum depression (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Introduction | **Data** | Capacity & Prioritization | The Plan!
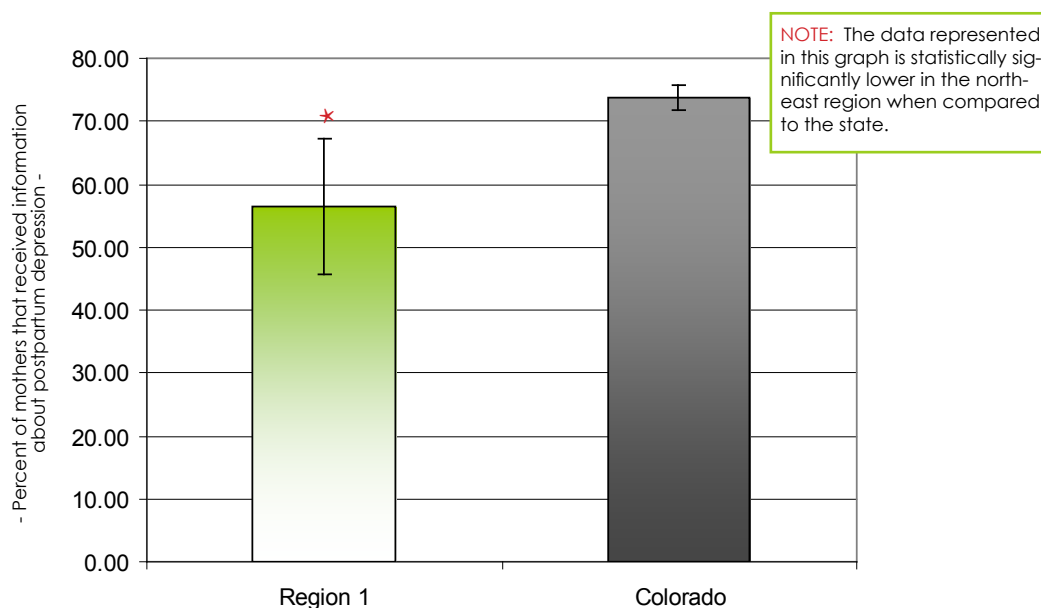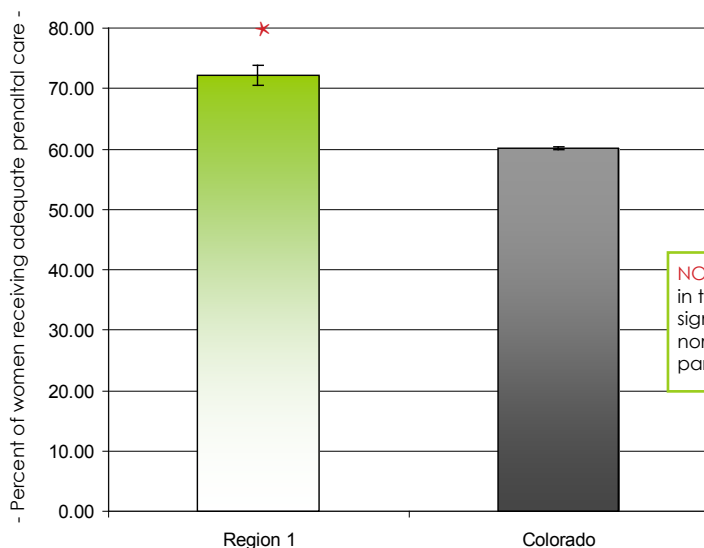
Percent of women who received adequate prenatal care (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Percent of women who went for dental care during pregnancy (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
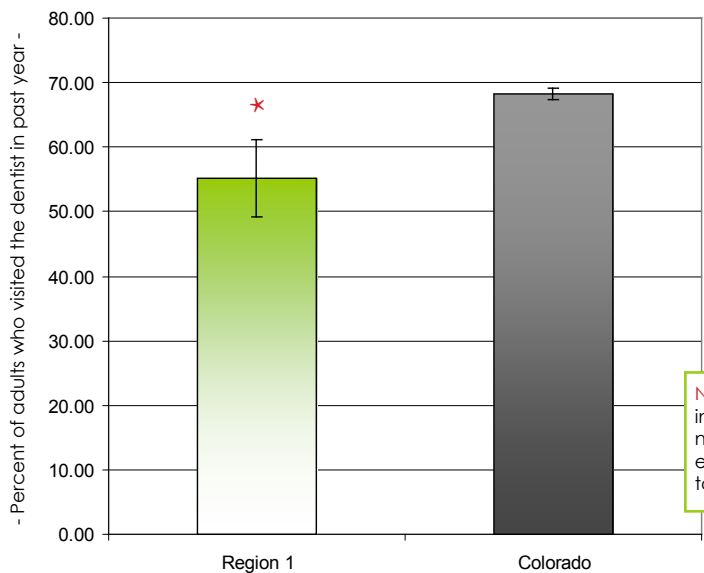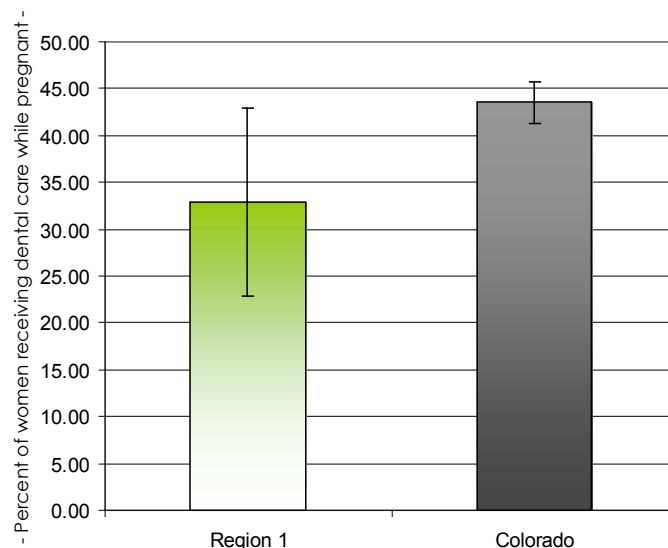
Percent of adults who visited the dentist for any reason within the past 12 months (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Number of safety net providers in the Northeast Region (2011)	Northeast Region
Community Health Centers	2
Community Mental Health Centers	2 (8 offices)
Community-funded Safety Net Clinics	9
Community-based Dental Health Clinics	2
Emergency Departments	8
Local Public Health Departments and Nursing Services	1 (6 offices)
Rural Health Clinics	8
School-based Health Centers	0

Source: Colorado Health Institute

Percent of adults 18+ who report having one or more regular health care providers (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
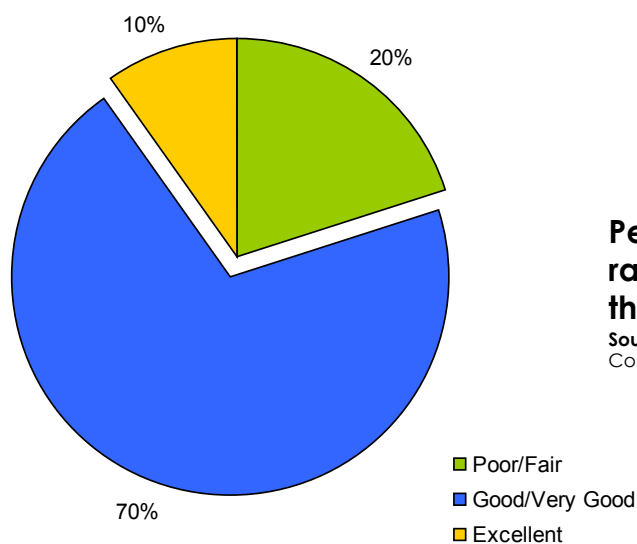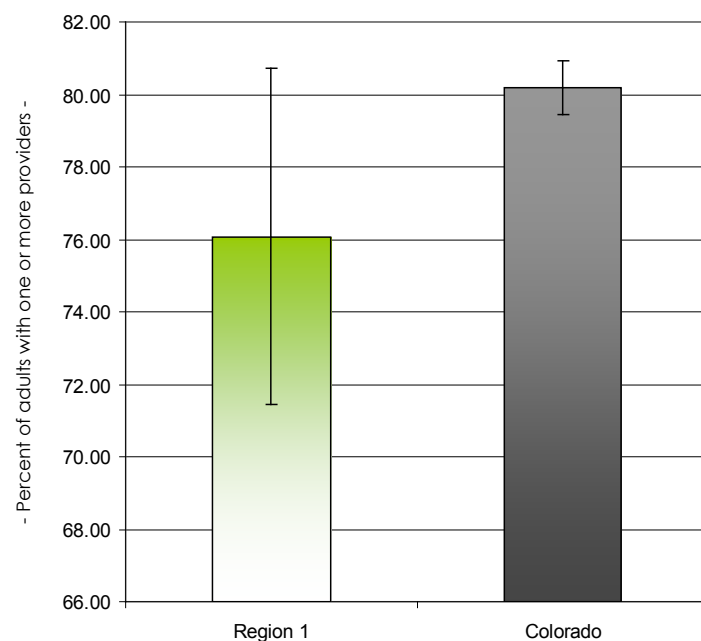
Percent of how well adults 18+ rated health care providers in their county (2012)
Source: Northeast Colorado Health Department,
Community Health Survey

- Poor/Fair
- Good/Very Good
- Excellent

10%
20%
70%

Percent of adults 18+ who are concerned about availability of doctors or medical clinics in their community (2012)

Source: Northeast Colorado Health Department, Community Health Survey

- Very/Slightly concerned
- Not concerned
- Don't Know

3%

26%

71%

- Very/Slightly concerned
- Not concerned
- Don't Know

13%

28%

59%
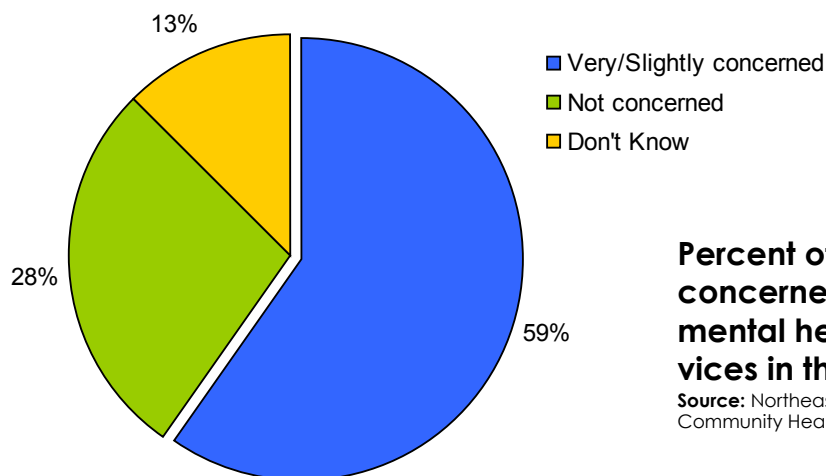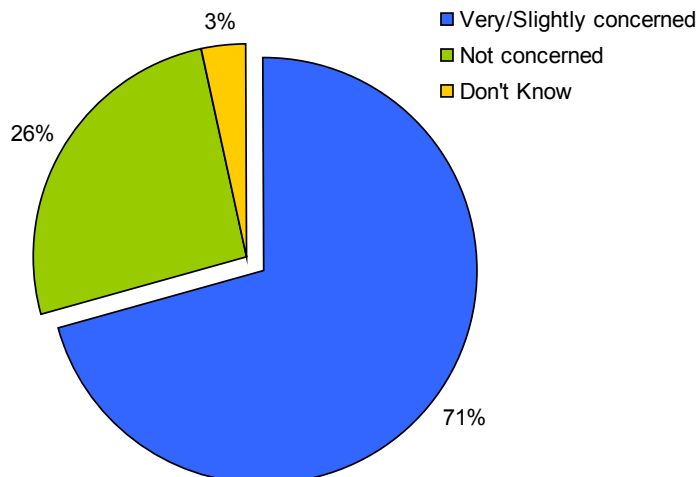
Percent of adults 18+ who are concerned about availability of mental health/counseling services in their community (2012)

Source: Northeast Colorado Health Department, Community Health Survey

Percent of adults 18+ who are concerned about availability of mental health/counseling services in their community (2012)

