CO
07

Understanding the Numbers

Indicator Details and Promising Initiatives

The Colorado Health Report Card

The Colorado Health Foundation™

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Table of Contents

Acknowledgments 2
Introduction 3
Indicator selection 3
Data sources 3
Ranking, grading and indicator precision 4
Ranking 4
Grading 4
Indicator precision: confidence intervals and small differences 4
Changes from the 2006 Colorado Health Report Card ... 5
Report Card indicators and the *Healthy People 2010* initiative 6
Introduction to indicator-specific sheets 7
Healthy Beginnings Overview 9
Prenatal Care 10
Smoking While Pregnant 12
Low Birth Weight 14
Infant Mortality 16
Immunizations 18
Healthy Children Overview 21
Uninsured 22
Poverty 24
Medical Home 26
Preventive Dental Care 28
Vigorous Exercise 30
Overweight 32
Healthy Adolescents Overview 35
Uninsured 36
Poverty 38
Nutrition 40
Vigorous Exercise 42
Overweight 44
Binge Drinking 46
Smoking 48
Depression 50
Attempted Suicide 52
Sexually Active 54
Condom Use 56
Teen Fertility 58
Healthy Adults Overview 61
Uninsured 62
Medical Home 64
Nutrition 66
Exercise 68
Obesity 70
Current Smokers 72
Binge Drinking 74
Poor Mental Health 76
Diabetes 78
High Blood Pressure 80
Healthy Aging Overview 83
Medical Home 84
Immunizations 86
Exercise 88
Poor Physical Health 90
Poor Mental Health 92
Limited Activity 94
Preventable Hospitalizations 96
Report Card summary 99
Appendix I: Indicator summary table 100
Appendix II: Data source descriptions 104
Behavior Risk Factor Surveillance System Survey 104
Youth Risk Behavior Survey 104
The National Survey of Children's Health and the Colorado Child Health Survey 105
Current Population Survey 105
Vital Statistics System 106
National Immunization Survey 106
Pregnancy Risk Assessment Monitoring System 107
Medicare Standard Analytic Files and Ambulatory Care Sensitive Conditions 107

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Introduction

Understanding the Numbers: Indicator Details and Promising Initiatives is designed to give both lay readers and technical experts additional information about the development of the 2007 Colorado Health Report Card, as well as in depth information for each of the 40 indicators selected.

Understanding the Numbers provides a discussion of:

- How each indicator was selected;
- Data source used for each indicator;
- Indicator ranking and grading;
- Indicator precision, including confidence intervals and small differences;
- Indicator changes from the 2006 Colorado Health Report Card; and,
- The relationship of indicators to the federal *Healthy People 2010* initiative.

The majority of this document consists of two-page fact sheets for each indicator. The fact sheets provide a definition of the indicator, a brief discussion of its significance and additional information on Colorado's performance on the indicator. The fact sheets also identify initiatives in Colorado and elsewhere that hold promise for improving population health related to the indicator.

Indicator selection

The 2007 Colorado Health Report Card describes how Colorado compares to other states on 40 indicators organized by five phases of the life cycle—*Healthy Beginnings, Healthy Children, Healthy Adolescents, Healthy Adults* and *Healthy Aging*. Final indicator selection was based on a review of the 20 indicators used in last year's Report Card, indicators used in other national and state report card efforts, consultation with the Colorado Health Report Card Advisory Committee and input from technical experts at the Colorado Department of Public Health and Environment. In addition to a focus on life cycle phases, selected indicators illuminate several important dimensions of population health in Colorado: access to health care (insurance coverage); health risks (such as smoking); chronic health conditions (such as diabetes) and health outcomes (such as mortality).

- Twenty-nine indicators measure Colorado's progress towards achieving national public health objectives set forth in *Healthy People 2010*.
- Data for twenty-nine indicators are available for all states. Data for two of the *Healthy Beginnings* and nine *Healthy Adolescents* indicators are not collected by all states.
- All of the indicators are measured annually or biannually.

Data sources

The indicators selected for the 2007 Colorado Health Report Card come from nine different data sources. The most frequently used source, the Behavior Risk Factor Surveillance System (BRFSS), was used for 15 indicators. The BRFSS, the National Child Health Survey (NCHS) and the Youth Risk Behavior Survey (YRBS), as well as Vital Statistics and the Pregnancy Risk Assessment Monitoring System (PRAMS), are each maintained by state health departments in cooperation with the federal Centers for Disease Control and Prevention (CDC).[1] CDC's administrative oversight and funding of these state data collection efforts ensures that indicators are comparable across states by using common data collection instruments. The Current Population Survey (CPS) and Medicare Standard Analytical Files (MSA) are administered and maintained by other federal agencies. The National Immunization Survey is administered through CDC. Appendix I identifies the data source for each indicator. Appendix II contains a brief description of each data source and a link to the relevant Web site for more information. All indicator values and ranks are the most current available as of September 1, 2007.

Ranking, grading and indicator precision

Ranking

All of the indicators selected for the 2007 Colorado Health Report Card are reported in a consistent manner across all or most states,[2] allowing us to rank Colorado's performance relative to other states. For each indicator the "best" performing state is ranked first. Colorado ranks first on two indicators—a low incidence of working age adults who are obese and a high rate of older adults who have had recommended vaccinations—to 44th for low rates of insurance coverage for children. An "adjusted rank" was calculated for the 11 indicators for which fewer than 50 states reported data. The rationale for this is that being 10th out of 30 states, for example, is not as good as being 10th out of 50 states. To illustrate how the calculation was derived, for the "abstinence from smoking during the last three months of pregnancy" indicator, Colorado ranked fifth among the 19 states that report data for this indicator. To calculate an adjusted rank we divided five by 19 and multiplied this number by 50. The resulting "score" yielded an adjusted rank of 13 (scores were rounded to the nearest whole number). The affected indicator fact sheets show actual rank and number of states reporting followed by the adjusted rank, for example, 5/19 = 13/50. For several indicators more than one state may have the same value. For example, 80.3 percent of children in both Colorado and California received the recommended five immunization series in 2006; both states were assigned the rank of 28th. The next state, Hawaii, with 80.1 percent of children immunized, was ranked 30th.[3]

Grading

A grade is assigned to each life cycle phase based on Colorado's average rank for all indicators included in the phase. For example, the average rank for the seven Healthy Children indicators is 27.7. The letter grade of C- was assigned according to the rank/letter grade equivalencies shown in the table to the right. Because most states are like Colorado in that they have inconsistent indicator rankings within a life cycle domain, it is unlikely that any state would have an average domain rank above 5 or below 45.[4]

Average Rank	Letter Grade
1 – 3	A+
4 – 6	A
7 – 10	A-
11 – 13	B+
14 – 16	B
17 – 20	B-
21 – 23	C+
24 – 26	C
27 – 30	C-
31 – 33	D+
34 – 36	D
37 – 40	D-
41 – 43	F+
44 – 46	F
47 – 50	F-

Indicator precision: confidence intervals and small differences

Most of the indicators are derived from responses to sample surveys and therefore are subject to sampling error, that is, the possibility that the sample differs from the population from which it is drawn in some significant way. For indicators based on a sample, it is appropriate to calculate a "confidence interval," often referred to as a "margin of error." The margin of error is important to consider when ranking states based on sample surveys because two or more states that appear to have different values may not be statistically different from each other. Similarly, changes in an indicator's value from year to year or differences among subpopulations (age, gender, ethnic and income groups) may not reflect real differences in the population from which the sample was drawn. Some indicators such as infant mortality and teen fertility come from the Vital Statistics System records, which are maintained on virtually all such vital events. For these indicators, differences are real and not subject to sampling error. However, small differences in values from year to year may represent short-term fluctuations that do not constitute a trend. Similarly, small differences between states or subpopulations with similar values may be the result of short-term fluctuations.

Changes from the 2006 Colorado Health Report Card

The 2007 Colorado Health Report Card differs in several ways from its predecessor released in May 2006. The goal of both Report Cards, however, remains the same—to present the most reliable data available, in a fully accessible format, about the health of Colorado's population in order to engage all Coloradans in a conversation about what it will take to make Colorado the healthiest state in the nation. Major differences between the two are summarized in the table below.

	2006	2007
Number of indicators	20 indicators for four of five phases of the life cycle.	40 indicators for all five phases of the life cycle.
Indicator pairing	Indicators were presented in risk factor/outcome pairs. For example, "Mothers who receive inadequate prenatal care" was paired with "Babies with low birth weight."	Indicators were not paired to avoid the implication that an adverse outcome such as low birth weight is the result of a single risk factor, inadequate prenatal care.
Advisory panel	Due to time constraints, input from outside experts on indicator selection was limited.	An advisory committee was convened and staff from the Colorado Department of Public Health and Environment were consulted during the indicator selection process.
Grading	Grades for each indicator were calculated using a weighted average of: 1) the relationship of Colorado's score to *Healthy People 2010* target; 2) Colorado's rank among states; and, 3) the indicator's 10-year trend (improved, stable or deteriorated) in Colorado.	Grades for each phase of the life cycle were calculated based solely on Colorado's average rank among states for the indicators in that domain.
Overall grade	Grades for all 20 indicators were averaged to produce a state grade of C+.	No state grade has been assigned. The average rank for the 40 indicators is 17.8, which is equivalent to a B-.*

** This average rank and grade are presented for information only. Because of the differences in indicators selected and grading methods, it is not appropriate to compare the 2006 overall grade of C+ with the 2007 overall grade of B-.*

Report Card indicators and the *Healthy People 2010* initiative

Healthy People 2010 is a compilation of disease prevention and health promotion objectives for the nation to achieve during the first decade of the 21st century. Created by experts from inside and outside of government, it identifies a wide range of public health priorities and couples them with measurable objectives. *Healthy People 2010* includes 467 objectives designed to increase the quality and years of healthy life of all Americans by eliminating health disparities.[5]

Twenty-nine of the indicators selected for the 2007 Colorado Health Report Card are among the objectives included in *Healthy People 2010*. These indicators allow us to compare Colorado's performance not only against other states but also against targets developed by experts in the public health community. A few of these targets, such as teen fertility, have already been achieved in Colorado and the United States. Regrettably, most have not. At the Centers for Disease Control and Prevention, staff of the *Healthy People 2010* initiative are in the process of developing a revised set of objectives for 2020.

In some cases *Healthy People 2010* targets are for age ranges different from the indicators used in this report. For example, *Healthy People 2010* objective 22-1 is "Reduce the proportion of adults who engage in no leisure-time physical activity." The target is 20 percent for persons ages 18 and over (i.e., 80 percent should engage in some leisure-time physical activity each month). In this Report Card we have reported physical activity separately for adults 18 – 64 and adults 65 and over. Not surprisingly, adults 18 – 64 are more likely to engage in leisure-time physical activity (84 percent) than adults 65 and over (75 percent). Later in this report we show the *Healthy People 2010* target value (80 percent) on the working-age adult and older adult physical activity fact sheets, noting that the target applies to a broader age range in Appendix I. Similarly, the *Healthy People 2010* target for fruit and vegetable consumption is for 75 percent of people ages two and over to consume at least two servings of fruit and three servings of vegetables, at least one of which is dark green or orange. We have shown the 75 percent fruit and vegetable target for children, adolescents and adults even though this target was not developed specifically for each of these life cycle phases.

Introduction to indicator-specific sheets

The bulk of this document consists of indicator-specific fact sheets for each of the 40 indicators selected. Each fact sheet includes:

- A technical definition of the indicator;
- A brief discussion of the indicator's significance;
- A brief discussion of Colorado's performance on the indicator, including trends over time and disparities that exist between subgroups of Colorado's residents; and
- A brief description of up to three promising initiatives, both in Colorado and elsewhere, that were designed to improve population health on the specific indicator described.

The table at the beginning of the sheet illustrates:

- Colorado's most recent value for the indicator and the year for which it is available;
- For some indicators, more recent Colorado data may be available but was not consistently available across the other states;
- The affected indicator fact sheets show actual rank and number of states reporting followed by the adjusted rank, for example, 5/19 = 13/50;
- The name and value for the top performing state; and,
- The *Healthy People 2010* (HP2010) target value, where applicable.

Finally, most fact sheets include three graphs:

- A graph that shows values for all states ranked from best (left) to worst (right) with the column for Colorado indicated in dark orange. States whose values are not significantly different from Colorado's are shown in a slightly lighter orange. Confidence intervals, which are used to determine statistically significant differences, are not available for all indicators.
- A graph that shows historical values for Colorado, typically beginning in 2000 or 2001. The values for most indicators have been relatively stable since 2000.
- A graph that shows current values for identified Colorado subpopulations. These are gender, ethnicity or income.

Sources for all of the information included in the fact sheets are identified in the endnotes for each fact sheet. The source Web sites provide additional information on each indicator.

Note on the selection of promising initiatives

The Colorado Health Report Card is designed to provide reliable measures of Colorado's movement toward "becoming the healthiest state in the nation." Further, it is intended to motivate individuals, organizations and policymakers to take the next steps needed to improve our performance. To this end, we have identified a number of initiatives and/or programs in Colorado and elsewhere that illustrate positive action steps made by public and private organizations which hold promise toward improving population health. In the selection of these initiatives, we have highlighted those that offer innovative approaches to change, some have been formally evaluated; others have not. Many of the initiatives are relatively new and therefore do not have an established track record, yet they are indeed promising.

1. Not all states participate in the NCHS, YRBSS and PRAMS. The number of states providing indicator values derived from these surveys is stated on each indicator fact sheet and in Appendix I.
2. Values for all 50 states are available for 29 of the 40 indicators.
3. Most indicators are shown as percents to the first decimal place (e.g., 22.7 percent). When two or more states have the same value to the first decimal place they are given the same rank. (See discussion of confidence intervals and small differences.)
4. Average ranks and equivalent letter grades have not been calculated for the other 49 states.
5. *Healthy People 2010,* <www.healthypeople.gov/About/hpfact.htm>

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Healthy Beginnings

Every child deserves a healthy start. Delayed prenatal care and smoking while pregnant are among the factors that contribute to low birth weight and to babies who die in the first year of life. As children grow, the best way to protect them against disease is to see to it they receive all the recommended childhood vaccinations. Colorado does poorly, compared to other states, in all these areas, thus earning a grade of C-. Policymakers, health care providers and families can all do better in ensuring that all of our children have a healthy beginning.

Health Indicator	Rank among states
21.2 percent of women receive initial prenatal care later than the first trimester	**39th**
89.4 percent of women abstain from cigarette smoking during the last three months of pregnancy	**13th**
9.0 percent of babies are born with a low birth weight (less than 5 pounds, 9 ounces)	**39th**
Infant mortality rate (**6.2 infant deaths per 1,000 live births**)	**17th**
80.3 percent of preschool-age children received all recommended doses of five key vaccines	**28th**

Average Rank	**27.3**
Average Grade	**C-**

Prenatal Care

Healthy Beginnings

Most recent CO value (2005)	CO rank (2004)	CO value (2004)	Best state (2004)	Best state value (2004)	HP2010 target
21.4%	33/42 = 39/50	21.2%	Iowa	11.8%	10%

Indicator Definition

Women reporting prenatal care was initiated after their first trimester of pregnancy or not at all.

Indicator Significance

Women who receive prenatal care early in their pregnancy tend to have bigger, healthier babies and suffer fewer complications associated with childbirth. Those early prenatal visits help assure they have a healthy pregnancy, and receive proper guidance about diet, nutrition and exercise. Prenatal care providers also monitor weight gain and health risk factors throughout the pregnancy. Although prenatal care cannot fully eliminate the risk factors associated with poverty and age, early access to comprehensive prenatal care enables women to make healthy lifestyle choices during pregnancy. The number of women in the United States receiving prenatal care in the first trimester has risen from 76 percent in 1990 to 84 percent in 2003.[1]

Colorado Specifics

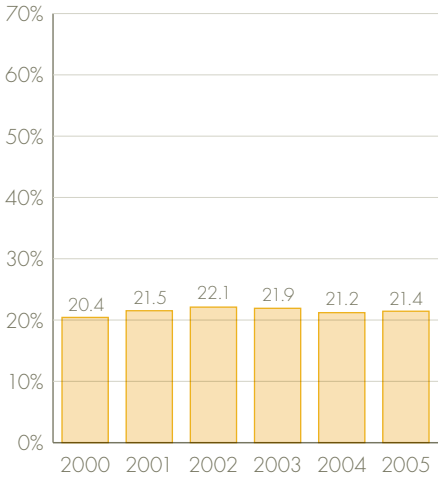
Colorado ranks low among states, 33rd among the 42 reporting, in delayed prenatal care. The number of Colorado women receiving late or no prenatal care has remained fairly constant over the past five years at around 21 percent. Hispanic, African-American and American Indian women have higher rates of delayed or no prenatal care when compared to white pregnant women in Colorado.[2]

Promising Initiatives

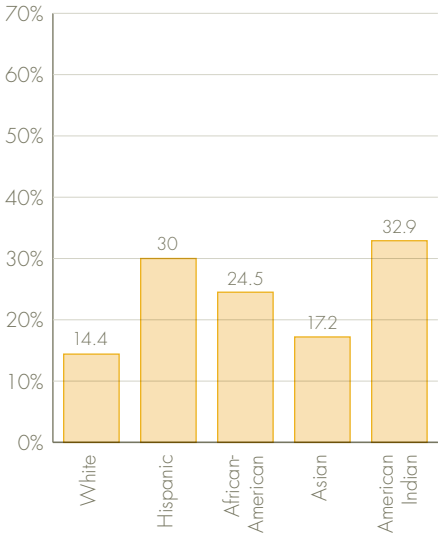
In Colorado

B4 Babies and Beyond provides a single unified entry point into prenatal care services for low-income women in Mesa County. B4 Babies has successfully reduced the number of babies born at a low birth weight. It was recognized in 1997 by the U.S. Department of Health and Human Services as a "Model That Works." The program has proven so successful that 100 percent of physicians and certified nurse midwives who deliver babies in Mesa County and 98 percent of the pediatric and family practice physicians participate in the program.[3]

Women who started prenatal care later than first trimester in Colorado[5]



Women who started prenatal care later than first trimester by race in Colorado[6]

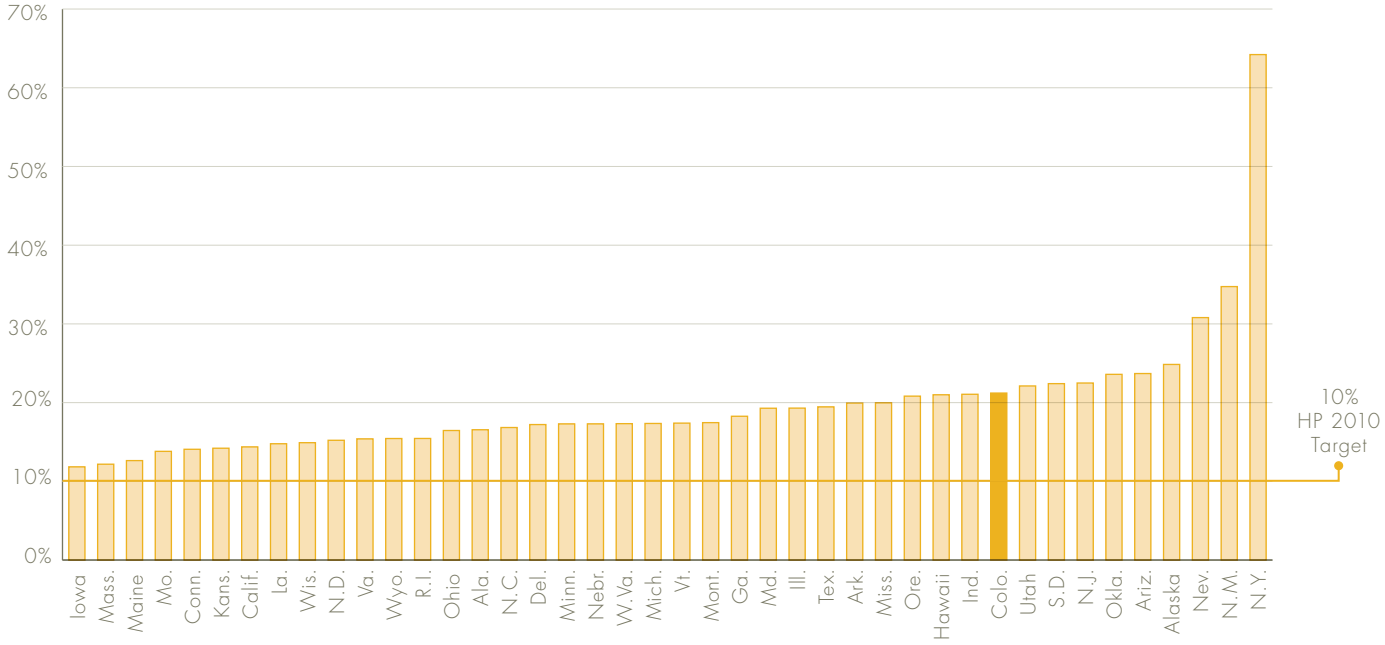


Prenatal Care (continued)

Elsewhere

California's Nurse Home Visitation Program has replicated Colorado's Nurse Family Partnership program in nine counties. Outreach focuses on first-time mothers referred to the program through the Department of Employment and Temporary Assistance, doctors, school nurses and door-to-door outreach in communities with high-risk populations. The program involves regular home visits by a nurse who consults with pregnant women on their physical and social needs. A licensed mental health clinician may accompany the nurse on home visits. Expectant mothers receive an average of nine visits during pregnancy and 14 follow-up visits. The program succeeded in decreasing low-birth weight rates and increasing the immunization rate of infants during their first 18 months of life.[4]

Women who started prenatal care later than first trimester[7]



Text

1. Women's Health USA 2005, <mchb.hrsa.gov/whusa_05/pages/0424pc.htm>
2. "Late or No Prenatal Care," Child Trends DataBank, <www.childtrendsdatabank.org/indicators/25PrenatalCare.cfm>
3. Hilltop, <www.htop.org>
4. Pathways Mapping Initiative, <www.pathwaystooutcomes.org/index.cfm?fuseaction=Page.viewPage&pageid=53>

Charts

5. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2000 – 2005, <www.cdphe.state.co.us/hs/vs/>
6. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2005, <www.cdphe.state.co.us/hs/vs/2005.html>
7. **Source:** Centers for Disease Control and Prevention, National Vital Statistics System, 2004, <209.217.72.34/VitalStats/TableViewer/tableView.aspx?Reportid=1707>

Smoking While Pregnant

Healthy Beginnings

Most recent CO value (2005)	CO rank (2000–2003)	CO value (2000–2003)	Best state (2000–2003)	Best state value (2000–2003)	HP2010 target
89.8%	5/19 = 13/50	89.4%	Utah	96.1%	99%

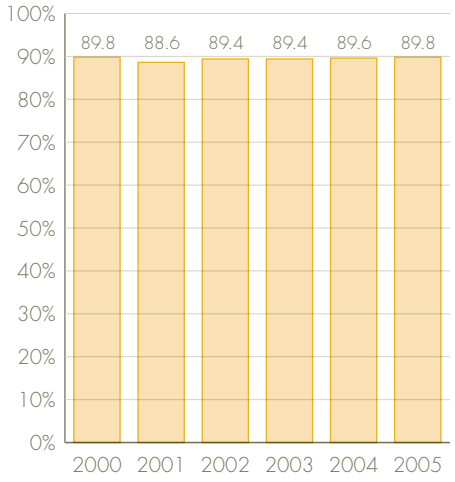
Indicator Definition

The percentage of women who report abstinence from cigarette smoking during the last three months of pregnancy.

Indicator Significance

Smoking during pregnancy is the single most preventable cause of prenatal and birth-related complications affecting both mothers and newborns. Pregnancy complications often result from prenatal exposure to cigarette smoke, which contains more than 4,000 chemicals, many of them toxic. Smoking cigarettes during pregnancy doubles the risk of low birth weight and retarded fetal development. But research shows that if a mother quits smoking during the first trimester of pregnancy, the risk decreases significantly. Secondhand smoke also contributes to health problems for both mothers and their unborn fetuses. More than 20 percent of U.S. women smoke and more than half of these women continue to smoke during pregnancy. If these women would stop smoking during pregnancy, the number of stillbirths would drop by an estimated 11 percent, and newborn deaths would be cut by an estimated 5 percent, statistics compiled by the U.S. Public Health Service suggest.[1]

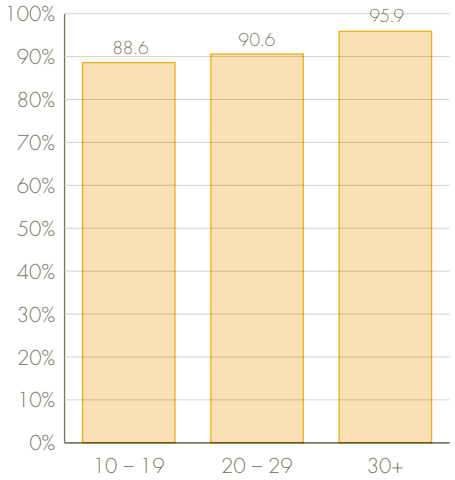
Women who abstained from cigarette smoking during last three months of pregnancy in Colorado[5]



Colorado Specifics

The percentage of women who abstain from smoking during pregnancy has changed very little in Colorado in the past five years, hovering around 88 percent. This places Colorado fifth among the 19 states that report data. Young mothers are less likely to abstain from smoking than are mothers age 30 and older. Analysis of 2003 data by the Colorado Department of Public Health and Environment shows a similar relationship between smoking during pregnancy and a mother's education: among mothers with more than 12 years of education, 97 percent abstained from smoking during pregnancy, versus 82 percent among less-educated mothers. The infant mortality rate for mothers who smoke during pregnancy is 10.7 compared to 5.9 for those who do not smoke.[2]

Women who abstained from cigarette smoking during last three months of pregnancy by age of mother in Colorado[6]



Promising Initiatives

In Colorado

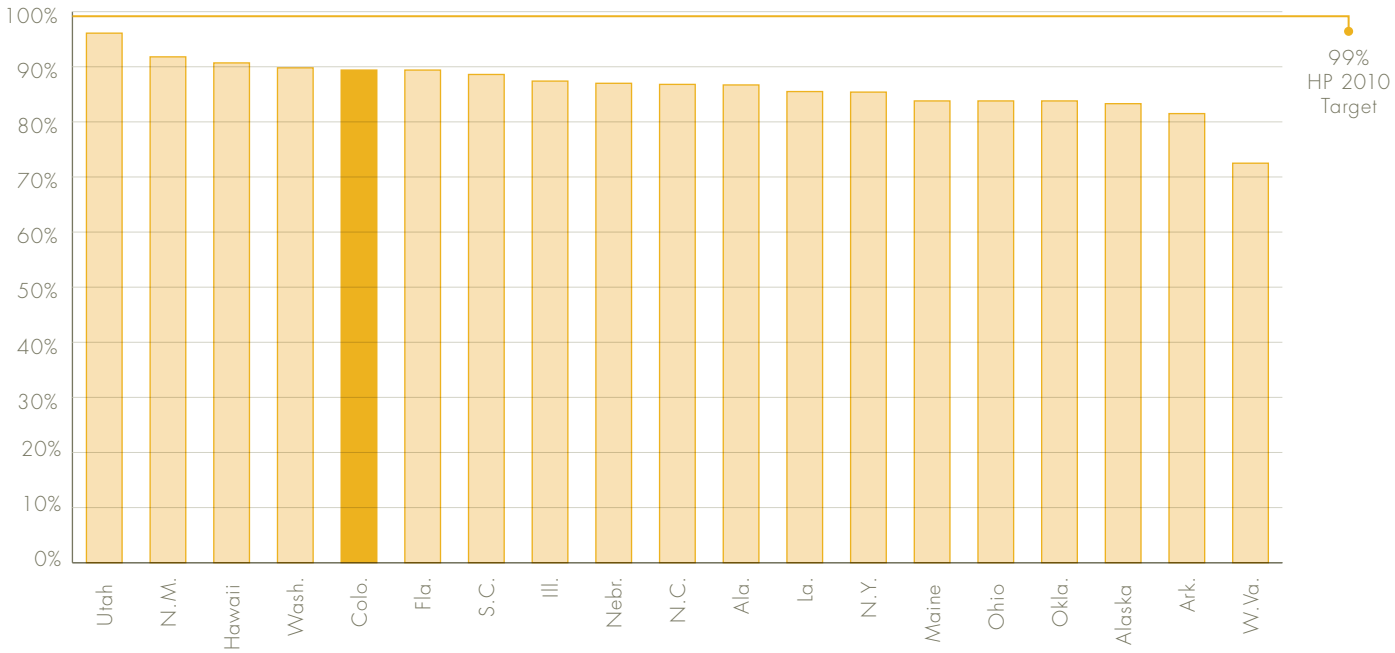
The Colorado Department of Public Health and Environment sponsors several programs that target pregnant women who are at-risk for delivering a low birth weight baby. The Prenatal Plus Program, funded through Medicaid, counsels pregnant women on strategies for quitting smoking. Fifty-one percent of the pregnant women who enter the program quit smoking, which has contributed to reducing the incidence of low birth weight from 14 to 9 percent.[3]

Smoking While Pregnant (continued)

Elsewhere

Tobacco Intervention and Prevention Strategy (TIPS) targets young women and pregnant mothers in South Carolina. By bringing a program of stress management techniques, education and behavior modification to the schools, workplaces and doctors' offices—the places where the women are—TIPS is able to overcome the transportation barriers many low-income women face. The result: women are empowered to resist tobacco, and attain better health for themselves and their infants.[4]

Women who abstained from cigarette smoking during last three months of pregnancy[7]



Text

1. "Smoking During Pregnancy," The March of Dimes, <www.marchofdimes.com/professionals/14332_1171.asp>
2. The March of Dimes, <www.marchofdimes.com/professionals/14332_1171.asp>

   "How Smoking Affects You and Your Baby," The Baby Center, <www.babycenter.com/refcap/pregnancy/pregquitsmoking/1405720.htm>

   Colorado Pregnancy Risk Assessment Monitoring System (PRAMS) 2004 Surveillance Report, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/hs/pubs/2003Prams.pdf>

   2006 Colorado Health Watch, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/hs/HW2006/Perinatal/InfantMortality.pdf>
3. "Smoking and Pregnancy," Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/pp/womens/obsmoking/SmokingandPregnancy.html>
4. "Tobacco Use in Rural Areas," Texas A&M Health Science Center, School of Rural Public Health, <centers.srph.tamhsc.edu/centers/rhp2010/12Volume1tobacco.pdf>

Charts

5. **Source:** Colorado Department of Public Health and Environment, Pregnancy Risk Assessment Monitoring System, 2000 – 2005, <www.cdphe.state.co.us/scripts/htmsql.exe/cohid/pramsfrm1.hsql>
6. **Source:** Colorado Department of Public Health and Environment, Pregnancy Risk Assessment Monitoring System, 2005, <www.cdphe.state.co.us/hs/vs/2005/Colorado_2005.pdf>
7. **Source:** Centers for Disease Control and Prevention, Pregnancy Risk Assessment Monitoring System, 2003, <www.cdc.gov/mmwr/preview/mmwrhtml/ss5509a1.htm?s_cid=ss5509a1_e#tab2>

Low Birth Weight

Healthy Beginnings

Most recent CO value (2005)	CO rank (2004)	CO value (2004)	Best state (2004)	Best state value (2004)	HP2010 target
9.3%	39/50	9.0%	Alaska & Oregon	6%	5%

Indicator Definition

Percent of babies born weighing less than 5 lbs., 9 oz. (2,500 grams).

Indicator Significance

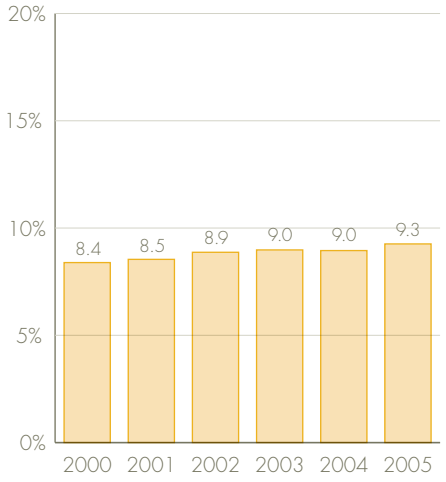
Low birth weight babies are more likely to experience neurological and developmental disabilities, and even death, than are babies who weigh more at birth. Nationally, the rate of low birth weight has steadily increased, from 6.7 percent in 1984 to 8.2 percent in 2005. Multiple births increase the likelihood of low birth weight: 57 percent of twins and 94 percent of triplets are born weighing less than 5 lbs., 9 oz. Inadequate maternal weight gain, inadequate prenatal care and smoking during pregnancy can all contribute to low birth weight. So does the increased incidence of induced delivery, Cesarean section and assisted reproductive technology. With advances in technology, more premature infants and infants born small for their gestational age are able to be saved.[1]

Colorado Specifics

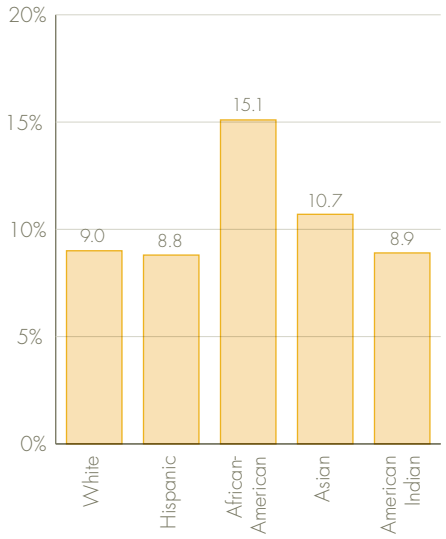
Historically, Colorado has had a relatively high percentage of low weight births. In 2004 it ranked 39th, with 9 percent of births below 5 lbs., 9 oz.—well above the 6 percent achieved by the top-performing states, Alaska and Oregon. Over the past five years in Colorado, the percentage of low weight births has increased slightly, from 8.4 percent in 2000 to 9.3 percent in 2005. African-American and Asian mothers have a substantially higher incidence of low weight births than do white and Hispanic mothers.

Factors associated with Colorado's high proportion of low-weight births include altitude, inadequate maternal weight gain, smoking during pregnancy, multiple births and various complications of pregnancy.[2]

Low weight births
in Colorado[5]



Low weight births
by race in Colorado[6]



Promising Initiatives

In Colorado

The Nurse-Family Partnership (NFP), a 20-year-old Denver-based program, provides comprehensive prenatal care to low-income, first-time expectant parents. A nurse visits the home regularly to encourage a nurturing family environment throughout the pregnancy, as well as the first years of the infant's life. The result: Participants in Boulder reduced the number of low birth weights they reported by 8 percent.[3]

Additionally, Colorado's Prenatal Plus program, started in 1996, provides services to low-income women enrolled in Medicaid deemed at risk for delivering a low birth weight infant. Health care professionals target lifestyle and behavioral choices, such as smoking or maternal weight gain, that could affect the baby's health. The program

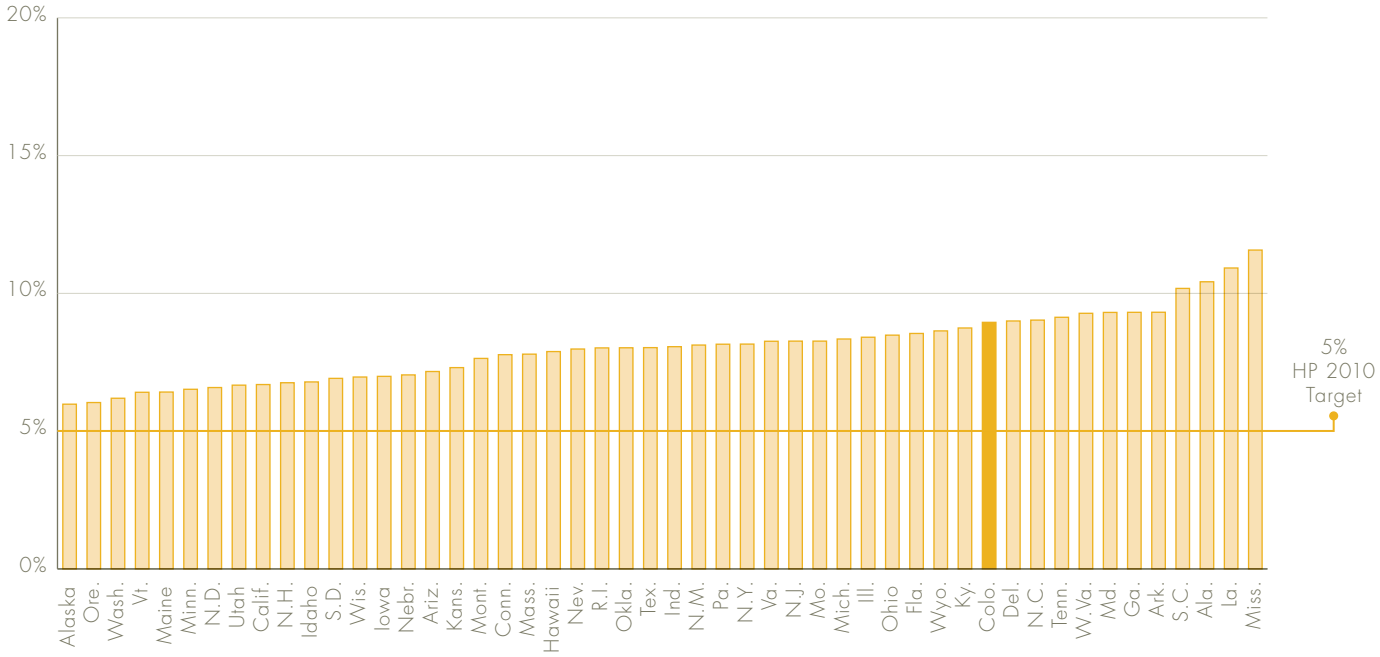
Low Birth Weight (continued)

has successfully decreased the number of low birth weight babies whose families receive Medicaid assistance. A 2002 cost study by the Colorado Department of Public Health and Environment showed that for every $1 spent on Prenatal Plus services, $2.48 is saved in Medicaid costs during the first year of the infant's life. The program is administered jointly by the Colorado Department of Public Health and Environment and the Department of Health Care Policy and Financing.