Source: Northeast Colorado Health Department, Community Health Survey

- Very/Slightly concerned
- Not concerned
- Don't Know

6%

40%

54%
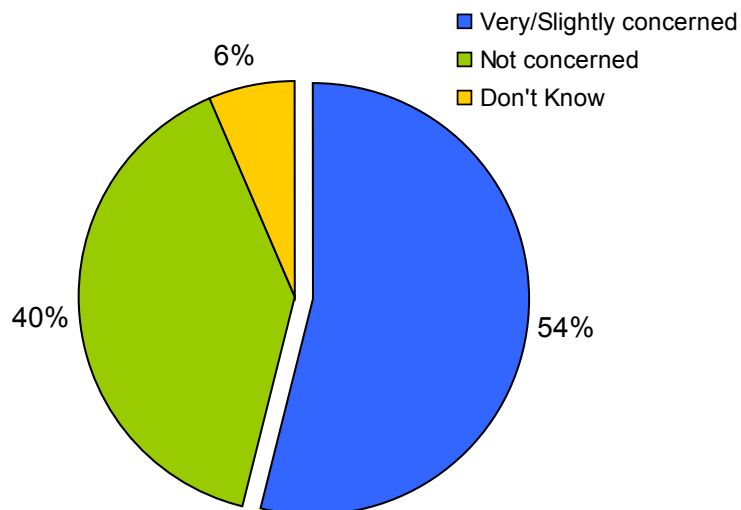
Percent of adults who had a flu shot in the past 12 months (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
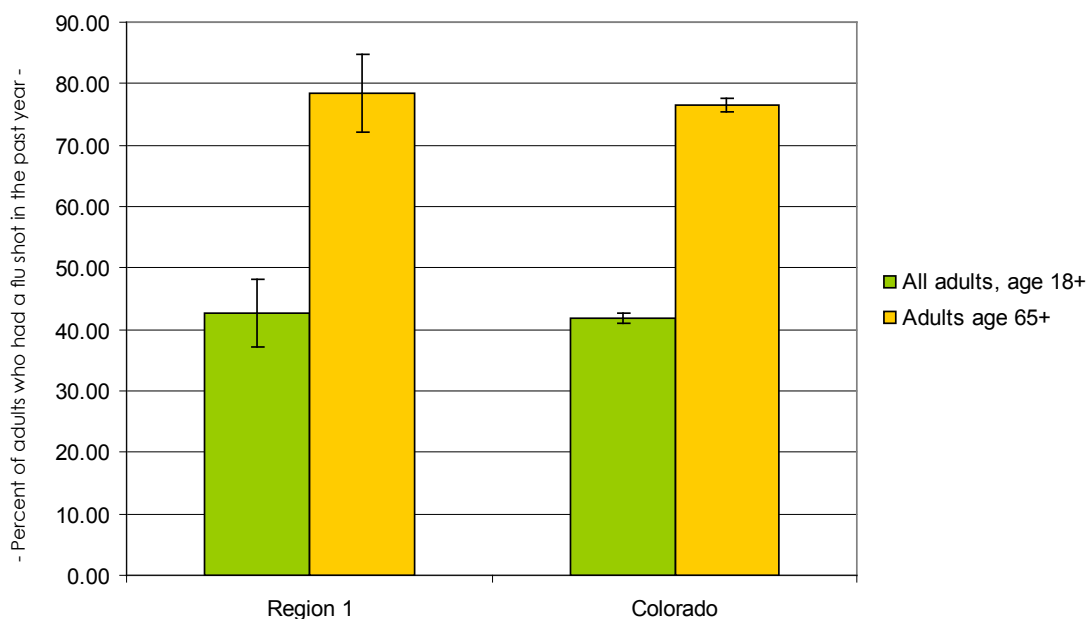
Results from NCHD's Community Health Survey showed that 41.6% of respondents had received a flu shot in the past year and 43.8% of respondents said they had ever received a pneumonia shot.

Percent of adults who have ever had a pneumonia shot (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Introduction | **Data** | Capacity & Prioritization | The Plan!
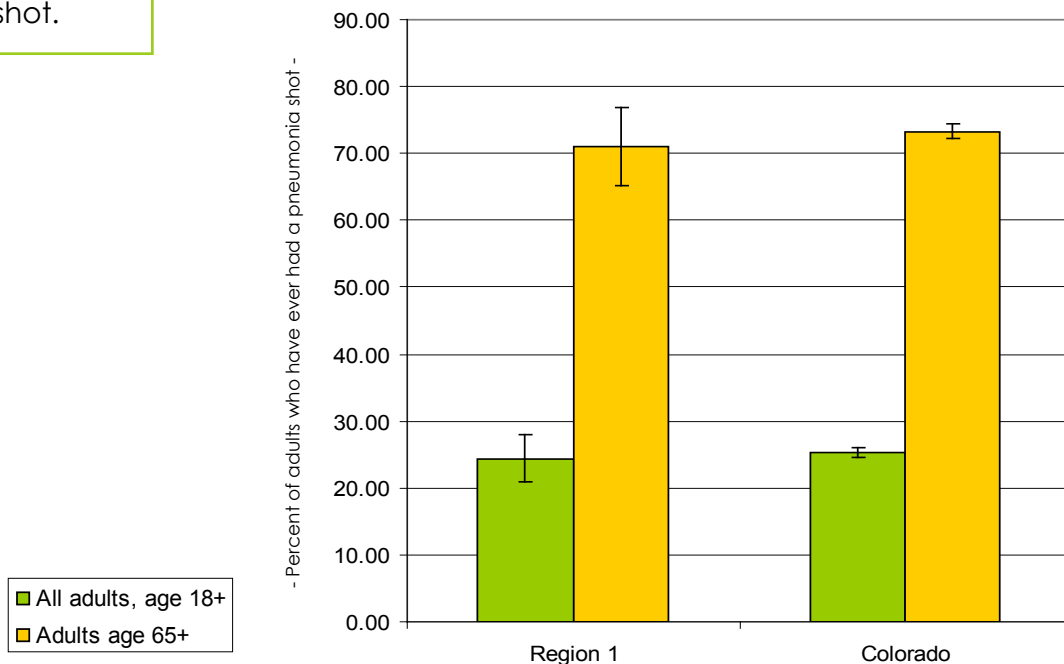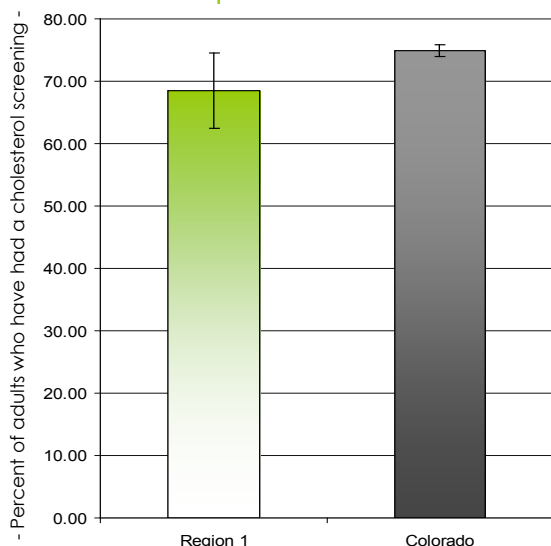
Percent of adults who have had a cholesterol screening in the past 5 years (2007, 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Results from NCHD's Community Health Survey showed that 73.3% of respondents said they had a blood cholesterol test of any type in the past five years.

Percent of women age 40+ who had a mammogram within the last 2 years (2008, 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Results from NCHD's Community Health Survey showed that 61.0% of respondents that were women over age 40 had received a mammogram in the past five years.

Percent of adults 50+ who had a colonoscopy within 10 years or a sigmoidoscopy within 5 years or fecal occult blood test within last year (2008, 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Results from NCHD's Community Health Survey showed that 41.4% of respondents said they had ever received a sigmoidoscopy, colonoscopy or proctoscopy.


NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Percent of adults 18+ by length of time since last routine checkup, not for a specific illness, injury or condition (2012)

Source: Northeast Colorado Health Department, Community Health Survey

Results from NCHD's Community Health Survey showed that 84.4% of respondents said their child, 17 or younger, had routine well-child checkups or physical exams in the last year.

- Within past year
- 1 - 5 years
- More than 5 years
- Don't know/Never

3%
8%
25%
64%
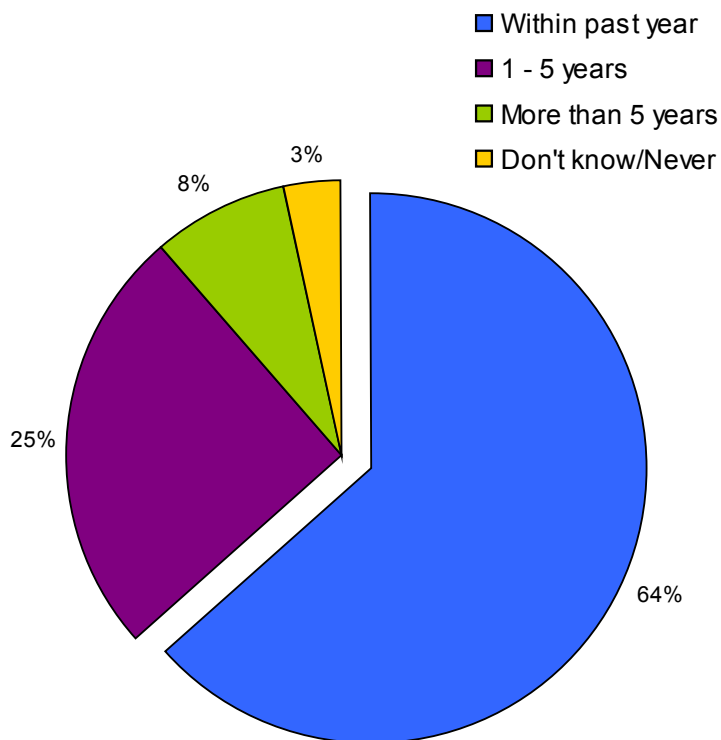
Percent of adults 18+ by length of time since last dental exam and/or teeth cleaning (2012)

Source: Northeast Colorado Health Department, Community Health Survey

4%
11%
32%
53%

Results from NCHD's Community Health Survey showed that 70.3% of respondents said their child, 17 or younger, had been to the dentist in the past year.

- Within past year
- 1 - 5 years
- More than 5 years
- Don't know/Never
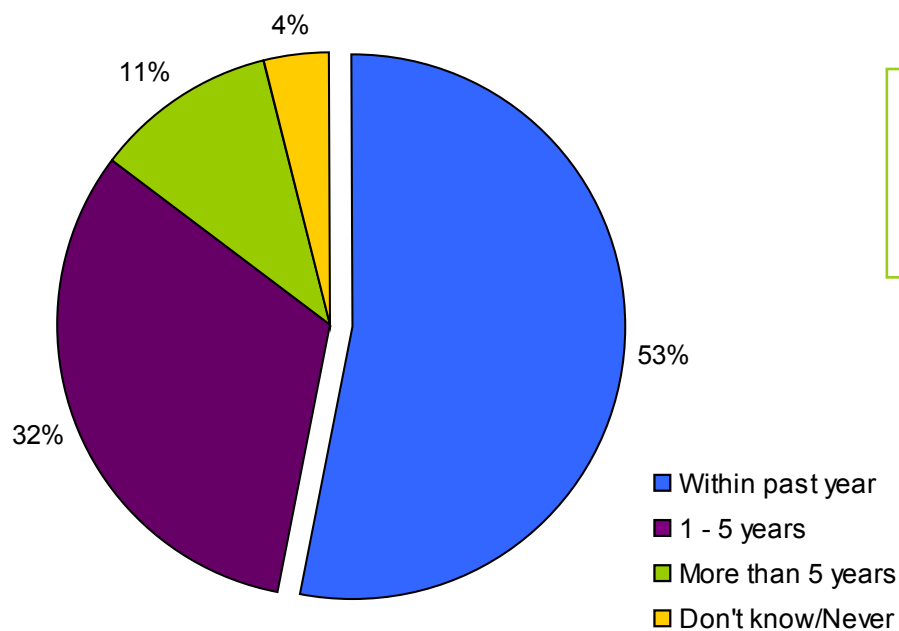
SUMMARY

Access, Utilization & Quality Care

Health insurance coverage

Received needed care

Provider availability

Preventive care

STRENGTHS

- Adequate prenatal care was higher than the state (statistically significant)

- Over half of the adult population has been to a routine checkup in the past year

CHALLENGES

- Percent of mothers that had a healthcare provider talk to them about postpartum depression was low (statistically significant)

- Percent of adults who visited the dentist in the past 12 months was low (statistically significant)

- Screenings for colon cancer - colonoscopy, sigmoidoscopy, or fecal occult blood test - were lower than the state (statistically significant)

Quality of Life & Morbidity

Population Health Outcomes
Quality of Life
Morbidity
Mortality
Life Expectancy

Quality of life

Morbidity
  Arthritis
  Asthma
  Cancer
  Diabetes
  Heart disease and stroke
  Oral health
  Communicable disease
  Occupational health
  Birth defects
  Injury

Mortality

Percent of adults reporting their general health was fair or poor (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

- Percent of adults reporting fair or poor general health -

30.00
25.00
20.00
15.00
10.00
5.00
0.00

Region 1   Colorado
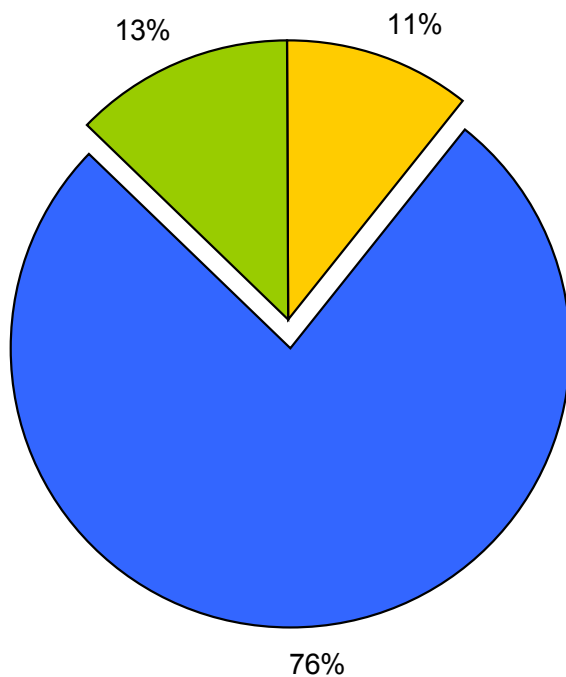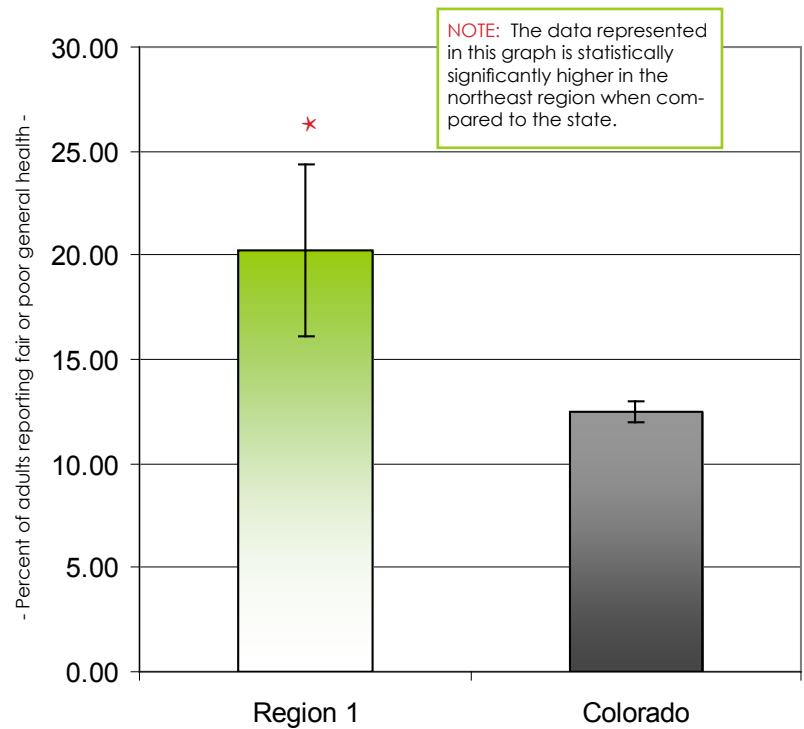
Percent of adults that rated the quality of life in their county as poor/fair, good/ very good, or excellent (2012)

Source: Northeast Colorado Health Department,
Community Health Survey

13%   11%

76%

☐ Poor/Fair
☐ Good/Very Good
☐ Excellent

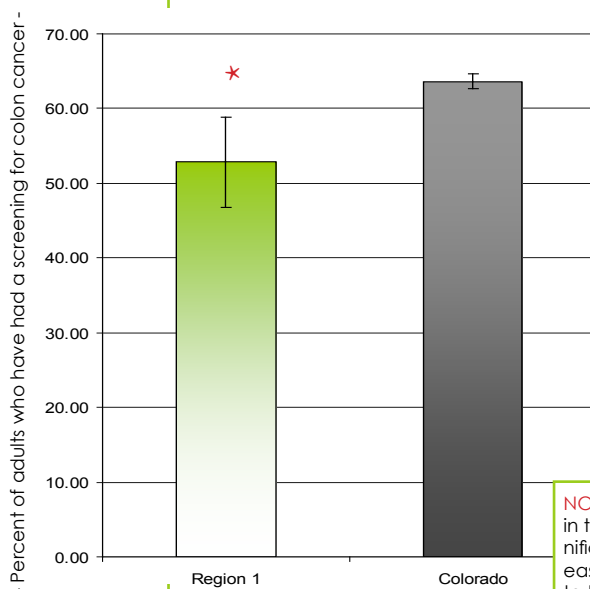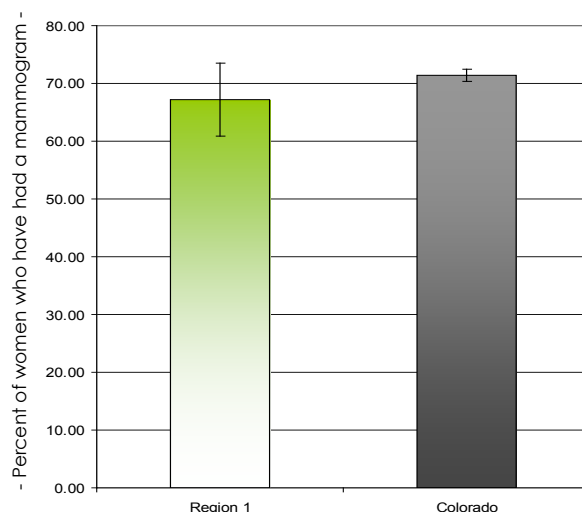## Percent of adults 18+ with arthritis (2007, 2009)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
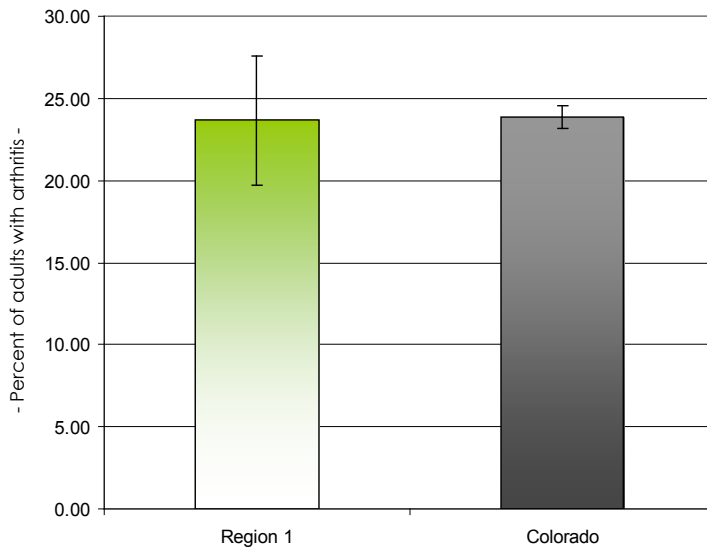
Results from NCHD's Community Health Survey showed that 11.9% of respondents reported they had ever been diagnosed with arthritis.

Percent of adults 18+, and children 1-14, that have been told by a health care provider that they currently have asthma (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- Adults 18+ with asthma
- Children 1-14 with asthma
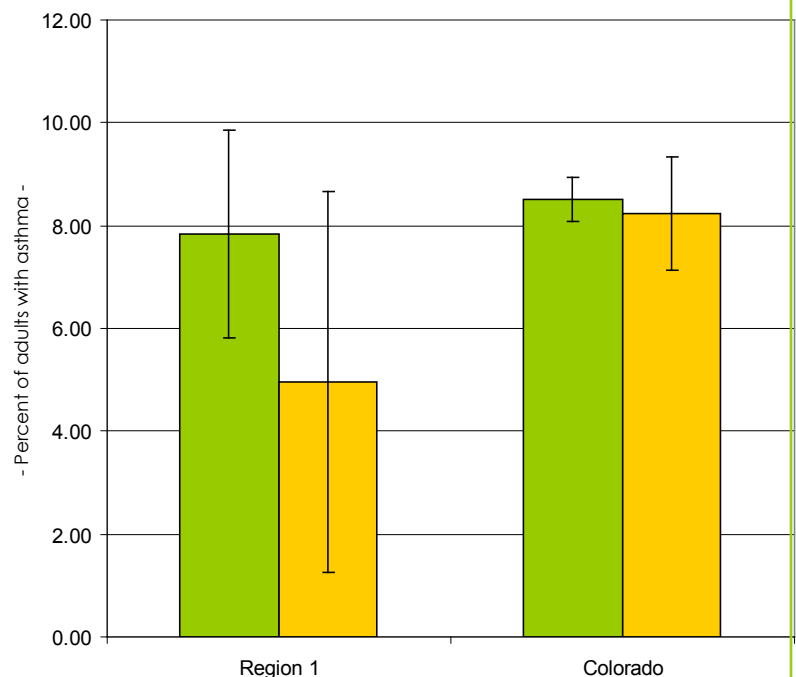
Results from NCHD's Community Health Survey showed that 11.3% of respondents reported they had ever been diagnosed with asthma. In addition 18% of adults reported that their child, 17 years or younger, had ever been diagnosed with asthma.

Age-adjusted incidence rate of invasive cancer, all sites combined, per 100,000 population (2006 - 2008)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Results from NCHD's Community Health Survey showed that 12.6% of respondents reported they had ever been diagnosed with cancer. In addition 1.2% of adults reported that their child, 17 years or younger, had ever been diagnosed with cancer.
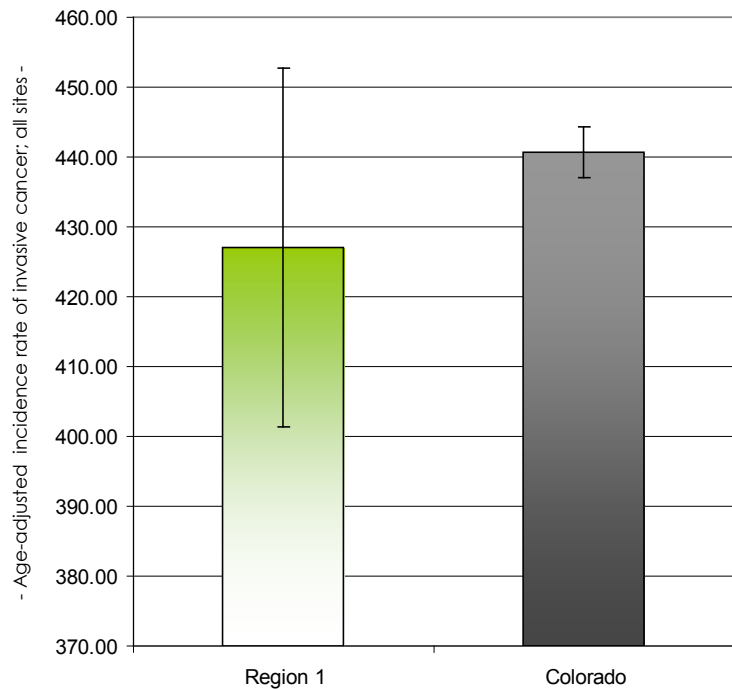
Age-adjusted cancer incidence rate by common type (2006 - 2008)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

**Age-adjusted incidence rate is per 100,000 gender-specific population

Percent of adults 18+ with diabetes (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Percent of women who had diabetes that started during pregnancy (2009 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
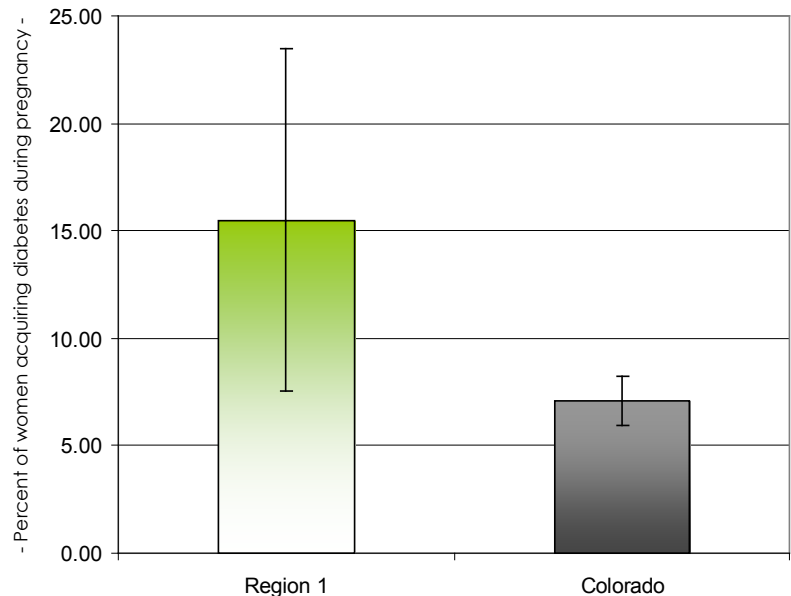
Results from NCHD's Community Health Survey showed that 5.3% of respondents reported they had ever been diagnosed with diabetes. In addition 1.6% of adults reported that their child, 17 years or younger, had ever been diagnosed with diabetes.
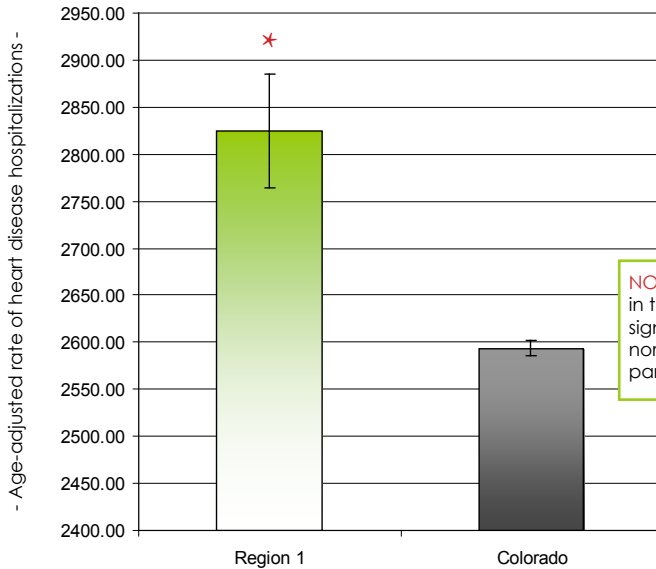
Age-adjusted rate of heart disease hospitalizations, per 100,000 population (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Percent of adults 18+ who ever had a heart attack or angina or coronary heart disease (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
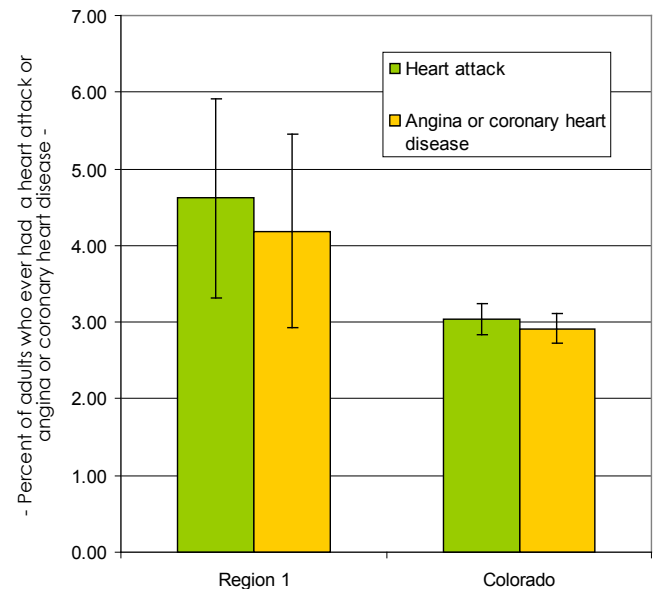
Age-adjusted rate of hospitalization by cardiovascular diagnosis (2008 - 2010)
Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state for acute myocardial infarctions and congestive heart failure, but statistically significantly lower for stroke hospitalizations.