Elsewhere

Montana's Initiative for the Abatement of Mortality in Infants (MIAMI) is a comprehensive plan to decrease low birth weight by providing adequate prenatal care. Public Health Home Visiting (PHHV) is a part of this initiative that involves connecting with high-risk pregnant women and infants identified with special health needs by directly visiting them in their homes. MIAMI was created to ensure access to maternal health care and to prevent pre-term deliveries with low birth weight.[4]

Low weight births[7]



Text

1. Child Stats.gov, <childstats.gov/americaschildren/health1.asp>
2. "Tipping the Scales: Weighing in on the Low Birth Weight Problem in Colorado," Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/ps/mch/mchadmin/tippingthescales.pdf>
3. Nurse-Family Partnership, <www.nursefamilypartnership.org/content/index.cfm?fuseaction=showContent&contentID=2&navID=2> State of Colorado Nurse-Family Partnership, Evaluation Report 6, <www.cdphe.state.co.us/ps/nursehome/NFPevalreport.pdf>
4. Montana Department of Public Health and Human Services, <www.dphhs.mt.gov/index.html>

Charts

5. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2000 – 2005, <www.cdphe.state.co.us/hs/vs/>
6. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2005, <www.cdphe.state.co.us/hs/vs/>
7. **Source:** Centers for Disease Control and Prevention, National Vital Statistics System, 2005, <209.217.72.34/VitalStats/TableViewer/tableView.aspx?Reportid=1695>

Infant Mortality

Healthy Beginnings

Most recent CO value (2005)	CO rank (2003–2004)	CO value (2003–2004)	Best state (2003–2004)	Best state value (2003–2004)	HP2010 target
6.4	17/50	6.2	Vermont	4.7	4.5

Indicator Definition

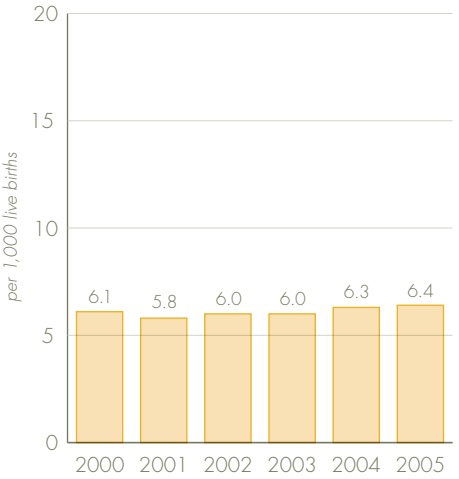
The number of infant deaths (under one year of age) per 1,000 live births.

Indicator Significance

The infant mortality rate is widely used as an indicator of population health and illuminates how socioeconomic conditions can influence both infant and maternal health. About two-thirds of infant deaths in the United States occur during the first month of life, and are due primarily to premature delivery or other complications of childbirth.

Advances in prenatal and neonatal care have resulted in dramatic decreases in infant mortality. One hundred years ago, 10 percent of infants died in the first year of life compared to less than 1 percent today. Nevertheless, the U.S. infant mortality rate lags behind most industrialized countries. In 2004, the infant mortality rate in Japan was 3.3 per 1,000 compared to 6.8 per 1,000 in the United States. Also in 2004, African-American and American Indian/Alaska Native populations had significantly higher infant mortality rates (13.6 and 8.4) than white (5.7) and Hispanic populations (5.5).[1]

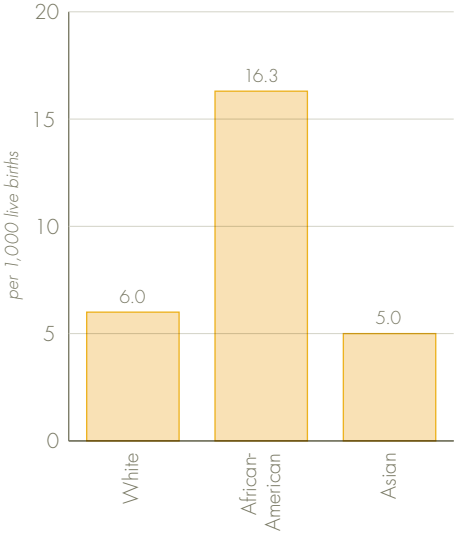
Infant mortality rate
in Colorado[4]



Colorado Specifics

Colorado ranked 17th among the states in 2004 with an infant mortality rate of 6.2 per 1,000. This was slightly below the national average (6.7) but substantially above the best performing state, Vermont (4.7 per 1,000 live births). Over the past five years Colorado's infant mortality rate has stayed relatively constant, ranging between 5.8 and 6.4 deaths per 1,000 live births. The rate is lowest among whites (6.0 per 1,000) and Asians (5.0 per 1,000) and substantially higher for African-Americans (16.3 per 1,000).

Infant mortality rate
by race in Colorado[5]



Promising Initiatives

In Colorado

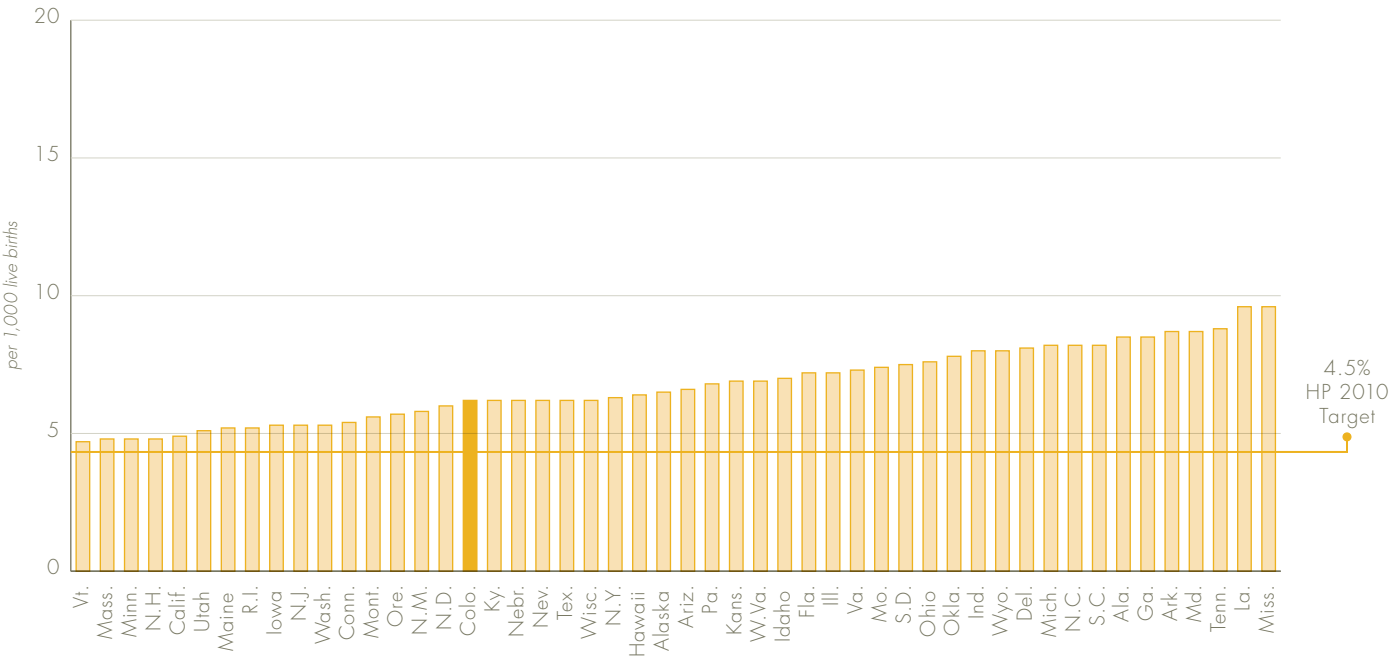
The Aurora/Arapahoe Healthy Start Initiative targets families in six zip codes with high infant mortality rates. This initiative provides participants access to comprehensive prenatal, postpartum, infant and child care as needed. The goal is to reduce infant mortality through a community-based, targeted outreach and service model that improves access to services for minority families with high rates of poverty.[2]

Infant Mortality (continued)

Elsewhere

Illinois experienced an all-time low rate of infant mortality in 2002 and the rate has continued to drop. Yet infant mortality among the African-American population continues to increase. A new program, Closing the Gap on Infant Mortality, was launched in 2006 to address the disparities in health and health care plaguing African-Americans and their babies. Closing the Gap targets four districts with the highest rates of pre-term births and sudden infant death syndrome (SIDS) in the state. Through advertisements strategically placed at bus stops and train stations, Closing the Gap is spreading the message of early and regular prenatal care. It also trains community members to act as peer educators by leading presentations and discussions around issues related to infant mortality. By using community members, the program is more able to provide culturally appropriate messages.[3]

Infant mortality rate[6]



Text

1. "Infant Mortality," Child Stats.gov, <childstats.gov/americaschildren/health2.asp>

   "Definition of Infant Mortality Rate," Medicinenet.com, <www.medterms.com/script/main/art.asp?articlekey=3967>

2. Maternal and Child Health Bureau, Health Resources and Services Administration, <perfdata.hrsa.gov/mchb/mchreports/TVISReports/UI/Abstracts/Abstract.aspx?AbstractIndex=8&FY=2003&MCHBBranch=Healthy%20Start>

3. "Grammy Award-winning recording artist Common joins state effort to reduce African American infant mortality rate," Illinois Government News Network, <www.illinois.gov/PressReleases/ShowPressRelease.cfm?RecNum=4679&SubjectID=56>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2000 – 2005, <www.cdphe.state.co.us/hs/vs/>

5. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2005, <www.cdphe.state.co.us/hs/vs/>

6. **Source:** Centers for Disease Control and Prevention, National Vital Statistics System, 2005, <209.217.72.34/VitalStats/TableViewer/tableView.aspx?Reportid=1695>

Immunizations

Healthy Beginnings

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
80.3%	28/50	80.3%	Massachusetts	86.9%	90%

Indicator Definition

Children (ages 19 – 35 months) that have received the recommended vaccination series 4:3:1:3:3 which includes four or more doses of diphtheria, tetanus, and pertussis; three or more doses of poliovirus vaccine; one or more doses of any measles-containing vaccine; three or more doses of *Haemophilus influenzae* type b (Hib) vaccine; and three or more doses of hepatitis B vaccine.

Indicator Significance

Immunizations are considered to be one of the greatest and most cost-effective achievements of biomedical science and public health. At the outset of the Twentieth Century there were over a million cases annually of diseases such as smallpox, diphtheria, pertussis (whooping cough) and measles in the United States. Thanks to advances in childhood immunization there are fewer than 10,000 cases of these diseases today in a much larger population. Parental beliefs and customs, and fears about the safety of vaccines, impede full immunization. Other barriers include the costs of the growing number of vaccinations recommended by the American Academy of Pediatrics and the Advisory Committee on Immunization Practices.[1,2]

Colorado Specifics

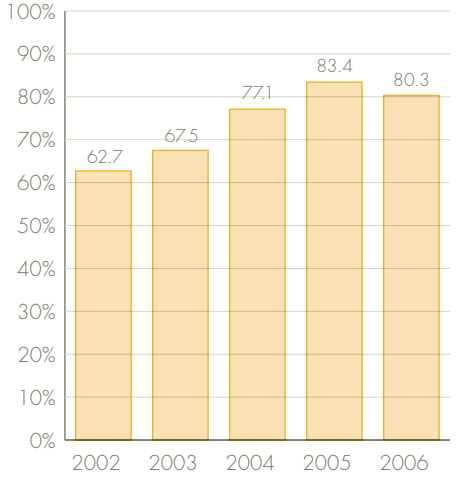
Colorado faced a shortage of the pertussis vaccine in 2002, resulting in a rank at the bottom for vaccination coverage of Colorado's 19- to 35-month-olds. Since then, it has experienced a marked improvement, reaching 83 percent in 2005. The most recent data show Colorado dropping slightly to 80 percent of infants receiving the full series of recommended vaccinations. Colorado's rank has also slipped from 16th among the states in 2005 to 28th in 2006. Clearly Colorado needs to recommit to recent efforts to increase its rate of immunizations if it is to reach the *Healthy People 2010* target of 90 percent within the next three years.

Promising Initiatives

In Colorado

The Colorado Children's Immunization Coalition (CCIC) has achieved significant successes since it was established in 1995 through funding from The Colorado Trust. Among them: administering a seven-year, $3 million immunization improvement project that reached 10 counties and 75 clinics. CCIC worked with other organizations to expand the state childhood immunization registry, and lobbied state officials to get the first-ever allocation of state funding—$250,000 in 2005 and $368,000 in 2006—to expand the Colorado Immunization Information System.[3]

***Young children receiving all recommended vaccinations** in Colorado*[5]

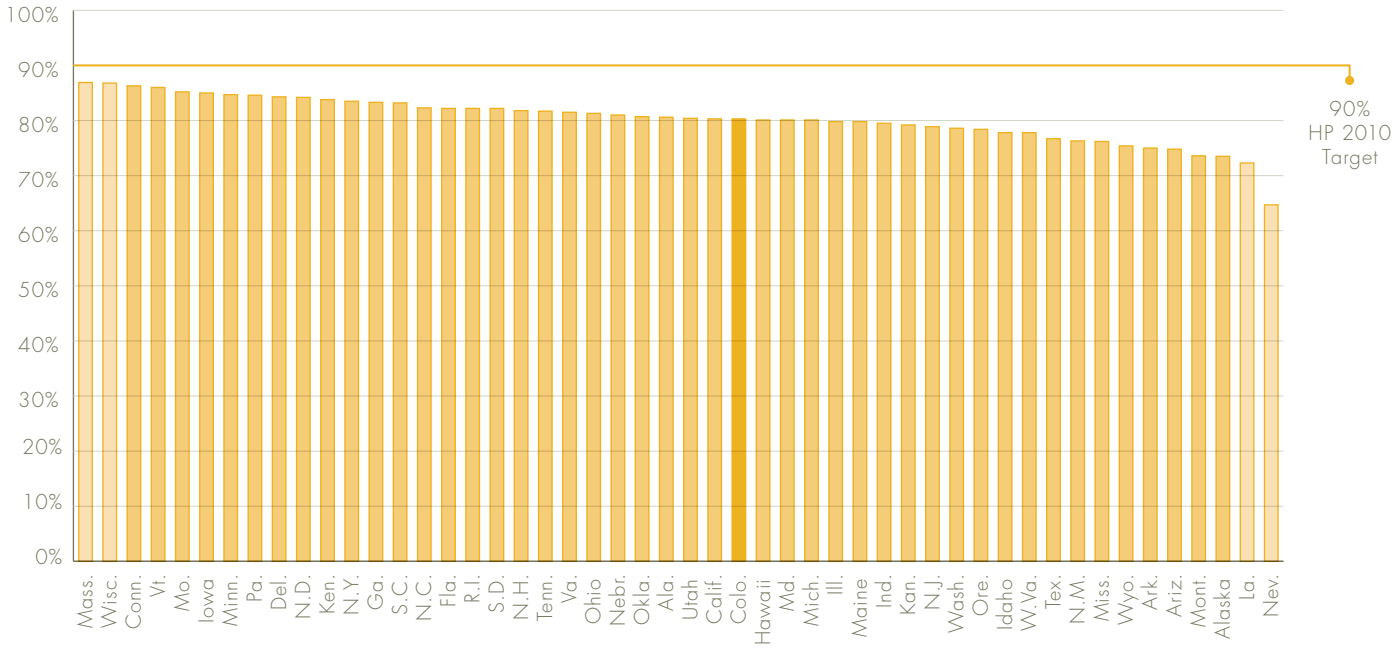


Immunizations (continued)

Elsewhere

Seniors for Childhood Immunization (SCI), developed at the Institute of Research and Education on Aging, University of North Texas, uses trained older adult volunteers to educate new mothers on the importance of vaccinations. Since older adults have seen or even experienced the effects of diseases such as polio that are now all but eradicated in the United States, they can be an important, often untapped, resource to advocate for community-wide immunization programs. The SCI model has been adopted by other states, and in 2006 more than 600 families were reached through the program's efforts.[4]

Young children receiving all recommended vaccinations[6]



Text

1. "Ten Great Public Health Achievements in the 20th Century," *MMWR Weekly,* April 2, 1999, Centers for Disease Control and Prevention, <www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm>

   "Achievements in Public Health, 1900 – 1999 Impact of Vaccines Universally Recommended for Children—United States, 1990 – 1998," *MMWR Weekly,* April 2, 1999, Centers for Disease Control and Prevention, <www.cdc.gov/mmwr/preview/mmwrhtml/00056803.htm>

2. "Immunizations/Vaccines," American Academy of Pediatrics, <www.aap.org/healthtopics/immunizations.cfm>

   "Breaking the barriers to childhood immunization," *American Family Physician*, April 1996, <findarticles.com/p/articles/mi_m3225/is_n5_v53/ai_18219830>

3. Colorado Children's Immunization Coalition, <www.childrensimmunization.org/>

4. Seniors/Volunteers for Childhood Immunizations, <www.cps.unt.edu/svci/>

Charts

5. **Source:** Centers for Disease Control and Prevention, National Immunization Survey, 2000 – 2005, <www.cdc.gov/vaccines/stats-surv/nis/data/tables_2006.htm#diff>

6. **Source:** Centers for Disease Control and Prevention, National Immunization Survey, 2005, <www.cdc.gov/vaccines/stats-surv/nis/data/tables_2006.htm#diff>

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Healthy Children

Too many Colorado children live in poverty, and too few have health insurance. Roughly 120,000 (14 percent) of the state's children under age 12 had no form of insurance in 2006. Forty-three states—including some much poorer than Colorado—did better at this. Children without insurance are more likely to have no primary health care provider, and thus are less likely to get needed medical and dental care. Too few Colorado children get enough exercise, and 10 percent are overweight. While Colorado children are among the leanest in the nation, the state does poorly on most other indicators, resulting in a grade of C-. Insuring our children, seeing that they have a medical and dental home, and making sure they get enough exercise will better prepare them for the challenges of adolescence and adulthood.

Health Indicator	Rank among states
14.1 percent of children are not covered by private or public health insurance	**44th**
14.4 percent of children live in families with incomes below the federal poverty level	**16th**
45.8 percent of children have a primary care provider AND consistently received all needed care, including one or more preventive care visits during the past 12 months	**28th**
70.5 percent of children received all the routine dental preventive care needed in the past 12 months	**38th**
57.1 percent of school-age children participated in vigorous physical activity for four or more days per week	**37th**
9.9 percent of children are overweight	**3rd**

Average Rank	**27.7**
Average Grade	C-

Uninsured

Healthy Children

Most recent CO value (2004–2006)	CO rank (2004–2006)	CO value (2004–2006)	Best state (2004–2006)	Best state value (2004–2006)	HP2010 target
14.1%	44/50	14.1%	Michigan	4.6%	0%

Indicator Definition

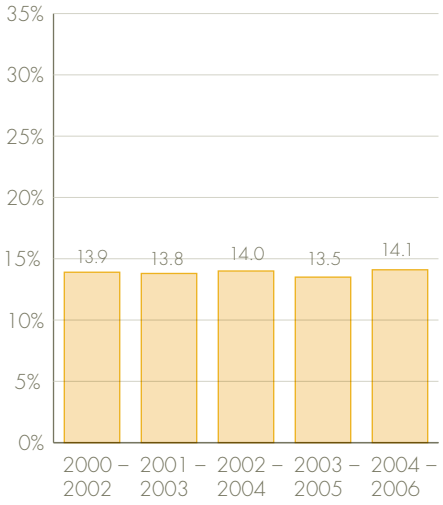
Children (ages 0 – 12 years) are considered uninsured if they do not have a public or private source of health care coverage for the entire past calendar year.

Indicator Significance

Some 9 million children (12 percent) under age 18 years are uninsured nationwide. Sixty percent of these children live in two-parent families and 70 percent live in families with incomes below 200 percent of the federal poverty level (FPL) ($41,228 a year for a family of four in 2006).

The lack of insurance coverage is a significant barrier to health care access; thus, it increases the likelihood that uninsured children will not receive the medical care they need when they need it. Uninsured children are three times more likely to forgo seeing a doctor. Without access to primary care, children are less likely to be fully immunized, less likely to receive recommended growth and developmental assessments, and parents and children are less likely to receive important guidance about health, nutrition and childhood safety. Finally, care for acute and chronic illness is often delayed until conditions become severe, resulting in more costly treatment.[1]

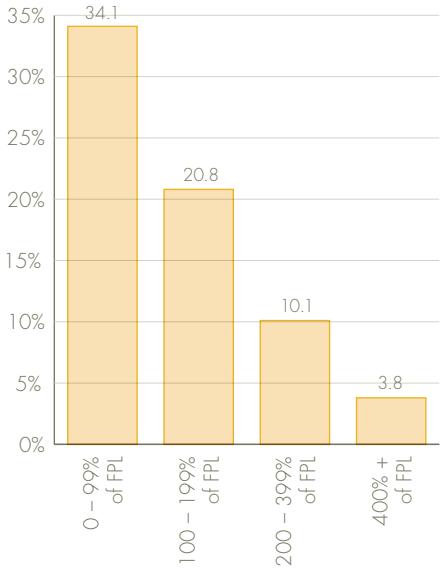
Children without health insurance in Colorado[6]



Colorado Specifics

Two-thirds of Colorado's children are insured through private insurance, mostly through employer-sponsored coverage and sometimes through individually-purchased policies. An additional 14 percent are covered by Medicaid or the state's Child Health Plan Plus (CHP+) and 6 percent are covered through some other type of insurance, including military coverage and Medicare.[2] This leaves about 180,000 (14 percent or about one in six) of Colorado's children without health care coverage. This rate puts Colorado at 44th among the 50 states. Over the past five years the rate has remained fairly stable. Families with incomes less than the federal poverty level are more than eight times as likely to be uninsured as families with incomes at 400 percent FPL or above.[3]

Children without health insurance by income in Colorado[7]



Promising Initiatives

In Colorado

The 2010 All Kids Covered initiative is a two-year-old collaborative effort among a variety of organizations in the health care community. Led by the Colorado Coalition for the Medically Underserved, the Colorado Children's Campaign and Colorado Covering Kids and Families, members work together to craft and promote legislation to expand access to meaningful health insurance coverage for children in Colorado. In its first year, the initiative was instrumental in passing two important pieces of legislation. The first mandates that state government collect data on the number

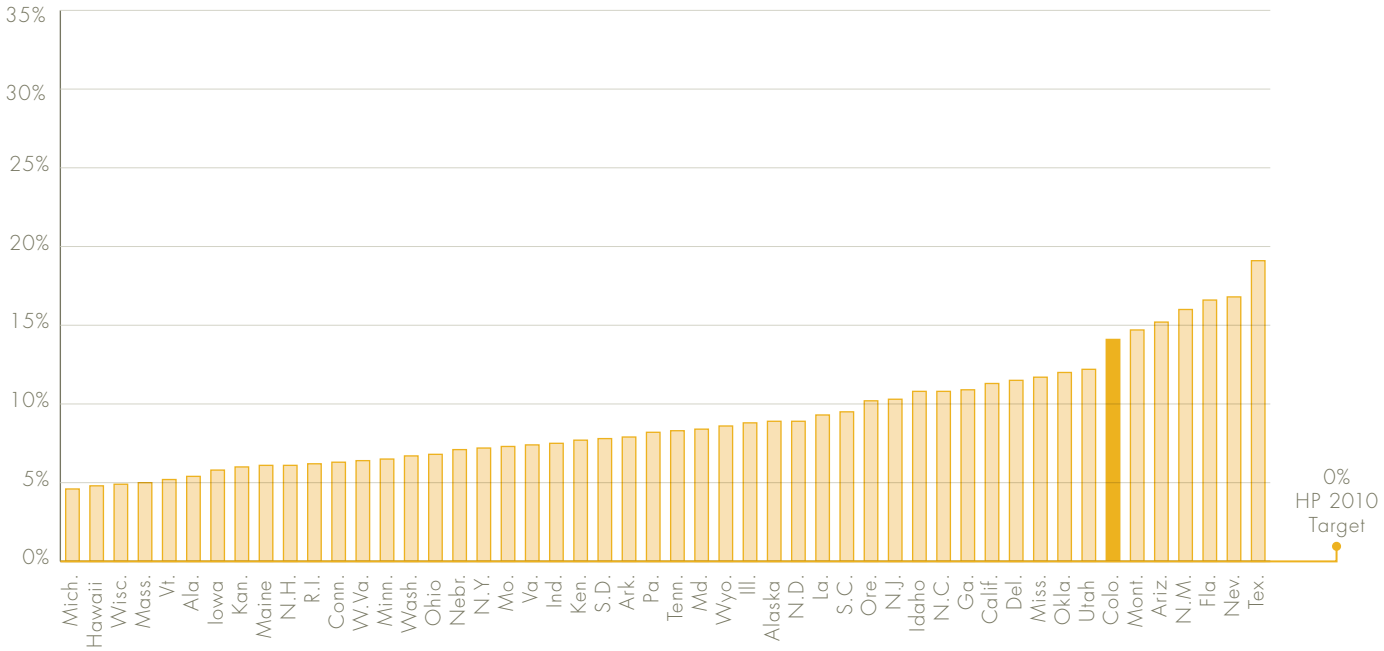
Uninsured (continued)

of publicly insured children who have a "medical home," that is, a primary health care provider. The second provides for "presumptive eligibility," a policy that enrolls eligible children in public health care programs so they may receive vital and timely care while their applications are processed and verified.[4]

Elsewhere

Illinois was the first state to implement a program to insure that all children there have health care coverage. In 2005, Gov. Rod R. Blagojevich signed into law the All Kids Program. The statewide initiative includes all children, regardless of income, under the age of 18. The coverage includes physician visits, hospitalizations, prescription drugs, dental and vision care, including eyeglasses. All Kids covers all recommended immunizations and special needs such as medical equipment, speech therapy and physical therapy. Depending on family size and income, the program imposes a monthly premium and some co-payments.[5]

Children without health insurance[8]



Text

1. American Medical Student Association, <www.amsa.org/cph/CHIPfact.cfm>
   Kaiser Commission on Medicaid and the Uninsured, <www.kff.org/medicaid/upload/2177-05.pdf>
2. Rates in this sentence refer to children ages 0 to 17 years.
3. "Fulfilling the Promise: Opportunities and Strategies for Insuring Colorado's Kids," Colorado Children's Campaign, <www.coloradokids.org/includes/downloads/fulfillingthepromisereport.pdf>
4. For more information: Colorado Coalition for the Medically Underserved, <www.ccmu.org>
5. All Kids, <www.allkids.com/about.html>

Charts

6. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.
7. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2004 – 2006.
8. **Source:** U.S. Census Bureau, Current Population Survey, 2004 – 2006, <www.census.gov/hhes/www/cpstc/cps_table_creator.html>

Poverty

Healthy Children

Most recent CO value (2004–2006)	CO rank (2004–2006)	CO value (2004–2006)	Best state (2004–2006)	Best state value (2004–2006)	HP2010 target
14.4%	16/50	14.4%	New Hampshire	6.5%	NA

Indicator Definition

The percentage of children (ages 0 – 12 years) who live in a family with an annual income below the federal poverty level, which in 2006 was $20,614 for a family of four.

Indicator Significance

Low-income children are at risk for a range of health-related problems, including lack of health insurance coverage, lack of access to comprehensive health care services and poorer health outcomes. Nationwide, more than 12 million children under age 18 live in families that fall below the federal poverty level. Despite economic growth nationally since 2002, the number of children in poor families grew 6 percent from 2002 – 2006 and the national child poverty rate reached 17 percent.[1]

Colorado Specifics

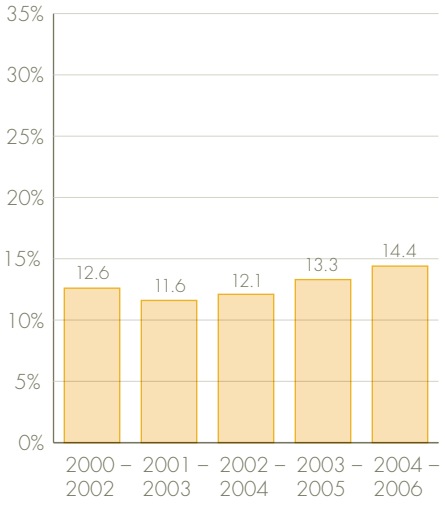
Poverty dramatically affects Colorado's children and their overall well-being, contributing to poor health and low academic performance. Colorado ranks 16th out of 50 states for children living below the federal poverty level, with 14 percent or approximately 160,000 children. Colorado's child poverty rate has inched up slightly in recent years despite an improved economy. Child poverty rates are roughly six times higher for African-American and Hispanic children compared to white children. While the poverty rates for Colorado African-American and Hispanic children are similar to national levels, the poverty level for white children is much lower than the national average, creating greater ethnic and racial disparities in Colorado.

Promising Initiatives

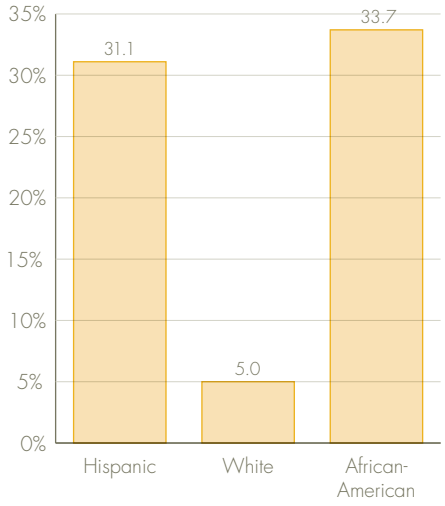
In Colorado

The Colorado Children's Campaign gives voice to 1.2 million Colorado children. Although the Campaign advocates for the needs of all children, a particular focus is on those living in low-income families. With little disposable income, these families struggle to gain access to adequate K – 12 education and basic health care services for their children. The Colorado Children's Campaign has a 21-year history in Colorado and during this time has promoted the passage of such programs as Child Health Plan Plus (CHP+) and a range of public health initiatives designed to promote the health and well-being of the state's children.[2]

Children living in families with income below the federal poverty level in Colorado[4]



Children living in families with income below the federal poverty level by race in Colorado[5]

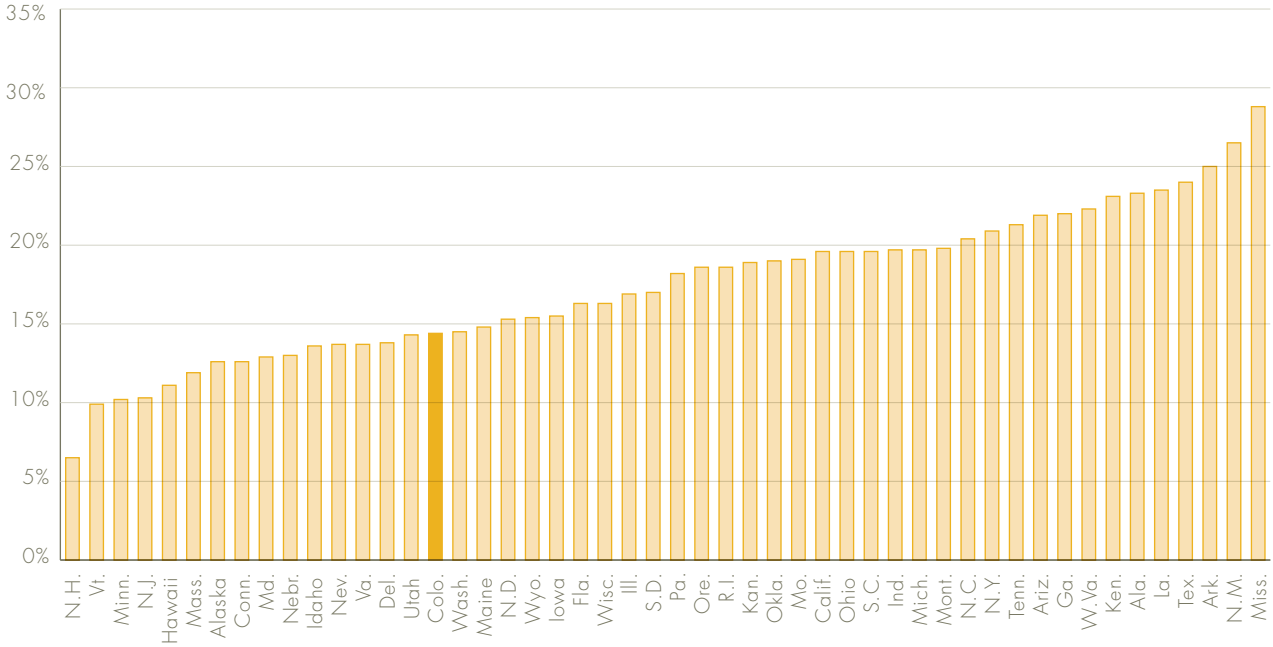


Poverty (continued)

Elsewhere

The Skillman Foundation in Detroit, a private non-profit organization, strives to create nurturing environments for children. A majority of Detroit's children live in poverty. The Skillman Foundation funds programs that target quality education, safe communities and social opportunities to enhance the lives of Detroit's impoverished children. By identifying and rewarding high-achieving schools, the foundation can then promote the replication of their programs in better-performing schools in other districts. The foundation also partners with local agencies to create more child-friendly environments in neighborhoods with large numbers of children but few resources.[3]

Children living in families with income below the federal poverty level[6]



Text

1. Historical Poverty Tables, U.S. Census Bureau, <www.census.gov/hhes/www/poverty/histpov/hstpov3.html>
2. Colorado Children's Campaign, <www.coloradokids.org/about_us/index.html>
3. The Skillman Foundation, <www.skillman.org/index.asp>

Charts

4. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.
5. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2004 – 2006.
6. **Source:** U.S. Census Bureau, Current Population Survey, 2004 – 2006, <www.census.gov/hhes/www/cpstc/cps_table_creator.html>

Medical Home

Healthy Children

Most recent CO value (2006)	CO rank (2003)	CO value (2003)	Best state (2003)	Best state value (2003)	HP2010 target
52.2%	28/50	45.8%	New Hampshire	61%	97%

Indicator Definition

Children (ages 0 – 17 years) who have a regular primary health care provider and have made a preventive care visit to that provider at least once during the past 12 months.

Indicator Significance

Children with a "medical home" have a place in which they can receive comprehensive, family-centered and coordinated health care. This promotes healthy development, and allows minor problems to be identified and treated before they become serious. Especially important for children are age-appropriate screenings and immunizations. Without a regular source of primary health care, children are nine times more likely to be hospitalized for preventable problems. Uninsured children are 13 times more likely to lack a regular source of primary care.[1]

Colorado Specifics

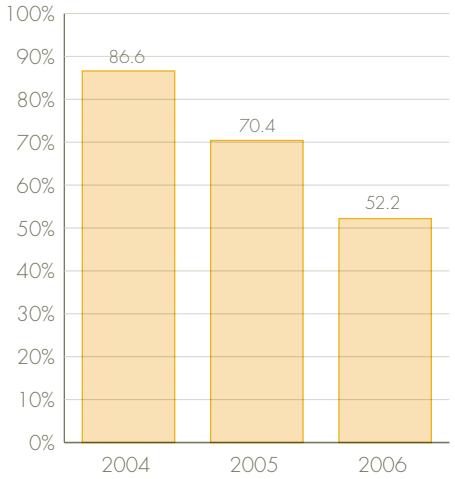
Colorado ranks 28th among states for children with a reported regular source of primary health care. The proportion of children who have a personal doctor has been declining over the past three years in Colorado. Children who live in families with incomes below the federal poverty level ($20,614 for a family of four in 2006) are almost three times more likely to lack a personal doctor than children in families at or above 400 percent of the federal poverty level.

Promising Initiatives

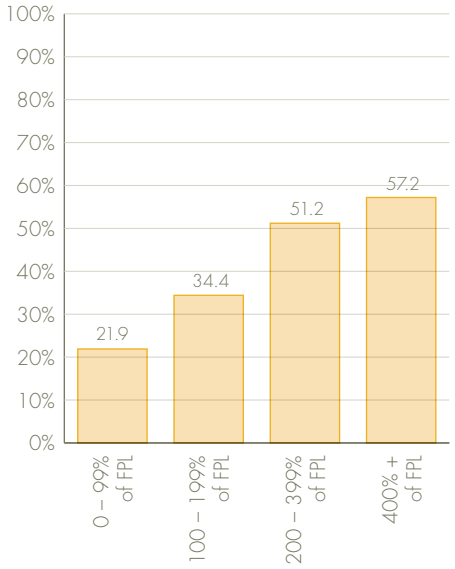
In Colorado

The Colorado Children's Healthcare Access Program (CCHAP) seeks to ensure that every child in Colorado has a high quality medical home. CCHAP encourages and enables pediatricians and family physicians in private practice to devote 10 – 20 percent of their practices to children enrolled in Medicaid or Child Health Plan Plus (CHP+). To date, CCHAP has expanded to 28 practices in 34 pediatric locations around the Denver Metro Area. CCHAP is also establishing a demonstration program with the Department of Health Care Policy and Financing to provide higher reimbursement and incentives to physicians that provide comprehensive care to publicly-insured children. Three years ago, only 20 percent of private pediatric practices in the Denver area accepted Medicaid or CHP+ children; today the number has increased to almost 50 percent. CCHAP envisions expanding to the rest of the state over the next two years.[2]

***Children with a regular source of primary health care** in Colorado*[4]



***Children with a regular source of primary health care** by income in Colorado*[5]

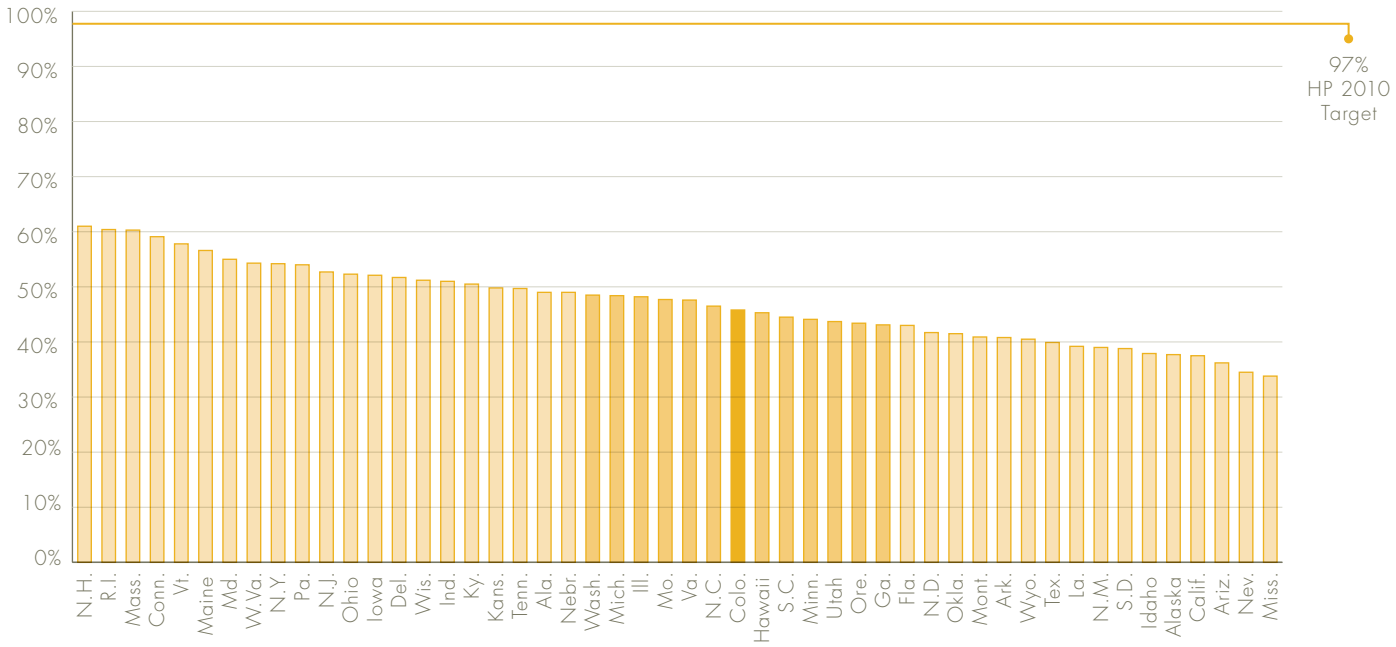


Medical Home (continued)

Elsewhere

The Integrated Mental Health Primary Care Program (IMP) in New York has helped close the gap between primary care and mental health services. Both adults and children are treated by a bilingual staff in eight primary care sites serving in the New York Presbyterian Hospital Ambulatory Care Network. It is the first and largest program of its kind in New York City, incorporating mental health exams into regular child health care. IMP attempts to destigmatize treatment of mental health by placing it within the same environment as a primary care physician. Physicians are trained how to identify psychiatric disorders and to effectively refer patients to an appropriate psychiatrist or psychologist, making access to mental health care immediate.[3]

Children with a regular source of primary health care[6]



Text

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2. Colorado Children's Health Care Access Program, <www.cchap.org/>

"A Conversation with Steve Poole," CHI HealthTalk, <www.coloradohealthinstitute.org/newsletter/aug/healthtalk_aug_07.html>

3. "Innovative Health Care in a Primary Health Care Setting Available through New York Presbyterian," New York-Presbyterian, <www.nyp.org/news/hospital/813.html>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Child Health Survey, 2004 – 2006, <www.cdphe.state.co.us/hs/yrbs/childhealth.html>

5. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

6. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

Preventive Dental Care

Healthy Children

Most recent CO value (2003)	CO rank (2003)	CO value (2003)	Best state (2003)	Best state value (2003)	HP2010 target
70.5%	38/50	70.5%	Vermont	85.7%	NA

Indicator Definition

Children (ages 1 – 17 years) reported by parents to have received all needed preventive dental care during the past 12 months.