Percent of adults, 18+, ever lost any teeth due to decay or periodontal disease (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
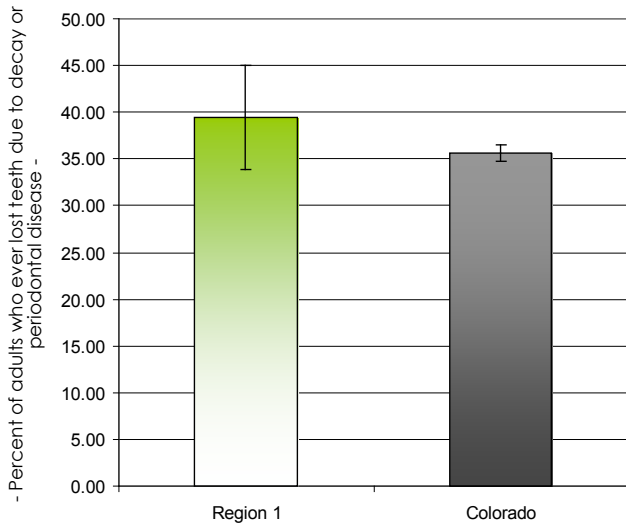
Percent of children, 1-14, with fair or poor condition of teeth (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
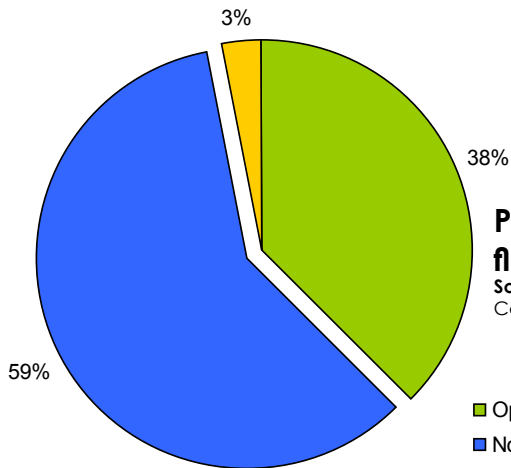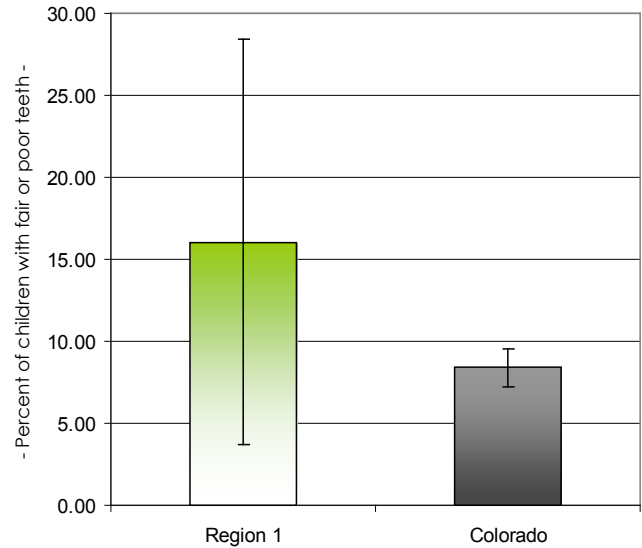
Percent of community water systems by fluoridation level (2008)

Source: My Water's Fluoride,
Centers for Disease Control and Prevention

- ■ Optimal fluoridation levels
- ■ Non-optimal fluoridation levels
- ■ Varying fluoridation levels

Percent of population served by community water systems by fluoridation level (2008)

Source: My Water's Fluoride,
Centers for Disease Control and Prevention

- ■ Optimal fluoridation levels
- ■ Non-optimal fluoridation levels
- ■ Varying fluoridation levels

Introduction | **Data** | Capacity & Prioritization | The Plan!
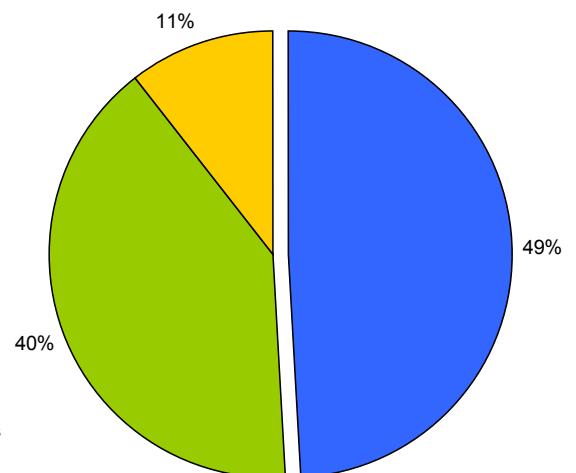
Rate of new HIV cases per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
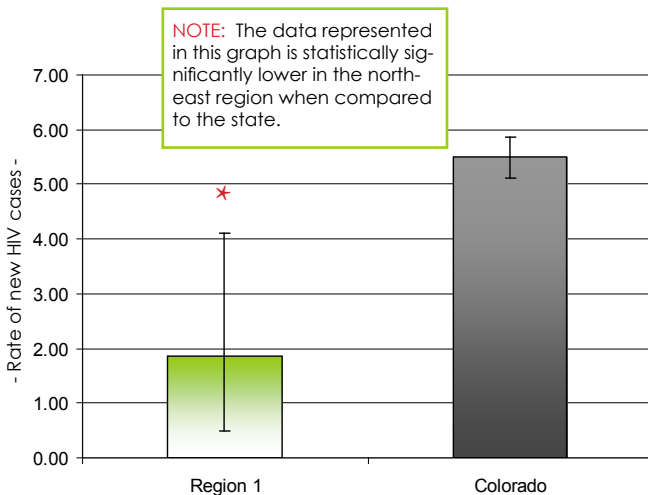
Rate of new tuberculosis cases per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Rate of new Gonorrhea cases, 15-29 years, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Rate of new Chlamydia cases, 15-29 years, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
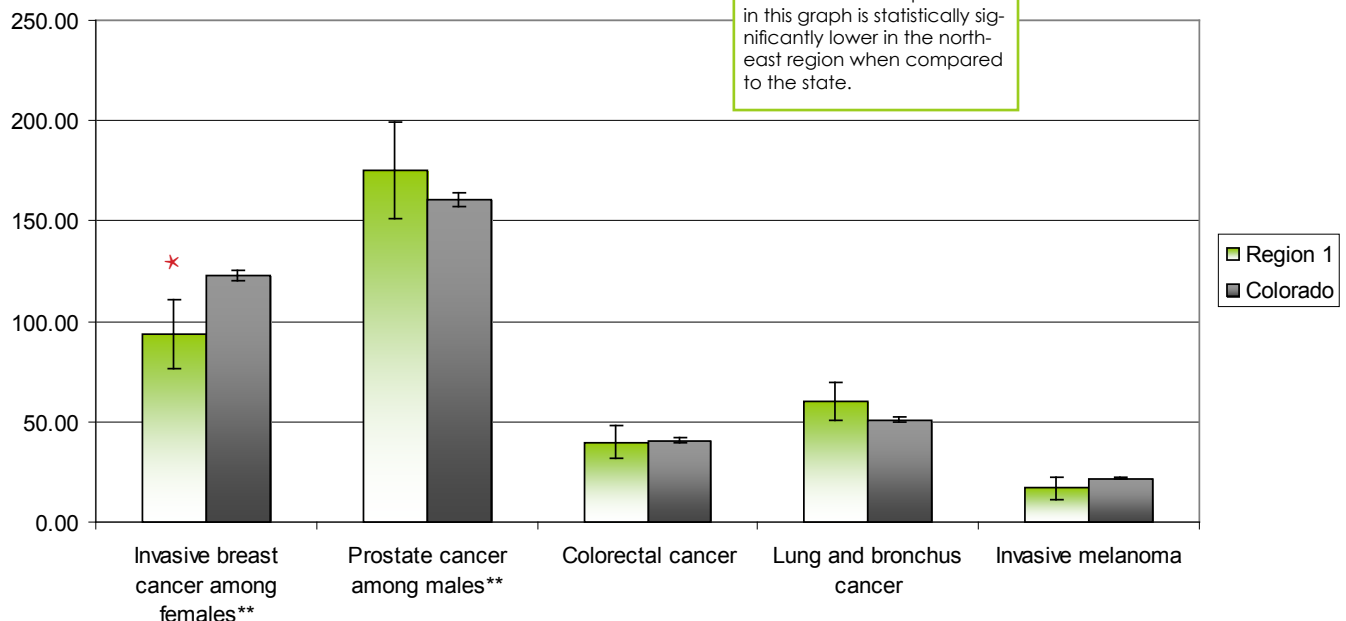Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.

Rate of new Pertussis cases per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
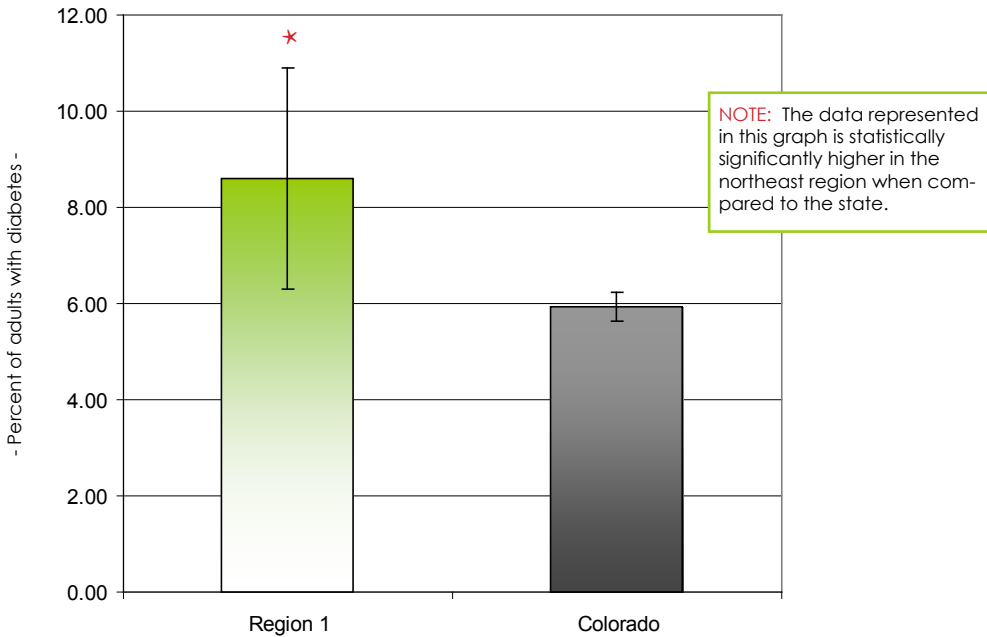Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
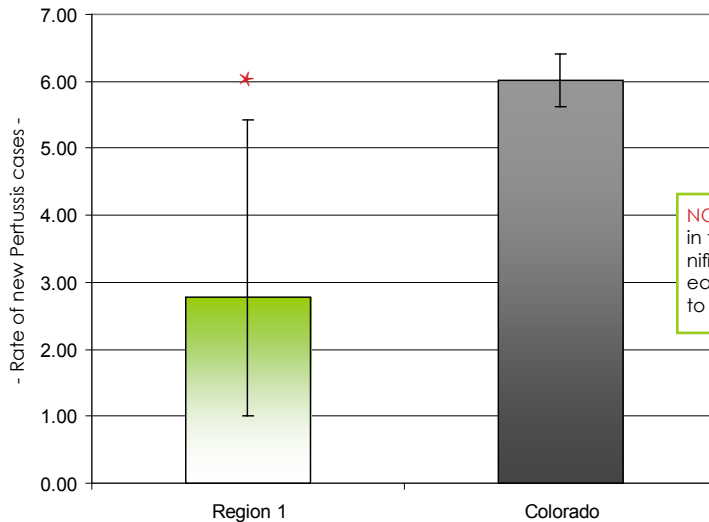
Rate of new chronic Hepatitis B cases per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
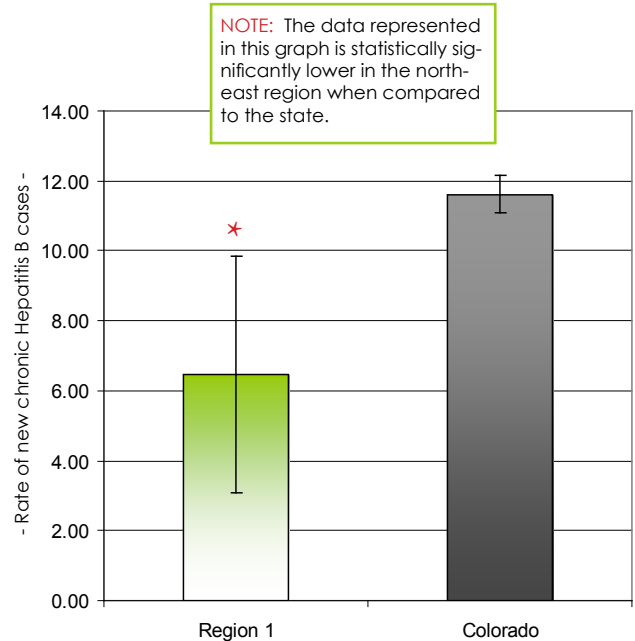
Incidence rates of food or water-borne infections 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: Some of the data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Introduction

Data

Capacity & Prioritization

The Plan!

Rate of new West Nile virus cases per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.
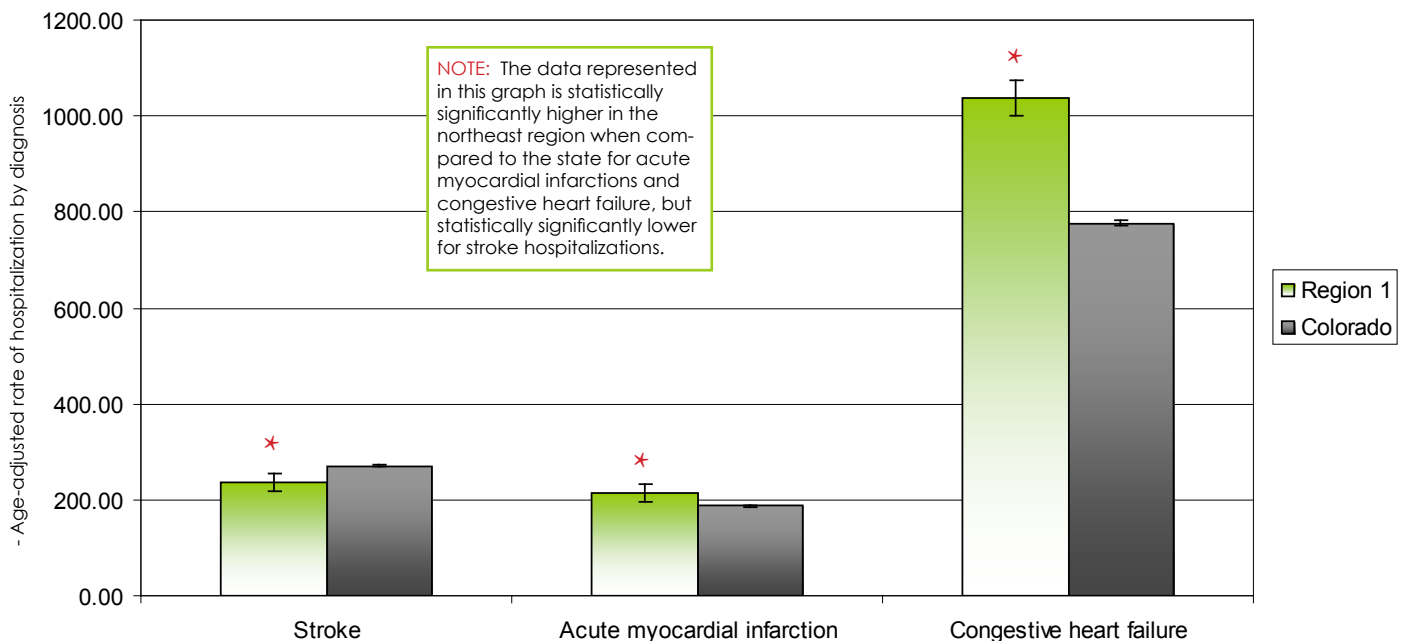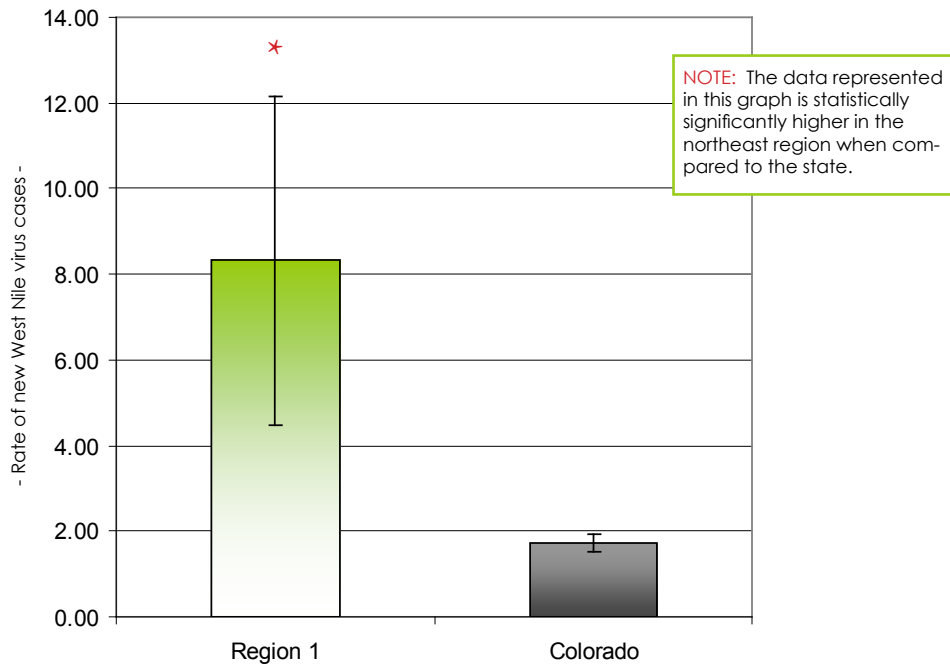
Rate of influenza hospitalizations in people age 65+ per 100,000 population age 65+ (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

Population Health Outcomes

Introduction

Data

Capacity & Prioritization

The Plan!

Table of Contents
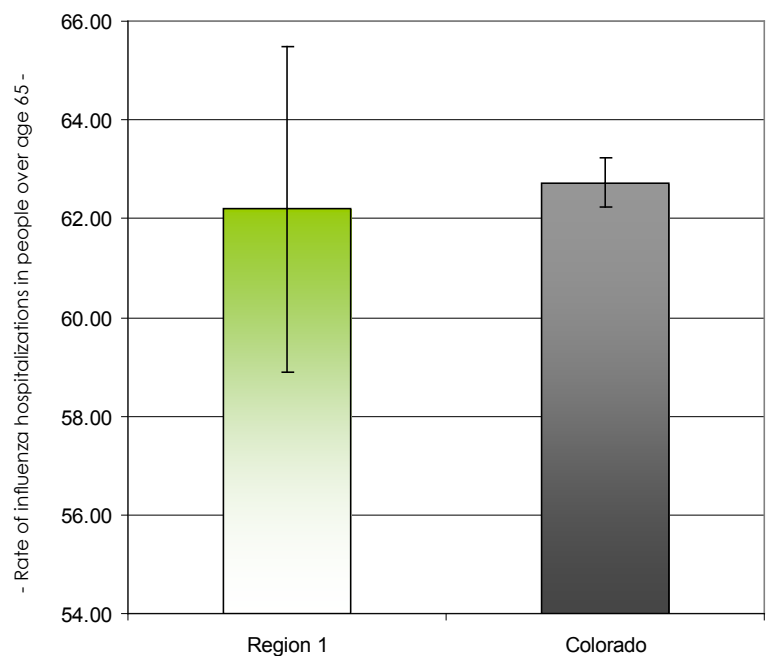
Rate of work-related hospitalizations, per 100,000 employed population age 16+ (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

- Rate of work-related hospitalizations -

Region 1   Colorado
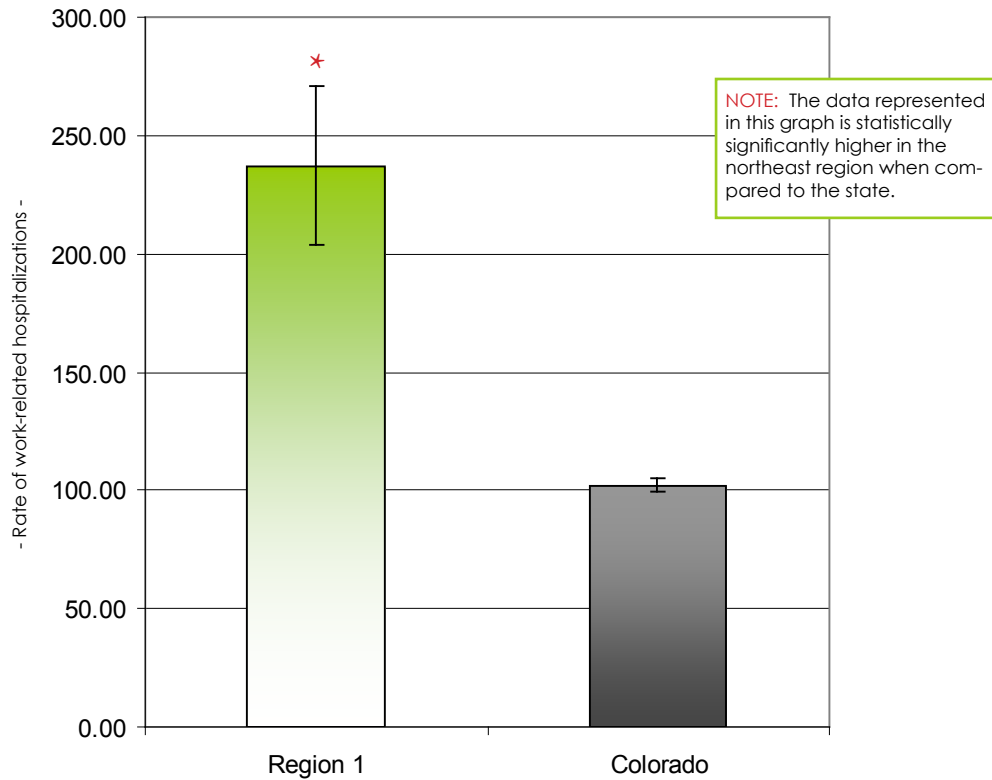
Percent of employment filing non-fatal lost-time workers' compensation claims (2004 - 2008)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