Indicator Significance

Tooth decay is the leading chronic infectious disease affecting children. By the time they're 11, an estimated 50 percent of all children will have experienced tooth decay, and by the age of 19, 68 percent will have decay in their permanent teeth. Low-income children are twice as likely to suffer from untreated tooth decay, often resulting in chronic pain, underweight and poor appearance. These problems often interfere with a child's ability to succeed in school. Data shows that on average 51 million school hours a year are lost to dental-related illnesses in the United States.

The American Dental Association suggests cleaning a baby's mouth the first few days after birth and to begin taking a child for an oral exam between the ages of one and two years.[1] A regular diet of nutritious foods low in sugar is highly effective in preventing tooth decay.

Colorado Specifics

In Colorado, oral disease is five times more common than asthma. Colorado ranks in the bottom tier of states (38 out of 50) for children reported to have received all preventive dental care needed in the past 12 months. Disparities exist for children living at various income levels. Only half of children living in households below the poverty level received preventive dental care in Colorado in 2003, while over 80 percent of children living in higher income households received such care.[2]

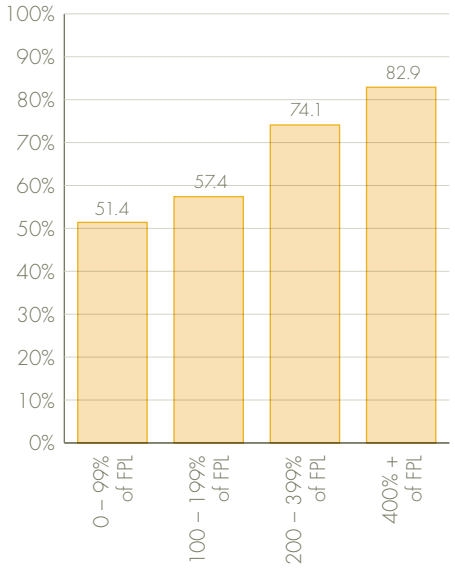
Promising Initiatives

In Colorado

Cavity Free at Three is a collaborative effort of The Colorado Health Foundation, Caring for Colorado Foundation, Delta Dental Foundation and Rose Community Foundation. This project is designed to strengthen the safety net's capacity to provide preventive services to high-risk, high-need pregnant women and their babies, up to age 3. The goal: to change oral health delivery systems so that dental disease can be completely prevented in young children in Colorado.

Caring for Colorado began a five-year plan in 2002 dedicating $5 million to promote oral health in Colorado. A primary target of the Oral Health Improvement Program is low-income children. Through collaborations between oral health and primary health care providers, the program seeks to increase preventive education and oral health services to both children and new mothers who encounter various barriers to obtaining needed care.[3]

Children receiving all routine preventive dental care in last 12 months *by income in Colorado*[5]

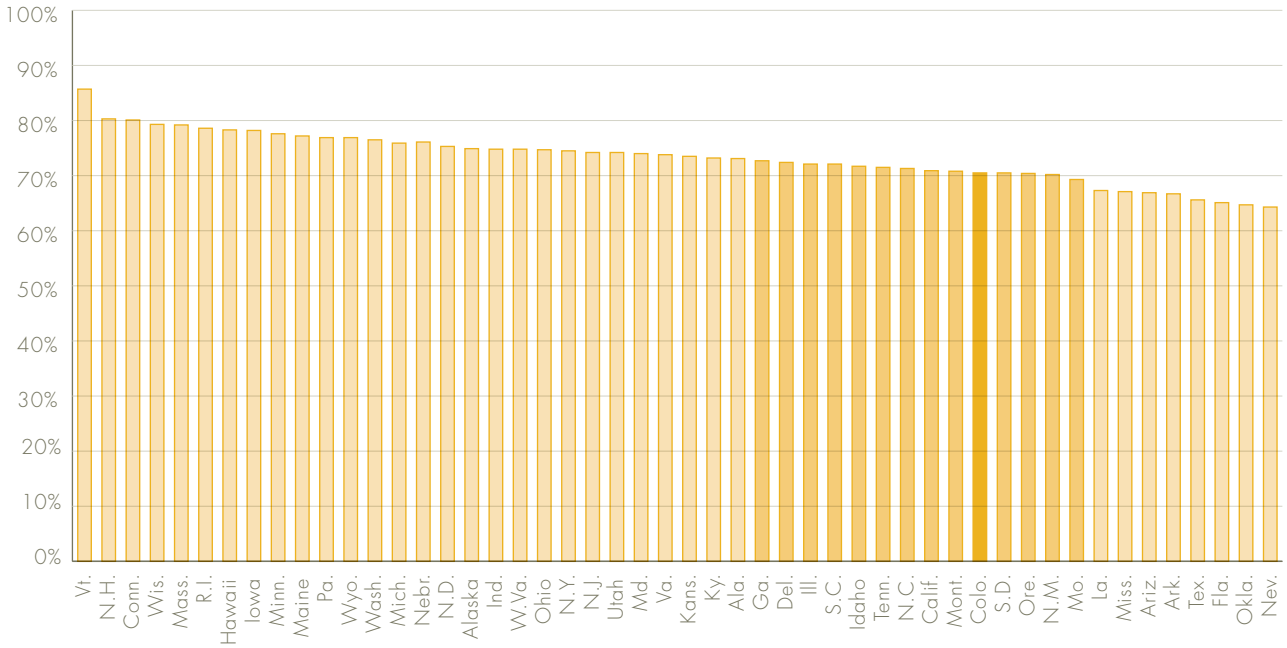


Preventive Dental Care (continued)

Elsewhere

Minnesota established a Statewide Oral Health Action Plan in 2003 to implement innovative approaches to promoting better oral health care among the state's children. Available in three languages, *The Tooth Book* was published to educate families on early dental care. It is being distributed to parents of high-risk children through home visits. These home visits have become an important component of the state's initiative. The University of Minnesota and Marquette University School of Dentistry are providing training in teaching age-appropriate care and early identification of risk factors.[4]

Children receiving all routine preventive dental care in last 12 months[6]



Text

1. "Children's Oral Health," National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, <www.cdc.gov/OralHealth/factsheets/sgr2000-fs3.htm>
2. Be a Smart Mouth, <www.beasmartmouth.com/pdf/stateplanf.pdf>
3. Be a Smart Mouth, <www.beasmartmouth.com/pdf/stateplanf.pdf>
4. Minnesota Head Start Association, <www.mnheadstart.org/oralhealth.html>

Charts

5. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>
6. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

Vigorous Exercise

Healthy Children

Most recent CO value (2003)	CO rank (2003)	CO value (2003)	Best state (2003)	Best state value (2003)	HP2010 target
57.1%	37/50	57.1%	Alabama	69.2%	NA

Indicator Definition

Children (ages 6 – 17 years) who participate in at least 20 minutes of vigorous physical activity (i.e., physical activity that made them sweat and breathe hard for at least 20 minutes) on at least four days per week.

Indicator Significance

As the number of children who are overweight increases, so does the number of children who have low levels of physical activity. Inactive children are more likely to become inactive adults. A lack of physical exercise results in an increased risk for overweight, obesity and chronic disease. Participating in frequent vigorous physical activity is a protective factor for children that results in psychological and social well-being and reduces the risk of premature death as adults.[1]

Colorado Specifics

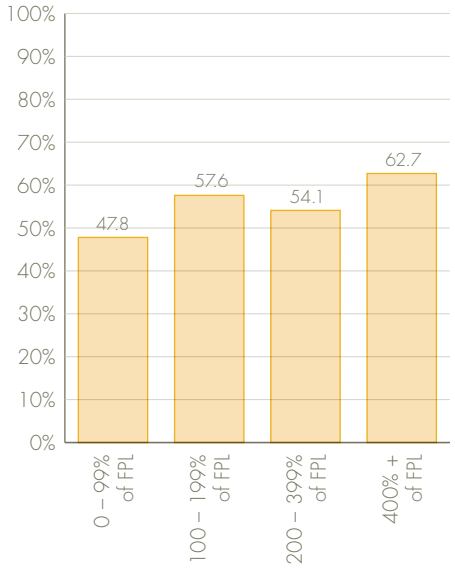
Colorado's children rank near the middle of other states that report childhood physical activity. Health disparities exist in Colorado with regard to childhood physical activity, as fewer girls report engaging in vigorous physical activity (51 percent) than do boys (62 percent). Also, children living in poverty are less likely to engage in frequent vigorous physical activity than those in families at 400 percent or more of the federal poverty level.

Promising Initiatives

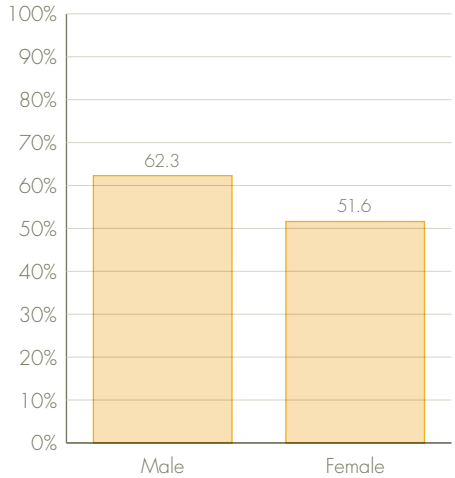
In Colorado

Stapleton has been transformed from Denver's former airport into a model community for healthy living, with an urban design plan that encourages children and adults to engage in regular physical activity. Adopting programs such as Passport to Healthy Living and the Healthy Neighborhoods Initiative, Stapleton designers have teamed up with University of Colorado at Denver and Health Sciences Center to provide programs that educate residents on how to maintain more healthy and active lifestyles. The Transport Management Association works with the Stapleton community to provide alternatives to car transportation through a shuttle service and improved bicycle paths throughout the community. Bike, Walk, Roll promotes non-car trips to school where children are treated to breakfast and given further information about safety while riding a bicycle.[2]

***Children who participated in vigorous physical activity** by income in Colorado*[4]



***Children who participated in vigorous physical activity** by sex in Colorado*[5]

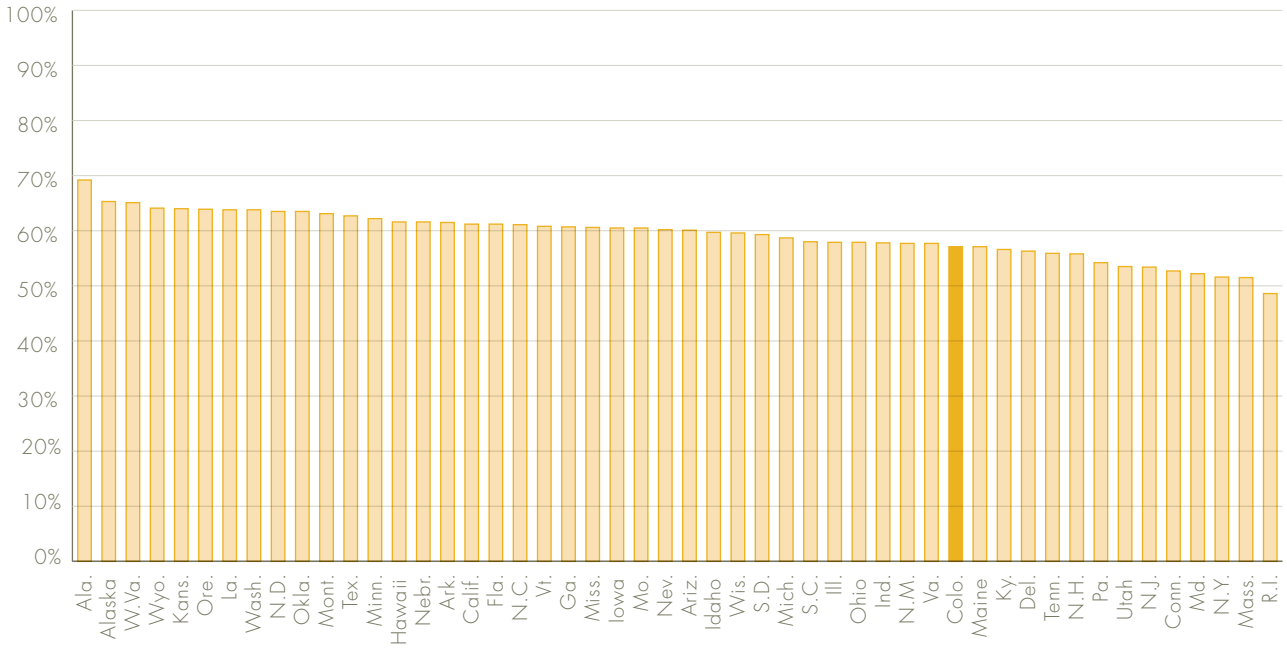


Vigorous Exercise (continued)

Elsewhere

The Harvest Foundation has made a three-year, $1.56-million grant to support Virginia's National Complete Streets Coalition. It is the largest investment of such kind given in the country. The streets in Martinsville and Henry Counties will be re-designed to promote walking and biking in attractive and engaging ways. A local coalition is working to revitalize entire communities and therefore to improve economic development. The University of North Carolina and the Centers for Disease Control and Prevention will be evaluating the initiative.[3]

Children who participated in vigorous physical activity[6]



Text

1. "Obesity in Youth," American Obesity Association, <obesity1.tempdomainname.com/subs/fastfacts/obesity_youth.shtml>

"Healthy Youth," National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, <www.cdc.gov/HealthyYouth/physicalactivity/facts.htm>

2. Stapleton Foundation, <www.stapletonfoundation.org/default.asp>

3. "Harvest to fund initiative," Harvest Foundation, <www.theharvestfoundation.org/news.cfm?ID=245>

Charts

4. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

5. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

6. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/SurveyAreas.aspx>

Overweight

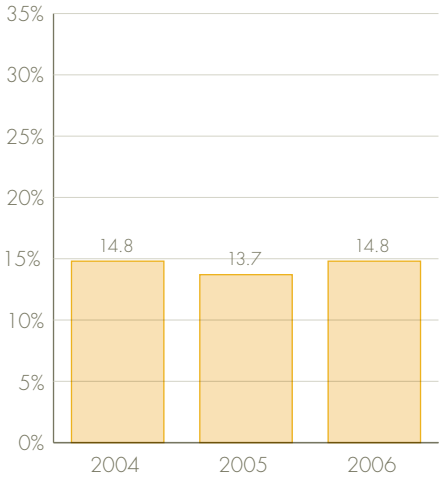
Healthy Children

Most recent CO value (2006)	CO rank (2003)	CO value (2003)	Best state (2003)	Best state value (2003)	HP2010 target
14.8%	3/50	9.9%	Utah	8.5%	5%

Indicator Definition

"Overweight" for children (ages 10 – 17 years) is defined as having a Body Mass Index (BMI) at or above the 95th percentile on the Centers for Disease Control and Prevention's gender- and age-specific revised Growth Charts for the United States. The BMI for children and adolescents is a number calculated from a child's weight and height. BMI measurements for children and adolescents reflect normal differences in body fat between boys and girls while considering differences in body fat at various ages. It provides a reliable indicator of body fat and is used to screen for excessive weight gain that may lead to health problems.

Overweight children in Colorado[7]



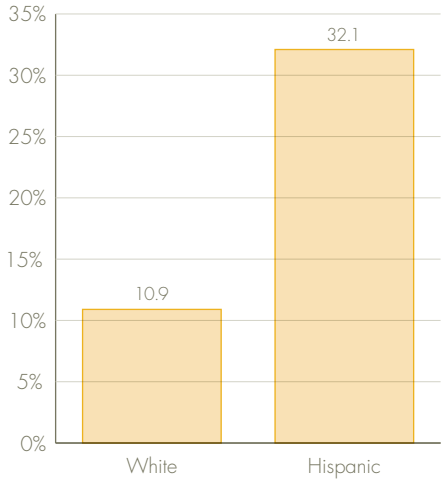
Indicator Significance

The proportion of children ages 6 – 11 in the United States who are overweight increased from 7 percent in 1976 – 80 to 19 percent in 2003. The growing proportion of children who are overweight has been described as an epidemic requiring an immediate policy response. For the first time in history, children in the United States may have a lower life expectancy than their parents due to the increased incidence of obesity and related conditions such as diabetes, hypertension and heart disease. Using the *Healthy People 2010* guidelines, all states are far from achieving the goal of a childhood obesity rate of 5 percent or less.[1]

Colorado Specifics

Colorado has a relatively low proportion of children who are overweight compared to other states. However, the 2006 Child Health Survey conducted by the Colorado Department of Public Health and Environment found 15 percent of children overweight and an additional 13 percent at risk of being overweight. Hispanic children were nearly three times more likely to be overweight than white children.[2]

Overweight children by race in Colorado[8]



Promising Initiatives

In Colorado

The Colorado Physical Activity and Nutrition Program (COPAN) is a broad-based collaborative effort to promote education about healthy living choices in schools.[3] COPAN's Nutrition State Plan 2010 seeks to raise awareness of parents, childcare providers, preschool educators and other community agencies with initiatives designed to create supportive environments that promote physical activity and good nutrition.[4]

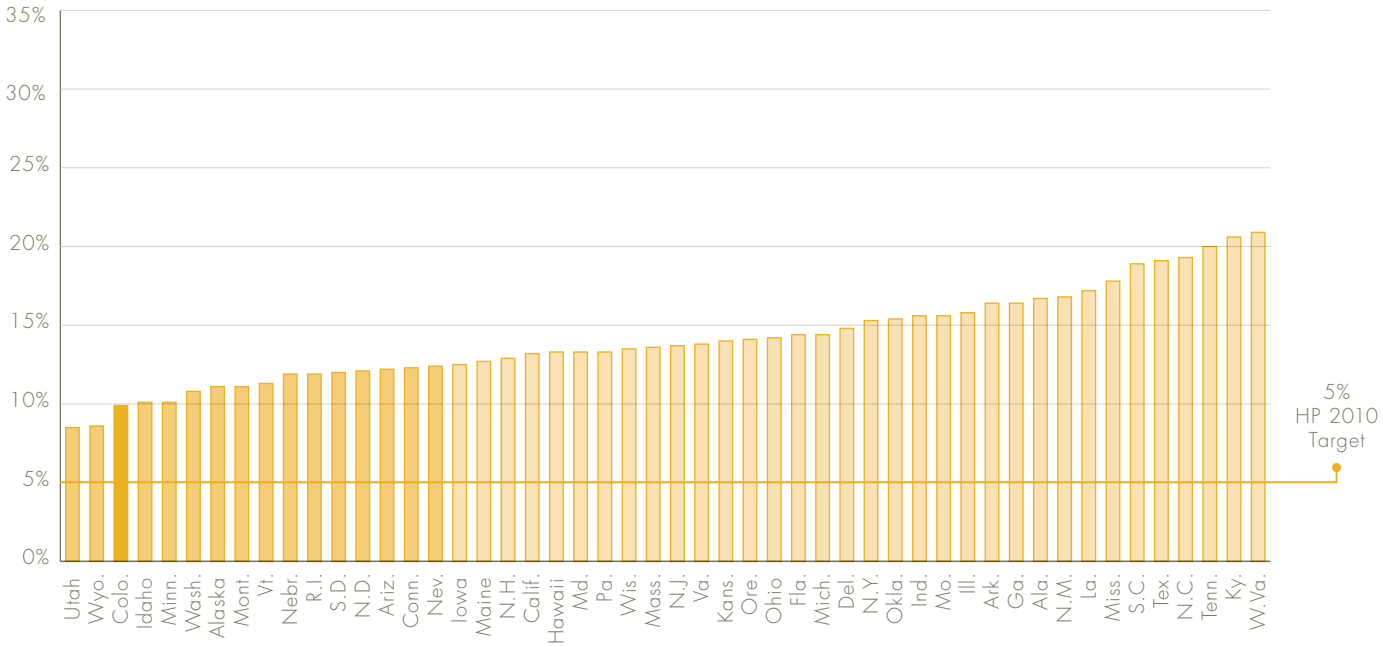
LiveWell Colorado, through efforts partially sponsored by The Colorado Health Foundation, dedicates millions of dollars to reducing obesity in the state. Grant recipients encourage healthy living through policies, programs and environmental changes that often focus on school and community settings.[5]

Overweight (continued)

Elsewhere

In 2003, under the leadership of former Gov. Mike Huckabee, Arkansas launched a broad-based initiative to reverse the state's trends in childhood obesity. The Arkansas Center for Health Improvement was given the responsibility to measure each child's Body Mass Index (BMI) at school. Parents were notified of the results, and were provided with an explanation of the health risks associated with obesity. In the past three years, improvements in the BMI reporting have made Arkansas a model for other states. A recent evaluation found that the progression of the childhood obesity epidemic has been halted in Arkansas.[6]

Overweight children[9]



Text

1. "Overweight Prevalence," Centers for Disease Control and Prevention, <www.cdc.gov/nccdphp/dnpa/obesity/childhood/prevalence.htm>

   Tracking Progress: Third Annual Arkansas Assessment of Childhood and Adolescent Obesity, Arkansas Center for Health Improvement, <www.achi.net/BMI_Info/Docs/2006/Results06/ACHI_2006_Full_Online_BMI_State_BMI_Report%20.pdf>

2. 2006 Child Health Survey, Colorado Department of Public Health and Environment.

3. Colorado Physical Activity and Nutritional Program, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/pp/COPAN/Schoolsite/SchoolSite.html>

4. Colorado Department of Public Health and Environment and Colorado Physical Activity and Nutrition Coalition. December, 2004. State Plan 2010, <www.cdphe.state.co.us/pp/COPAN/2004stateplan.pdf>

5. Live Well Colorado, <livewellcolorado.com/index.php>

6. "Tracking Progress: Third Annual Arkansas Assessment of Childhood and Adolescent Obesity," <www.achi.net/BMI_Info/Docs/2006/Results06/ACHI_2006_BMI_National_rpt.pdf>

Charts

7. **Source:** Colorado Department of Public Health and Environment, Child Health Survey, 2004 – 2006, <www.cdphe.state.co.us/hs/yrbs/childhealth.html>

8. **Source:** Colorado Department of Public Health and Environment, Child Health Survey, 2006, <www.cdphe.state.co.us/hs/yrbs/childhealth.html>

9. **Source:** National Center for Health Statistics, National Survey of Children's Health, 2003, Centers for Disease Control and Prevention, <nschdata.org/DataQuery/DataQueryResults.aspx>

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Healthy Adolescents

The transitional years of adolescence pose special challenges for establishing good health habits. Compared to other states, Colorado's adolescents score relatively well on nutrition, exercise and weight, mental health and avoiding risky sexual behaviors. Too many, however, binge drink and smoke, and the number of births to teenage mothers, while lower than in the past, is still higher than in most states. Underlying all this is the same lack of health insurance—14 percent have none—found among younger children. Addressing these issues will enable Colorado's adolescents to enter adulthood with good health and good health habits.

Health Indicator	Rank among states
14.1 percent of adolescents are not covered by private or public health insurance	**41st**
10.3 percent of adolescents live in families with incomes below the federal poverty level	**14th**
19.2 percent of adolescents ate five or more servings per day of fruits and/or vegetables during the past seven days	**16th**
70.1 percent of adolescents participated in vigorous physical activity on three or more of the past seven days	**5th**
9.8 percent of adolescents are overweight	**8th**
30.6 percent of adolescents had five or more drinks of alcohol in a row on one or more of the past 30 days	**41st**
18.7 percent of adolescents smoked cigarettes on one or more of the past 30 days	**18th**
25.0 percent of adolescents felt so sad or hopeless almost every day for two consecutive weeks during the past 12 months that they stopped doing some usual activities	**9th**
6.7 percent of adolescents attempted suicide one or more times during the past 12 months	**7th**
29.5 percent of adolescents were sexually active in the past three months	**6th**
Among students who had sexual intercourse during the past three months, **69.3 percent** reported using a condom during last sexual intercourse	**5th**
Teen fertility rate (**43.9 births to teen mothers per 1,000 teenage women**)	**36th**
Average Rank	**17.1**
Average Grade	**B-**

Uninsured

Healthy Adolescents

Most recent CO value (2004–2006)	CO rank (2004–2006)	CO value (2004–2006)	Best state (2004–2006)	Best state value (2004–2006)	HP2010 target
14.1%	41/50	14.1%	Iowa	5.4%	0%

Indicator Definition

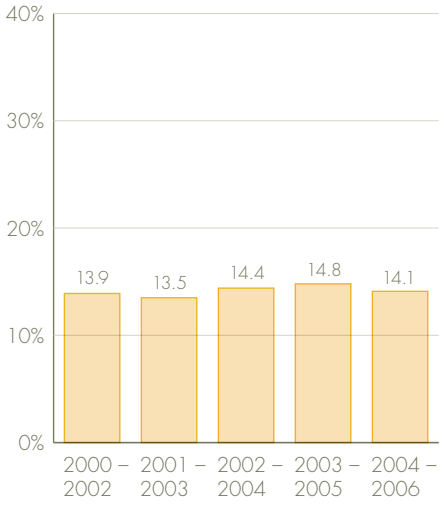
Adolescents (ages 13 – 17 years) are considered uninsured if they did not have a public or private source of health care coverage for the entire past calendar year.

Indicator Significance

Over the past decade, the percentage of adolescents covered by health insurance in the United States has increased for poor and near-poor families due to growth in public insurance programs such as Medicaid and the State Child Health Insurance Program (SCHIP). However, because of declines in private health insurance coverage for dependents of workers, coverage for adolescents in middle- and higher-income families has declined. Insurance coverage plays a critical role in ensuring access to health care services. Adolescents who have insurance coverage are more likely to have an on-going relationship with a primary physician. Since health status is linked to high school performance, having a continuous and reliable source of primary care is an important determinant of success.

Although poor and near-poor families make up one-third of the total population, they represent two-thirds of uninsured adolescents.[1]

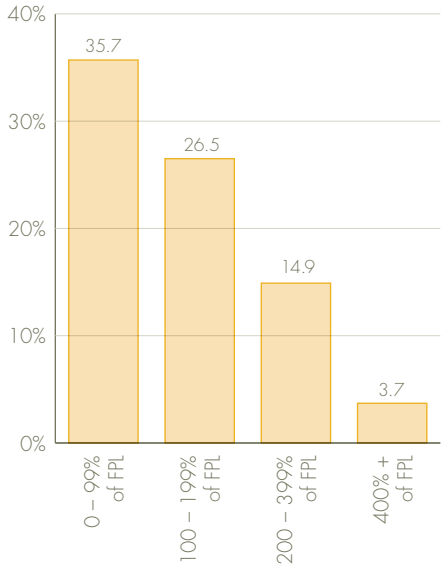
Adolescents without health insurance in Colorado[4]



Colorado Specifics

Colorado ranks 41st in insurance coverage for adolescents. Uninsurance rates for Colorado adolescents have remained relatively stable at around 14 percent for the past five years. Insurance coverage for adolescents is strongly associated with family income. Adolescents in families below the federal poverty level are roughly 10 times more likely to be uninsured as those living in families at or above 400 percent of the federal poverty level.

Adolescents without health insurance by income in Colorado[5]



Promising Initiatives

In Colorado

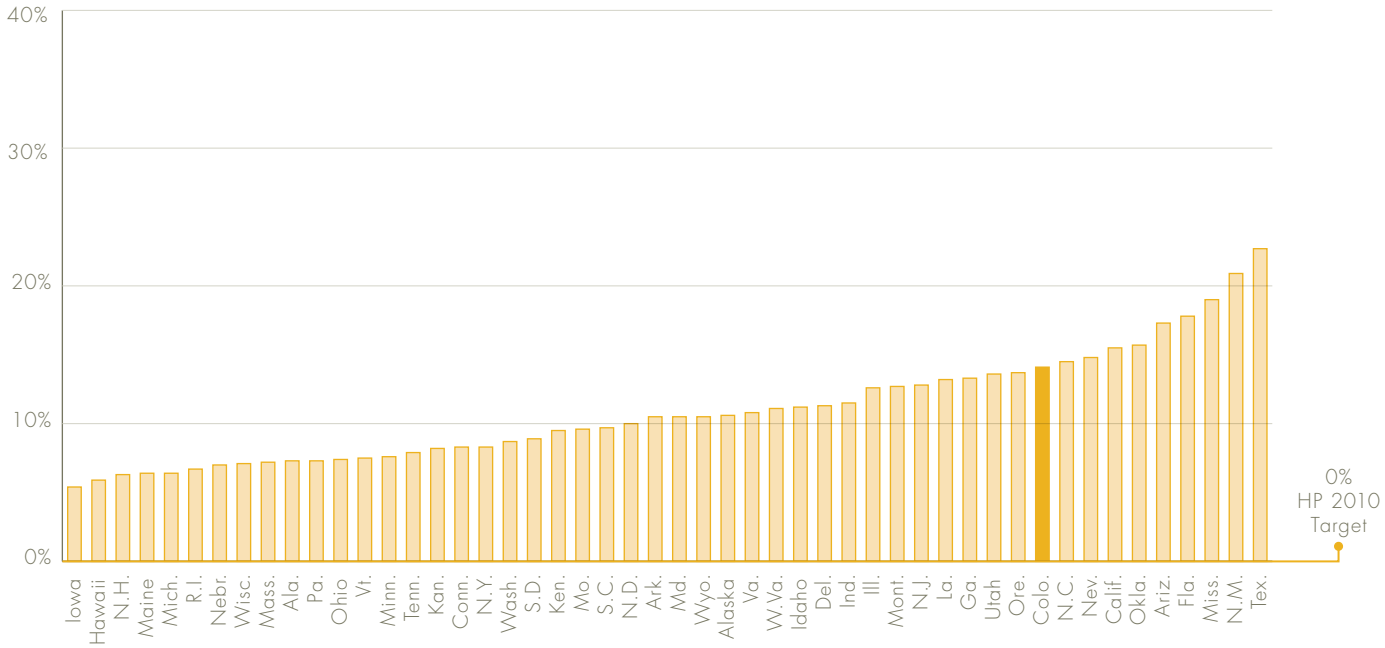
Rocky Mountain Youth Clinics (RMYC) is a nonprofit organization that provides access to high quality health care services for children and adolescents in the Denver metropolitan area. RMYC serves youth regardless of insurance coverage or their family's ability to pay. This unique program model seeks to provide care in those places where adolescents live and spend their time, such as schools, youth centers, residential facilities and homeless shelters. RMYC has three primary clinics, two mobile units and more than 20 smaller off-site clinics. In 2007, RMYC expanded its efforts to provide health and dental care to a number of rural Colorado communities.[2]

Uninsured (continued)

Elsewhere

The Lucile Packard Children's Hospital at Stanford, in Palo Alto, Calif., created the Teen Health Van to provide comprehensive health care to teens in California's San Mateo, Santa Clara, and San Francisco Counties. With social workers, dieticians and physicians on board, a comprehensive range of health issues can be covered in one visit. The van program uses innovative techniques such as theater, art and cooking classes to attract the interest of teens. The program has an 87 percent return rate of teens, as well as a constant influx of new patients.[3]

Adolescents without health insurance[6]



Text

1. "Trends in Public and Private Health Insurance for Adolescents," *Journal of the American Medical Association,* March 10, 2004, <jama.ama-assn.org/cgi/content/full/291/10/1231>

2. The Rocky Mountain Youth Clinics, Programs and Services, <www.rockymountainyouth.org/index.php?s=16>

3. Lucile Packard Children's Hospital at Stanford, Clinical Services and Specialities, <www.lpch.org/clinicalSpecialtiesServices/ClinicalSpecialties/MobileHealthClinics/adolescentHealthVan.html>

Charts

4. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.

5. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.

6. **Source:** U.S. Census Bureau, Current Population Survey, 2004 – 2006, <www.census.gov/hhes/www/cpstc/cps_table_creator.html>

Poverty

Healthy Adolescents

Most recent CO value (2004–2006)	CO rank (2004–2006)	CO value (2004–2006)	Best state (2004–2006)	Best state value (2004–2006)	HP2010 target
10.3%	14/50	10.3%	New Hampshire	5.6%	NA

Indicator Definition

The percentage of teens (ages 13 – 17 years) who live in a family with an annual income below the federal poverty level, which in 2006 was $20,614 for a family of four.

Indicator Significance

Low-income adolescents are more likely to be uninsured and therefore less able to see a health care provider regularly. Lacking insurance, they may forgo wellness checkups, eye exams, acute and chronic illness care and preventive dental care. Adolescents who live in poverty are at increased risk of suicide, school violence and gang involvement, yet they have the least access to much-needed mental health care.[1]

Colorado Specifics

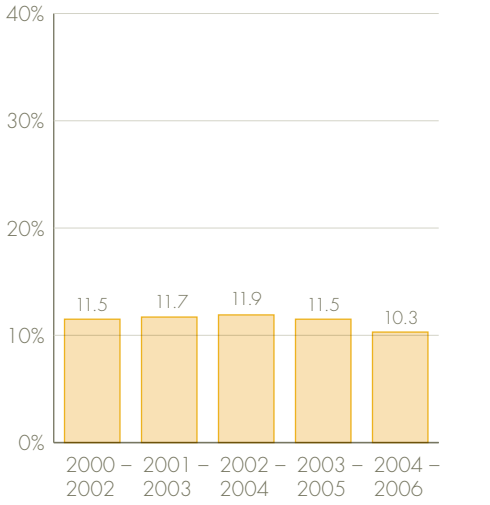
Colorado's 10 percent adolescent poverty rate is 14th lowest among the states. The rate has stayed relatively constant since 2000. Adolescents living in poverty are found in Colorado's urban and rural communities. Poverty disproportionately affects minority adolescents. Both African-American and Hispanic adolescents are much more likely to be living in poverty than their white peers. These large disparities in adolescent poverty rates help explain the ethnic disparities in other health indicators.

Promising Initiatives

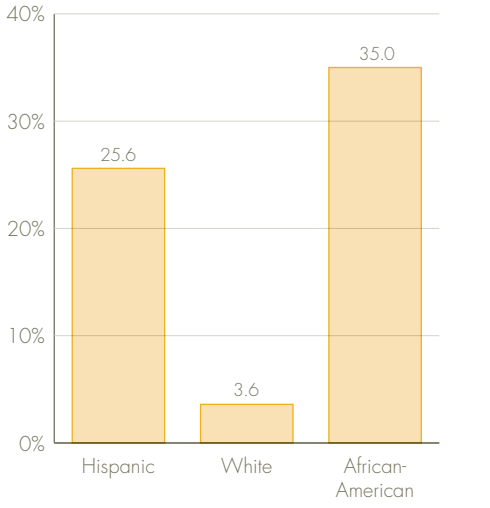
In Colorado

An increasing number of programs serving low-income adolescents have been launched in the past 10 years. In Prowers County, 19 percent of families live below the federal poverty level. The county has been designated both as a medically underserved area and a health profession shortage area. In August 2007, school officials announced that a School-based Health Center (SBHC) will be established at Lamar High School to meet the physical and emotional health care needs of students. As of January 2007, Colorado was home to 34 SBHCs and one mobile van serving students, 60 percent of whom come from low-income—and likely uninsured—families.[2]

Adolescents living in families with income below the federal poverty level in Colorado[4]



Adolescents living in families with income below the federal poverty level by race in Colorado[5]

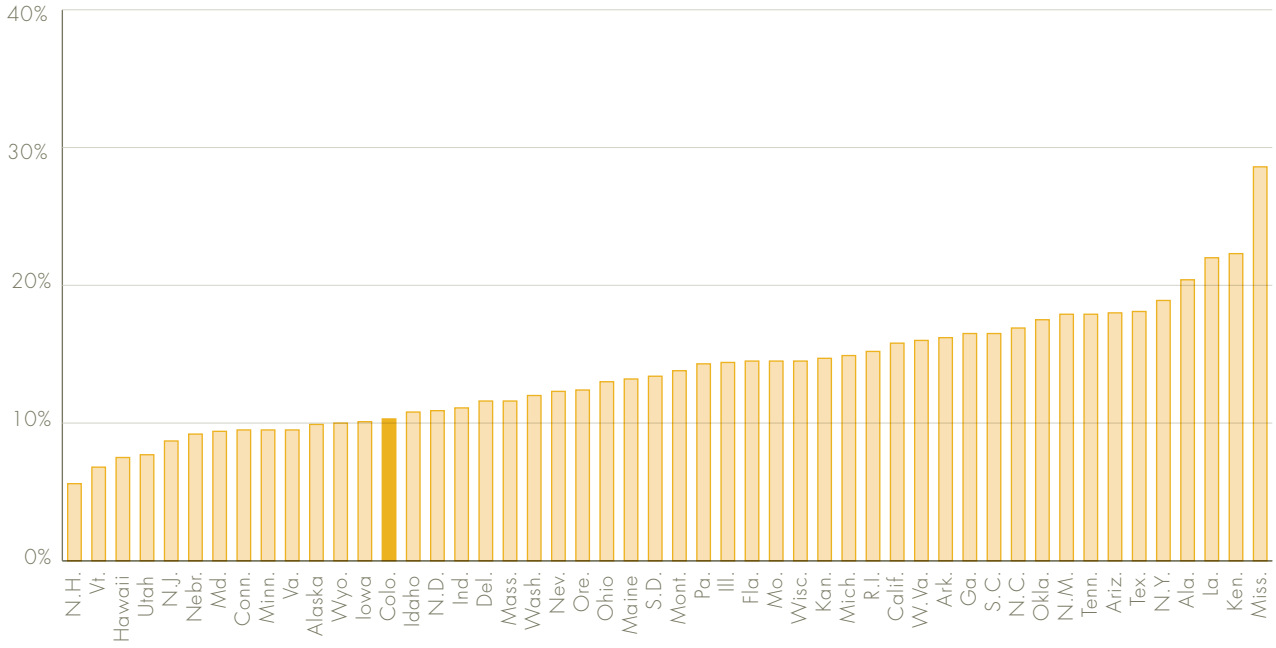


Poverty (continued)

Elsewhere

In 2003, the governor of New York released $25 million of Temporary Assistance for Needy Families funding to create summer employment opportunities for the state's teenagers. Since then, the program has employed 25,000 to 50,000 teens annually. The Summer Youth Employment Program (SYEP) received an additional $15 million to support jobs for youth ages 14 – 21. SYEP gives teens the chance to gain valuable work skills while earning a summer income. In the longer term, it provides career awareness, financial literacy and interpersonal skills for them. The philosophy of the program is that education provided in the work setting has the potential to help adolescents escape poverty by imparting important work readiness skills.[3]

Adolescents living in families with income below the federal poverty level[6]



Text

1. "The Impact of Poverty on Adolescent Health," Adolescent Health, National Association of Social Workers, <www.socialworkers.org/practice/adolescent_health/ah0503.pdf>
2. "School-based Health Care Launched in Lamar," *The Lamar Ledger*, Aug. 3, 2007, <www.lamardaily.com/articles/2007/08/03/news/local_news/doc46b39a64754c4859092284.txt>
3. Summer Youth Employment Program, New York City Department of Youth and Community Development, <www.nyc.gov/html/dycd/html/services-employment-syep.html>

Charts

4. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.
5. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2004 – 2006.
6. **Source:** U.S. Census Bureau, Current Population Survey, 2004 – 2006, <www.census.gov/hhes/www/cpstc/cps_table_creator.html>

Nutrition

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
19.2%	11/34 = 16/50	19.2%	Rhode Island	25.4%	75%

Indicator Definition

High school students who report eating five or more servings of fruits and vegetables every day for the past seven days.