- Rate of workers' compensation claims -

| | 1.6 | 1.5 | 1.7 | 1.8 | 1.8 |

Northeast Region
1.6   1.5   1.7   1.8   1.8

Colorado
1.4   1.3   1.4   1.3   1.3

2004   2005   2006   2007   2008
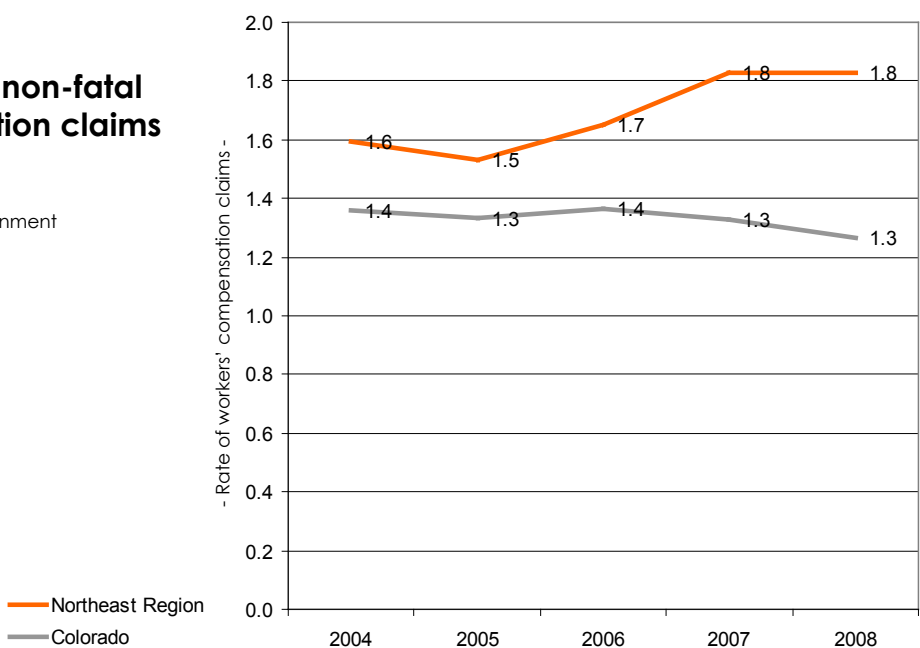
Rate of major congenital anomalies, per 100,000 live births (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
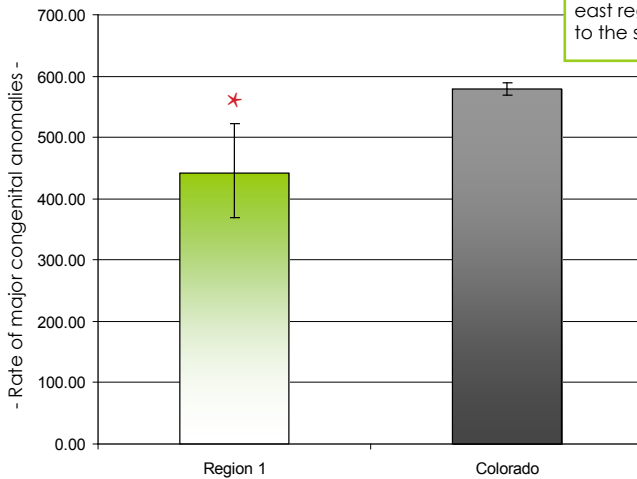
Percent of live births with low birth weight, <2500 grams (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
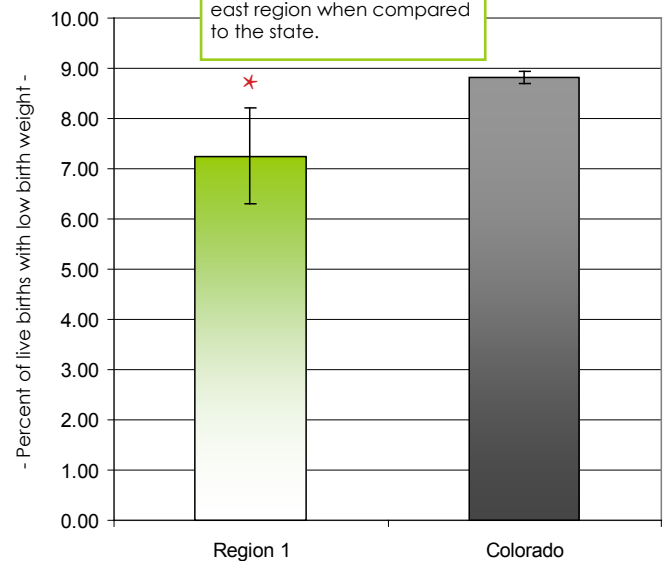
Age-adjusted rate of unintentional poisoning hospitalizations, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly lower in the northeast region when compared to the state.
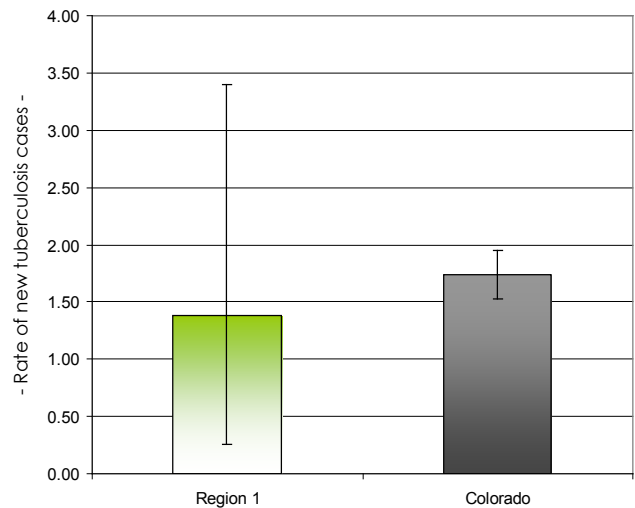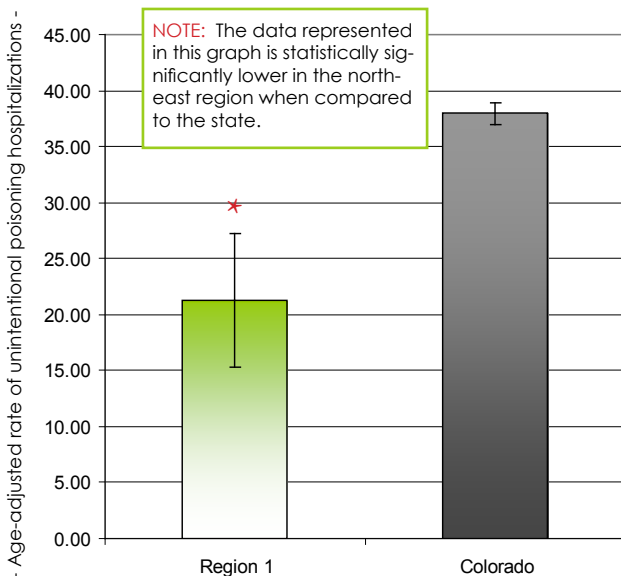

Age-adjusted rate of motor vehicle accident injuries, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
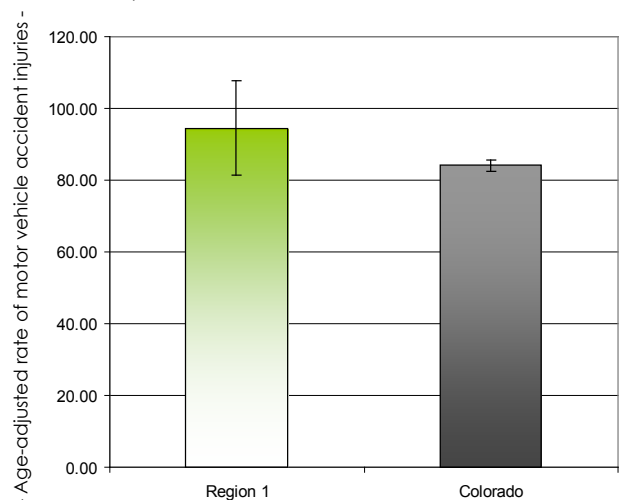
Mortality

Population Health Outcomes
Quality of Life
Morbidity
Mortality
Life Expectancy

Mortality
    Infant
    Causes of death
    Years of potential life lost

Rate of infant deaths, under 1 year of age, per 1,000 live births (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment
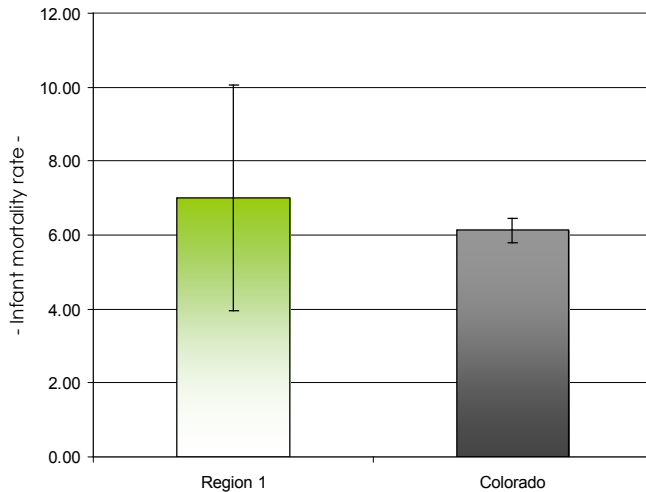
Age-adjusted rate for all causes of death, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
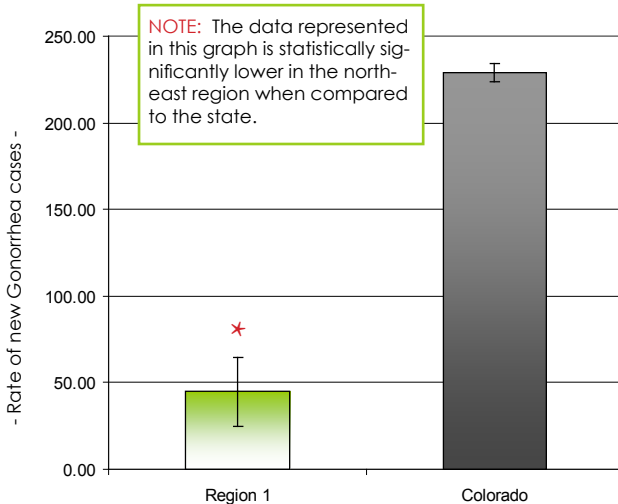Colorado Department of Public Health and Environment
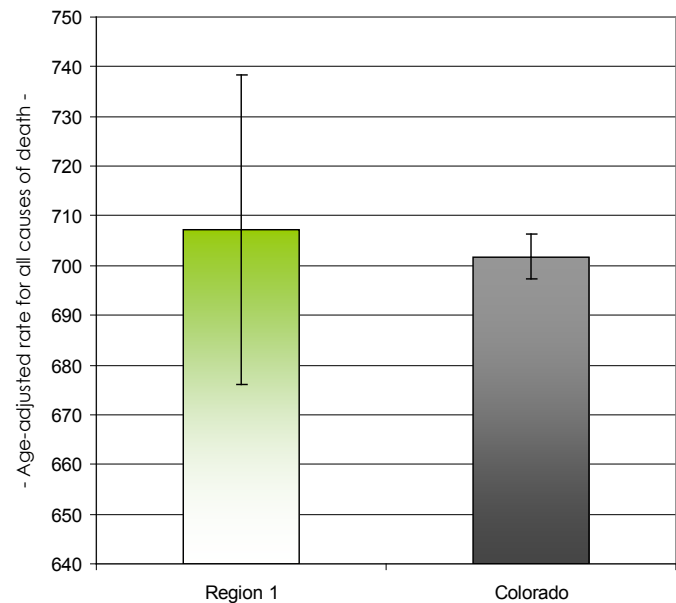
Age-adjusted rate for leading causes of death, per 100,000 population (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

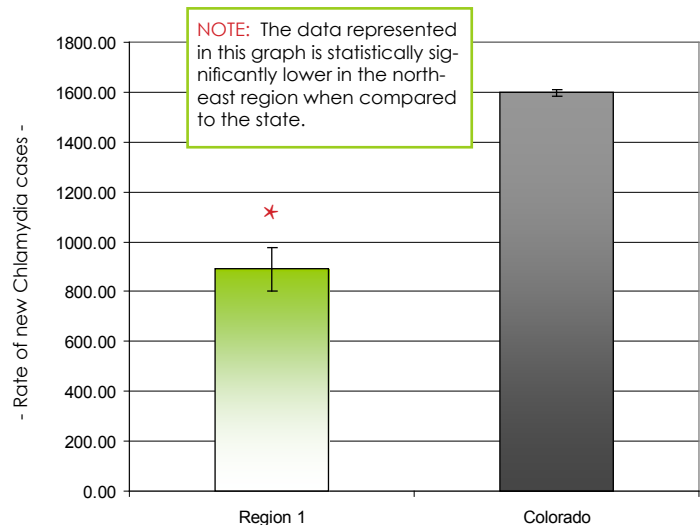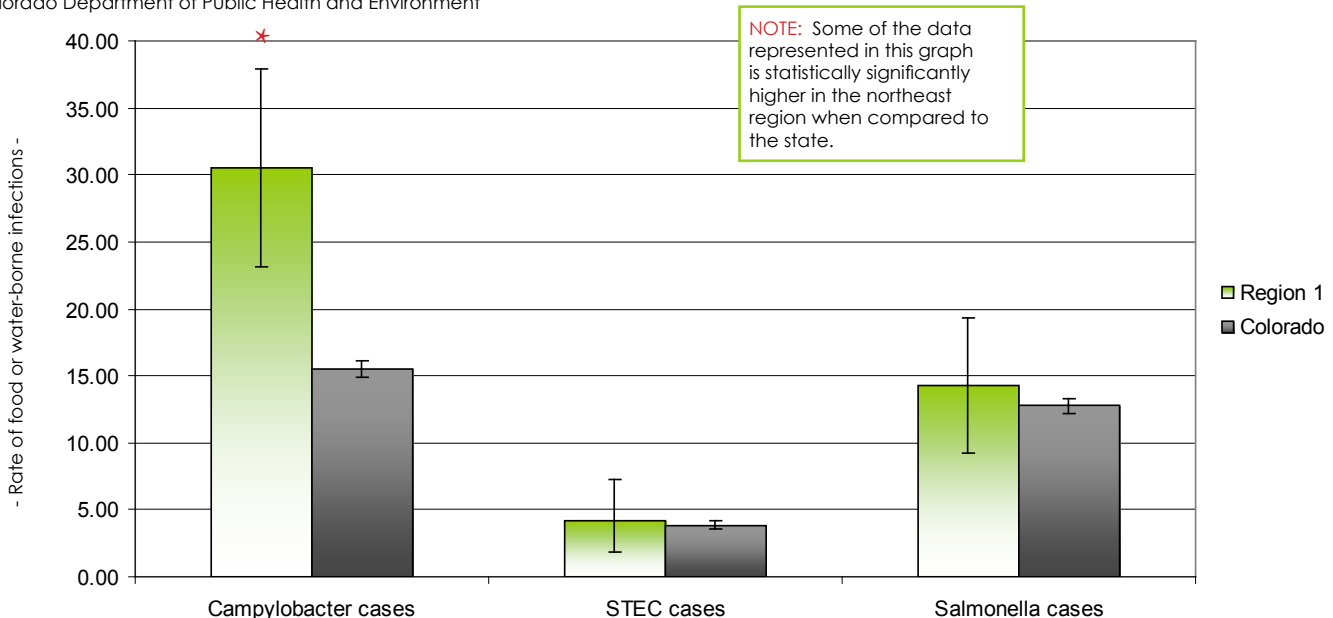NOTE: Heart disease, as a leading cause of death, is statistically significantly higher in the northeast region when compared to the state, while deaths due to Alzheimers disease is statistically significantly lower in the northeast region when comapred to Colorado.

Cause	Rate
Heart disease	163.0
Malignant neoplasms	156.5
Chronic lower respiratory diseases	50.1
Unintentional injuries	46.5
Cerebrovascular diseases	36.4
Alzheimers disease	22.1
Diabetes mellitus	21.7
Influenza and pneumonia	14.9
Nephritis, nephrotic syndrome, nephrosis	14.3
Other diseases of respiratory system	10.1

Introduction | **Data** | Capacity & Prioritization | The Plan!

Age-adjusted rate for all causes of YPLL, years of potential life lost (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: The data represented in this graph is statistically significantly higher in the northeast region when compared to the state.

Age-adjusted rate for leading causes of YPLL, years of potential life lost (2008 - 2010)

Source: Colorado Health Indicators,
Colorado Department of Public Health and Environment

NOTE: Unintentional injuries, perinatal conditions, heart disease, cerebrovascular diseases and diabetes, as a leading causes of YPLL, are all statistically significantly higher in the northeast region when compared to the state, while suicide as a leading cause of YPLL is statistically significantly lower in the northeast region when comapred to Colorado.