Indicator Significance

According to results from the Youth Risk Behavior Survey, the state with the highest percentage of high school students reporting optimum consumption of fruits and vegetables is Rhode Island at 25 percent. During adolescence, there is a tendency for teens to engage in poorer eating habits than in childhood when their eating is more closely monitored by parents. Poor eating habits in adolescence can have serious health consequences in later life, including osteoporosis, obesity and immature adult stature. Eating disorders are most prevalent during this period of physical development. Nutritional surveys indicate that the highest prevalence of nutritional deficiencies occur during adolescence.[1]

Colorado Specifics

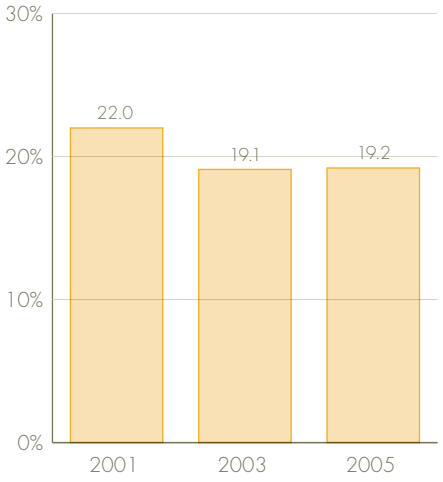
Colorado high school students report average fruit and vegetable consumption compared to teens in other reporting states. Since 2003, the number of high school students reporting an optimal consumption level of fruits and vegetables has slightly decreased. More boys report eating recommended amounts than do girls and white teens are more likely to eat recommended amounts of fruits and vegetables than are Hispanic teens.

Promising Initiatives

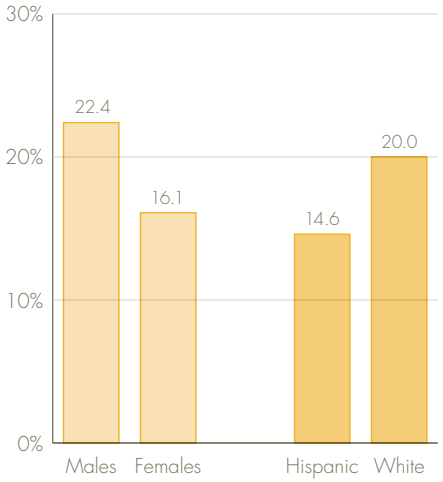
In Colorado

Over the last three years, The Keystone Center in Colorado and the National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology (NCSSSMST) have conducted three successful Keystone Center Youth Policy Summit programs. Each year, 40 high school students from 10 NCSSSMST schools across the nation are invited to Colorado to participate in the Youth Policy Summit. In 2006, in preparation for the summit, students conducted an independent research project focused on childhood and adolescent nutrition. At the Summit, students meet to share their results with food, nutrition and medical experts from prominent nonprofits, corporations and government agencies. A final report produced by the students includes recommendations for school administrators and state policymakers. This unique approach challenged teen participants to think about the best ways of delivering effective health messages to their peers.[2]

High school students who ate five or more daily servings of fruits and vegetables in past seven days *in Colorado*[4]



High school students who ate five or more daily servings of fruits and vegetables in past seven days *by sex and race in Colorado*[5]

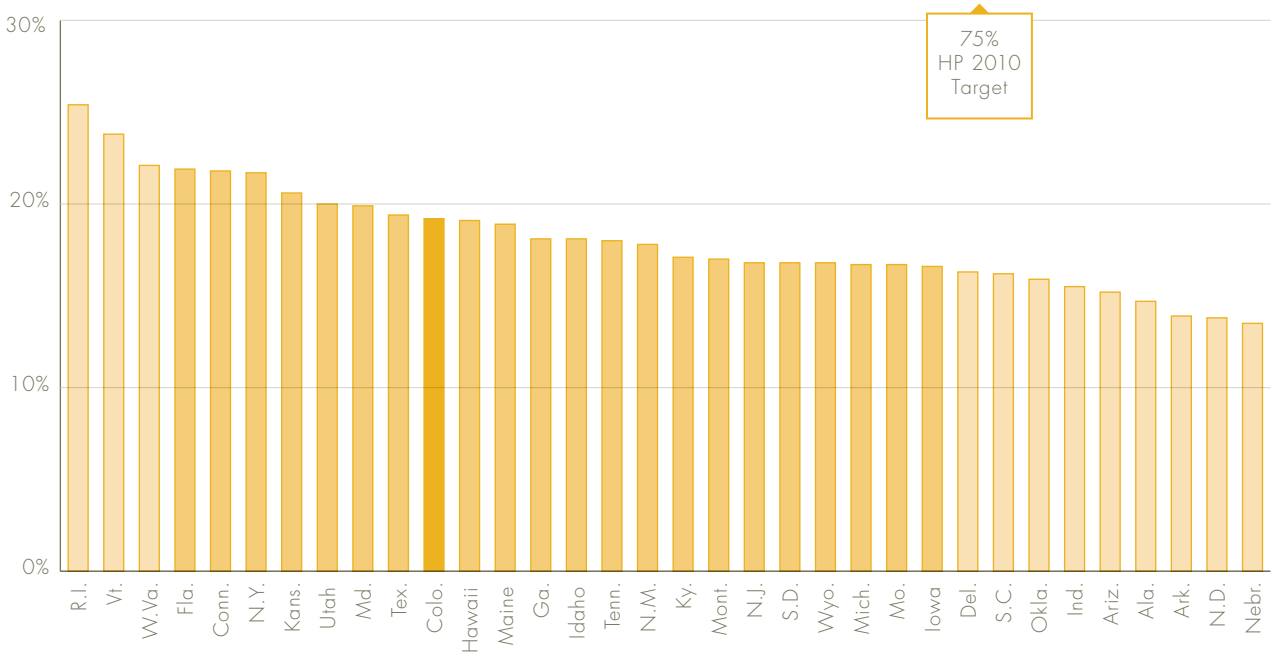


Nutrition (continued)

Elsewhere

CANfit, the California Adolescent Nutrition and Fitness Program, has spent more than a decade working to improve the health and nutrition of low-income, ethnic youth who have been most affected by the obesity epidemic. CANfit works to empower and engage local communities by providing culturally appropriate programs that highlight nutrition and physical activity. The program incorporates aspects of dance, hip-hop and music to deliver health messages. CANfit also consults with other youth organizations to enhance their ability to provide nutritious choices and information to the adolescents participating in their programs. CANfit advocates for policy change and encourages unique nutrition programs through grant funding.[3]

High school students who ate five or more daily servings of fruits and vegetables in past seven days[6]



Text

1. University of Chicago Pritzker School of Medicine, "Adolescent Nutrition," <pedclerk.bsd.uchicago.edu/adolescentNutrition.html>
2. Keystone Center Youth Policy Summit Student Agreement, <www.keystone.org/kss/documents/Final%20Report-YPS_2006.pdf>
3. California Adolescent Nutrition and Fitness Program, <www.canfit.org/about_us.html>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Vigorous Exercise

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
70.1%	4/39 = 5/50	70.1%	New Hampshire	72.1%	85%

Indicator Definition

Percent of high school students who participated in at least 20 minutes of physical activity vigorous enough to make them sweat and breathe hard, on three or more of the past seven days.

Indicator Significance

The adolescent years are characterized as a time of seeking greater personal autonomy and choice and therefore lifestyle decisions made during adolescence will likely affect present, as well as future health status. Patterns of activity change during the teen years, with environmental and social factors often encouraging inactivity. They go from the active play of childhood to more sedentary activities that involve talking or "hanging out." Television, computers and video games increasingly serve as primary recreational outlets for teens. Prolonged periods of inactivity can lead to overweight and obesity, which in turn increase the risk for chronic diseases such as diabetes.[1]

Colorado Specifics

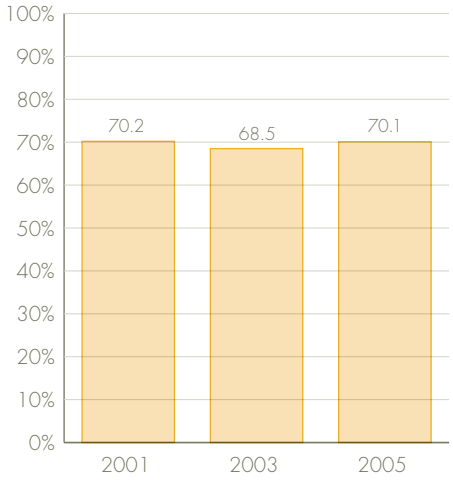
Colorado high school students fare well in comparison to students in other states with regard to reported levels of physical activity, ranking fourth among 39 states. The most recent data show that 70 percent of high school students report engaging in vigorous physical activity on three or more days over the past week, a rate that has changed little since first measured in 2001. Mirroring national trends, minority youth and girls in Colorado are somewhat less likely to engage in vigorous physical activity than other groups.[2]

Promising Initiatives

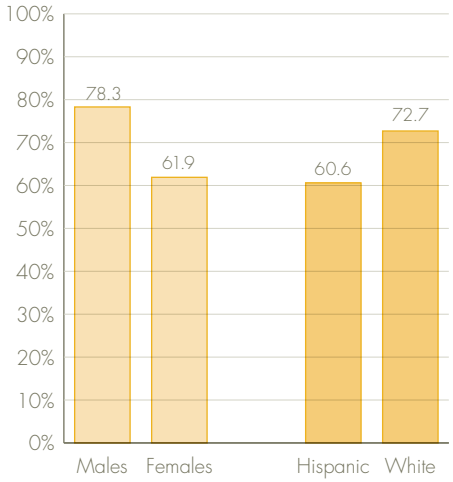
In Colorado

A recent report from the Colorado Children's Campaign notes that Colorado does not require physical education teachers to be certified nor are statewide data available on how many Colorado schools offer physical education programs. The report notes that "schools have felt pressure to focus on academic accountability, which has led to the elimination of 'nonessential' areas of study including nutrition and physical education even though evidence suggests that the cognitive benefits of physical activity during the school day compensates for time not spent on other academic areas." Citing a parent survey that indicates strong support for physical education requirements in schools, the report recommends that the state collect information on physical education programs in Colorado schools.[3]

High school students who participated in vigorous physical activity at least three days in the past week in Colorado[5]



High school students who participated in vigorous physical activity at least three days in the past week by sex and race in Colorado[6]

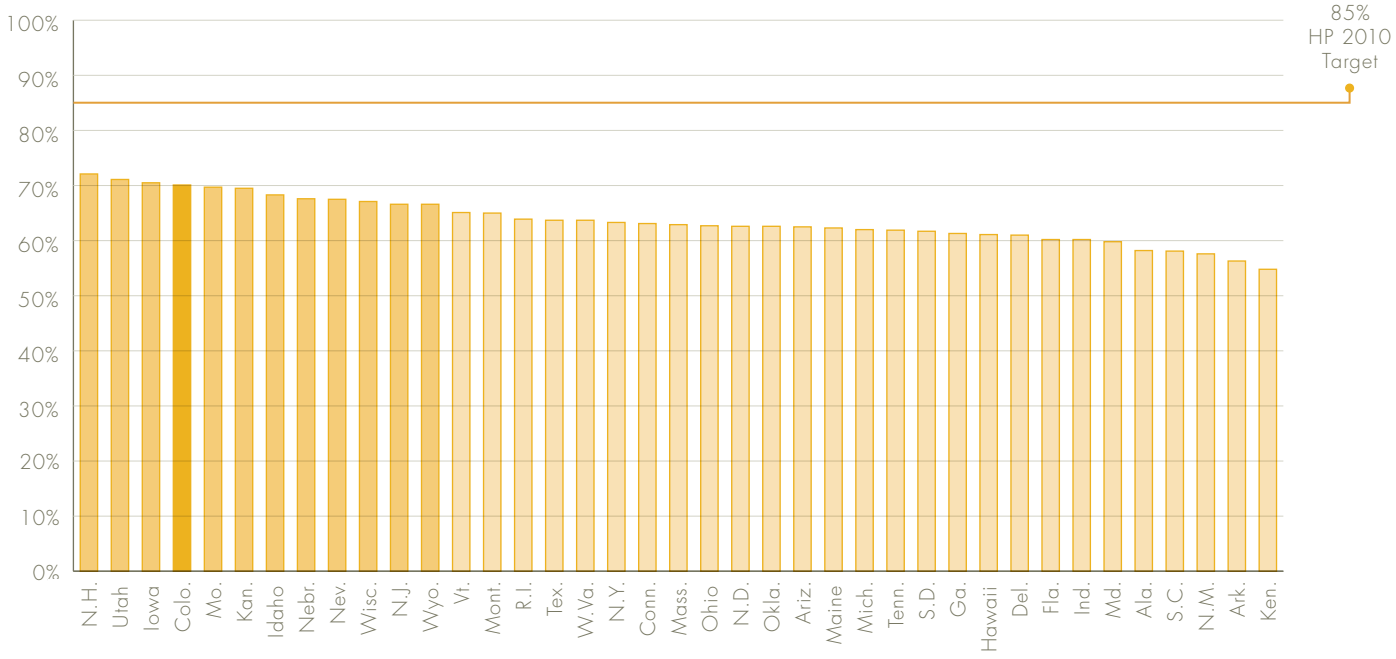


Vigorous Exercise (continued)

Elsewhere

"5 – 2 – 1 Go!" is the message of a Massachusetts initiative to get at-risk adolescents moving more and eating better to improve their overall health. By promoting the consumption of five or more fruits and vegetables each day, limiting television to two hours a day, and adding one hour of physical exercise, the state hopes to lower the growing number of overweight teens in Massachusetts. Using the Planet Health curriculum developed by the Harvard School of Public Health, the initiative has brought teachers, parents and community members together to develop a health improvement plan. The program has been so successful, it was adopted by Blue Cross and Blue Shield of Massachusetts in the creation of after-school programs.[4]

High school students who participated in vigorous physical activity at least three days in the past week[7]



Text

1. Shona L. Bass, Ph.D., Michael L. Booth, Ph.D., Louise L. Hardy, Ph.D. "Changes in Sedentary Behavior among Adolescent Girls: A 2.5-Year Prospective Case Study." *Journal of Adolescent Health 40* (2007): 158 – 165.

"Improving the Health of Adolescents and Young Adults: A Guide for States and Communities," U.S. Department of Health and Human Services, <nahic.ucsf.edu//downloads/niiah/execsum.pdf>

2. Making the Connection Between Health and Learning, Colorado Department of Education, <www.cde.state.co.us/cdeprevention/download/pdf/CCHSplan2.pdf>

3. "Childhood Obesity in Colorado: A Growing Problem," Colorado Children's Campaign, <www.coloradokids.org/includes/downloads/obesityworkingpaperfinal.pdf?PHPSESSID=35eb8c126a1827bd2f157cfee15dcf04>

4. Centers for Disease Control and Prevention, <www.cdc.gov/nccdphp/publications/exemplary/pdfs/Nutrition_Massachusetts.pdf>

Charts

5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

6. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

7. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Overweight

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
9.8%	6/39 = 8/50	9.8%	Utah	5.6%	5%

Indicator Definition

"Overweight" among adolescents is defined as having a Body Mass Index (BMI) at or above the 95th percentile on the gender- and age-specific revised Growth Charts of the Centers for Disease Control and Prevention (CDC). BMI for children }and adolescents is a number calculated from their weight and height. BMI measurements for children and adolescents reflect normal differences in body fat between boys and girls while considering differences in body fat at various ages.[1]

Indicator Significance

According to CDC, more than 18 percent of all children and adolescents ages 6 – 19 are overweight, which can lead to obesity if left untreated. Being overweight is a serious health issue affecting a growing number of adolescents, threatening their quality of life and putting them at increased risk for chronic disease as adults. Once an adolescent has become overweight, it is likely he or she will carry into adulthood the excess weight and other related conditions leading to poor health. Even when excess weight is lost, overweight teenagers maintain increased risk factors for coronary artery disease and stroke as adults.[2]

Colorado Specifics

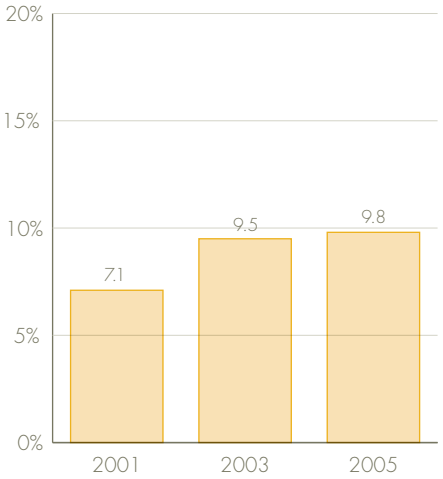
Although Colorado has one of the lowest percentages of overweight high school students in the country, more of them have become overweight in the past six years, as have Coloradans in general. High school-aged boys are twice as likely to be overweight than are girls, and Hispanic students are twice as likely to be overweight than their white peers.[3]

Promising Initiatives

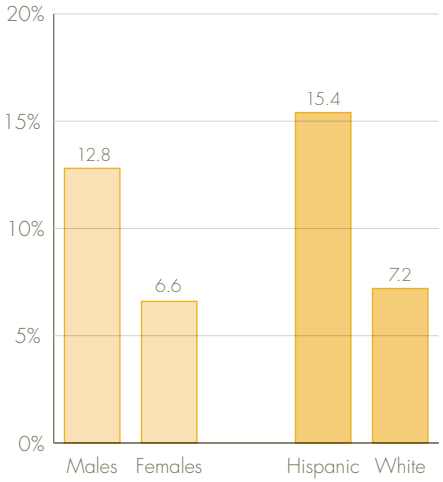
In Colorado

Colorado Connections for Healthy Schools (CCHS) is a coalition that includes the Colorado Department of Education and the Colorado Department of Public Health and Environment's school-aged children. CCHS has developed a Healthy Kids Colorado Survey (HKCS) administered to high school students that focuses on physical activity as it is a gateway to other health-related issues such as poor nutrition, overweight, obesity and diabetes. Based on findings from the 2005 – 06 survey, CCHS has developed a comprehensive curriculum for schools that includes physical education and nutrition classes.[4]

Overweight adolescents
in Colorado[6]



Overweight adolescents
by sex and race in Colorado[7]

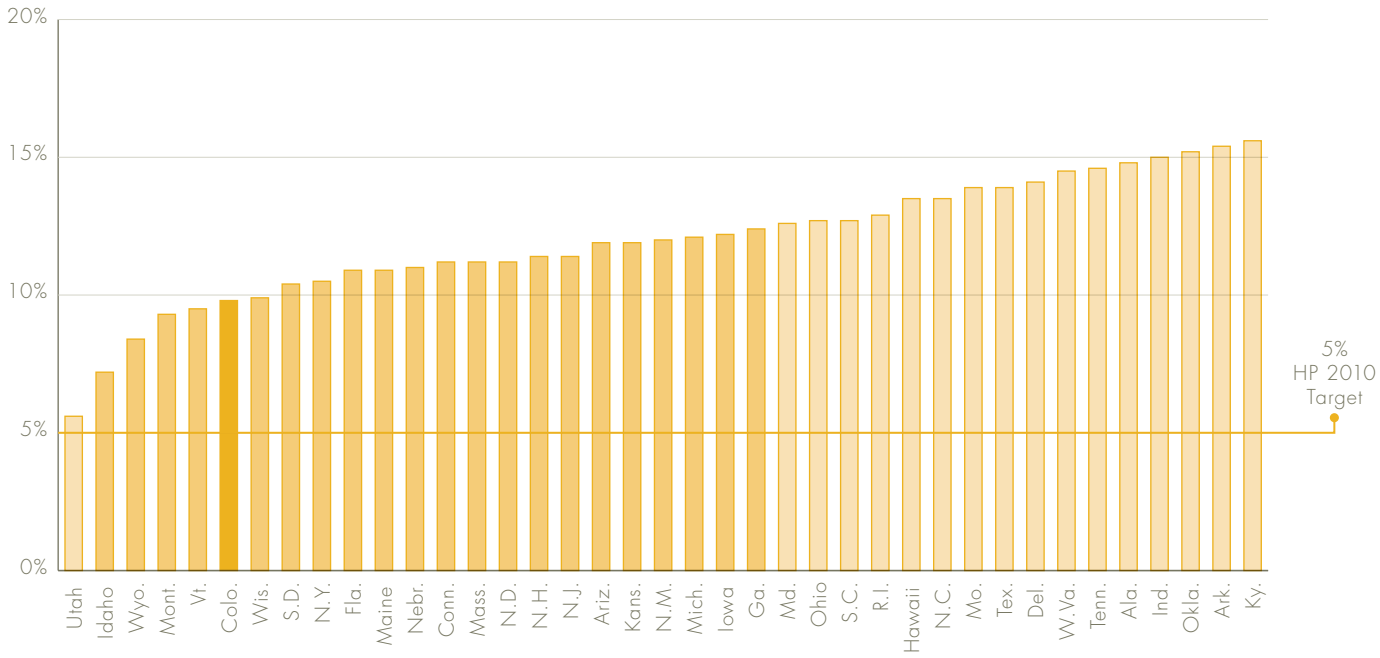


Overweight (continued)

Elsewhere

In 2005, Morristown Memorial Hospital in New Jersey was awarded a grant from the Robert Wood Johnson Foundation (RWJF) to create a Web-based nutrition and fitness program. This initiative, entitled Project TeenFit, is an online obesity-prevention program for adolescents that works in conjunction with the hospital's other award-winning site, teenhealthFX.com. Since teenagers seek information from the Internet, the health professionals at Morristown Memorial wanted to create a space where teens can ask questions and receive responses not only from doctors but also from other teens. The goal is to educate and to inform students, while instilling long-term and effective behavior changes.[5]

Overweight adolescents[8]



Text

1. Centers for Disease Control and Prevention's Growth Charts, <www.cdc.gov/growthcharts/>
2. Centers for Disease Control and Prevention, "Obesity and Overweight," <www.cdc.gov/nccdphp/dnpa/obesity/childhood/prevalence.htm>
3. Irene Alton, "The Overweight Adolescent," University of Minnesota School of Public Health, Epidemiology and Community Health publications, <www.epi.umn.edu/let/pubs/img/adol_ch7.pdf>

   "Prevention and Treatment of Overweight in Children and Adolescents," *American Family Physician*, June 1, 2004, <www.aafp.org/afp/20040601/2591.html>
4. Colorado Department of Education, <www.cde.state.co.us/cdeprevention/index.htm>
5. Morristown Memorial Hospital, <www.morristown.com/teenagers/TeenageObesity.html>

   Teen Health FX.com, <www.morristown.com/teenagers/TeenHealth.html>

Charts

6. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
7. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
8. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Binge Drinking

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
30.6%	33/40 = 41/50	30.6%	Utah	8.8%	2%

Indicator Definition

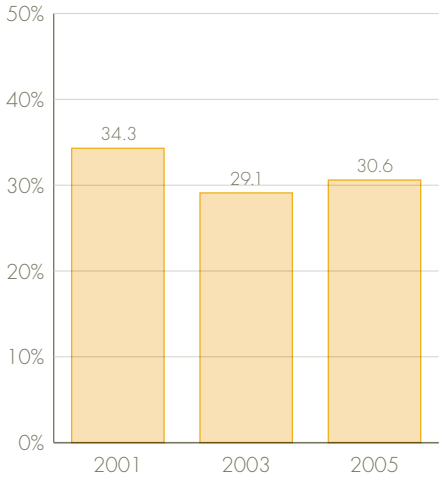
High school students who report having five or more drinks of alcohol within a couple of hours on one or more occasions over the past 30 days.

Indicator Significance

Teens who are binge drinkers during adolescence are more likely to be binge drinkers in early adulthood according to an analysis of National Longitudinal Survey of Youth (NLSY) data. Efforts to prevent and treat adolescent binge drinking are likely to have a positive impact on adult drinking patterns and therefore have an immediate, as well as a longer-term impact on population health.

On average, boys start drinking at age 11, girls at 13, and both are consuming regularly by age 16. Those who start drinking before age 15 are four times more likely to develop alcohol dependence. An estimated 3 million teenagers suffer from alcoholism. The leading causes of death in this age group are auto accidents, homicide and suicide, with alcohol a contributing factor in all three. In addition, depression, anxiety and anti-social personality disorders are all related to alcohol dependence in teens.[1]

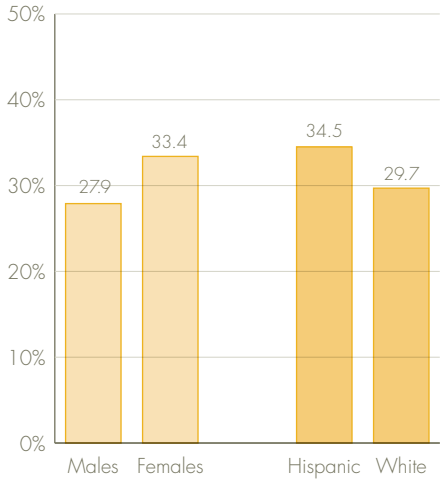
High school students who report binge drinking in Colorado[4]



Colorado Specifics

Colorado ranks 33rd out of 40 states reporting the percent of high school students who binge drink. This poor ranking is cause for concern as trends over the past six years do not show an appreciable change in this statistic. Girls and Hispanic high school students report slightly higher percentages of binge drinking (33 percent and 34 percent, respectively) than do boys (28 percent) and white students (30 percent).

High school students who report binge drinking by sex and race in Colorado[5]



Promising Initiatives

In Colorado

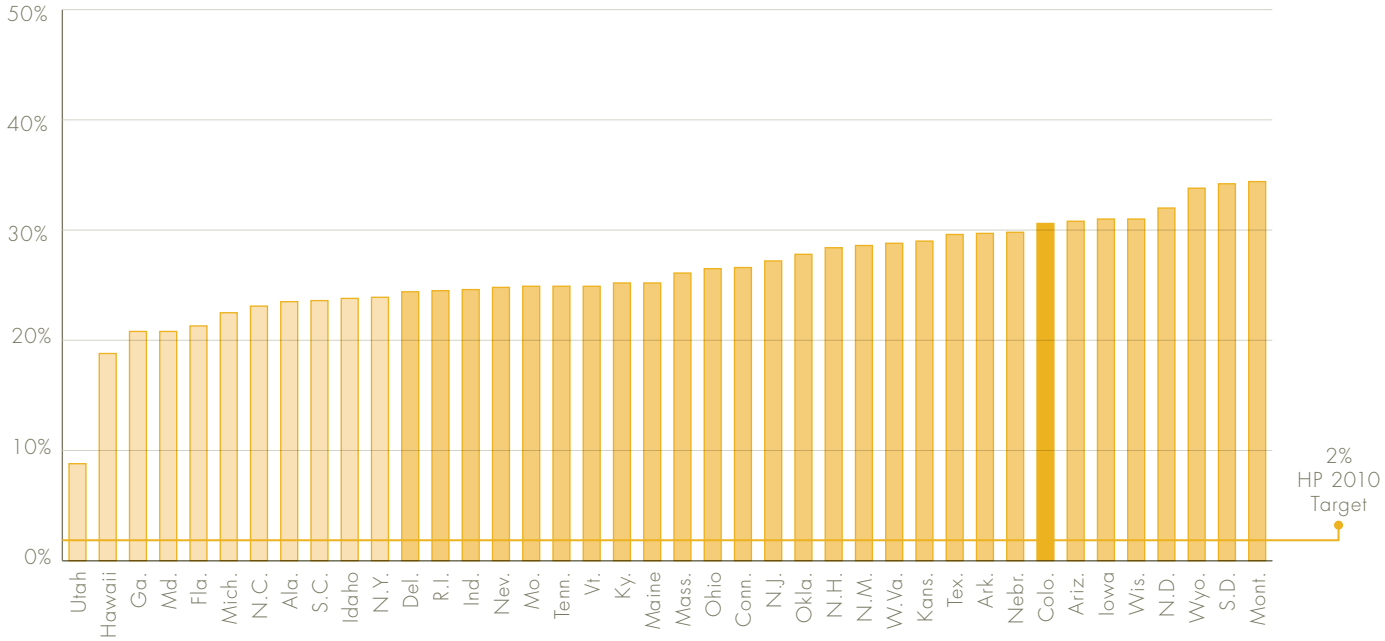
Make a Difference: Talk to Your Child about Alcohol, a program initiated by former Colorado First Lady Frances Owens, targets parents and guardians of young adolescents, ages 10 – 14. Research shows that it is in these pre-teen and early teen years that children begin experimenting with alcohol. The program is designed to educate adults on how to initiate a conversation with their children about alcohol use, to prevent later abuse. Studies indicate that parents can have a significant influence over their children's behavior. This initiative builds on a home-based effort to promote healthy choices.[2]

Binge Drinking (continued)

Elsewhere

Creating Healthy Adolescents—A Model Prevention Project (CHAMP) is a Vermont initiative that focuses on children in state custody and foster care. An estimated 80 percent of these children come from substance-abusing families and are at risk of substance abuse at an early age after being placed in state custody. CHAMP targets foster families and educates foster parents to recognize the signs and symptoms of alcohol abuse. The program has developed curriculum and training models that can be replicated in other states.[3]

High school students who report binge drinking[6]



Text

1. "Adolescent Binge Drinking Associated with Binge Drinking During Early Adulthood," a research summary at Join Together Website, <www.jointogether.org/news/research/summaries/2005/adolescent-binge-drinking.html>

   Focus Adolescent Services, <www.focusas.com/Alcohol.html>

2. College Drinking: Changing the Culture, a Website created by the National Institute on Alcohol Abuse and Alcoholism, <www.collegedrinkingprevention.gov/OtherAlcoholInformation/makeDifference.aspx>

3. Rural Assistance Center, "Success Stories," <www.raconline.org/success/success_details.php?success_id=102>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Smoking

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
18.7%	14/40 = 18/50	18.7%	Utah	7.4%	16%

Indicator Definition

Percentage of high school students who smoked cigarettes on one or more occasions during the past 30 days.

Indicator Significance

By the time they are 12th graders, one quarter of adolescents have begun smoking cigarettes. Smoking can lead to decreased physical activity because of phlegm production and related respiratory problems. Lung development can also be retarded if cigarette smoking is started at an early age. Each day 6,000 children under age 18 start smoking, with 2,000 becoming regular smokers. If this trend continues, an estimated 6.4 million of today's adolescents will die prematurely from smoking-related illnesses. Most adolescents who have smoked 100 or more cigarettes report that they would like to quit but can't. Studies also link cigarette smoking to mental health problems such as depression.[1]

Colorado Specifics

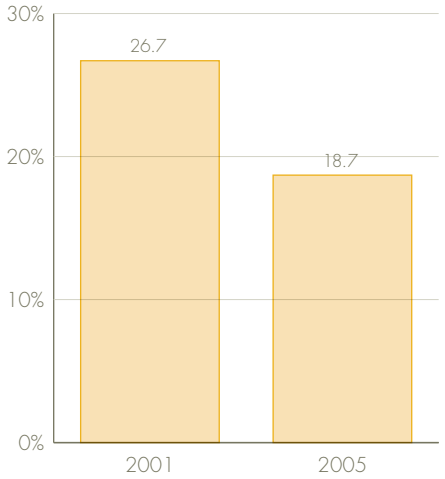
Colorado ranks 18th among the 40 states that collect data on adolescent smoking. While nearly one in five adolescents smoked in the past 30 days, Colorado's adolescent smoking rate has declined from 27 percent in 2001 to 19 percent in 2005. Hispanic adolescents are slightly less likely to smoke than white adolescents (16 percent vs. 19 percent).

Promising Initiatives

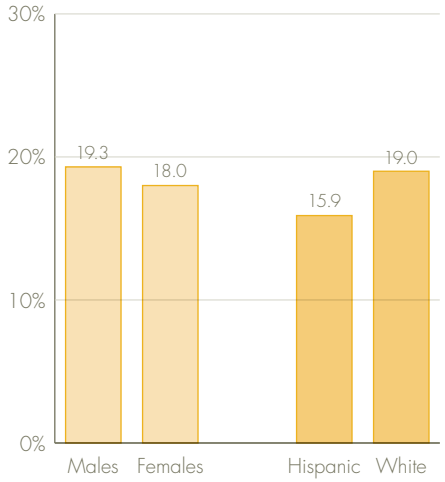
In Colorado

Colorado is one of three states that funds a tobacco prevention program reflecting the Centers for Disease Control and Prevention (CDC) recommendations on anti-smoking campaigns. Funding for this program comes from the state's tobacco tax. Colorado spends $1.31 billion on smoking-caused health costs, and $25.5 million on smoking-prevention programs.

High school students who smoked cigarettes in past month in Colorado[3]



High school students who smoked cigarettes in past month by sex and race in Colorado[4]

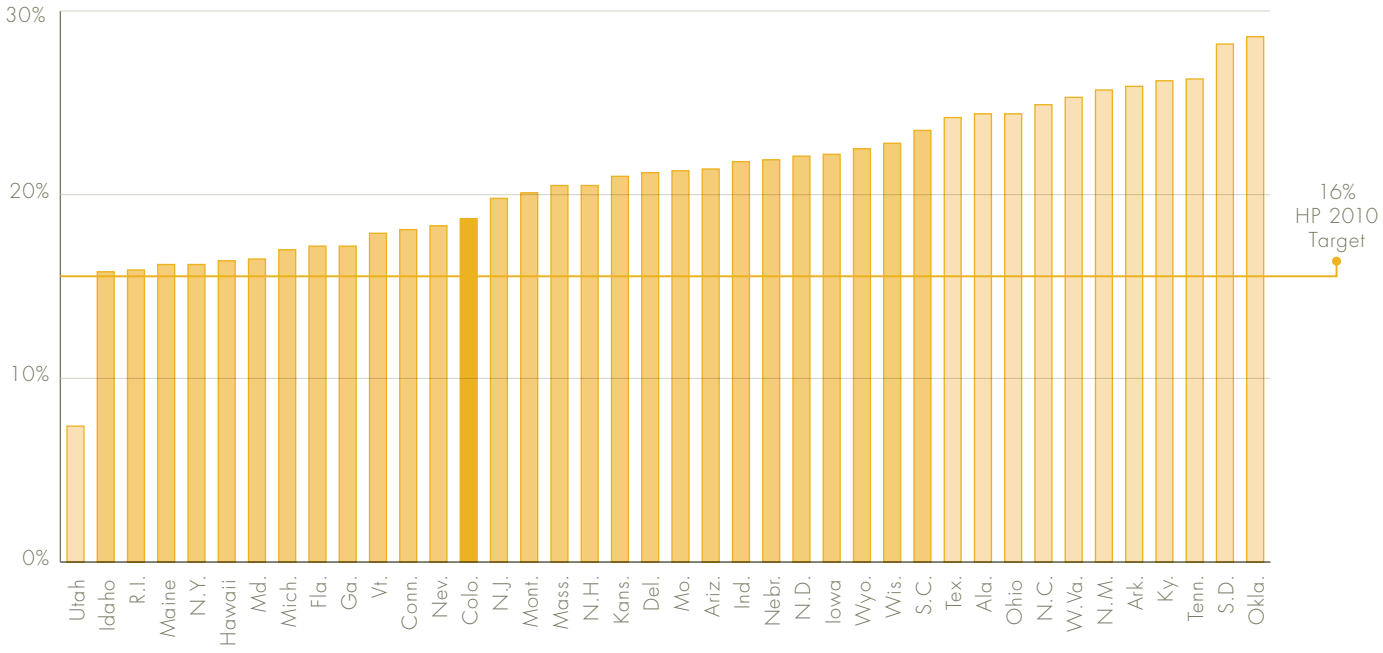


Smoking (continued)

Elsewhere

In February 2007, the American Legacy Foundation received a matching grant from CDC for $3.6 million to expand its marketing of the truth® campaign into small communities in 18 states where exposure to anti-smoking messages has been minimal because of limited access to cable TV. The foundation's program is designed to reach as many teens as possible to provide alternative messages about smoking to combat the $41 million-a-day pro-tobacco campaigns waged by large tobacco companies. The truth® campaign educates young people about the adverse health affects of smoking while revealing the tactics used by tobacco companies to recruit new smokers.[2]

High school students who smoked cigarettes in past month[5]



Text

1. "Adolescent smoking statistics," American Lung Association, <www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=39868>

"Smoking increases teen depression," American Psychological Association, <www.apa.org/monitor/dec00/smoking.html>

2. American Legacy Association, <www.americanlegacy.org/741.htm>

Charts

3. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

5. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Depression

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
25.0%	7/39 = 9/50	25.0%	North Dakota	20.3%	NA

Indicator Definition

High school students who report feeling sad or hopeless almost every day for two or more consecutive weeks during the past 12 months, and the feelings of sadness or hopelessness interfere with usual daily activities.

Indicator Significance

An estimated one in eight adolescents in the United States exhibits symptoms of depression. But because depression is also associated with other behavioral conditions such as anxiety and disruptive behavior, it is difficult to diagnose in adolescents. Because teens experience many hormonal changes that lead to relationship conflicts and other stresses associated with the normal maturation process, diagnosis is challenging. Mood shifts may last for several days but if negative behavior becomes long-term with substance abuse and failing school performance, a more serious condition may be present. Teens experiencing depression are at higher risk for suicide and substance abuse.[1]

Colorado Specifics

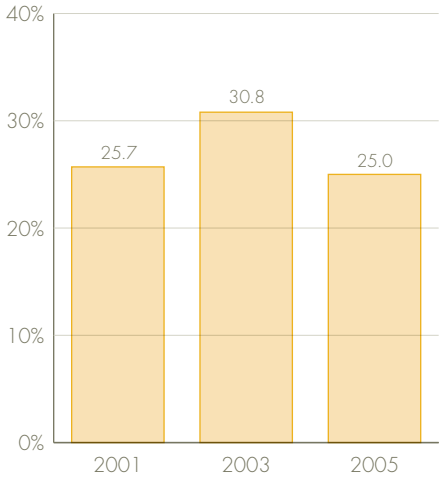
Colorado appears to have fewer high school students reporting depressive symptoms compared to other states. However, over the past six years, the prevalence of students reporting depressive symptoms remains troublingly high—fluctuating between 25 and 31 percent. This high rate is cause for concern because depression can lead to suicide, alcohol and drug abuse and school failure. Girls are almost three times more likely to suffer from depression than are boys and Hispanic students report a higher percentage than their white peers (34 percent vs. 23 percent).

Promising Initiatives

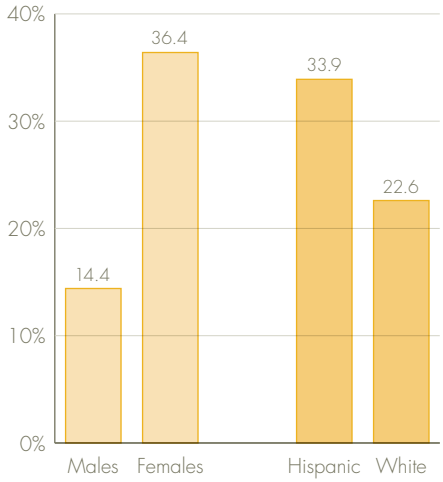
In Colorado

Southwest Open School (SWOS), an alternative high school in Cortez, enrolls approximately 150 – 180 students, most of them from low-income families. Many of these teens face additional challenges such as homelessness, school and social failure, chemical dependency, physical, emotional and sexual abuse, and pregnancy. To address these problems, the school established an on-site clinic in partnership with other community providers including the Montezuma County Health Department, which provides immunizations and dental clinics at the school twice a year. In addition, the Southwest Mental Health Center and the Ute Mountain Tribe provide counselors at the school to help students with serious mental health issues.[2]

High school students who report being ***depressed*** *in Colorado*[4]



High school students who report being ***depressed*** *by sex and race in Colorado*[5]

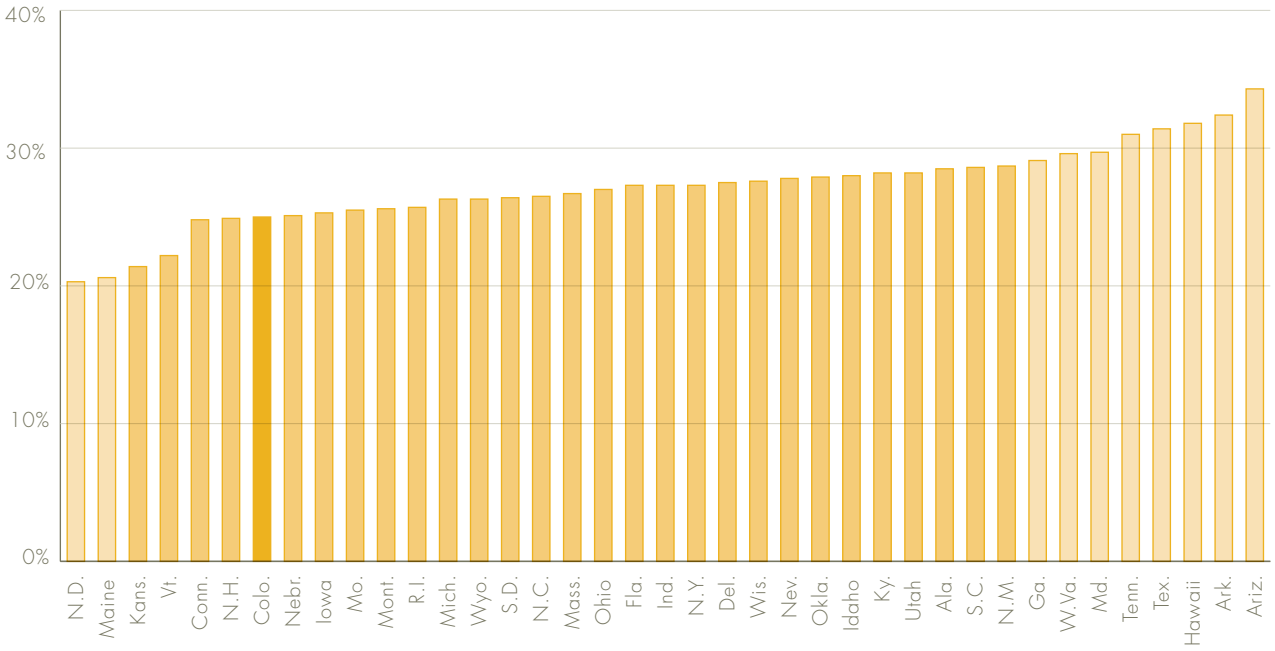


Depression (continued)

Elsewhere

The Milwaukee Department of Health and Healthy Behaviors began a program to screen high school students for depression in 2002. Working with Milwaukee Public Schools, local hospitals and a Mobile Urgent Treatment unit, the department created Youth Mental Health Connections, which provides treatment to teens that are uninsured, underinsured or who need emergency mental health services. Two nurse practitioners provide volunteer screening. Program designers hope to provide poor and minority students in the Milwaukee area with equal access to mental health care.[3]

High school students who report being depressed [6]



Text

1. "Adolescent depression" Medline Plus Medical Dictionary, <www.nlm.nih.gov/medlineplus/ency/article/001518.htm>
   "Depression in Children and Adolescents," athealth.com, <www.athealth.com/Consumer/disorders/ChildDepression.html>
2. For more information: <www.cortez.k12.co.us>
3. National Association of County and City Health Officials, Model Practices database, <archive.naccho.org/modelpractices/Result.asp?PracticeID=281>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Attempted Suicide

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
6.7%	6/40 = 7/50	6.7%	Vermont	6.2%	1%

Indicator Definition

High school students who report they have attempted suicide one or more times during the past 12 months.

Indicator Significance

Someone commits suicide every 17 minutes in the United States. Suicide peaks during mid-adolescence with approximately 2 million attempts each year. Although the overall suicide rate has decreased over time, it has nearly tripled for the 15 – 24 age group. Half of those who make one attempt are likely to make another. The best means to prevent suicide is education about how to recognize the warning signs often linked to mental illnesses such as chronic depression and bipolar disorder. Ninety percent of suicides are related to a history of mental illness rather than one singular event.[1]

Colorado Specifics

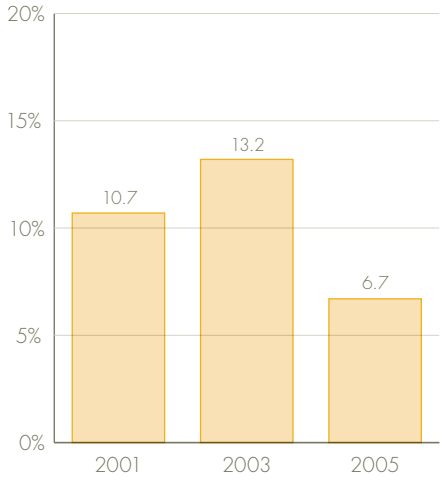
The Rocky Mountain region has the highest suicide rate in the nation for all ages. Colorado loses approximately 48 teenagers each year to suicide, making it the second leading cause of death for those between the ages of 15 – 19. Yet compared to 40 other states, Colorado ranked sixth lowest in the percentage of high school students who attempted suicide in 2005. Suicide attempts among high school students have decreased in recent years, reaching 6.7 percent in 2005 compared to 13.2 percent in 2003. High school aged girls are three times more likely to attempt suicide compared to boys, and percentages are higher among Hispanics than white high school students.[2]

Promising Initiatives

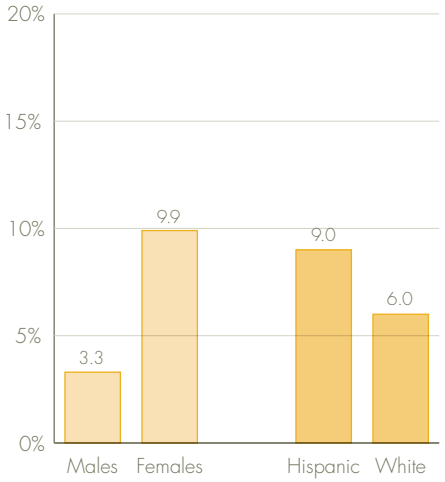
In Colorado

The Colorado Trust has provided grants to 10 communities throughout the state to invest in suicide prevention, and as of August, 2007, the Trust announced it will continue to fund these programs, as well as two additional ones. This funding initiative has reached into 31 counties, raising awareness and reducing the stigma of suicide. The Trust awarded $75,000 to Mental Health America Corporation, the state's most comprehensive suicide prevention and education program, to oversee the Colorado Suicide Prevention and Intervention Plan. Over a seven year period (2002 – 2009) the Trust has dedicated $4.9 million to the cause of reducing suicide in the state.[3]

High school students who attempted suicide ***in past year*** *in Colorado*[5]



High school students who attempted suicide ***in past year*** *by sex and race in Colorado*[6]

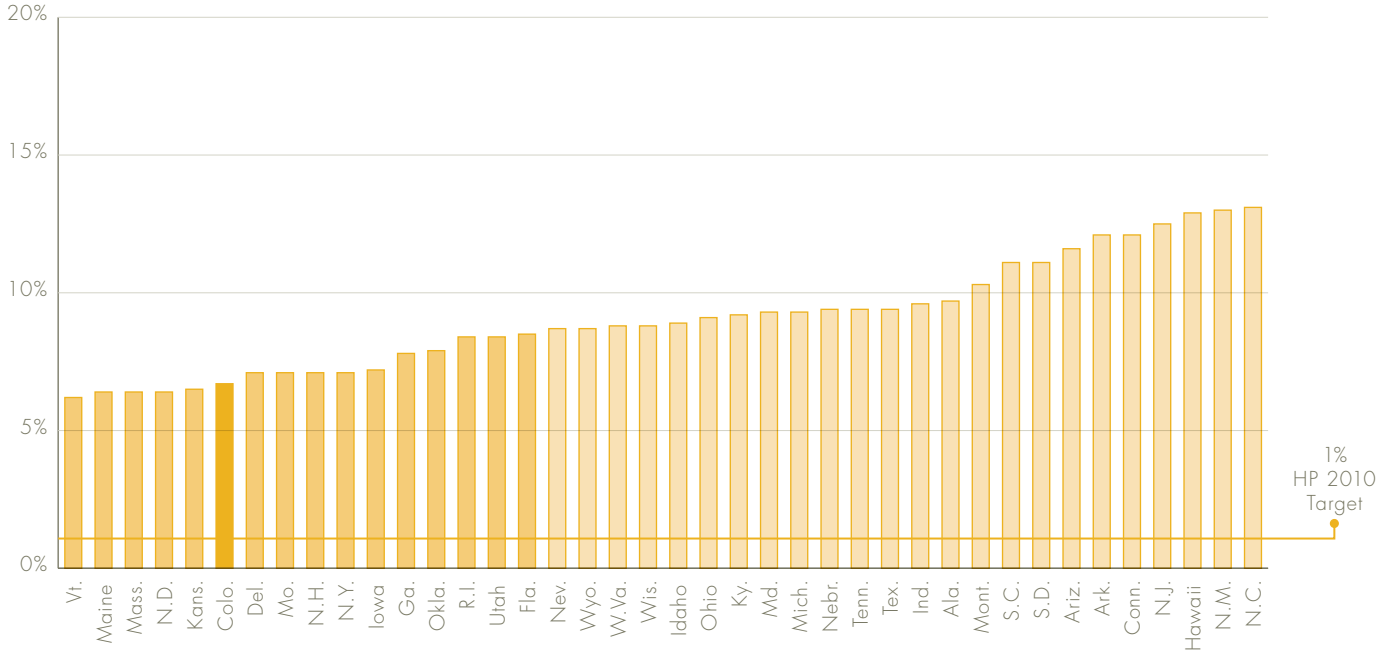


Attempted Suicide (continued)

Elsewhere

The legislature in Washington State supported an initiative created by parents who lost their sons to suicide in 1995. The Youth Suicide Prevention Program (YSPP) evolved to become a private non-profit organization in 2001, supported by the Department of Health and the School of Nursing at the University of Washington. YSPP educates teens through school-based campaigns and curriculum while also training teachers, administrators, and parents how to discuss the issue and identify at-risk teens. YSPP has been successful in working with the media by providing guidelines on how to report teen suicide if it does occur, in order to reduce the risk of copycat suicide attempts.[4]

High school students who attempted suicide in past year[7]



Text

1. "2006 Fact Sheet on Suicide," National Adolescent Health Information Center, <nahic.ucsf.edu/downloads/Suicide.pdf>

"Suicide in Youth," National Alliance on Mental Illness, <www.nami.org/Template.cfm?Section=By_Illness&template=/ContentManagement/ContentDisplay.cfm&ContentID=10210>

2. "Mental Health Among Colorado's Youth," Colorado Connections for Health Schools, <www.cde.state.co.us/cdeprevention/download/pdf/MentalHealthF.pdf>

"Youth and Suicide," Colorado State University Extension, <www.ext.colostate.edu/PUBS/CONSUMER/10213.html>

3. The Colorado Trust, <www.coloradotrust.org>

4. Youth Suicide Prevention Program, <www.yspp.org/index.htm>

Charts

5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

6. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

7. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Sexually Active

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
29.5%	3/27 = 6/50	29.5%	New York	29.2%	NA

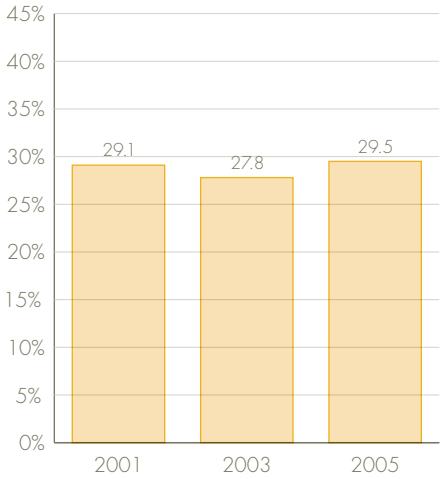
Indicator Definition

Percentage of high school students who had sexual intercourse with one or more people during the past three months.

Indicator Significance

Over the past decade, the incidence of sexual intercourse among students has decreased, even as contraceptive use has shown an overall increase. These combined factors have contributed to a decrease in teen pregnancy. However, sexually transmitted diseases (STDs) among adolescents have experienced a dramatic and consistent increase. An estimated 4 million teens in the United States have contracted an STD. Fewer than half of high school students report having sexual intercourse, with the percentage increasing by grade level. Boys and lower socioeconomic teens report higher rates of sexual activity. The younger the girl who becomes sexually active the greater the typical age difference between her and her partner, and the more likely she will have an unintended pregnancy. Adolescents who have never had sexual intercourse say concerns about pregnancy, STDs, and HIV/AIDS influence their abstinence. Teens say they wish they had more information regarding sexual behavior and choice.[1]

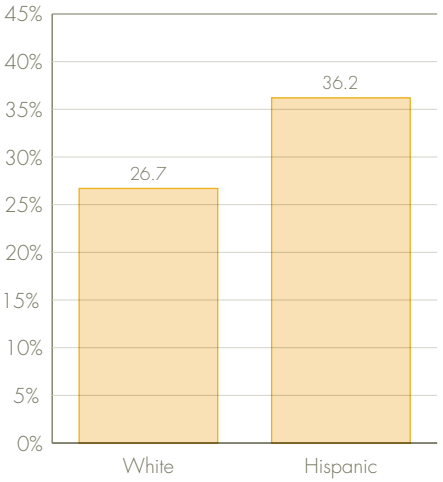
High school students who report being ***sexually active*** *in Colorado*[4]



Colorado Specifics

Colorado ranks third among the 27 states that collect data on adolescent sexual activity. Nevertheless, nearly one-third of Colorado adolescents reported having had sexual intercourse within the past three months, a rate that has changed little in the past five years. Hispanic teenagers are somewhat more likely to report being sexually active than white teenagers.

High school students who report being ***sexually active*** *by race in Colorado*[5]



Promising Initiatives

In Colorado

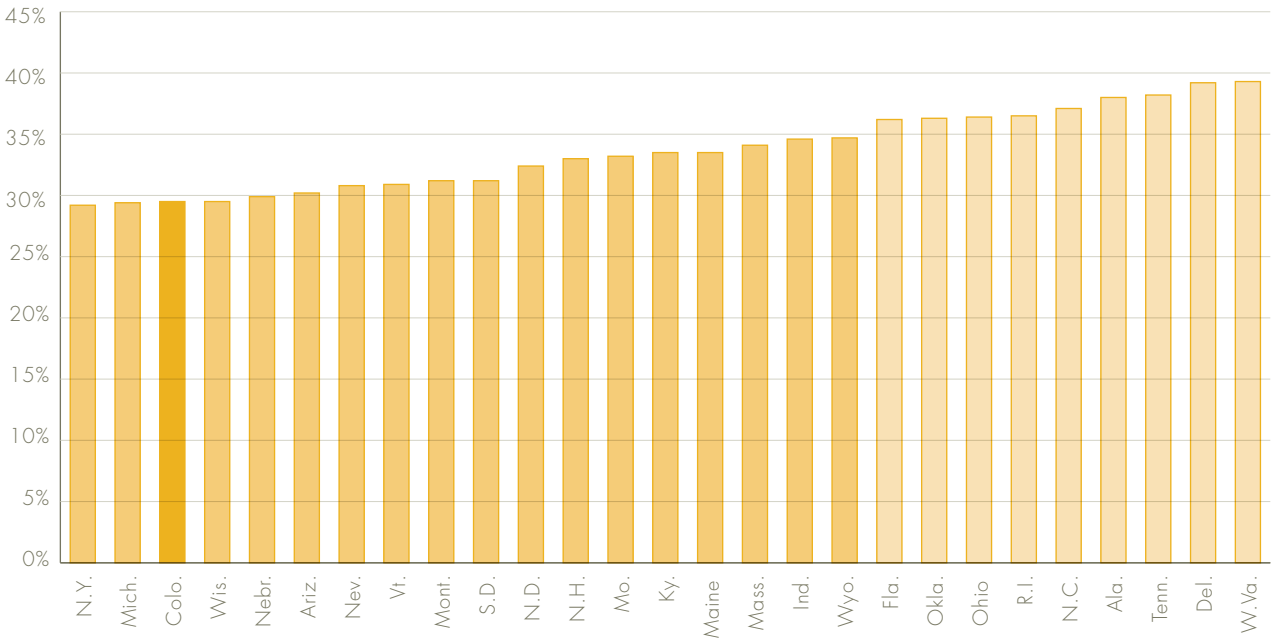
The Colorado Organization on Adolescent Pregnancy, Parenting and Prevention (COAPPP) connects communities to help them work together to prevent teen pregnancy and STDs, while raising awareness about teen health issues and promoting teen parents' well-being. COAPPP seeks to identify the specific cultural contexts unique to each community, and target its message to best reach diverse populations, using succinct and up-to-date data to present the most accurate picture possible to the public.[2]

Sexually Active (continued)

Elsewhere

The New York Department of Health and Mental Hygiene (DOHMH) in 2006 launched a Healthy Teen initiative, seeking to make high-quality reproductive health care services more accessible and teen friendly. A tool kit for health care providers, *7 Steps to Provide Comprehensive Sexual and Reproductive Health Care to Adolescents*, assists them in counseling teens on making informed decisions about sexual activity. The program strives to deliver culturally appropriate services, including screening for reproductive and mental health risks and providing follow-up counseling.[3]

High school students who report being sexually active[6]



Text

1. "U.S. Teen Sexual Activity," Kaiser Family Foundation, <douglascountyaidsproject.org/LetsTalk.files/Info.US-Teen-Sexual-Activity.pdf>
2. Colorado Organization on Adolescent Pregnancy, Parenting and Prevention, <www.coappp.org/resources/index.htm>
3. New York City Department of Health and Mental Hygiene, <home2.nyc.gov/html/doh/html/pr2006/pr043-06.shtml>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Condom Use

Healthy Adolescents

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
69.3%	3/32 = 5/50	69.3%	New Jersey	71.2%	95%

Indicator Definition

Percent of high school students sexually active in the last month who reported using a condom.

Indicator Significance

One in four of the 15 million new cases of sexually transmitted disease (STDs) each year occurs among teenagers. Although condom use has increased in the past decade, no significant increase in use occurred between 2003 and 2005. Unprotected intercourse increases both the risk of spreading STDs and unintended pregnancy. Condom use is highest among African-American teenagers and younger students (9th grade). Older students (12th grade) are likely to use other forms of contraception, which compromises the goal of decreasing STD transmission.[1]

Colorado Specifics

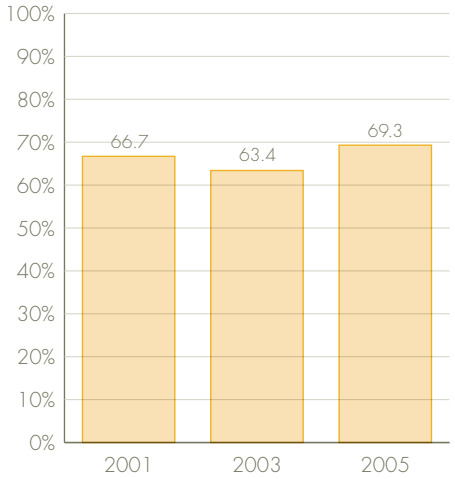
Colorado ranks third among the 33 states that monitor condom use among sexually active high school students. Nevertheless, only about two-thirds of all students who reported being sexually active in the past month also reported using a condom, a rate that has been stable since 2001.

Promising Initiatives

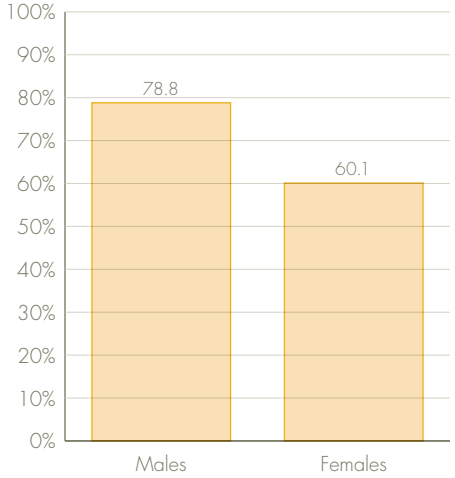
In Colorado

In the 2007 legislative session, the Colorado General Assembly passed HB 1292 requiring that a comprehensive, science-based sex education program be taught in Colorado school districts that offer sex education. Presenting medical and scientific information, the curriculum will discuss abstinence as the only 100 percent-effective means of preventing pregnancy and STDs, but will also discuss the importance of using contraceptives if sexually active. Preceding the law, Poudre School District developed a 10-lesson, comprehensive approach to sex education. The curriculum provides students with information on healthy relationships, condom use, other forms of contraception and the risks associated with sexually transmitted diseases.[2]

High school students who were sexually active and used condoms in Colorado[4]



High school students who were sexually active and used condoms by sex in Colorado[5]

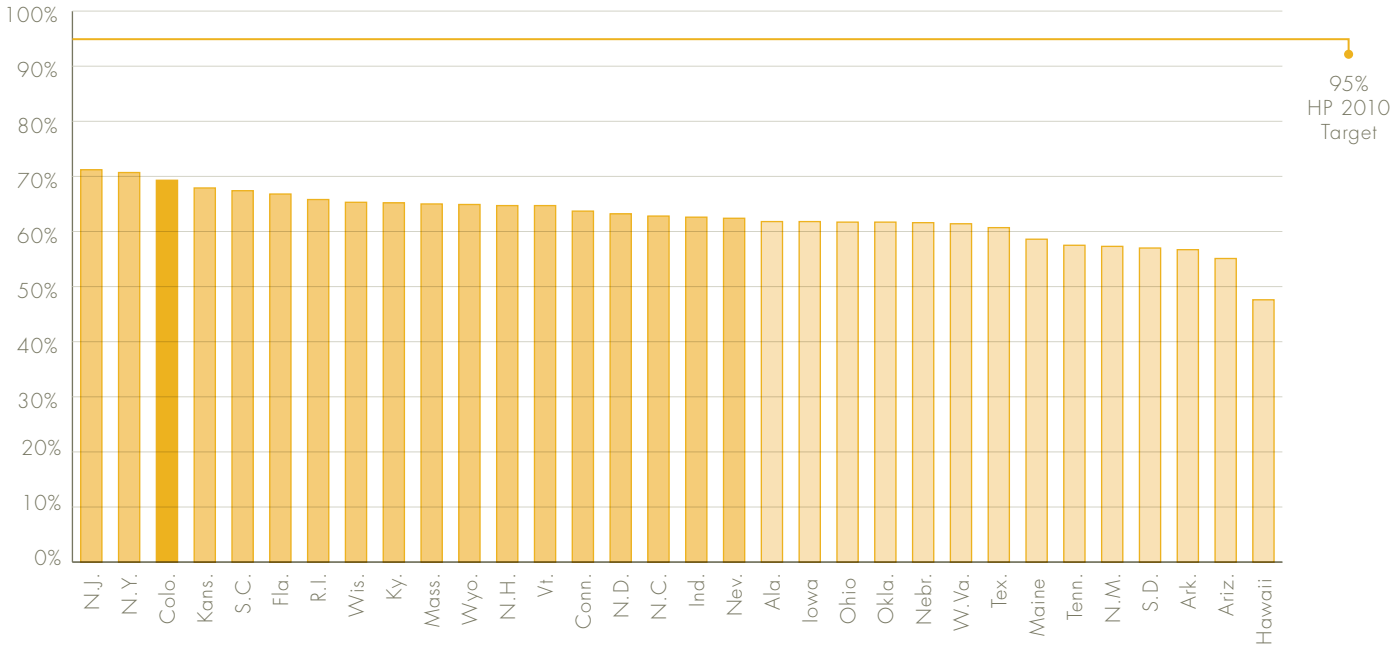


Condom Use (continued)

Elsewhere

"Real Life. Real Talk. Youth Council," a campaign developed by Planned Parenthood of Central and Northern Arizona, relies on youth volunteers to connect with other teens to discuss sexual choices, the risk of STDs and pregnancy. Teen volunteers attend concerts and other recreational venues where teenagers typically spend time. In these discussions, abstinence is identified as the only fool-proof method of pregnancy prevention and avoiding STDs, but safe sex practices are also discussed, including the correct use of condoms. The program was designed to lower Arizona's high teen pregnancy and STD rates.[3]

High school students who were sexually active and used condoms[6]



Text

1. Centers for Disease Control and Prevention's National Youth Risk Behavior Study, 1991 – 2005, <www.cdc.gov/HealthyYouth/yrbs/pdf/trends/2005_YRBS_Sexual_Behaviors.pdf>

"Teens and STDs: A New Message for a Healthy Millennium," Focus on the Family's *Focus on Your Child,* <www.focusonyourchild.com/health/art1/A0001531.html>

2. "Sexuality Education Victories in Colorado and Kansas," Sexuality Education and Information Council of the United States, <www.siecus.org/policy/PUpdates/pdate0325.html>

Colorado State Legislature, <www.leg.state.co.us/Clics/Clics2007A/csl.nsf/fsbillcont3/8BE351914A5391DD8725726400804B00?Open&file=1292_ren.pdf>

"Sex By the Book: Poudre School District makes peace with comprehensive sex ed," *Rocky Mountain Chronicle,* <www.rmchronicle.com/index.php?option=com_content&task=view&id=524>

3. "Teens spreading word on sex ed in unique program," *The Arizona Republic,* <www.azcentral.com/arizonarepublic/centralphoenix/articles/0729ext-reallife0729Z4.html>

Charts

4. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2001 – 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

5. **Source:** Colorado Department of Public Health and Environment, Youth Risk Behavior Survey, 2005, <www.cdphe.state.co.us/hs/yrbs/yrbs.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/yrbss/index.asp>

Teen Fertility

Healthy Adolescents

Most recent CO value (2005)	CO rank (2004)	CO value (2004)	Best state (2004)	Best state value (2004)	HP2010 target
39.3/1,000*	36/50	43.9/1,000*	New Hampshire	18.2/1,000	43/1,000

Indicator Definition

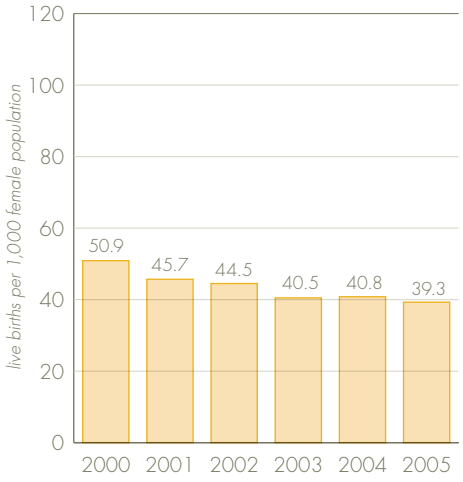
Births to teens (ages 15 – 19 years), per 1,000.

Indicator Significance

Since 1990, there has been a consistent decline in the teen pregnancy rate in the United States. However, as a country, the United States has the highest rate of teen fertility among industrialized nations, nearly double that of Canada and eight times higher than Japan. The rate of decline has been very gradual with a mere 1 percent decrease in the teen pregnancy rate from 2003 – 2004.

Teenage childbearing presents a challenge to both teen mothers and their children. Only one-third of teen mothers will complete high school. Women who give birth as teenagers face a significant disadvantage when competing in the job market and significantly increase the likelihood of raising their children in poverty. Children born to teen mothers also experience increased health risks including low birth weight and a range of developmental delays and disabilities. Teen pregnancy has been estimated to cost the United States $7 billion each year in excess health care costs.[1]

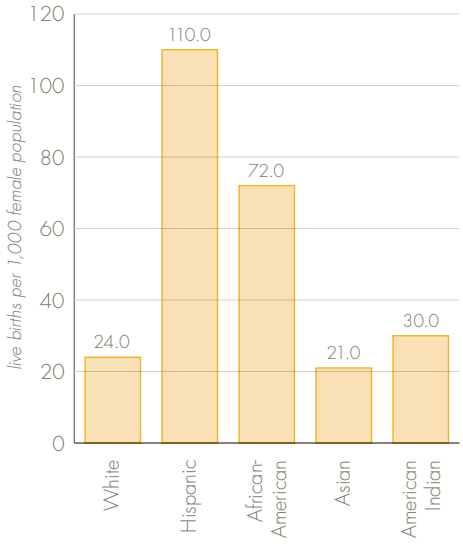
Teen fertility rate
*in Colorado[6]**



Colorado Specifics

Estimates indicate that a baby is born to a teen mother every four hours in Colorado. According to the National Campaign to End Teen Pregnancy, teen pregnancy-related expenses cost Colorado taxpayers at least $167 million in 2005.[2] Teen pregnancy in Colorado disproportionately affects the Hispanic community. In 2005, 62 percent of all teenage births were to girls of Hispanic origin. While the fertility rate has decreased for white, Asian, and American Indian teens, it has changed little for Hispanic teens.[3]

Teen fertility rate
by race in Colorado[7]



Promising Initiatives

In Colorado

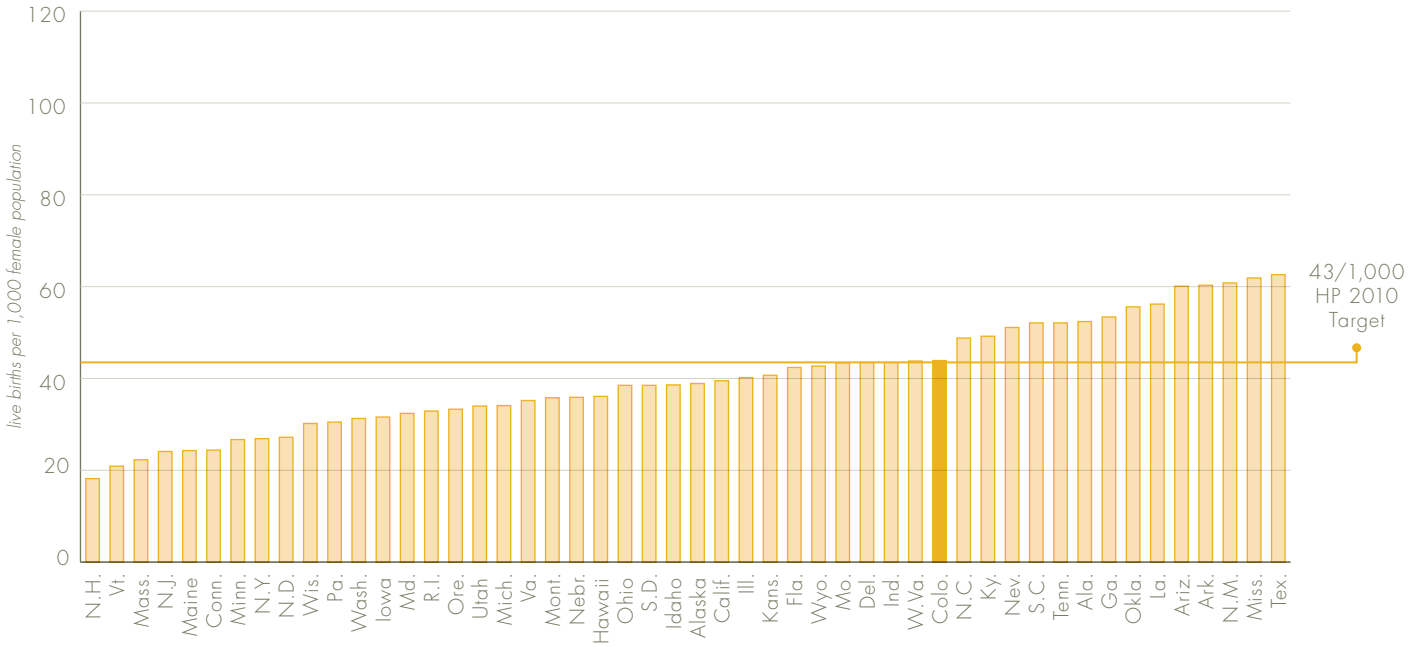
The Colorado Adolescent Maternity Program (CAMP) is one of the oldest programs in the United States focused on teen pregnancy. CAMP is a source of prenatal care, delivery and postpartum care. The program views its participants as "resources to be developed and not as problems to be managed." Its unique Little Sisters and Daughters Program involves the 12- to 14- year-old siblings of the teen mothers participating in CAMP. These younger teens meet with mentors who establish trust so that experiences can be shared, while also engaging them in discussions about future goals, including pregnancy prevention. The goals of CAMP are to provide comprehensive prenatal care, decrease high-school drop out rates, and to prevent abuse and neglect of at-risk siblings and daughters who are at increased risk of teen pregnancy.[4]

Teen Fertility (continued)

Elsewhere

The United Way of Greater Milwaukee, Wisc., dedicates $900,000 each year to programs designed to prevent teen pregnancy. The United Way has developed its own Teen Pregnancy Prevention information campaign that brings issues related to teen pregnancy to the public's attention. A United Way report, *If Truth be Told,* provides a comprehensive evaluation of programs throughout the state to objectively assess best practices and success stories. The United Way also has created an Oversight Committee of more than 30 community members to direct the public information and media campaign.[5]

Teen fertility rate[8]



Text

1. "Teen Pregnancy Facts," Lifeline Family Center, Cape Coral, Fla., <www.lifelinefamilycenter.org/teenpregnancyfacts.htm>
2. "By the Numbers," National Campaign to Prevent Teen Pregnancy, <www.teenpregnancy.org/costs/default.asp>
3. "The State of Adolescent Sexual Health in Colorado 2007," Colorado Organization on Adolescent Pregnancy, Parenting and Prevention, <www.coappp.org/images/COA-002%20insert-FINAL.pdf>
4. University of Colorado Health Sciences Center, <www.uchsc.edu/camp/info.htm>
5. United Way of Greater Milwaukee, <www.unitedwaymilwaukee.org/Teen_Pregnancy.html>

Charts

6. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2000 – 2005, <www.cdphe.state.co.us/hs/vs/>

   * **Note:** Teen fertility rates from the Colorado Department of Public Health and Environment (CDPHE) differ slightly from rates from the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) used to rank states. The numerator used by CDPHE includes births reported after data has been sent to NCHS. For the denominator CDPHE uses population estimates from the Colorado State Demography Office; NCHS uses population estimates from the Census Bureau. The 2004 value for Colorado from NCHS was 43.9/1,000 compared with 40.8/1,000 from CDPHE.

7. **Source:** Colorado Department of Public Health and Environment, Vital Statistics, 2005, <www.cdphe.state.co.us/hs/vs/>
8. **Source:** Centers for Disease Control and Prevention, National Vital Statistics System, 2004, <www.cdc.gov/nchs/data/nvsr/nvsr55/nvsr55_1_table11.pdf>

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Healthy Adults

Colorado's working-age adults are healthier than their counterparts in most other states, according to measures in this Report Card. We have the second-lowest incidence of diabetes and hypertension, and we have low rates of smoking and reported poor mental health days. Colorado's adults are more likely to exercise, and we have the lowest rate of adult obesity in the country. But we do poorly in terms of insurance coverage: one in five working-age adults lacked health insurance in 2006, and one in four has no regular health care provider. The grade of B masks some troubling trends and disparities. Our obesity rate has doubled in less than 20 years; low-income Coloradans, and racial and ethnic minorities, lag behind on most indicators. Most ominously, Colorado's failure to do better by our children threatens our future grades for healthy adults and our ability to maintain our reputation as a healthy and prosperous state.

Health Indicator	Rank among states
19.6 percent of working-age adults are not covered by private or public health insurance	**32nd**
75.5 percent of adults have one (or more) person(s) they think of as their personal doctor or health care provider	**32nd**
23.0 percent of adults consumed five or more fruits and/or vegetables per day within the past week	**18th**
83.9 percent of adults participated in any physical activity within the past month	**5th**
18.4 percent of adults are obese	**1st**
19.5 percent of adults currently smoke cigarettes	**8th**
18.6 percent of adults binge drink (males having five or more drinks on one occasion, females having four or more drinks on one occasion) in the past month	**30th**
11.8 percent of adults report that their mental health was not good eight or more days in the past month	**8th**
3.8 percent of adults reported they were diagnosed with diabetes	**2nd**
15.5 percent of adults reported they were diagnosed with high blood pressure	**2nd**
Average Rank	**13.8**
Average Grade	**B**

Uninsured

Healthy Adults

Most recent CO value (2004–2006)	CO rank (2004–2006)	CO value (2004–2006)	Best state (2004–2006)	Best state value (2004–2006)	HP2010 target
19.6%	32/50	19.6%	Minnesota	10.7%	0%

Indicator Definition

Adults (ages 18 – 64 years) are considered uninsured if they did not have a public or private source of health care coverage for the entire past calendar year.