SUMMARY

Quality of Life, Morbidity & Mortality

Quality of life

Morbidity
   Arthritis
   Asthma
   Cancer
   Diabetes
   Heart disease and stroke
   Oral health
   Communicable disease
   Occupational health
   Birth defects
   Injury

Mortality
   Infant
   Causes of death
   Years of potential life lost

STRENGTHS

- Low rates of breast cancer (statistically significant)

- Low rates of stroke hospitalizatoins (statistically significant)

- Low incidence rates of Chlamydia and Gonorrhea (statistically significant)

- Lower rate of new Pertussis and chronic Hepatitis B cases (statistically significant)

- Low rate of birth defects and low birth weight babies (statistically significant)

CHALLENGES

- Higher percentage of people reporting their general health was fair or poor (statistically significant)

- Higher percent of adults with diabetes (statistically significant)

- High rate of hospitalizatoins due to heart disease, congestive heart failure, and myocardial infarctions (statistically significant)

- Higher percent of adults who have lost teeth due to decay/ periodontal disease and children with fair or poor condition of teeth

- High incidence of campylobacter and West Nile virus (statistically significant)

- High rate of work-related hospitalizations (statistically significant)

- High rate of heart disease mortality (statistically significant)

- High rate for all causes of YPLL (statistically significant)

Capacity

WHY A CAPACITY ASSESSMENT
The degree to which the public health system is able to achieve its community health goals is determined in large part by capacity. A capacity assessment can help determine gaps and duplication of core services within a public health system. In order to get a good picture of the northeast region's capacity, services need to be assessed not only from local public health, but also partner organizations.

Our community health assessment was the first step in reaching this phase. We needed to first pinpoint what some of our key issues were before we could test our capacity to address them.

HOW WE STARTED THE PROCESS
When we began trying to piece together the results from

our community health assessment we had three tiers of data to pull from:
• Information collected from the general public through our community health surveys;
• Discussion points that came out of community key informant and stakeholder meetings NCHD hosted in each county;
• The statistics compiled from the Colorado Health Indicators database.

Our goal with this initial analysis was to sift through the volumes of data collected and identify those topics that rose to the surface in both the quantitative data from the health statistics, and qualitative data from community members and stakeholders.

NCHD's in-house project management team began with the qualitative data, assessing

common themes that were mentioned frequently. We chose five topics that were repeatedly mentioned, some of them very broad, as a starting point, they included:
• Mental Health
• Oral Health
• Substance Abuse
• Chronic Disease
• Access to Care

We continued our efforts to refine our list of key issues by comparing the quantitative data to each of the five topics above, eventually narrowing down our final list of key issues for our capacity assessment to three, they include:
• Mental Health
• Oral Health
• Nutrition, Physical Activity & Healthy Weight

OUR RATIONALE

Mental Health
Mental health was an issue that came up at every community meeting we hosted and availability of adequate mental health services was also listed as a concern on our community health survey. Although it can be a separate issue from substance abuse, they often times can go hand-in-hand. Our team felt that focusing on the issue of mental health services would also eventually tie into substance abuse as well.

Oral Health
Oral health was another issue that was mentioned repeatedly during our qualitative data collection. In addition, our health statistics indicate there are fewer adults visiting the dentist in this region when compared to the state and higher percentages of adults and children with dental disease or poor/fair condition of teeth.

Nutrition, Physical Activity & Healthy Weight

The issue of obesity in northeast Colorado is of concern. Our adult population has statistically significantly higher rates of overweight or obesity when compared to the rest of the state, and our children have the highest rates in the state. However, our problems related to overweight and obesity don't stop there. We also have statistically significantly higher rates of cardiovascular disease and diabetes, and statistically significantly lower percentages of active adults. Rather than tackle obesity, heart disease or diabetes as a singular health issue, or chronic disease as a much larger health issue, our team chose to focus on the behaviors that would benefit a multitude of health-related problems.

THE ASSESSMENT

Once we chose the topics we wanted to focus on, a capacity assessment was developed and sent to over 50 individuals and stakeholder organizations throughout northeast Colorado. The assessment asked for input regarding what level of capacity each person or organization could offer in addressing each topic. The capacity could be in the form of direct patient care assets, health education assets, policy advocacy assets, or capital or financial assets, and contributions could range anywhere from "no effort" with a score of (1) to "tremendous effort" with a score of (3). The overall capacity score represented below for each topic is the average of all responses received. The higher the score, the higher the capacity.

ASSESSMENT RESULTS

Mental Health
Average capacity score: 1.75
For mental health there was greater effort shown under the health education assets category to make referrals and incorporate health education into worksite wellness. There was also strong effort indicated to provide direct messages to clients and disseminate information. Under the policy/advocacy assets category, there were high responses for effort shown to facilitate coalition/advisory groups as well as develop/implement public policy. However, direct lobbying of decision-makers had a high percentage of "no effort" responses. Under financial/capital assets, providing administrative staff and providing financial assistance to both other organizations and clients yielded a high percentage of "no effort" responses. Most assets were offered either through current programs or outside the normal scope.

Oral health
Average capacity score: 1.69
The capacities to provide policy/advocacy assets as well as capital/financial assets were the categories that had the most "no effort" responses. Providing meeting space, recruiting volunteers and facilitating advisory/coalition groups were the only areas in these sections where any moderate effort could be seen. In general, it seemed that organizations could either offer a service themselves or were completely uninvolved; the exception being health education assets, which had a high percentage provided through direct programs and outside normal scope as well. Under the category of health education assets, much effort was seen in making referrals and incorporating health education into worksite wellness. However, there was much less seen in assigning health educators.

Physical activity, nutrition, healthy weight
Average capacity score: 1.92
Under the health education assets category, strong effort was shown in disseminating information through various channels as well as making referrals. There was also some good effort shown in providing direct messages both to clients and outside the organization. There were challenges, however, in assigning health

Capacity/Burden Scatterplot

Source: Capacity Assessment Survey and Health Burden Survey
Northeast Colorado Health Department

High Capacity, Low Burden — High Capacity, High Burden

◆ Mental Health
■ Oral Health
▲ Diet, Physical Activty, Healthy Weight

Capacity (y-axis) vs Burden (x-axis)

Low Capacity, Low Burden — Low Capacity, High Burden
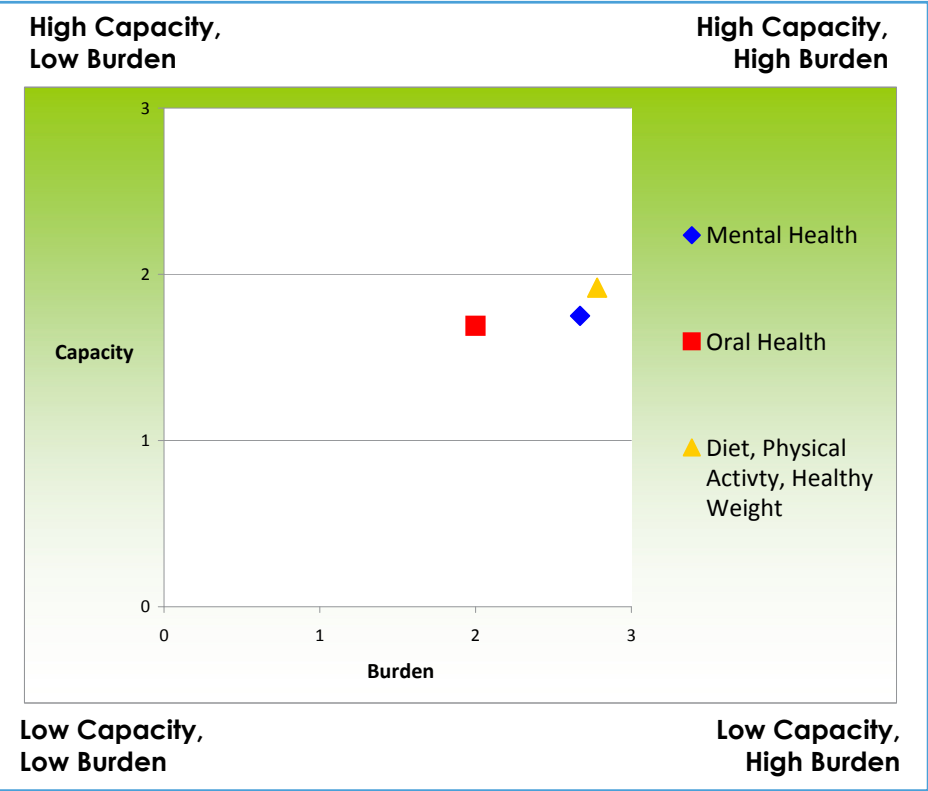
ASSESSMENT RESULTS
continued

educators. Under the policy/advocacy assets category, there was strong effort shown in facilitating coalition/advisory groups, but all other categories yielded high responses for "no effort" or "moderate effort." Under the capital/financial assets category, there was high effort for recruiting volunteers, but challenges were great for providing financial assistance to clients and outside organizations. All assets were offered either through current programs or outside the normal scope of the organization.

HEALTH BURDEN SCORES

In addition to the capacity scores, we also gathered information regarding the burden each of these issues has on residents in northeast Colorado. These scores were gathered through a survey that was sent to the members of our steering committee. The survey asked each respondent to rate the severity of impact of each of the issues, ranging from "minimal" with a score of (1) to "extreme" with a score of (3). The overall health burden score represented below for each topic is the average of all responses received. The higher the score, the higher the health burden.

Mental Health
Health burden score: 2.67

Oral Health
Health burden score: 2.00

Physical activity, nutrition, healthy weight
Health burden score: 2.78

A scatterplot illustrating how the capacity and burden scores overlap for each key issue is shown on the previous page.

Prioritization

The prioritization process was initiated after reviewing the relevant quantitative and qualitative health data for each of the three key topics, the results of the capacity and burden scores, as well as evidenced based key strategies for each topic. Steering committee members, as well as NCHD's PHIP project management team, were asked to rank the three issues in order of importance; with (1) representing their highest priority and (3) representing their lowest. The overall priority score represented for each topic is the average of all responses received. The lower the score, the higher the priority.

Mental Health
Priority score: 24

Oral Health
Priority score: 25

Physical activity, nutrition, and healthy weight
Priority score: 11

While physical activity, nutrition, and healthy weight was clearly the highest priority, there was much discussion regarding how each of these topics overlap. Quality of oral health can be directly related at times to proper nutrition and many components of mental health can be linked to physical activity, nutrition, and healthy weight; as well as overall health.

The consensus of the group was initially to focus on one priority for NCHD's Public Health Improvement Plan which would be the top issue that came out of the prioritization process. However, as discussion developed, there was agreement that both oral and mental health could be incorporated into the main topic.

The main focus of our 2013 Public Health Improvement Plan will be on physical activity, nutrition and healthy weight, but we will also be looking at how all three of these topics interrelate. Our goal over the next five years will be to identify what aspects of physical activity, nutrition and healthy weight contribute to our oral health and mental health issues, and vice versa.

Key Issue	Capacity Score	Health Burden Score	Priority Score
	Higher score = higher capacity	Higher score = higher burden	Lower score = higher priority
Mental Health	1.75	2.67	24
Oral Health	1.69	2.00	25
Physical activity, nutrition and healthy weight	1.92	2.78	11

PRIORITIZATION
continued

As we move forward implementing our identified strategies we will also continue to measure these relationships, both quantitatively and qualitatively, throughout that process to get a better idea of how we are affecting all three of these key issues.

Internal assessment

ASSESSING THE CAPACITY OF NCHD

In addition to assessing the capacity of our regional partners and collecting consensus regarding health priorities in northeast Colorado, we also completed an internal capacity assessment for NCHD. This internal assessment is a tool to give us an idea of where our strengths and weaknesses lie

as an agency, not just with the three key topics, but with core public health services in general. It provided an analysis of our services and recommendations for improvement. Knowing how our current infrastructure is working, in regards to needed services, staffing and funding, will help us as we look at writing our public health improvement plan.

RECOMMENDATIONS FROM THE ASSESSMENT

A detailed capacity analysis of each service can be found on the following two pages but the findings show that Prevention and Promotion is an area where more could be done targeting the three key topics. The capacity is good there, but raising mental health awareness may require more collaboration or a more

active role by NCHD. This may require assigning more staff to assist in targeting mental health issues. In addition, a concerted effort should be made focusing on adolescent health. NCHD has a very limited role regarding adolescent health and school planning. It may take more collaboration with other agencies, or utilizing more staff/funds to address these areas.

There are some sanitation services, such as public housing and health-related facilities, where there is uncertainty as to whom if anyone assures that sanitation is provided. This is an area where improved partnerships could foster better communication in determining who assures certain services. More funding/staff may be required to address infestation issues due to the constraints of the geography and prevalence of agriculture in the community. Improving technical capacity may also assist in improving infestation/sanitation issues, as will better tracking services.

Occupational health and safety is another service that could be provided either through NCHD or with collaboration. More training in the workforce region as well as more data and funding could address this area.

It was also stated that there are no regional epidemiologists counted as staff. This is another area where more well-trained staff should be assigned to regions or satellite offices to provide assistance.