Indicator Significance

The number of uninsured working-age adults in the United States has grown steadily from 30 million in 1999 to 38 million in 2006. Today, roughly one in five working-age Americans is uninsured. Nearly three-quarters of the uninsured are employed, with more than half holding full-time jobs. Research shows that adults without health insurance are less likely to seek medical care when needed. The growing number of uninsured adults has attracted national attention, drawing proposals for reform from state and national policymakers.[1]

Colorado Specifics

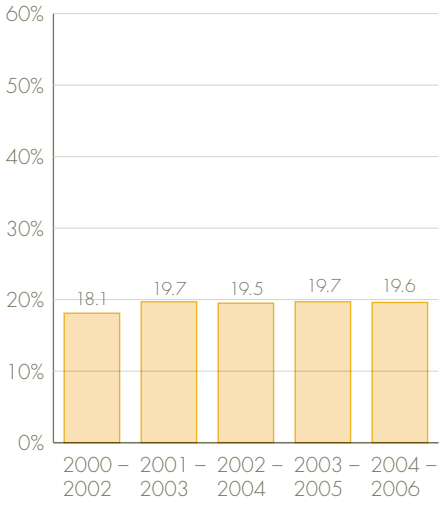
Colorado has consistently ranked in the lower half of states with regard to insurance coverage for working-age adults. Of the 772,000 uninsured Coloradans, 595,000 are of working age. Despite an improving economy there has been no significant change in the proportion of uninsured working-age adults. While uninsurance rates are higher for low-income adults, most uninsured adults are employed, many with full-time, year-round jobs. Uninsurance rates are higher for younger working-age adults and ethnic minorities. In 2006 the Colorado General Assembly created a Blue-Ribbon Commission on Health Care Reform to develop proposals to expand insurance coverage to as many Coloradans as possible. The Commission will report its recommendations to the General Assembly in early 2008.

Promising Initiatives

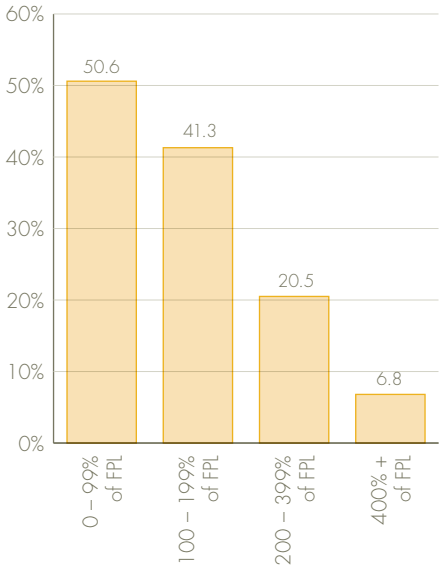
In Colorado

Pueblo StepUp is a high value limited benefit health care coverage initiative designed to cover Pueblo's working uninsured. The community pursued this initiative because the city and county consistently have had the highest insurance premiums in the state for several years. Pueblo's coverage initiative will be financed through contributions from employers, employees and the community.[2]

Adults without health insurance
in Colorado[4]



Adults without health insurance
by income in Colorado[5]

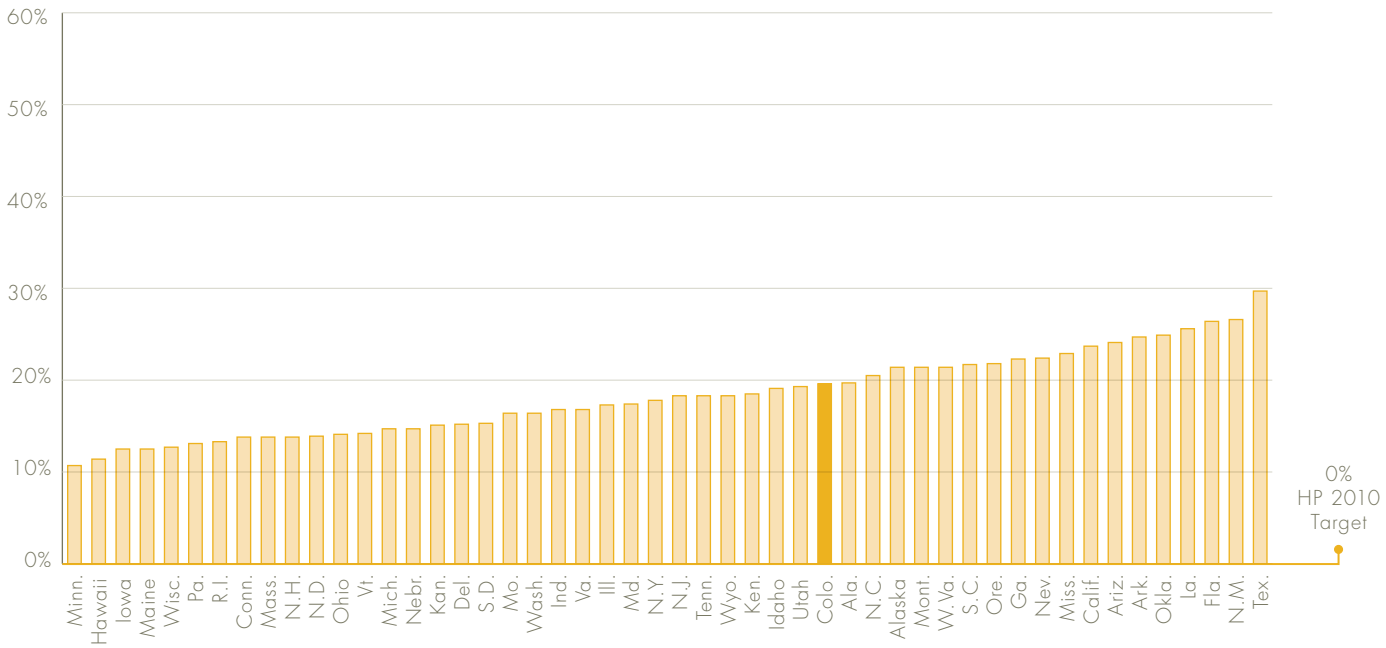


Uninsured (continued)

Elsewhere

Massachusetts has received national attention for its ambitious comprehensive health reform enacted in 2006. The reform includes expansion of Medicaid for children, a requirement that all adults purchase an affordable health insurance plan, and a requirement that most employers offer health insurance to their employees or pay a "Fair Share" contribution of up to $295 annually per employee. The plan includes tax-funded subsidies to help low- and moderate-income residents purchase private insurance and an "Insurance Connector" through which individuals and small employers can purchase standard-benefits insurance. By May 2007, more than 100,000 previously uninsured people had gained coverage.[3]

Adults without health insurance[6]



Text

1. U.S. Census Bureau, <www.census.gov/hhes/www/hlthins/hlthins.html>

   "Census Data on Growing Number of Uninsured Make Clear: National Health Care Strategy is Needed," Commonwealth Fund, <www.commonwealthfund.org/General/General_show.htm?doc_id=519979>

2. For more information: <www.healthaccesspueblo.org>

3. "Massachusetts Health Care Reform Plan: An Update," Kaiser Commission on Medicaid and the Uninsured, <www.kff.org/uninsured/upload/7494-02.pdf>

Charts

4. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2000 – 2006.

5. **Source:** Colorado Health Institute analysis of the U.S. Census Bureau's Current Population Survey, 2004 – 2006.

6. **Source:** U.S. Census Bureau, Current Population Survey, 2004 – 2006, <www.census.gov/hhes/www/cpstc/cps_table_creator.html>

Medical Home

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
75.5%	32/50	75.5%	Maine	89.4%	96%

Indicator Definition

Adults (ages 18 – 64 years) who report having one or more individuals they think of as their personal doctor or health care provider.

Indicator Significance

An increasing number of uninsured Americans report not having a regular source of medical care because of their inability to pay for medical-related expenses. Adult preventive screenings such as mammograms and colonoscopies are twice as likely to occur if an individual has a regular source of medical care. Forgoing routine medical care and preventive screenings often leads to an increased incidence of preventable illnesses and costlier treatments. Recent research has shown that having "medical homes," particularly for vulnerable population groups, is a cost-effective means to reduce health disparities. Adults with access to a regular source of medical care also are better able to better manage chronic illnesses.[1]

Colorado Specifics

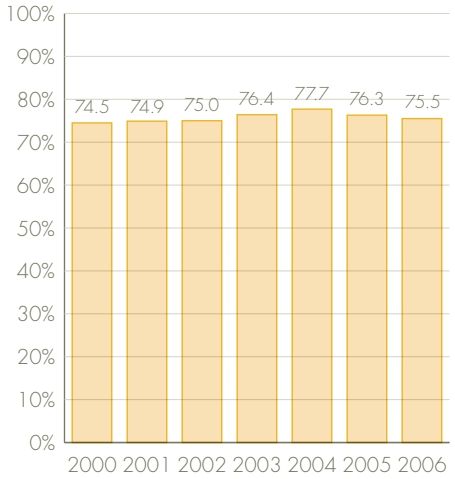
Roughly one-quarter of working-age adults in Colorado reported having no one they think of as their regular health care provider. Most states do better than this, though no state has reached the *Healthy People 2010* target of 96 percent. Colorado's poor showing is partly explained by the relatively high proportion of uninsured working-age adults. Both the uninsurance rate and the proportion of adults lacking a regular source of care have remained stable for several years. Higher-income adults are much more likely to have a regular source of care than those with lower incomes. The higher rate for the lowest income group may be due to their reliance on community clinics and hospital emergency departments as a regular source of care.

Promising Initiatives

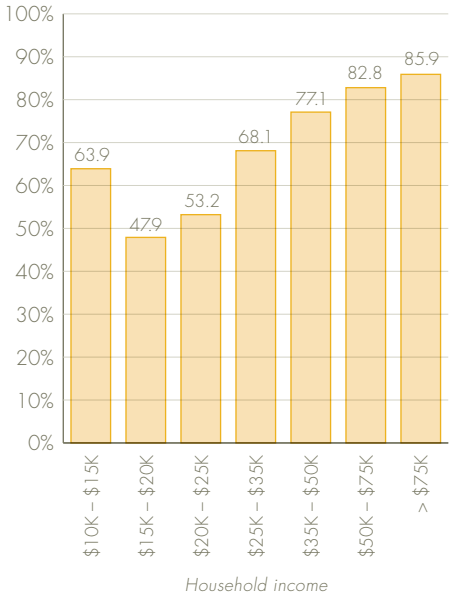
In Colorado

The Marillac Clinic serves Mesa County's low-income and uninsured residents. Marillac is a fully integrated and comprehensive primary care clinic offering mental health, social, dental and physical primary care to both uninsured adults and children. Prevention and early intervention are at the foundation of Marillac Clinic services, where no-cost labs and sliding fee x-rays are performed at the St. Mary's Hospital, on whose campus Marillac is located. No one is denied care at the clinic, although patients are expected to pay for some portion of their visit using a sliding fee schedule based on family income.[2]

***Adults with a regular source of medical care** in Colorado*[4]



***Adults with a regular source of medical care** by income in Colorado*[5]



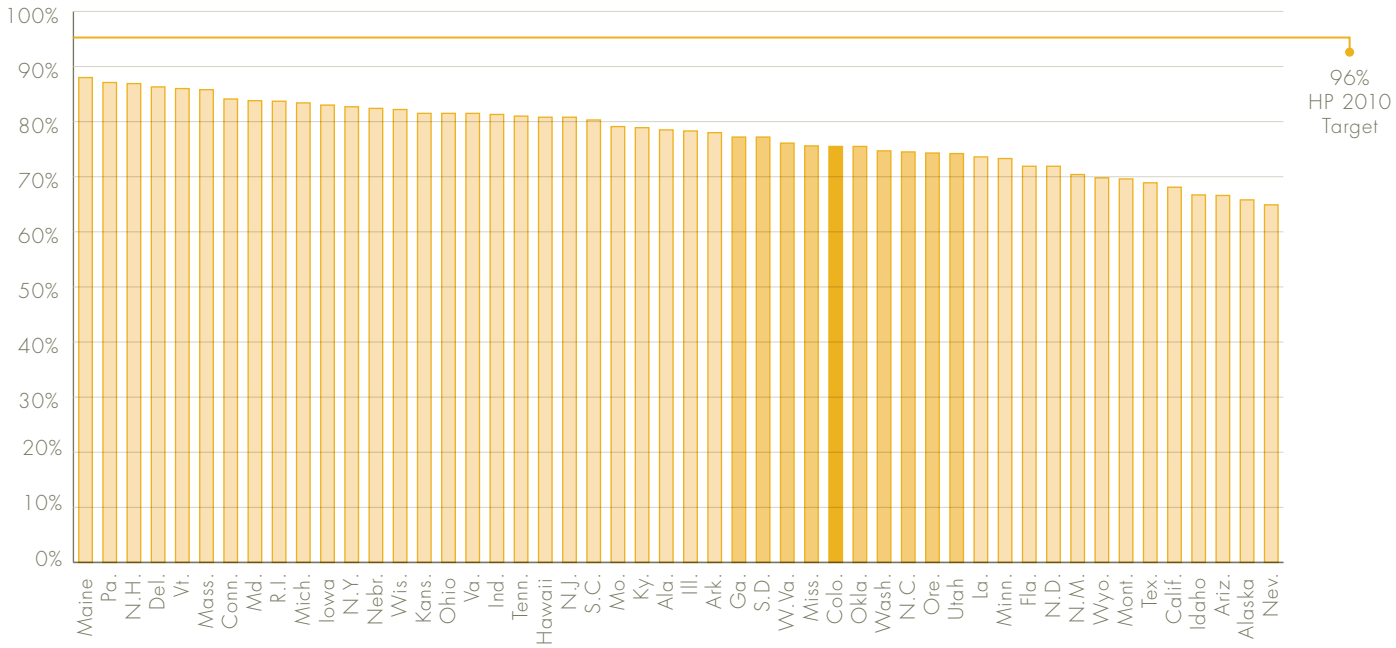
HEALTHY ADULTS

Medical Home (continued)

Elsewhere

Healthy San Francisco is a new initiative begun in April 2007 to provide coverage to the city's 82,000 uninsured adults. The goal is to provide a medical home to uninsured adults, not act as an insurance program. Healthy San Francisco provides funds to strengthen the city's safety net, which includes 20 clinics and a public hospital. To fund the program, employers with 20 or more employees are mandated to pay a minimum fee of $1.71 an hour for workers' health care. All uninsured city residents are eligible if they are ineligible for other government programs.[3]

Adults with a regular source of medical care[6]



Text

1. "Access and Timelines—Quality of Health Care in the United States: A Chartbook 2002," <www2.sph.unc.edu/pho/chartbook/pdf/leatherman_chbk_ch3_520.pdf>

"Disparities in health care are driven by where minorities seek care," The Commonwealth Fund, June 25, 2007, <www.commonwealthfund.org/publications/publications_show.htm?doc_id=506830>

2. Marillac Clinic, Sisters of Charity of Leavenworth Health Systems, <www.sclhealthsystem.org/serve/marillac_clinic.htm>

3. Healthy San Francisco, <www.sfhp.org/HealthySanFrancisco/>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Nutrition

Healthy Adults

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
23.0%	18/50	23.0%	Vermont	29.3%	75%

Indicator Definition

Percent of adults (ages 18 – 64 years) who consumed five or more servings of fruits and vegetables per day.

Indicator Significance

Adequate consumption of fruits and vegetables each day is linked to a decreased risk of some cancers, heart disease, diabetes and hypertension. As adolescents reach adulthood, metabolic rates begin to plateau and the body requires new sources and amounts of energy to maintain optimum health. Fruits and vegetables contain vitamins, minerals, and fiber that are essential for good health. Rather than consuming these vitamins and minerals through supplements, physicians and dieticians agree that eating a variety of fruits and vegetables results in better absorption of the needed nutrients to optimize health. Although energy consumption levels vary based on physical activity, it is most common that food intake needs decrease as people age.[1]

Colorado Specifics

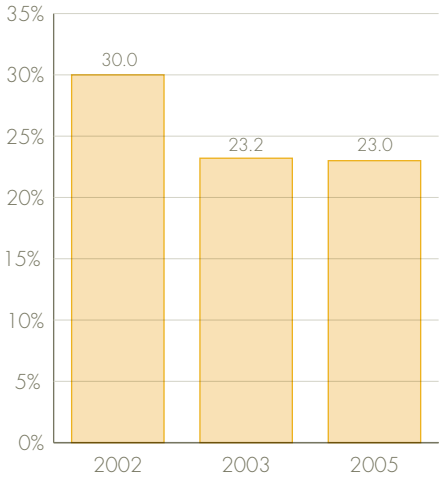
Despite Colorado's reputation for healthy lifestyles, fewer than one quarter of Colorado adults consume the recommended five servings of fruits and vegetables a day. Few states do much better and some are markedly worse. The *Healthy People 2010* target for fruit and vegetable consumption is for 75 percent of the population to eat five or more fruits and vegetables daily. Adult fruit and vegetable consumption—23 percent eating the recommended amount—is not much better than high school students, a group known for less healthy eating behaviors. Despite growing awareness of the importance of a healthy diet, there has been no improvement in adult fruit and vegetable consumption in recent years. The latest data show that women are somewhat more likely than men to eat the recommended amount of fruits and vegetables.

Promising Initiatives

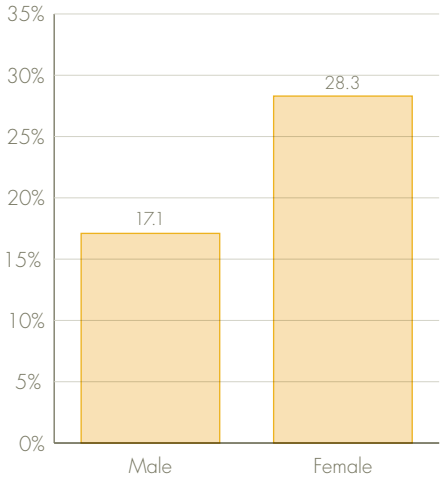
In Colorado

LiveWell Colorado is a collaborative effort by The Colorado Health Foundation, Kaiser Permanente and the Colorado Department of Public Health and Environment. The initiative is designed to reduce overweight and obesity rates and related chronic diseases by engaging with communities to promote healthy eating and active living and programs targeted at environmental changes.[2]

Adults who consumed five or more fruits and vegetables in past seven days in Colorado[5]



Adults who consumed five or more fruits and vegetables in past seven days by sex in Colorado[6]



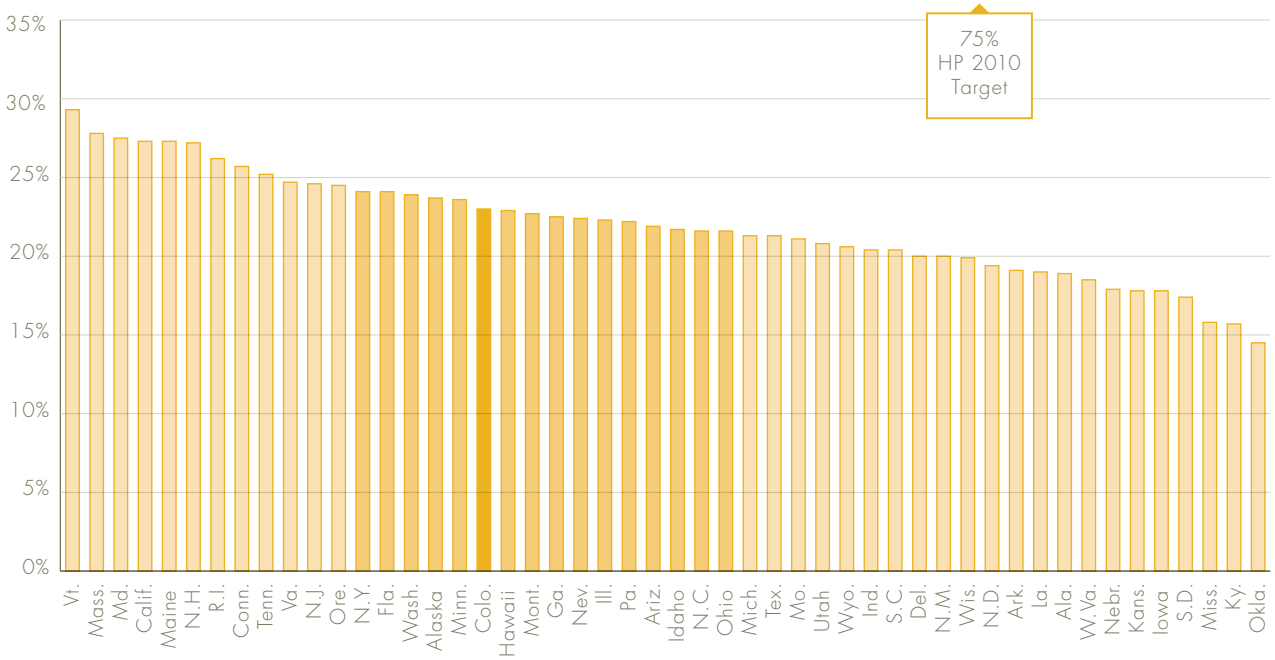
Nutrition (continued)

The Adult Food Stamp Nutrition Education Program (FSNEP) reaches low-income adults through classes that provide information about smart food buying techniques and good nutrition. The FSNEP is offered in 20 counties through the Colorado State University Cooperative Extension. On average, participants attend six to seven informational sessions through the program. Alternative Strategies for Nutrition Education is a sister program to FSNEP that uses a bilingual model to reach Spanish-speaking populations in Colorado.[3]

Elsewhere

Eating Well, Living Well is an initiative that provides nutritional education to English as a Second Language (ESL) students in California. In 2002, research conducted by the *California Nutrition for Healthy Active Families* program found that the longer Hispanic families are in the United States, the more likely they are to consume unhealthy foods. ESL textbooks were found to feature food such as hamburgers, pizza and ice cream. The high fat, sugar and salt content of these foods make them unhealthy choices, yet displaying them in textbooks conveys an alternative message to ESL students. The Eating Well, Living Well initiative incorporates good nutritional practices into the curriculum and its accompanying materials.[4]

Adults who consumed five or more fruits and vegetables in past seven days[7]



Text

1. Colorado Physical Activity and Nutrition State Plan 2010, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/pp/COPAN/2004stateplan.pdf>

"Nutrition and Well-Being, A – Z," <www.faqs.org/nutrition/A-Ap/Adult-Nutrition.html>

2. For more information: <www.livewellcolorado.com>

3. Colorado Nutrition Education Plan, Colorado State University, <www.fshn.cahs.colostate.edu/nep/>

4. "Why Nutrition Education in Adult ESL?" Eating Well, Living Well, <www.sdcoe.k12.ca.us/eatingwell/why.asp>

Charts

5. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

7. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Exercise

Healthy Adults

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
83.9%	5/50	83.9%	Minnesota	87.0%	80%

Indicator Definition

Percent of adults (ages 18 – 64 years) who participated in any leisure-time physical activity within the past month.

Indicator Significance

While most adults engage in some leisure-time physical activity, the majority of U.S. adults do not participate in the moderate level of physical activity recommended by the Centers for Disease Control and Prevention (CDC), a trend that has not changed since 2001. The CDC-recommended amount of physical activity for adults is more stringent than the indicator used in the Report Card; it includes at least 30 minutes of moderate-intensity physical activity on most and preferably all days. Physical activity is known to reduce the risk of certain chronic diseases and to increase overall health and well-being. Research has shown that as people age, their level of physical activity declines, particularly among women. Engaging in 30 minutes of exercise each day can reduce the risk of heart disease, stroke, and feelings of anxiety. A regular exercise regimen is more important than the intensity of the activity.[1]

Colorado Specifics

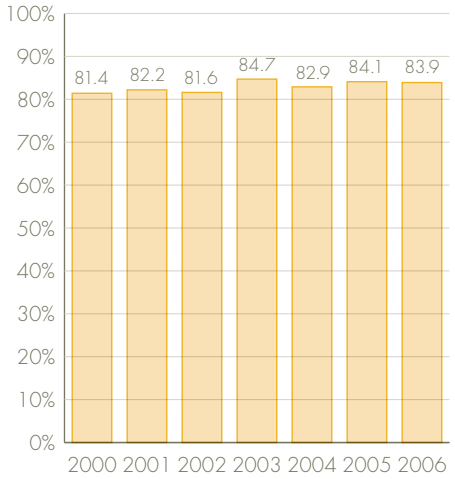
Colorado is one of the best-performing states on this indicator, with more than 80 percent of adults participating in some leisure-time physical activity in the past month. There are no recent data on the proportion that meets the more stringent standard of 30 minutes of "moderate" physical activity on most or all days. Despite a growing awareness of the health benefits of engaging in leisure-time physical activity, there has been no significant improvement in Colorado's performance on this indicator since 2000. Recent data show that racial/ethnic minority adults are less likely to engage in leisure-time physical activity than their white peers.

Promising Initiatives

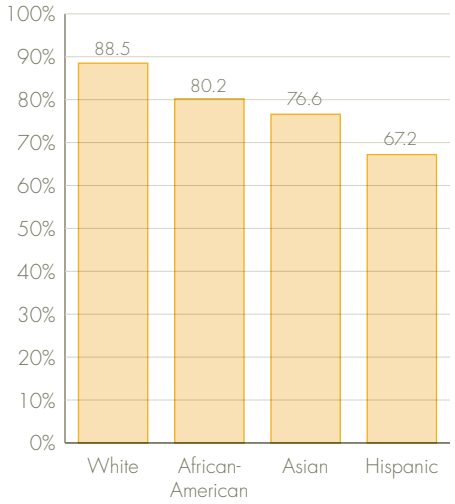
In Colorado

Colorado on the Move is the founding affiliate of *America on the Move*, a national initiative to improve health by increasing physical activity. State affiliates work directly in the schools, work sites and at the community level. The goal of *Colorado on the Move* is to decrease consumption by 100 calories a day while ensuring that children and adults walk at least 2,000 steps each day. Participants wear pedometers to monitor their steps.[2]

***Adults who participated in any physical activity in past month** in Colorado*[4]



***Adults who participated in any physical activity in past month** by race in Colorado*[5]

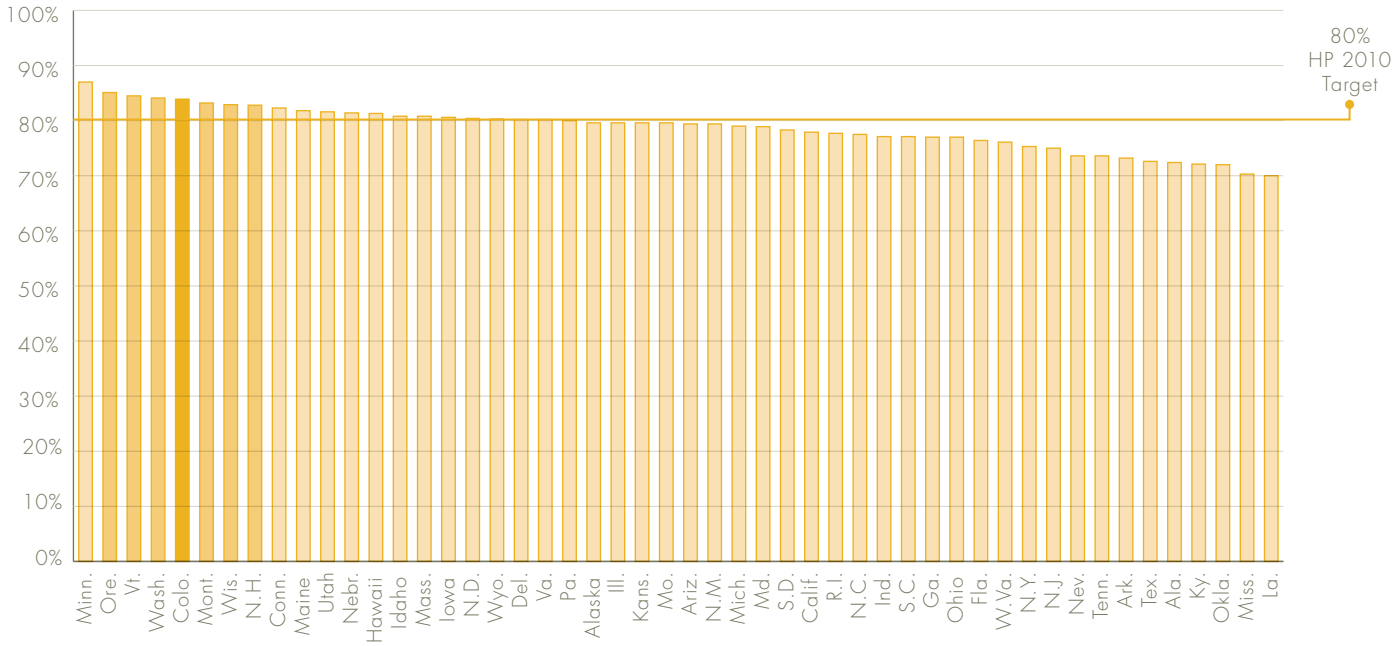


Exercise (continued)

Elsewhere

The governor of Georgia and the state's Department of Human Resources has launched a Live Healthy Georgia campaign to promote healthy living and reduce chronic disease. Prevention is the foundation of the statewide campaign. Live Healthy Georgia is designed to raise public awareness of risk factors associated with numerous chronic diseases and to provide information about ways to live a healthier life. Mostly, it's to encourage Georgians to get more active, and to fit exercise into their daily routines.[3]

Adults who participated in any physical activity in past month[6]



Text

1. "Adult Participation in Recommended Levels of Physical Activity, United States 2001 and 2003," *MMWR Weekly,* December 2, 2005, Centers for Disease Control and Prevention, <www.cdc.gov/mmwr/preview/mmwrhtml/mm5447a3.htm>

   "Planning Diet that Suits Your Exercise Program," YgoY, <fitness.ygoy.com/planning-diet-that-suits-your-exercise-program/>

2. Colorado on the Move, University of Colorado at Denver and Health Sciences Center, <www.uchsc.edu/nutrition/Coloradoonthemove/com.htm>

3. Live Healthy Georgia, <www.livehealthygeorgia.org/resource.shtml>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Obesity

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
18.4%	1/50	18.4%	Colorado	18.4%	15%

Indicator Definition

Percent of adults (ages 18 – 64 years) who have a Body Mass Index (BMI) greater than or equal to 30. BMI is a number based on a person's weight and height. For most adults, BMI correlates with body fat. BMI may overestimate body fat in athletes and others who are muscular and underestimate body fat in older persons or those who have lost muscle mass.

Indicator Significance

Since 1970, obesity rates have increased in the United States by more than 50 percent. Obesity is a serious public health problem. As the second leading cause of preventable death, obesity is a complex health condition that involves environmental, genetic, physiological, metabolic, behavioral and psychological aspects. In the United States, 127 million adults are considered overweight, 60 million obese and 9 million severely obese. Rates of obesity have increased for all adult age groups and across all regions of the United States, with adult women particularly at risk. Obese adults are two to three times more likely to die prematurely than those who are at a normal weight.[1]

Colorado Specifics

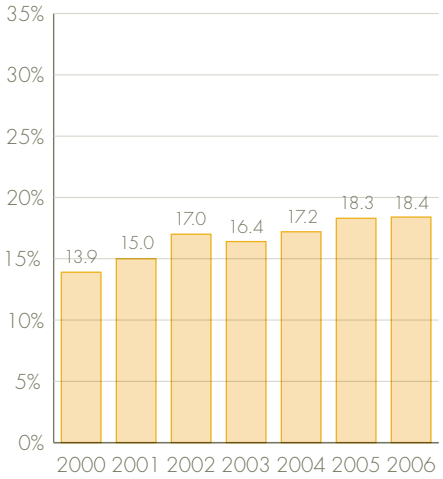
Colorado is the leanest state in the country but adult obesity rates are climbing here at a faster rate than the country as a whole. The adult obesity rate has more than doubled in Colorado since 1990 and now, like all other states, exceeds the *Healthy People 2010* target. While obesity rates are higher for low-income Coloradans, even those in higher income brackets who can most afford a healthy lifestyle exceed the *Healthy People 2010* target.

Promising Initiatives

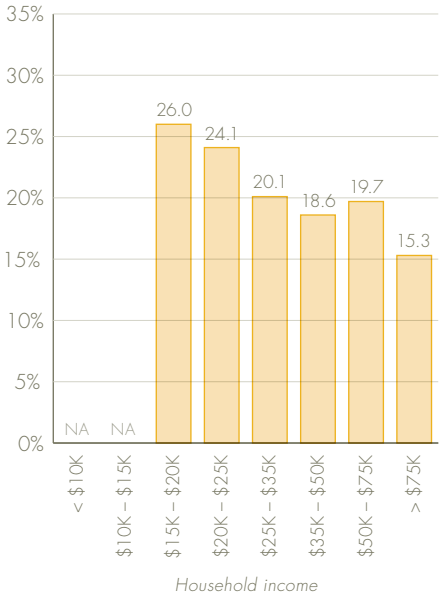
In Colorado

The Metro Denver Health and Wellness Commission recently issued a report that highlights both the health and economic costs of adult obesity. A broad coalition of 80 employers and community leaders has come together to promote policies and programs that support "a culture of healthy eating and active living." Chaired by Lt. Gov. Barbara O'Brien, the Commission aims to reverse the negative trend in adult obesity by 2012 and increase the percentage of healthy-weight residents by 2017. To monitor progress, the Commission has selected eight indicators, seven of which are included in this Report Card, by which it compares the Metro Denver area to 25 similarly-sized metropolitan areas with which it competes in the economic development arena.[2]

Adult obesity
in Colorado[4]



Adult obesity
by income in Colorado[5]



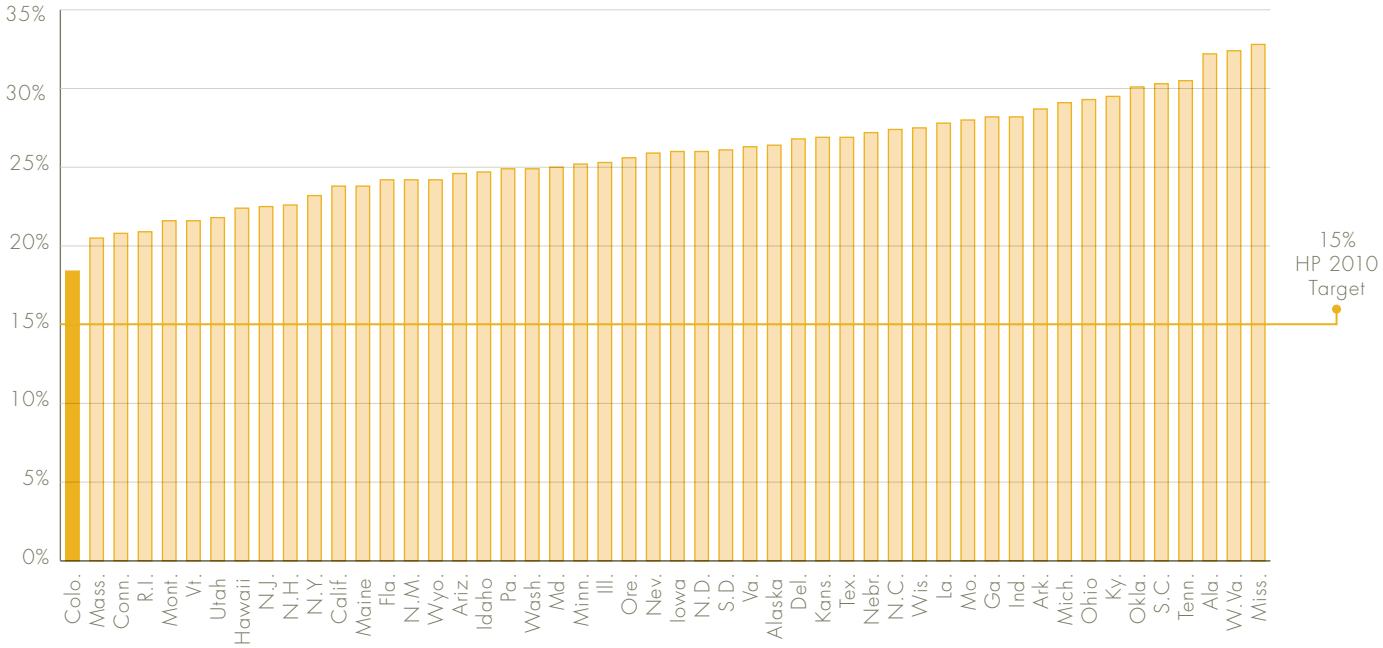
HEALTHY ADULTS

Obesity (continued)

Elsewhere

Active Living Ramsey County, begun in 2005 by a coalition of business leaders, city, county and school officials in Minnesota, targets county residents of all ages who desire to change their health behaviors. The goal is to provide safe and convenient venues for physical activity. One of its projects, 1,000 Benches, strategically places benches so that they are a visible distance apart to promote walking and build a "community path to health, one step at a time." The benches are made from recyclable materials, thus supporting local recycling programs. A comprehensive Geographic Information System has been developed that maps biking and pedestrian routes.[3]

Adult obesity[6]



Text

1. "Obesity in the U.S.," American Obesity Association, <obesity1.tempdomainname.com/subs/fastfacts/obesity_US.shtml>

2. Metro Denver 2007: A Report on the Health & Wellness of Our Community, Metro Denver Health and Wellness Commission, <www.mdhwc.org/Downloads/h%26wreport/MDHWC%20H%26W%20Report-Final.pdf>

3. Ramsey County ALRC, <www.co.ramsey.mn.us/alrc/projects.htm>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Current Smokers

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
19.5%	8/50	19.5%	Utah	10.6%	12%

Indicator Definition

Percent of adults (ages 18 – 64 years) who smoke cigarettes.

Indicator Significance

Cigarette smoking is the No. 1 preventable cause of death worldwide. In the United States, it is responsible for one in five deaths as a result of lung cancer, pulmonary disease and ischemic heart disease. Smoking not only affects the smoker, but environmental tobacco smoke (secondhand smoke) poses immediate risks to those exposed at work, home, and other public spaces. Secondhand smoke has been associated with increased asthma-related conditions in children as well as harm to the cardiovascular system.[1]

Colorado Specifics

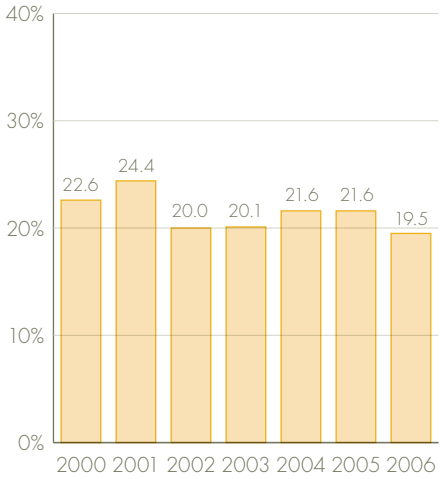
More than 40 years after the Surgeon General's landmark report linking cigarette smoking to lung cancer, one in five Colorado adults currently smokes cigarettes. With the rate of cigarette smoking among high school students similar to that of adults, a new generation of cigarette smokers has already been established. There is a strong relationship between cigarette smoking and income. Only 10 percent of Colorado adults with family incomes of $75,000 or more smoke, compared to 36 percent for those with family incomes in the $15,000 – $20,000 range.

Promising Initiatives

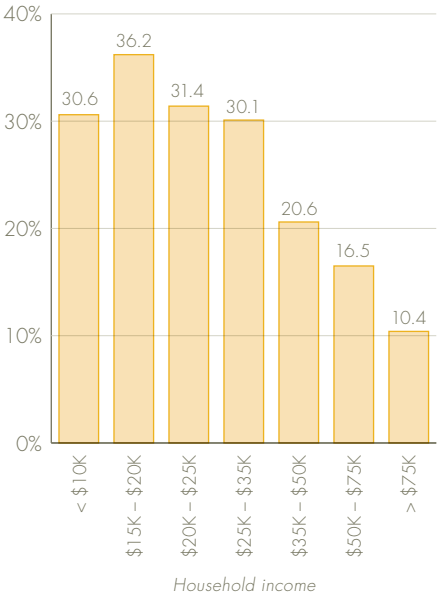
In Colorado

The Colorado Clean Indoor Act was enacted in 2006 to protect the public from involuntary exposure to secondhand smoke. Amendments were recently passed in 2007 to ban smoking in assisted-living facilities and casinos. Colorado was among the first 13 states to enact such far-reaching legislation.[2]

Adults who smoke cigarettes in Colorado[4]



Adults who smoke cigarettes by income in Colorado[5]

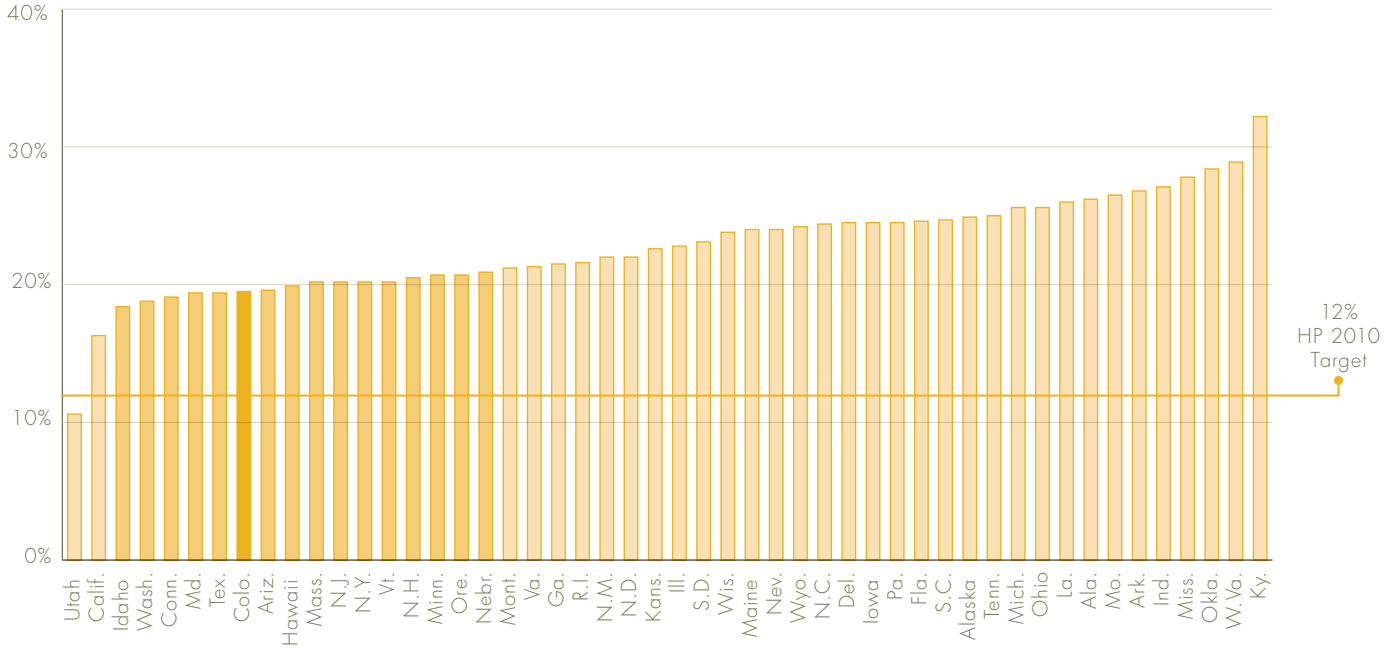


Current Smokers (continued)

Elsewhere

Massachusetts was the second state following California to implement a cigarette tax to fund a statewide tobacco control program. The Massachusetts Tobacco Control Program (MTCP) was developed to administer the public media campaign and educate the public about the health risks associated with tobacco use. The program has succeeded in decreasing cigarette consumption three times greater than the rest of the country. The Centers for Disease Control and Prevention drew from the Massachusetts and California tobacco programs to create guidelines for other states to follow.[3]

Adults who smoke cigarettes[6]



Text

1. "Smoking and Tobacco Use," Centers for Disease Control and Prevention, <www.cdc.gov/tobacco/basic_information/index.htm>

2. Smoke-Free Colorado, <www.smokefreecolorado.org/>

3. "The First Decade of the Massachusetts Tobacco Control Program," *Public Health Reports*, September – October 2005, <www.pubmedcentral.nih.gov/picrender.fcgi?artid=1497757&blobtype=pdf>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Binge Drinking

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
18.6%	30/50	18.6%	Tennessee	9.8%	6%

Indicator Definition

Percent of adults (ages 18 – 64 years) who binge drank (men having five or more drinks on one occasion, women having four or more) in the past month.

Indicator Significance

Approximately 100,000 Americans die annually from alcohol abuse. It is the third leading preventable cause of death in the United States. Binge drinking is linked to numerous tragic side effects, including unintentional injuries, motor vehicle crashes, suicide, alcohol poisoning and liver failure. In addition, binge drinking has high economic and social costs, including violent behavior, child neglect and lost productivity in the workplace. Between 1993 and 2001, the total number of binge drinking episodes among U.S. adults increased from approximately 1.2 billion to 1.5 billion, an increase of 17 percent per person.[1]

Colorado Specifics

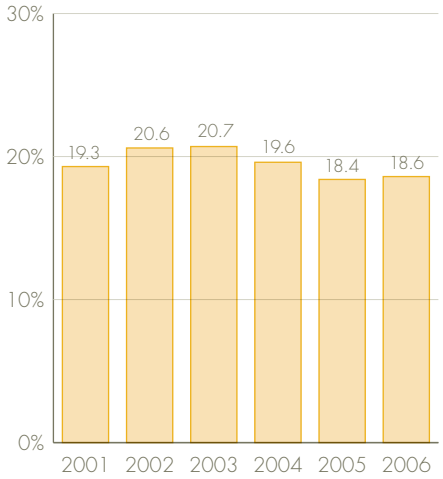
Almost one in five Coloradans ages 18 – 64 reports having engaged in binge drinking at least once in the past month. This is higher than the national average and places Colorado 30th among states. While national studies show that binge drinking rates are highest for young adults, the majority of binge drinking episodes occurred among those age 26 and older. In Colorado the adult binge drinking rate is twice as high for men as for women. The binge drinking rate in Colorado has changed little in the last five years, reflecting national trends.

Promising Initiatives

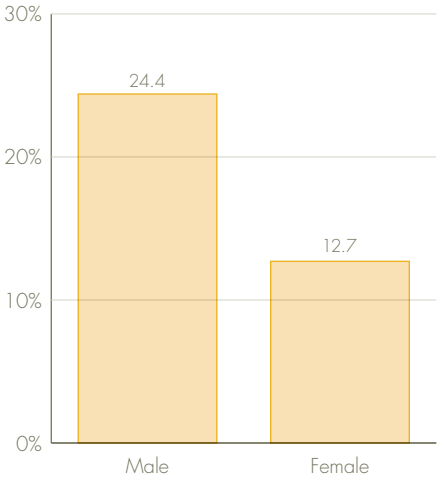
In Colorado

The Student Alcohol Management (SAM) Foundation seeks to educate college students and their parents about the risks of alcohol consumption and poisoning. The Foundation offers financial assistance to those colleges and universities that do not currently have an alcohol awareness program. The SAM Foundation was established after the alcohol-poisoning death of a student at Colorado State University in 2004.[2]

Adults who binge drink
in Colorado[4]



Adults who binge drink
by income in Colorado[5]

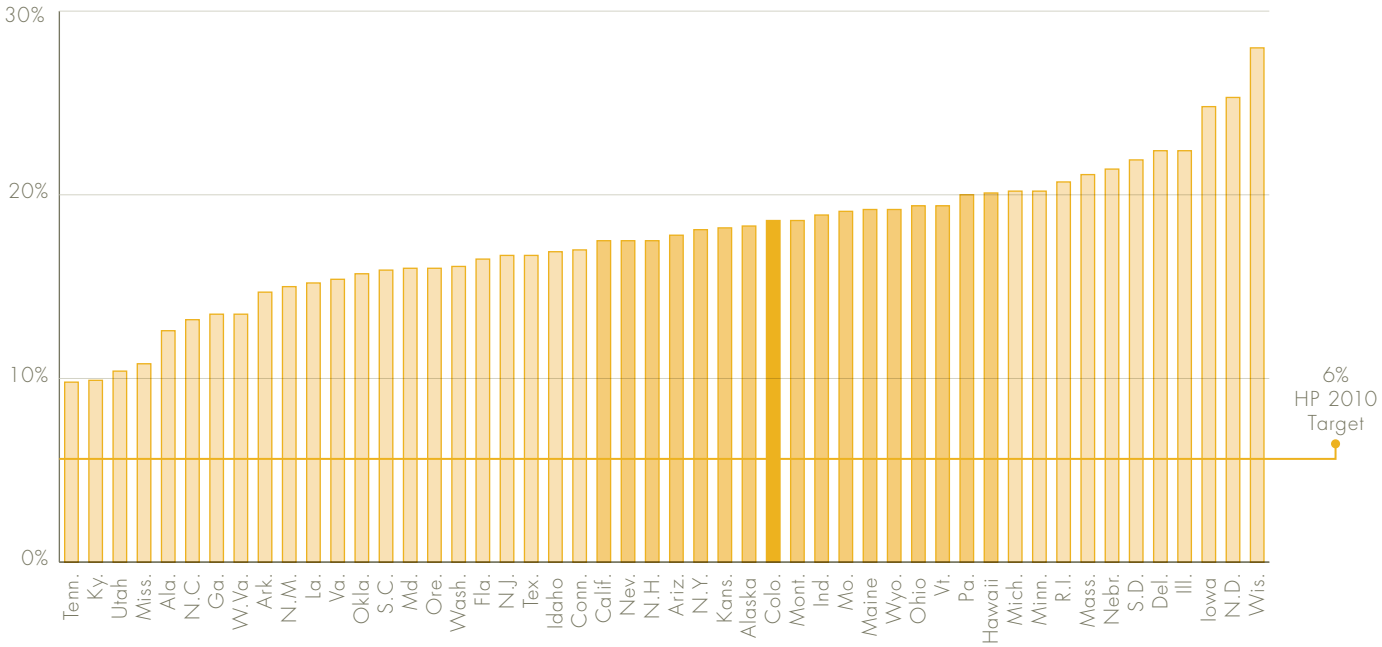


Binge Drinking (continued)

Elsewhere

Pathways Community Behavioral Healthcare, Inc., a non-profit organization with 34 locations throughout Missouri, treats a variety of mental health problems and provides comprehensive alcohol and drug abuse treatment programs. Substance abuse treatment focuses on the unique needs of both adolescents and adults, with different programs for each age group.[3]

Adults who binge drink[6]



Text

1. "Binge Drinking Among U.S. Adults," *Journal of the American Medical Association,* Jan. 1, 2003, <jama.amaassn.org/cgi/content/abstract/289/1/70?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=binge+drinking&searchid=1055861733085_1232&stored_search=&FIRSTINDEX=0>

2. The Sam Spady Foundation, <www.samspadyfoundation.org/index.html>

3. Pathways Community Behavioral Healthcare Inc., <www.pathwaysonline.org/index.htm>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Poor Mental Health

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
11.8%	8/50	11.8%	Minnesota	9.3%	NA

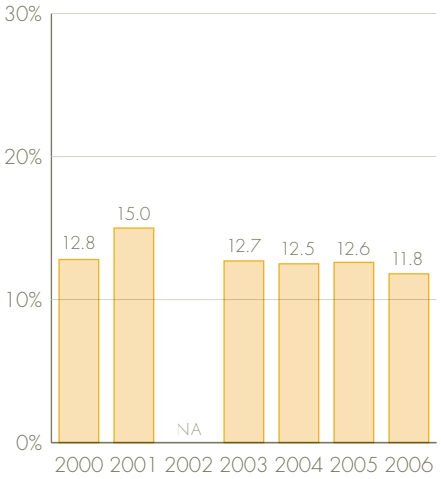
Indicator Definition

Percent of adults (ages 18 – 64 years) who reported mental health difficulties such as feelings of stress, depression or problems with emotions, for eight or more days in the past month.

Indicator Significance

One-third of all Americans report that they suffer from some mental or emotional problem for some number of days each month. Of these, 10 percent report such difficulties for 14 or more days a month. Overall, 11 percent of adults report experiencing feelings of sadness some of the time within a 30-day period. Of these emotional problems, depression is the most commonly reported. It is one of the most prevalent yet one of the most treatable emotional problems. Without treatment, symptoms can last for months and years. Since the symptoms of depression often are associated with physical illness, it frequently goes undiagnosed. Depression is more common among women, and adults living in poverty are at least twice as likely to feel sad, hopeless, worthless, or that everything is an effort, at least some of the time. Mental health problems can disrupt every aspect of a person's life including work, the ability to learn and function in a family.[1]

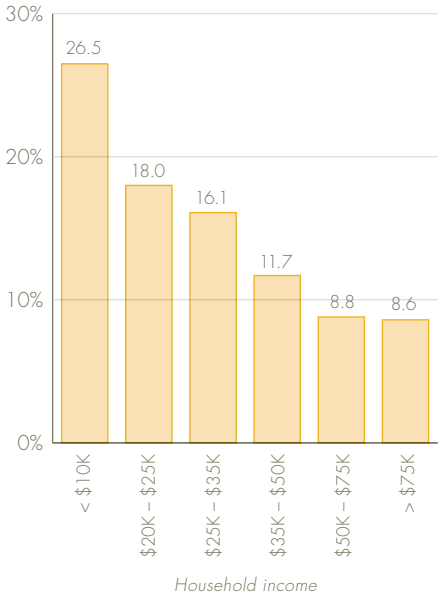
Adults who report poor mental health eight days or more during the past month in Colorado[4]



Colorado Specifics

Twelve percent of working-age Coloradans report eight or more days of poor mental health in the past month. While this compares favorably with most other states, it is a troubling indicator of the pervasiveness of mental health problems, which can detract from one's quality of life. Poor mental health is much more prevalent among low-income adults, with one in four in the lowest income bracket reporting poor mental health.

Adults who report poor mental health eight days or more during the past month by income in Colorado[5]



Promising Initiatives

In Colorado

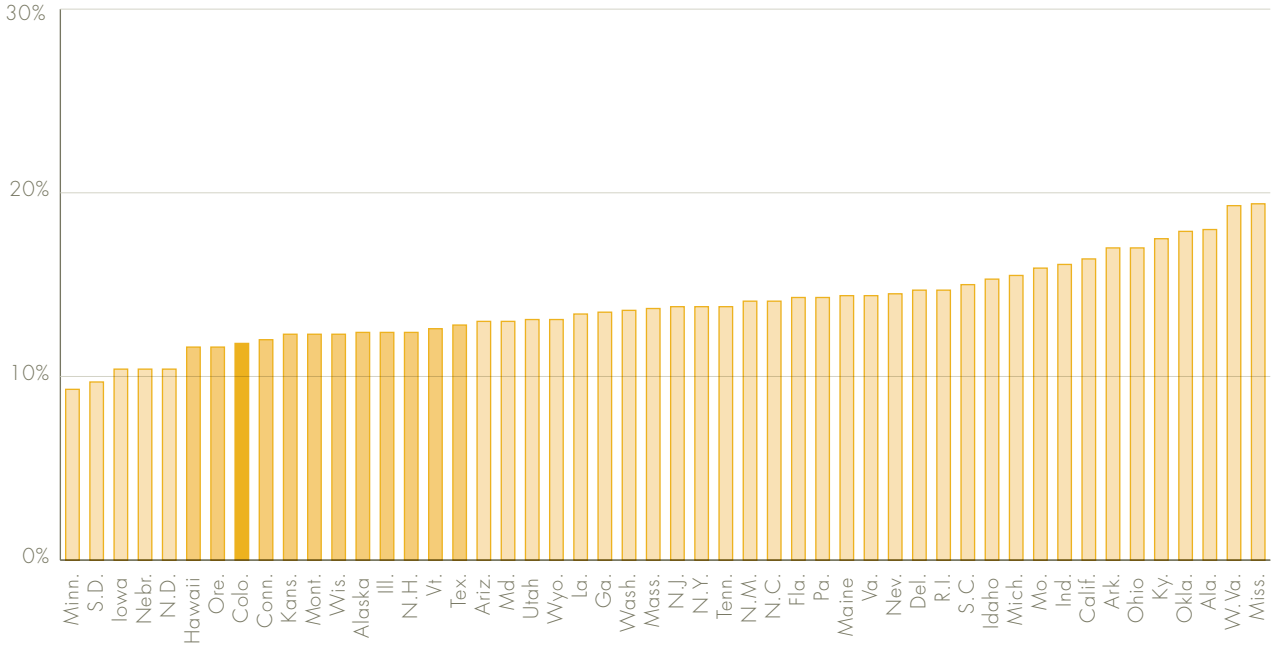
Advancing Colorado's Mental Health Care is a collaborative effort of The Colorado Health Foundation, Caring for Colorado Foundation, The Colorado Trust and the Denver Foundation. This five-year initiative aims to improve the mental health status and quality of life for children, youth and adults with severe mental illnesses by restructuring the delivery of mental health services at the community level. Six Colorado communities were selected to receive support for their efforts at integrating mental health services.[2]

Poor Mental Health (continued)

Elsewhere

In response to the Food and Drug Administration's (FDA) recommendation that adults affected by depression monitor their status with the help of friends, family, and clinicians, the California Department of Mental Health developed the Depression and Wellness Guide. This Guide focuses on treatment-monitoring rather than medication, which has been the focus of the FDA and other organizations in the past. The Depression and Wellness Guide is the first of its kind to offer a systematic approach for patients to track their progress. The guide was created by the clinical review committee and since its pilot study in 2005 it has helped more than 600 families.[3]

Adults who report poor mental health eight days or more during the past month[6]



Text

1. Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion Health-Related Quality of Life measures, <www.cdc.gov/hrqol/findings.htm>

   Office of the Surgeon General, "Mental Health: A Report of the Surgeon General," 2001, <www.surgeongeneral.gov/library/mentalhealth/chapter4/sec1.html#overview>

2. For more information: The Colorado Health Foundation, <www.ColoradoHealth.org>

3. "Families for Depression Awareness Launches Adult Depression Wellness Guide Nationwide," National Alliance on Mental Illness, California, <www.namicalifornia.org/document-detail.aspx?page=newsviews&tabb=currentnews&lang=ENG&idno=873>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Diabetes

Healthy Adults

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
3.8%	2/50	3.8%	Utah	3.7%	2.5%

Indicator Definition

Percent of adults (ages 18 – 64 years, excluding pregnant women) who have ever been told by a doctor that they have diabetes.

Indicator Significance

An estimated 20.8 million people in the United States report having been diagnosed with diabetes, with an estimated 6 million more who have not yet been diagnosed. It is the sixth-leading cause of death, carrying with it a long list of potential health complications including obesity, high blood pressure, heart disease, blindness and damage to the central nervous system. Every hour, eight diabetics will have a foot, ankle or leg amputated because of untreated complications of diabetes, and every day 45 diabetics will become blind. Many racial, ethnic and age groups are at elevated risk of developing diabetes, including African-Americans, Hispanics, American Indians and Asian Americans/Pacific Islanders. As people age they are also at increased risk of developing Type II diabetes.[1]

Colorado Specifics

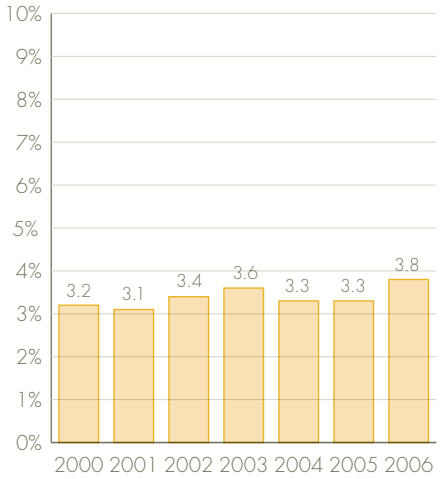
Colorado has one of the lowest rates of diabetes in the country, with roughly 4 percent of working-age adults diagnosed with the disease. However, this statistic can be misleading because an estimated 98,000 Coloradans of all ages have the disease but have not yet been diagnosed. While the recent trend among adults in Colorado has been relatively stable, the incidence of diabetes among all Coloradans has risen from 3 percent in 1993 to 5 percent in 2005, mirroring national trends. African-American and Hispanic adults have a somewhat higher incidence of diabetes than whites. The relatively low incidence of diabetes in Colorado is reflective of the relatively low rate of adult obesity, as the two are closely linked.[2]

Promising Initiatives

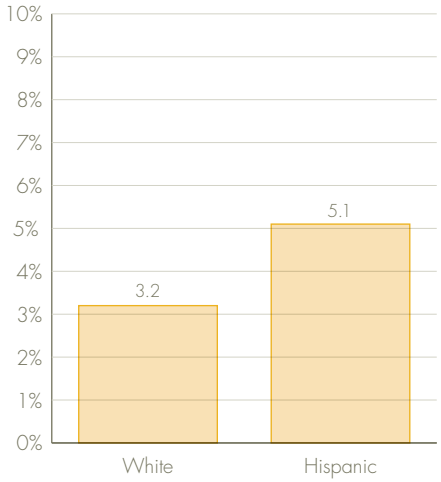
In Colorado

The Center for African American Health is focused on improving the health and well-being of African-Americans in the Metro Denver area. The Center seeks to reduce significant health disparities, including diabetes and high blood pressure, which disproportionately affect African-Americans. Community-based health education, participatory research, and outreach programs that promote active and healthy lifestyles comprise the heart of the center's activities.[3]

***Adults with diabetes** in Colorado*[5]



***Adults with diabetes** by race in Colorado*[6]

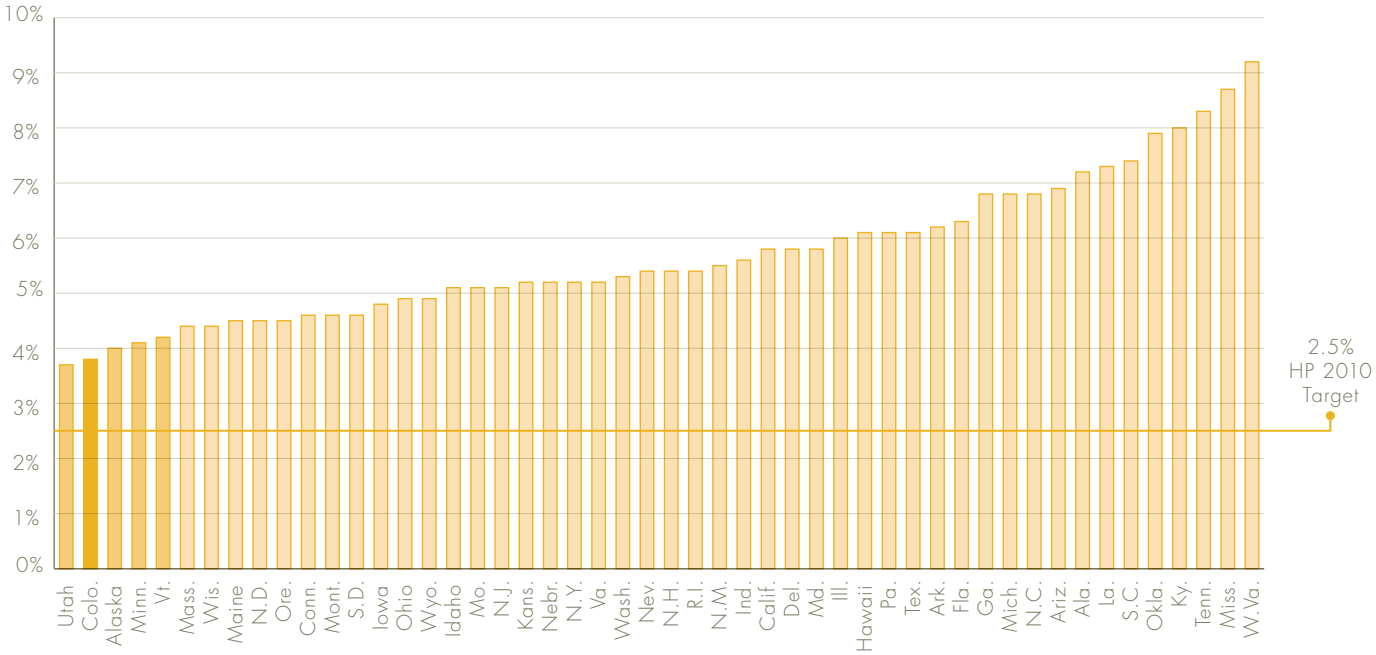


Diabetes (continued)

Elsewhere

DIRECT (Diabetes Intervention Reaching and Educating Communities Together) is the largest community-based initiative focused on diabetes prevention and management in the country. It is funded by the Centers for Disease Control and Prevention (CDC). Based in Raleigh, N.C., DIRECT targets high-risk African-American adults. Through health promotion, outreach and diabetic care, the program uses community leaders and organizations to develop specific interventions and policies to implement them.[4]

Adults with diabetes[7]



Text

1. National Diabetes Fact Sheet, Centers for Disease Control and Prevention, <www.cdc.gov/diabetes/pubs/factsheet05.htm>
2. Colorado Diabetes Prevention and Control Program, <www.cdphe.state.co.us/pp/diabetes/stats.html>
3. For more information: Center for African American Health <www.caahealth.org>
4. Project DIRECT, Centers for Disease Control and Prevention, <www.cdc.gov/diabetes/projects/direct.htm>

Charts

5. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
6. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>
7. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

High Blood Pressure

Healthy Adults

Most recent CO value (2005)	CO rank (2005)	CO value (2005)	Best state (2005)	Best state value (2005)	HP2010 target
15.5%	2/50	15.5%	Utah	13.8%	16%

Indicator Definition

Percent of adults (ages 18 – 64 years) who have been told by a doctor, nurse or other health professional they have high blood pressure (excludes gestational hypertension).

Indicator Significance

Hypertension or high-blood pressure affects one in four Americans over age 18. Hypertension is a gateway to other life-threatening diseases such as heart disease, stroke, kidney disease and renal failure. It is the main factor in kidney distress, and is a leading cause of complications during pregnancy and childbirth. Obesity and diabetes increase the risk of hypertension, and it is preventable by maintaining a healthy weight, staying active and refraining from tobacco products. For some individuals, medication may be necessary to lower hypertension and should be taken in accordance with a doctor's advice.[1]

Colorado Specifics

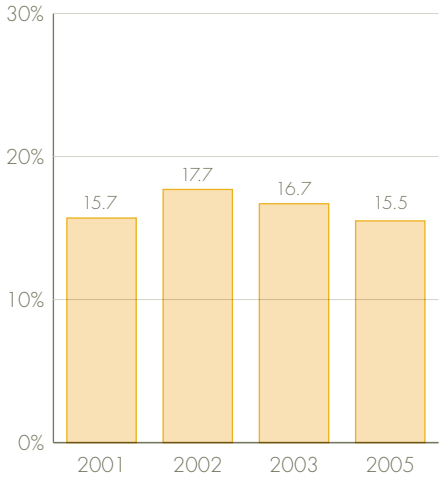
Compared to other states, Colorado fares well in the self-reported incidence of hypertension among working-age adults, ranking second only to Utah. Colorado's rate for adults is 16 percent, which is equal to the *Healthy People 2010* target for persons age 20 and older. Because the incidence of hypertension increases with age, the rate for older Coloradans probably exceeds the *Healthy People 2010* target. The small changes in the reported incidence of hypertension in recent years are not statistically significant. Working-age men have a higher rate of hypertension than do working-age women (18 percent vs. 13 percent).

Promising Initiatives

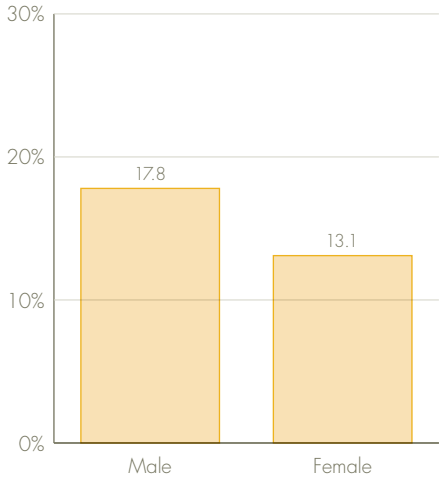
In Colorado

Colorado Heart Healthy, Stroke Free: Reaching the Future 2005 – 2010 is a state initiative of the Colorado Department of Public Health and Environment developed with input from community agencies and public health experts. Findings from the Behavior Risk Factor Surveillance System survey among Colorado adults revealed that fewer than one-third were able to identify signs of a heart attack or stroke. An important component of the Colorado Heart Healthy, Stroke Free strategy is informational campaigns that deliver appropriate and understandable messages to the public about identifying symptoms. The program also encourages hospitals to adopt recognized standards for heart disease and stroke treatment. An ongoing assessment of the program will identify best practices and suggest appropriate changes.[2]

Adults with hypertension
in Colorado[4]



Adults with hypertension
by sex in Colorado[5]

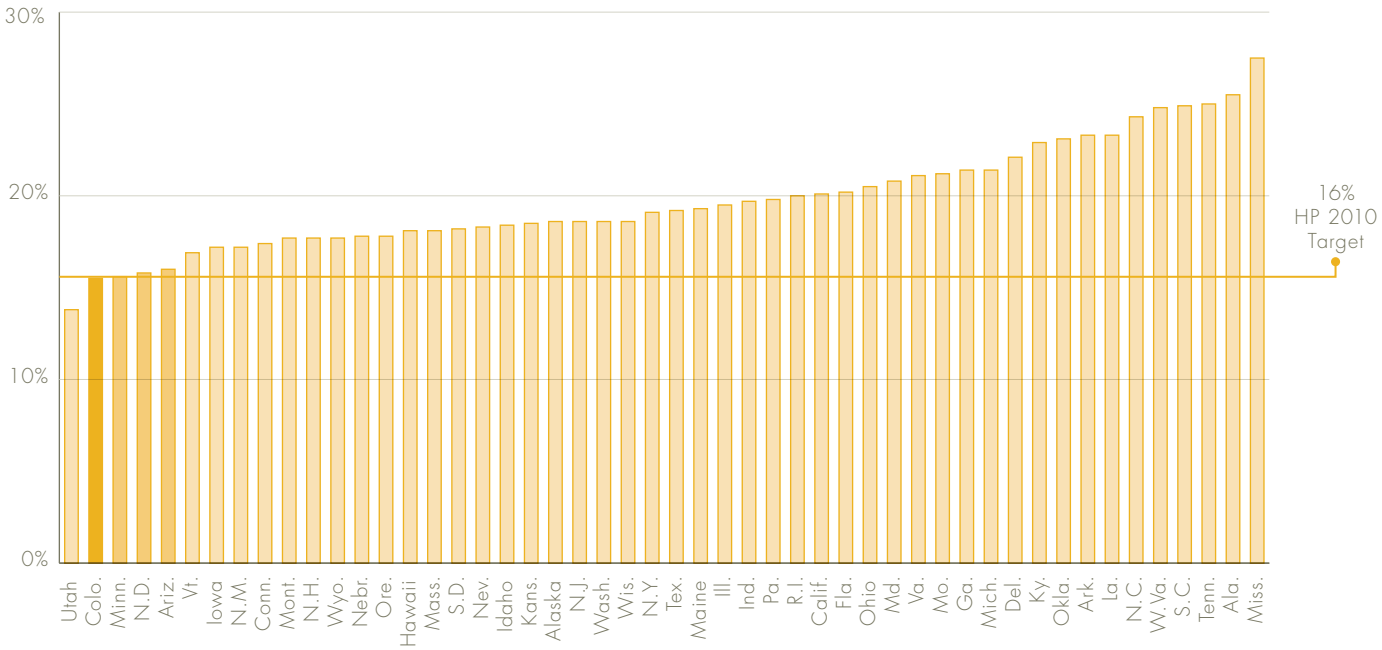


High Blood Pressure (continued)

Elsewhere

South Carolina implemented the Hypertension Initiative to bring it from "worst to first." After four years, it is well on its way with measurable progress and growth. Starting with 14 health care providers, the Initiative has expanded to more than 460 providers based in more than 70 clinical sites that link specialists with primary care physicians. Their interactive database tracks more than 200,000 patients. The Initiative has published *DASH*, an eating plan and cookbook that draws upon southern-style cooking. It has also created TEMR, a low-cost electronic medical record system available for participating providers. It hopes to develop a health promotion program that will focus on disease management in the future.[3]

Adults with hypertension[6]



Text

1. "Prevent and Control High Blood Pressure: Mission Possible," National High Blood Pressure Education Program, <hp2010.nhlbihin.net/mission/partner/young_adults.pdf>

2. Colorado Heart Healthy and Stroke Free: Reaching the Future 2005 – 2010, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/pp/cvd/CardiovascularDiseaseandStrokeStatePlan.pdf>

3. The Hypertension Initiative, Medical University of South Carolina, <worst2first.musc.edu/index.html?topic=About%20Us>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

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Healthy Aging

Colorado's older adults do relatively well by the measures used in this Report Card and compared to their peers in other states. We score in the top 10 on six of the seven *Healthy Aging* indicators. Following national trends, Colorado's older adults are living longer and healthier lives. They are more likely to engage in physical activity and report good physical and mental health. Based on this consistent high performance, Colorado gets an A- for *Healthy Aging*. But there is room for improvement. While Colorado ranks first in the percent of older adults who get pneumonia and flu vaccinations, only 62 percent have actually protected themselves against these diseases. Additionally, one in five older adults report that poor physical or mental health kept them from doing their usual activities on eight or more days in the last month. While over 90 percent of Colorado's older adults have one or more persons they think of as their personal doctor, most states do better. Better access to primary care could reduce the number of hospitalizations for conditions like diabetes, hypertension and pneumonia.

Health Indicator	Rank among states
93.4 percent of older adults have one (or more) person(s) they think of as their personal doctor or health care provider	**33rd**
62.2 percent of older adults have had a flu shot during the past 12 months and have had a pneumonia vaccination	**1st**
74.6 percent of older adults participated in any physical activity in the past 30 days	**5th**
18.2 percent of older adults report that their **physical** health was not good eight or more days in the past month	**7th**
5.9 percent of older adults report that their **mental** health was not good eight or more days in the past month	**5th**
19.9 percent of older adults reported eight or more days of limited activity in the past month due to poor physical or mental health	**7th**
Preventable hospitalizations among Medicare beneficiaries (**5,729 admissions per 100,000 beneficiaries**)	**10th**
Average Rank	**9.7**
Average Grade	**A-**

Medical Home

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
93.4%	33/50	93.4%	Rhode Island	97.1%	96%

Indicator Definition

Adults (ages 65 and older) who report having one or more individuals they think of as their personal doctor or health care provider.

Indicator Significance

An estimated 80 percent of older Americans live with a single chronic health condition and 50 percent live with two or more. With the graying of the population, health care spending is likely to increase by 25 percent by 2030. Medical care for older adults costs three to five times more than that provided to those under age 65. Having a regular source of medical care is especially critical for older adults because they so often must manage chronic health problems. Regular contact with a primary physician can ensure that older adults are regularly screened for common age-related diseases and that health conditions that occur during the aging process are properly managed.[1]

Colorado Specifics

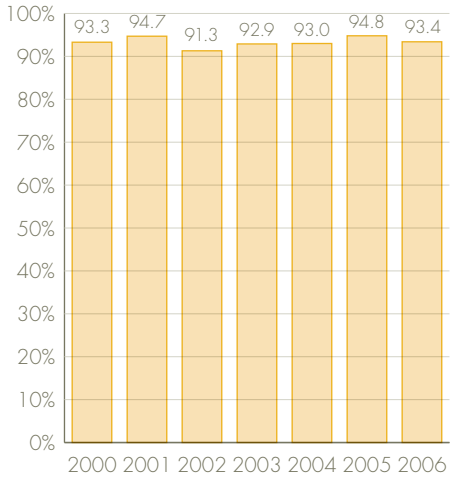
Fully 93 percent of older Coloradans report that they have a regular source of health care, a number that has remained stable since 2000. Yet even higher proportions of older adults in most other states report having a regular source of care. Older adults with higher incomes are only slightly more likely to have a regular source of care than those with lower incomes. Access to a regular source of care for older adults is superior to that for working age adults (75 percent) and especially so for children (52 percent). Income is much more strongly related to children and working-age adults having a regular source of care than among older adults. The near universal enrollment of older adults in Medicare is the likely explanation for this difference. Nevertheless, concern is growing that low-income older adults will have increasing difficulty securing a regular source of care as more physicians refuse to accept Medicare reimbursement rates.