NCHD contracted staff by service area and program funding data

Service	Number of personnel assigned	Total FTE (full-time employees) assigned	Is the funding stable?	Can the capacity be assured through another organization?	Sources of funding	Amount of funding
Health Assessment	4	4	Yes	No	-	-
Vital Records	4	2	Yes	No	-	-
Communicable Diseases	2	1	Yes	Yes	County and State	$40,568****
Prevention & Promotion	2	1	Yes*	Other**	State	$42,150
Environmental Health	8	8	Yes	No***	County, Federal, and Private	$534,575****
Emergency Preparedness & Response	4	1	At-risk	No	Federal	$160,982
Direct Services	25	21.92				

* Somewhat stable
** Chronic diseases/conditions available through another entity (CSU Extension). Communicable disease prevention not available through another entity.
*** Prevention and control of water-borne hazards available through another entity (state health department).
**** $19,568 county; $21,000 state

NCHD capacity by service area

This chart outlines the level of capacity for various activities within each service, on a scale from 1 - 4 (1 being no capacity in place, 4 being high capacity).
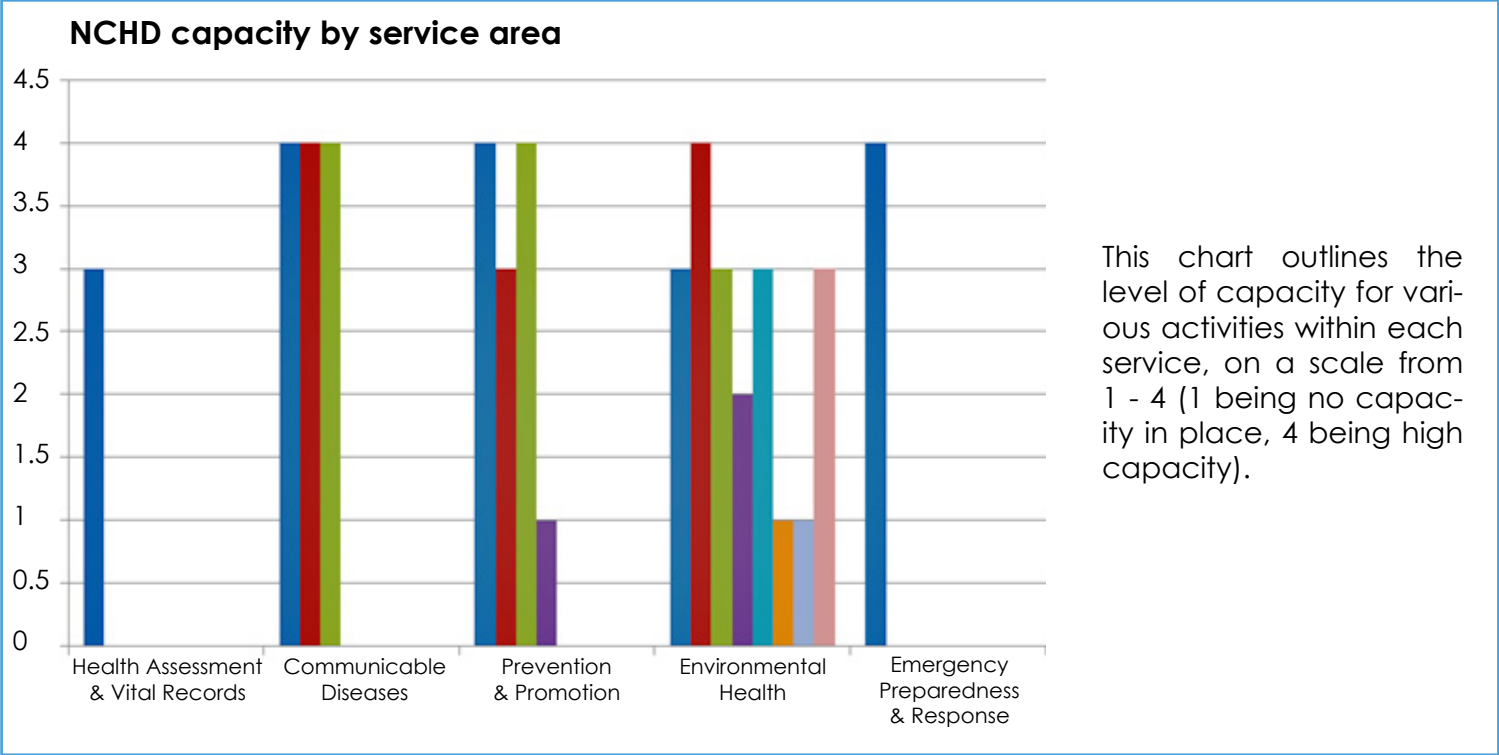
ASSESSMENT ANALYSIS

Assessment & Planning / Vital Records

NCHD has strong capacity for these services, with a 3 ranking signifying a moderate level of capacity in place. Mortality is the one health status that is regularly monitored within its jurisdiction. There is no mention of help from satellite offices, but more staff and operations funding are listed as areas for improvement. NCHD is involved in numerous needs and health assessments, often leading the assessment, participating and providing data as well as collecting data.

Communicable Diseases

The capacities to report and collect disease information, assure immunizations and prevent disease transmission were all given a ranking of 4, indicating that the capacity for this service is excellent and there are stable sources of funding from county and state. NCHD also receives assistance from Weld and Larimer counties for collection of disease information. The staff is spread amongst satellite offices, where full-time nurses are found in Morgan, Logan and Yuma counties, and part-time nurses in Phillips, Sedgwick and Washington counties.

While NCHD takes care of many services, there is also collaboration with other offices to provide these services. Immunizations and other chronic disease activities take place within these satellite offices. Operations funding is the only area of improvement suggested. However, a recommendation to grant tuberculosis contracts for prevention efforts, as well as for five-year averages was suggested. It is apparent that the overall capacity for communicable diseases is quite strong.

Services are assured either through their own department or through collaborations with other offices.

Prevention & Promotion

Overall, the capacity for prevention and promotion is strong, except for one glaring need for improvement. The capacity to assure injury prevention and education was only given a 1 ranking, which classifies a challenge for this service.

The capacity to assure communicable disease transmission prevention/education, as well as the capacity to assure maternal and child health promotion/prevention/education were both given a 4 ranking. The capacity to assure chronic disease conditions and related factors was given a 3 ranking. Most services, including injury prevention, maternal child health and chronic dis-

ASSESSMENT ANALYSIS
continued

ease prevention are provided within NCHD or at another agency.

Alternate agencies/organizations play an important part in assisting certain services. In Yuma, the 'Get Real' Coalition targets tobacco use. In Yuma, Phillips, and Morgan counties, the CSU Extension helps with nutrition. Centennial Mental Health assists with substance abuse, and physical activity is addressed through programs at CSU Extension, as well as the Baby Bear Hugs Program. The last two services correlate directly to priority areas, though more mental health awareness is needed.

There is oral health promotion in place, one of the main priority areas. There is a somewhat stable level of state funding used for this service, but more staff is required to assist in the areas of need. It may be beneficial to target prevention and promotion strategies towards adolescent health, as currently this service needs more attention. NCHD has created three new positions in an attempt to serve gaps in services. The additions should address areas such as tobacco prevention, cardiovascular disease and healthy living programs.

Environmental Health
The capacity rankings have a broad range for this service. The capacity to participate in land use planning and sustainable development, as well as the capacity to minimize the amount of solid and hazard-

ous waste and maximize recycling were both given a 1 ranking. There is clear room for improvement in these areas, specifically in regards to developing and/or expanding existing partnerships at the state level and with local private business. The capacity to prevent and control air-borne hazards was given a 2 ranking. The capacity to assure sanitation of institutional facilities, the capacity to prevent and control zoonotic and vector-borne hazards and the capacity to prevent and control water-borne hazards and surface ground water were given a 3 ranking. All these areas have

basic or moderate capacity. The capacity to assure safety of food provided to the public was given a 4 ranking signifying a high level of capacity in place.

Although most services could not be provided through another entity, NCHD does collaborate with other organizations in certain areas. Childcare issues are monitored by Child Licensing. Campgrounds and RV areas are looked at by the state health department. State correctional facilities are inspected through their own institution. There were areas where NCHD

ASSESSMENT ANALYSIS
continued

indicated that a service is needed but not provided within a jurisdiction. Complaint/investigation/response for hotels and motels received this designation. As well, the handling of bed bugs (monitoring, sampling, specimen handling) was an area where the service was needed but not provided. Community planning, general planning and sustainable living received the same designation, indicating a need for improvement. Finally, noise, occupational health and inspection of meth labs all were services that were needed and not provided. More data and a possible grant could help improve occupational health.

The funding for environmental health was stable. The staff is contracted throughout the numerous satellite offices. In addition to more funding needed, they mentioned the need for more technical assistance and more partnerships. This is apparent in areas where it is unknown who if anyone provides a certain service. Increased technical assistance may help overcome geographical/agricultural concerns which limit the ability to assure certain services are provided, particularly related to infestation. NCHD has also applied for a radon grant and sought federal training in this area.

Emergency Preparedness
& Response (EPR)
The capacity to implement EPR was given a 4 ranking,

which indicates a high level of capacity. However, the funding was noted as at-risk, and the main area of improvement was for more operations funding.

Most of the services take place directly at the main office, so satellite offices and partnerships were not mentioned. Their Project Public Health Ready status (PPHR) is recognized by the National Association of City and County Health Officials (NACCHO).

NCHD's internal capacity assessment was completed in December, 2012 by Dr. Tony Cappello, NCHD's public health director. The results of the survey were compiled into a review summary, as were the results of the external capacity assessment and health burden surveys and scoring matrix, by a master's student from the Colorado School of Public Health.

The Action Plan

The action plan that follows on the next two pages details the goals, objectives, and action steps that NCHD will implement over the next five years as we address our key health issue of physical activity, nutrition and healthy weight.

While this action plan was carefully put together, we know it is just a starting point in addressing the health of our communities.

Our overarching goal for the next five years is to "reduce people's risk for chronic disease and the upward trend of overweight and obesity through strategies focusing on physical activity, nutrition and healthy weight."

With that in mind we identified four, five-year goals that will individually support the overarching goal by increasing community awareness of of the health challenges we have in this area, identifying and supporting current resources and programs that are working, researching successful evidenced-based programs we may be able to implement, and evaluating how our two secondary topics, mental and oral health, affect our overarching goal.

The objectives we identified to achieve our goals are very broad. We anticipate that as our initial action steps are achieved, we will be able to expand upon the foundation we've built through this Public Health Improvement Planning process and incorporate new and innovative strategies with the help of our stakeholders and community members.

The completion of this plan marks the beginning of another journey entirely. Keeping our partners and community members informed and engaged with the continued long term goals and accomplishments of the Public Health Improvement Plan will also be our focus as continue to build partnerships, seek grant and funding opportunities, develop strategic community plans and programs, and continually build upon the successes and challenges we will face along the way.

Northeast Colorado Health Department

Public Health Improvement Action Plan 2013 - 2018

OBJECTIVES & ACTION STEPS

OVERARCHING GOAL:

Reduce people's risk for chronic disease and the upward trend of overweight and obesity through strategies focusing on physical activity, nutrition and healthy weight.

OBJECTIVE #1

Conduct presentations in each county, present the findings of the PHIP process and gather feedback regarding community resources that relate to physical activity, nutrition and healthy weight.

Action Steps

1.1 Host a meeting in each of our six counties by the end of 2013, inviting community members and stakeholders, to present the PHIP plan.

1.2 Gather an inventory of current community/county resources from key informants, stakeholders and community members that address the overarching goal, by the end of June, 2014.

OBJECTIVE #2

Identify and evaluate the oral health and mental health connections to the overarching goal.

Action Steps

2.1 Initiate a partnership with Centennial Mental Health, and other mental health providers/agencies, to promote and investigate the interactions between mental health and our overarching goal.

2.2 Utilize newly-hired dental hygienist to assist with identifying the gaps in the oral health system that could affect the overarching goal.

2.3 Evaluate the effectiveness of the partnerships with oral and mental health partners to determine the need for continued or innovative interventions, through June, 2018.

5-YEAR GOALS:

Increase aware-ness of the over-weight/obesity and chronic dis-ease issues in the northeast region.

Take an inven-tory of current resources across the region that ad-dress physical ac-tivity, nutrition and healthy weight; compare those resources against evidence-based practices and de-fine areas in need of improvement.

Partner with and /or support ex-isting and new concepts/pro-grams/resources that support the emphasis area of physical activi-ty, nutrition and healthy weight.

Evaluate how mental health and oral health con-tribute, influence, and impact our overarching goal.
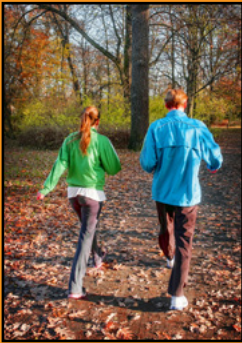
| Physical Activity | Nutrition | Healthy Weight |

OBJECTIVE #3

Develop an advertising and social marketing campaign to in-crease the awareness of our overarching goal.

Action Steps

3.1 Utilize NCHD resources and social media to help support and encourage local efforts that address the overarching goal.

3.2 Evaluate the effectiveness of social marketing/educational campaigns and strategies to determine the need for contin-ued or innovative interventions, through June, 2018.

OBJECTIVE #4

Identify funding opportunities to address the overarching goal.

Action Steps

4.1 Seek grant funding that will address the issues of physical activity, nutrition and healthy weight.

4.2 Utilize newly-hired dental hygienist to assist with the gaps in the oral health system that could affect the overarching goal.

4.3 Utilize the resources aviailable through local mental health providers to identify the gaps in the mental health system that could affect the overarching goal.

OBJECTIVE #5

Promote school and early learning center policies and pro-grams that increase physical activity, nutrition and healthy weight.

Action Steps

5.1 Partner with CSU with a grant through May, 2016 to de-crease obesity in northeast Colorado and increase heart health education with elementary students.

5.2 Identify an inventory of evidenced-based practices aimed at schools that address the overarching goal, for the 2014-15 school year.

5.3 Evaluate the effectiveness of school and early learning center programs to determine the need for continued or inno-vative interventions, through June, 2018.

Northeast Colorado Health Department