Promising Initiatives

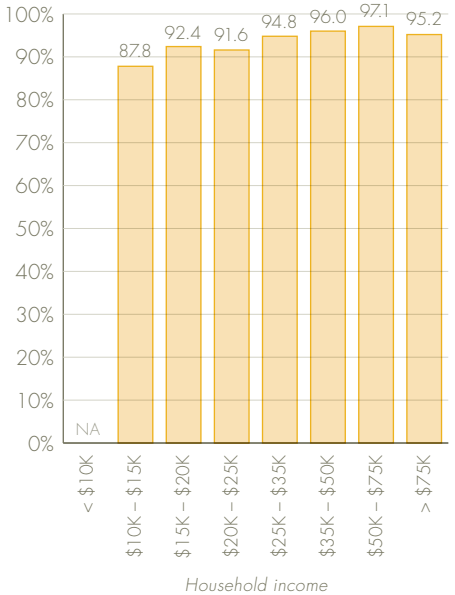
In Colorado

The Colorado Trust recently launched a four-year, $6.5 million Healthy Aging initiative. This statewide initiative has provided grants to 20 community-based organizations to strengthen and expand access to services for older adults, including training for caregivers of older adults, and wellness programs tailored to older adults.[2]

Older adults who report a regular source of medical care in Colorado[4]



Older adults who report a regular source of medical care by income in Colorado[5]

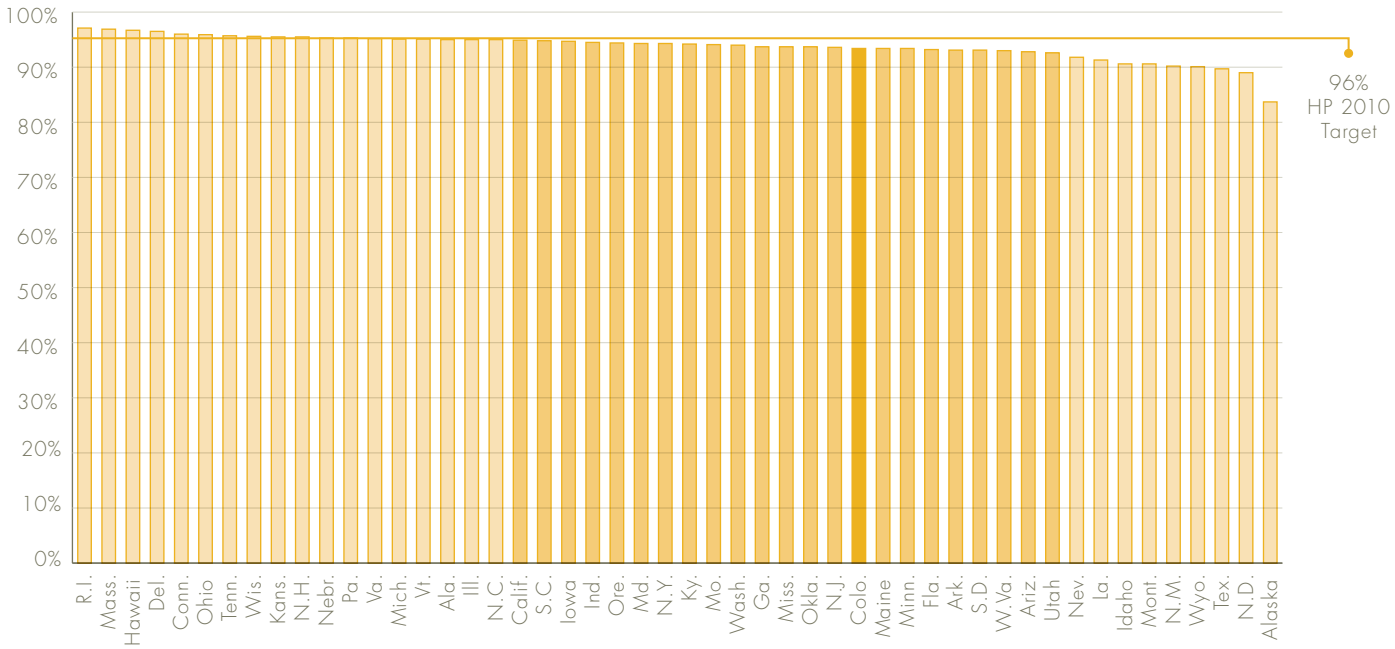


Medical Home (continued)

Elsewhere

The Patient Safety Health Care Network of North Iowa is a coalition of nine rural primary care hospitals that serve 14 sparsely populated and economically depressed rural counties. The counties have a high percentage of elderly residents (19 percent). All 14 counties are medically underserved. The network is developing and implementing a patient safety plan to improve the quality of care provided to residents. Concern about adverse drug reactions is a high priority. This region of the state has experienced an exodus of health care professionals, making access to primary care an even more troublesome issue. The network is now developing uniform standards for documenting and tracking data among the participating hospitals to improve patient care.[3]

Older adults who report a regular source of medical care[6]



Text

1. "The State of Aging and Health in America 2007," Centers for Disease Control and Prevention, <www.cdc.gov/aging/pdf/saha_2007.pdf>
2. The Colorado Trust, Healthy Aging Initiative, <www.coloradotrust.org/index.cfm?fuseAction=InitiativesGrantees.details&initiativeid=315>
3. Rural Health Development Grantees by State, FY2005, Health Resources and Services Administration, <ruralhealth.hrsa.gov/funding/NetworkDevelopmentDirectory2005.asp>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Immunizations

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
62.2%	1/50	62.2%	Colorado	62.2%	90%

Indicator Definition

Adults (ages 65 and older) who had a flu shot within the past year and had a pneumonia vaccine at some point.

Indicator Significance

Older adults are more susceptible to infections and often experience more severe symptoms from infections and other illnesses as they age. Complications from influenza and pneumonia are the sixth leading cause of death among older adults. More than 60,000 adults 65 and older die each year from such complications, many of which are preventable through recommended immunizations. Older adults are at greater risk of dying from infection-related illnesses than from a fatal car accident. Since flu and pneumonia spread from person to person, being vaccinated for both also protects friends and family with whom one has close contact. Physicians recommend an annual flu shot after the age of 50 and a single dose of pneumonia vaccine at age 65.[1]

Colorado Specifics

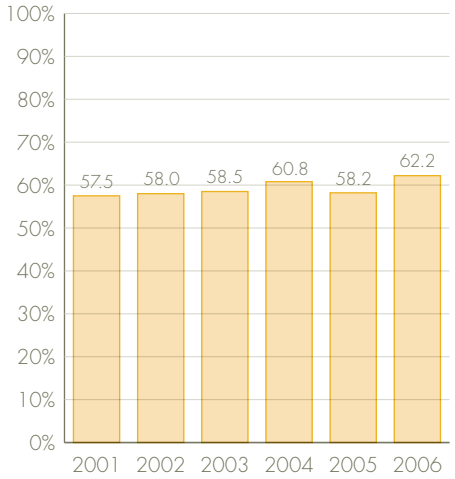
Colorado ranks first among the 50 states in the proportion of older adults who report having had a flu shot within the past year and having been vaccinated for pneumonia. Despite its first place standing, Colorado's older adult vaccination rate of 62 percent is still far below the *Healthy People 2010* target of 90 percent. This vaccination rate has changed little in the past five years and little difference is revealed by examining the rates by race, ethnicity and income.

Promising Initiatives

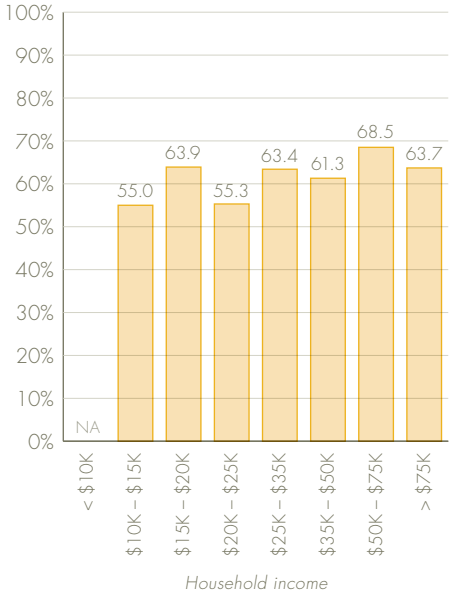
In Colorado

The Colorado Influenza and Pneumococcal Alert Coalition (CIPAC) seeks to raise public awareness of the importance of older adults receiving vaccinations. In 2002, CIPAC was awarded the Excellence in Immunization Award by the National Partners for Immunization (NPI) for its outstanding community outreach program. CIPAC has developed commercials and collects and disseminates pertinent data to health care providers.[2]

***Older adults with appropriate immunizations** in Colorado*[4]



***Older adults with appropriate immunizations** by income in Colorado*[5]

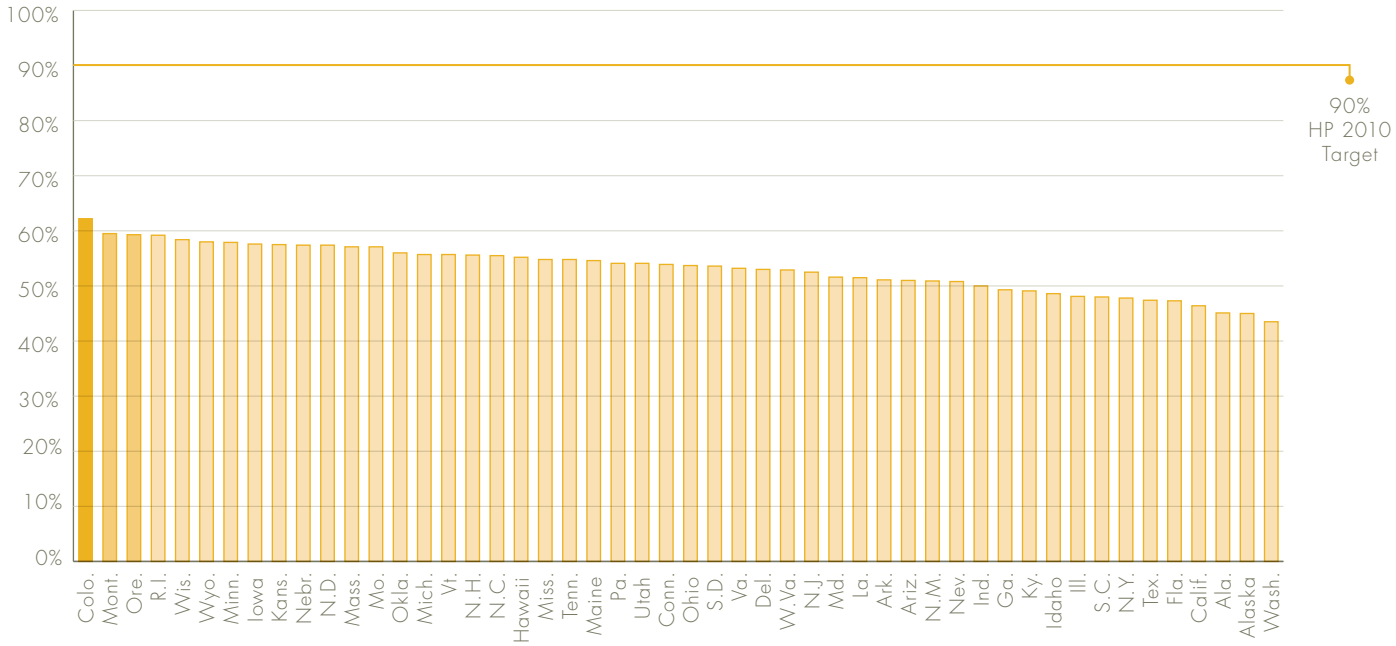


Immunizations (continued)

Elsewhere

To raise awareness among older adults and to generate media interest, San Diego County, Calif., ran a Boomer Biker Immunization Ride (BBIZ) for baby-boomers who ride Harley Davidson motorcycles. The October 2006 ride concluded with the immunization of more than 70 older adults at a local Harley Davidson store. The event attracted media attention and reached a large audience with messages about the importance of adult immunizations.[3]

Older adults with appropriate immunizations[6]



Text

1. 100% Immunization Campaign, American Society of Consultant Pharmacists, <www.immunizeseniors.org/o1_why.htm>
2. Colorado Influenza and Pneumococcal Alert Coalition, <immunizecolorado.com/aboutCIPAC.asp>
3. California Adult Immunization Coalition, <www.immunizecaadults.org/bbiz/BBIZ.asp>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Exercise

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
74.6%	5/50	74.6%	Minnesota	79.4%	80%

Indicator Definition

Adults (ages 65 and older) who participated in any physical activity within the past 30 days.

Indicator Significance

By the age of 75, one in every two women and one in every three men will get no physical exercise. Lacking any meaningful physical activity, their ability to perform basic and normal movement is lost as muscle and bone mass are depleted due to lack of use. An estimated 88 percent of adults 65 and older will have acquired at least one chronic illness that results in some loss of ability to engage in normal physical activities. Physical and social environmental factors, including lack of public transportation, often limit older adults' access to age-appropriate exercise programs. Physicians' lack of awareness of appropriate fitness routines for older adults may also serve as an impediment, particularly for those with one or more chronic illnesses. With the projected growth in the older adult population, the number of older adults with chronic conditions resulting from inactivity is likely to increase.[1]

Colorado Specifics

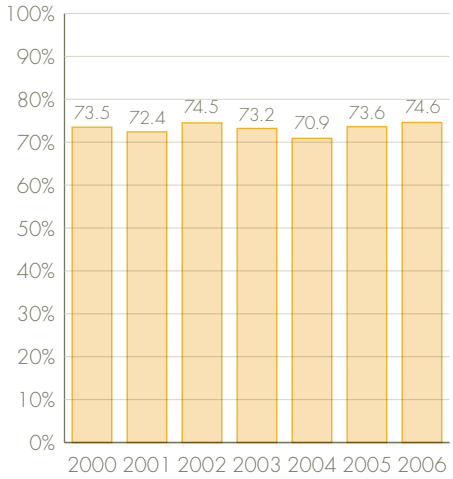
Colorado ranks an impressive fifth in the proportion of older adults who participated in at least some physical activity in the last month. Nevertheless, there has been no discernible improvement in this indicator since 2000 and the state is below the *Healthy People 2010* target of 80 percent. As with physical activity indicators for other age groups, older men are more likely to participate in physical activity than women (81 percent vs. 70 percent in 2006). Also, older adults in the higher income groups are more likely to participate in physical activity than lower-income older adults. While higher income makes favorite Colorado activities such as golf and skiing more accessible, there is no "entrance fee" to taking a few long walks each week.

Promising Initiatives

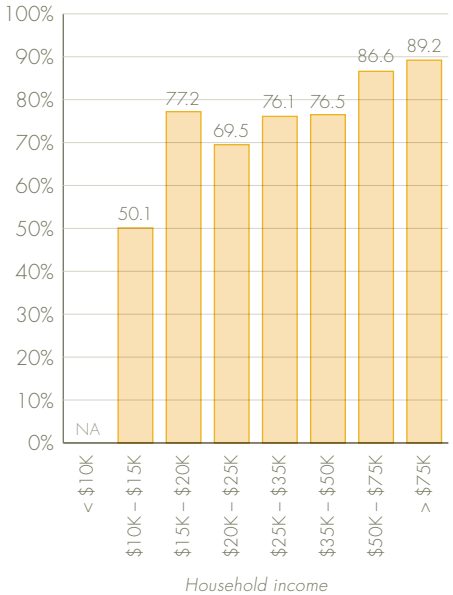
In Colorado

The Consortium for Older Adult Wellness is the only known organization in Colorado that trains professionals who work with older adults in model best-practice chronic disease prevention programs. The consortium offers safe, evidence-based best practice models and programming in the areas of physical activity, nutrition and fall prevention. These classes are for implementation in recreation centers, senior centers, nursing homes, assisted living centers, independent living centers, outpatient clinics, congregate meal sites, churches or anywhere older adults gather. COAW also provides technical assistance and consulting to organizations wishing to establish older adult wellness programs or plan health education strategies targeting older adults.[2]

Older adults who participated in any physical activity within past month in Colorado[4]



Older adults who participated in any physical activity within past month by income in Colorado[5]



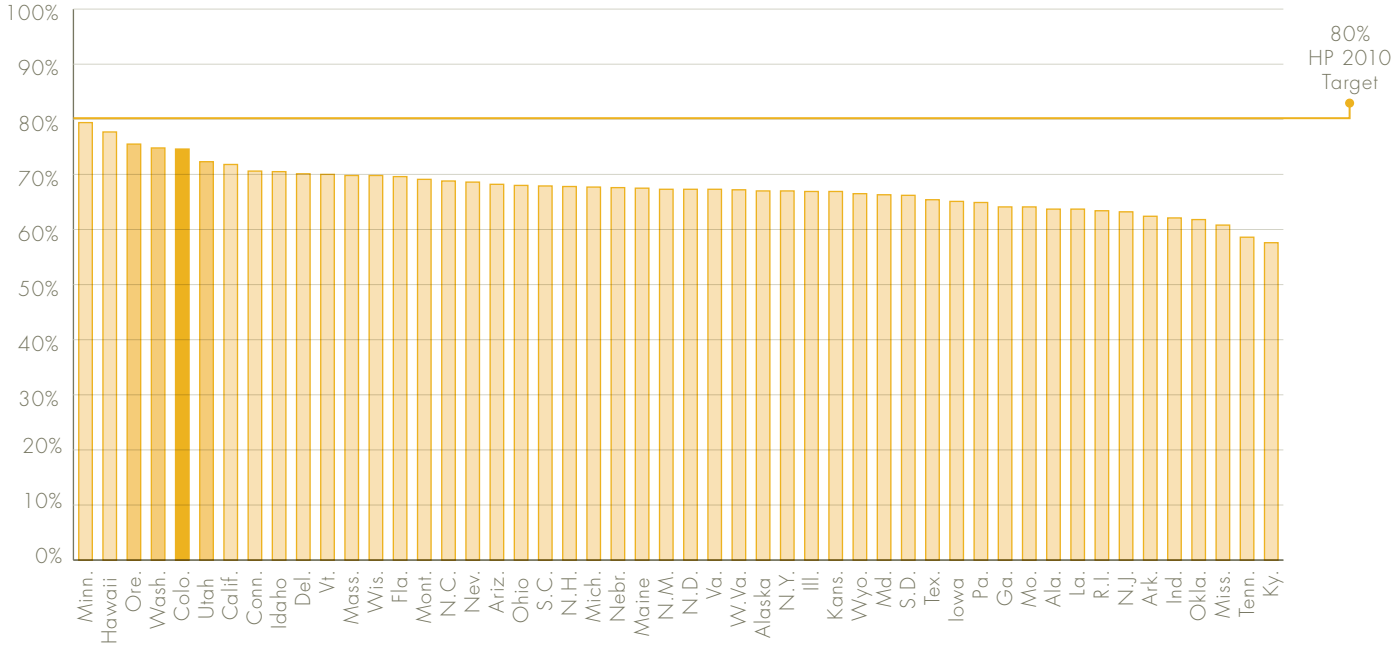
HEALTHY AGING

Exercise (continued)

Elsewhere

Physical Activity for Lifetime Success (PALS) is a program developed by the University of Washington, Health Promotions Research Center. It is designed to effect change in personal physical activity levels and promote policies that support exercise among low-income, ethnically diverse older adults. PALS links doctors from two primary clinics to senior center programs that are working to increase physical activity among older diabetics. Physicians develop a personal exercise plan for each individual, accompanied by a list of local programs and resources. PALS then compares the outcomes of program participants to the outcomes of diabetics who fail to get any physical activity.[3]

Older adults who participated in any physical activity within past month[6]



Text

1. Physical Activity for Older Adults: Exercise for life!, American Society on Aging, <www.asaging.org/CDC/module6/home.cfm>
2. Consortium for Older Adult Wellness, <www.consortiumforolderadultwellness.org>
3. University of Washington, Health Promotions Research Center, <www.cdc.gov/prc/research-projects/core-projects/physical-activity-lifetime-success.htm>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
5. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>
6. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Poor Physical Health

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
18.2%	7/50	18.2%	Hawaii	15.7%	NA

Indicator Definition

Adults (ages 65 and older) who reported that their physical health "was not good" eight or more days during the past month.

Indicator Significance

Physical health is a key indicator of overall well-being as people age. Lifestyle choices—such as inactivity, smoking, poor diet and social isolation—can affect an individual's perception of physical health. Likewise, physical health is strongly associated with mental health. Those who suffer from one or more chronic illnesses are more likely to report poor mental health, whereas those who have a chronic mental illness often have a secondary or primary physical condition. Physical symptoms such as stomach problems and low energy in older adults often suggest underlying mental health concerns, such as depression. For this reason, depressed older adults spend three times as much on medical care than do non-depressed older adults.[1]

Colorado Specifics

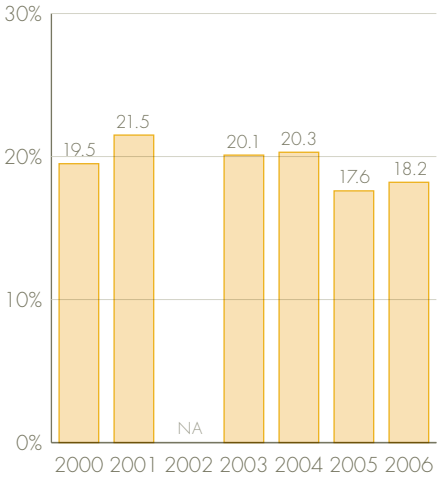
Colorado performs well compared to other states in the proportion of older adults reporting poor physical health, ranking seventh. There has been little change since 2000 in the proportion of older Coloradans reporting poor physical health. Older women are more likely to report poor physical health than are men. Improvements in physical activity and preventive health care could boost Colorado's performance on this important health indicator.

Promising Initiatives

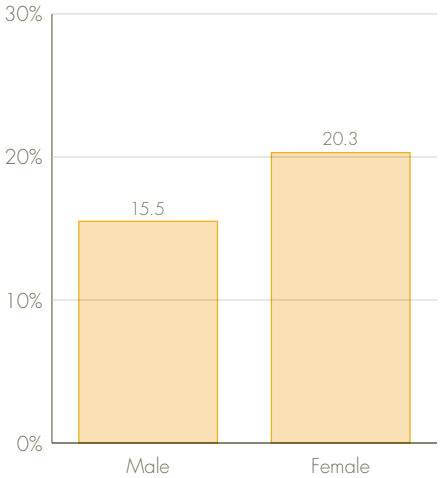
In Colorado

The Colorado Department for Public Health and Environment is launching Stanford University's Chronic Disease Self-Management Program (CDSMP) for older adults who lack private health plans. An internationally accepted best practice in disease management, the program helps participants set goals, make decisions and find the resources and support they need to make informed decisions about exercise, healthy eating, intimacy and personal relationships and positive communication with friends, family and caregivers. The program also provides information on medication management and best ways to participate in their medical treatment decisions. At the end of the program, each participant leaves with an action plan for self-management.

Older adults who report poor physical health eight or more days within past month in Colorado[3]



Older adults who report poor physical health eight or more days within past month by sex in Colorado[4]

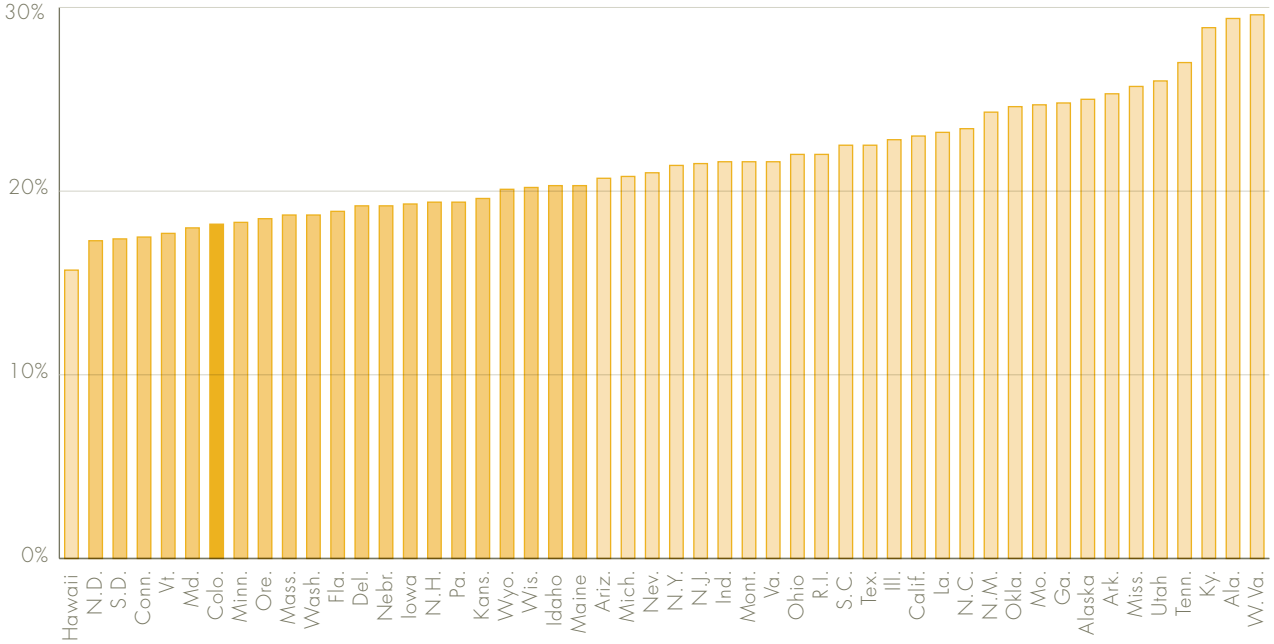


Poor Physical Health (continued)

Elsewhere

The Physical Activity Project, developed by the Virginia Department of Health and Department of Aging, targets adults living in rural areas whose populations have higher-than-average rates of chronic illness. Participants come to senior nutrition sites, where trained program coordinators teach low-impact exercise. The project began with 74 participants. A year later, participation had doubled. Forty percent of participants reported a decrease in pain and 50 percent reported that the program helped them reach personal fitness goals.[2]

Older adults who report poor physical health eight or more days within past month[5]



Text

1. "Aging Well: Toward a Way of Life for All People," *Preventing Chronic Disease*, July, 2005, <www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1364512> Philadelphia Mental Health and Aging Resource Guide, <www.mhaging.org/guide/mhmi.html>

2. Commonwealth Council on Aging: 2006 Best Practices Award Winners, Senior Navigator, <www.seniornavigator.com/vaprovider/consumer/snArticle.do?contentid=711>

Charts

3. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>

4. **Source:** Colorado Health Institute analysis of Behavior Risk Factor Surveillance System, 2006, <www.cdphe.state.co.us/cohid/brfss.html>

5. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Poor Mental Health

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
5.9%	5/50	5.9%	Minnesota	5.0%	NA

Indicator Definition

Percent of adults (ages 65 and older) who reported their mental health "was not good" (feelings of stress, depression and problems with emotions) for eight or more days during the past month.

Indicator Significance

Depression is not a normal part of aging, yet the National Institute of Mental Health reports that depression is widely under-recognized and untreated among older adults. Depression often accompanies chronic illness, and therefore goes unrecognized as a separate and treatable health problem. The majority of older adults cope appropriately with physical limitations, cognitive changes and other losses that accompany aging. But many—almost 20 percent—experience mental health problems that are not a normal part of aging. Older adults have the highest rate of suicide of any age group. Medicare does not adequately cover mental health care costs, so many lower-income older adults go without treatment. Loneliness and social isolation exacerbate poor mental health among adults as they age. They are the least likely group to seek help for depression and related mental problems. Drug interactions pose another dilemma for this age group. Because so many older adults take medications for physical health conditions, as many as 40 percent who are also taking antidepressants quit or repeatedly miss doses because of side effects, memory problems, or difficulty keeping track of their drug regimens.[1]

Colorado Specifics

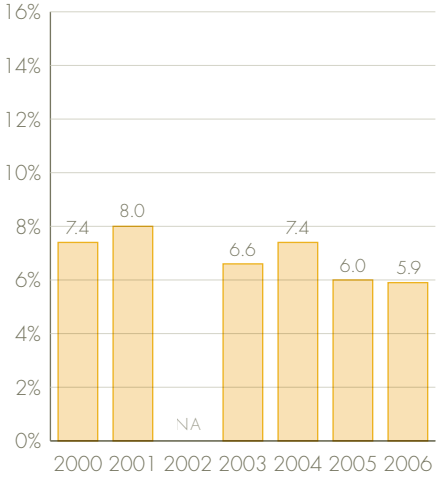
Only 6 percent of older Coloradans report eight or more days with poor mental heath in the past month, one of the lowest rates in the nation. The incidence of poor mental health among older adults has remained fairly constant since 2000.

Promising Initiatives

In Colorado

Senior Reach serves adults 60 and older in Jefferson, Gilpin, Clear Creek, Boulder and Broomfield Counties. It is a joint project of the federal Substance Abuse and Mental Health Services Administration, Jefferson Center for Mental Health, the Mental Health Centers serving Boulder and Broomfield Counties and the Seniors Resource Center. The program has provided better and less-fragmented services to older adults in the community, and helped more people to understand the special needs of seniors. It has instilled a willingness among those assisting older adults to be the "eyes and ears" in the community, and it has improved intra-agency collaboration. Senior Reach was recently awarded the 2007 Golden Light Bulb Award for best practices in the clinical arena by the Colorado Behavioral Healthcare Council.[2]

***Older adults who report poor mental health eight or more days within past month** in Colorado[4]*

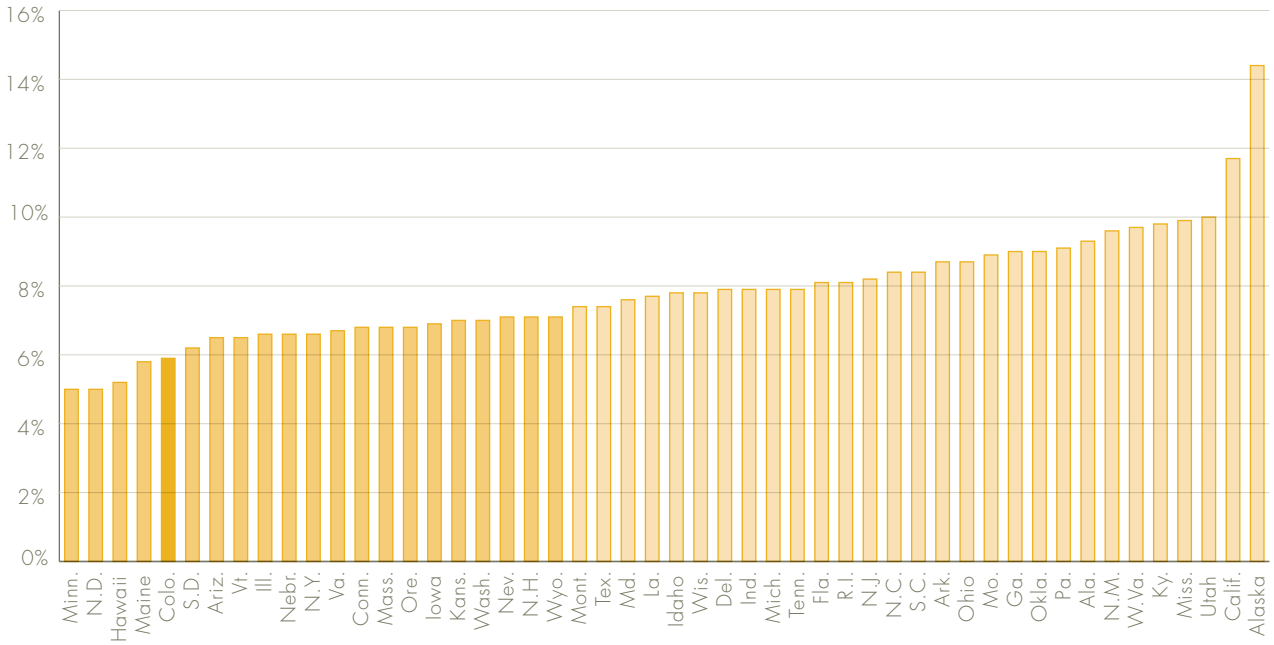


Poor Mental Health (continued)

Elsewhere

Butler County of Ohio has launched a pilot study to examine in-home mental health care for older adults. The Behavioral Health Initiative targets the majority of older adults whose mental illnesses are often left untreated and who remain underserved. This initiative serves 100 older adults through the county-funded Elderly Service Programs. Two social workers trained in behavioral health care make referrals to hospital psychiatrists when needed. By caring for these adults in their homes, the initiative attempts to maintain the adult's feelings of independence while providing the care that is often neglected.[3]

Older adults who report poor mental health eight or more days within past month[5]



Text

1. National Institute of Mental Health, <www.nimh.nih.gov/health/publications/older-adults-depression-and-suicide-facts.shtml>
   "Older Adults and Mental Health," Mental Health: A Report of the Surgeon General, <surgeongeneral.gov/library/mentalhealth/chapter5/sec1.html>
2. Jefferson County Mental Health, Senior Reach Program, <www.jeffersonmentalhealth.org/seniorreach/Revised%20Fact%20Sheet.pdf>
3. Council on Aging of Southwestern Ohio, <help4seniors.org/>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
5. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Limited Activity

Healthy Aging

Most recent CO value (2006)	CO rank (2006)	CO value (2006)	Best state (2006)	Best state value (2006)	HP2010 target
19.9%	7/50	19.9%	Wisconsin	11.0%	NA

Indicator Definition

Adults (ages 65 and older) who report that poor mental or physical health kept them from doing usual activities such as self-care, work or recreation eight or more days in the past month.

Indicator Significance

Chronic diseases often limit physical activity because of the functional limitations that accompany them.[1] Arthritis—a term that encompasses more than 100 different diseases and conditions—is the leading cause of disability and functional limitation in the United States. As the population ages, it is estimated that arthritis will affect 67 million adults by 2030. The 2003 – 05 National Health Interview Survey estimates that 21.6 percent of the adult U.S. population is limited in some way by arthritis. In addition, arthritis affects more than half of adults with diabetes and heart disease. Each year, arthritis-related conditions lead to more than 75,000 hospitalizations. Direct medical costs were $81 billion in 2003. Effective ways to prevent arthritis and lessen its symptoms include weight control, injury prevention, early diagnosis and symptom management and physical activity.

Colorado Specifics

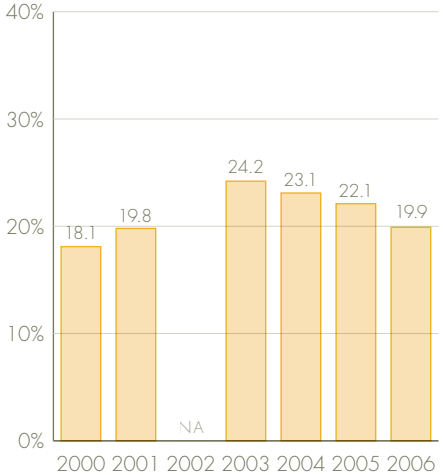
One in five older adults in Colorado reports being unable to engage is such usual activities as self-care, work or recreation because of deficient physical or mental health. This is nearly twice the level of the best-performing state, Wisconsin. Emerging national evidence suggests the rate of disability among older Americans is declining. This may be true in Colorado as well. Improved public awareness of the factors that contribute to healthy aging, such as exercise, diet and community involvement, along with better management of chronic conditions, will contribute to this positive change over time.

Promising Initiatives

In Colorado

The Colorado Physical Activity and Nutrition Program (COPAN) awarded eight grants to organizations throughout Colorado that promote physical activity for older adults. Several grant recipients have used the funds to train staff and to purchase age-appropriate equipment. The town of Buena Vista and the Upper Arkansas Area Agency on Aging have used the funding to launch the Arthritis Foundation Self-Help Program, a six-week course that has been demonstrated to reduce arthritis pain by 20 percent and physician visits by 40 percent.[2]

Older adults who report limited physical activity eight or more days within past month in Colorado[4]

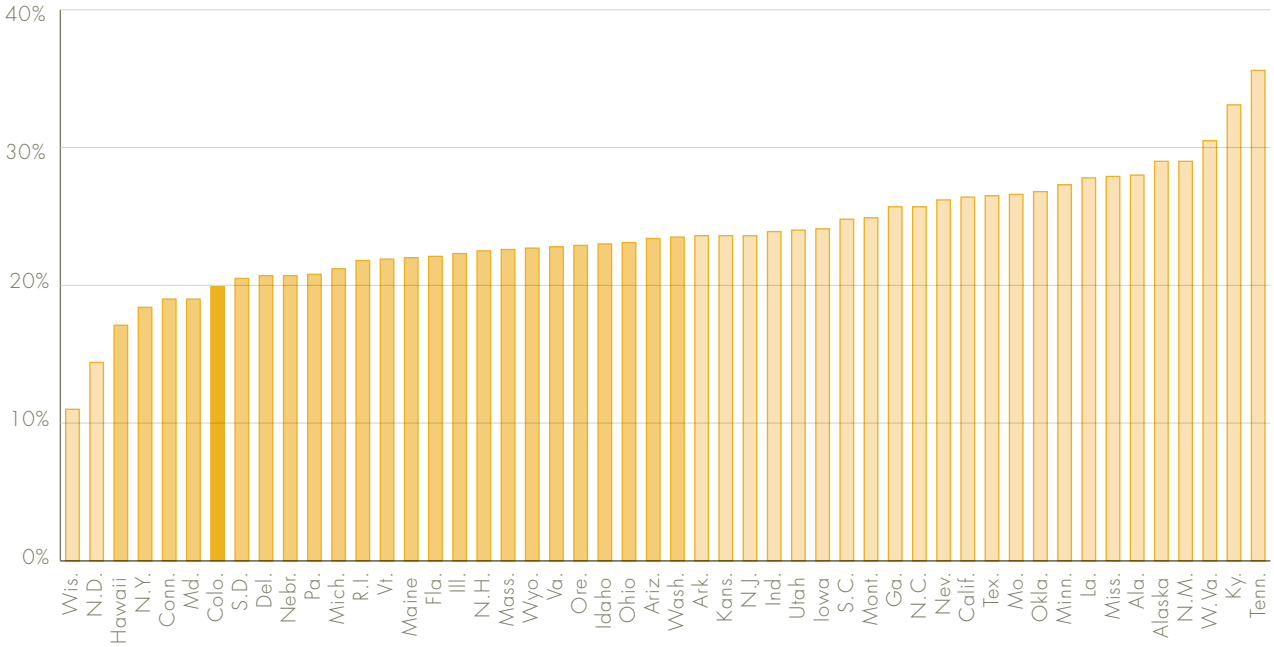


Limited Activity (continued)

Elsewhere

The Centers for Disease Control and Prevention has developed the National Arthritis Action Plan: a public health strategy in partnership with the Arthritis Foundation, the Association of State and Territorial Health Officials and numerous other partner organizations. The plan is a coordinated national effort to address the growing incidence of arthritis in the United States. This year, $13.5 million in federal funds will be used to implement the plan in 36 states.[3]

Older adults who report limited physical activity eight or more days within past month[5]



Text

1. "Targeting Arthritis: Reducing Disability for Nearly 19 Million Americans," Centers for Disease Control and Prevention, <www.cdc.gov/nccdphp/publications/aag/arthritis.htm>
2. Colorado Physical Activity and Nutrition Program, Colorado Department of Public Health and Environment, <www.cdphe.state.co.us/pp/COPAN/grants/index.html#older%20adult>
3. "Targeting Arthritis: Reducing Disability for Nearly 19 Million Americans," Centers for Disease Control and Prevention, <www.cdc.gov/nccdphp/publications/aag/arthritis.htm>

Charts

4. **Source:** Colorado Department of Public Health and Environment analysis of Behavior Risk Factor Surveillance System, 2000 – 2006, <www.cdphe.state.co.us/cohid/brfss.html>
5. **Source:** National Center for Chronic Disease Prevention and Health Promotion, Behavior Risk Factor Surveillance System, 2005, Centers for Disease Control and Prevention, <apps.nccd.cdc.gov/brfss/index.asp>

Preventable Hospitalizations

Healthy Aging

Most recent CO value (2003)	CO rank (2003)	CO value (2003)	Best state (2003)	Best state value (2003)	HP2010 target
5,729/100,000	10/50	5,729/100,000	Hawaii	4,069/100,000	NA

Indicator Definition

Hospital admissions per 100,000 Medicare beneficiaries for any one of the following 13 conditions:

- Short-term complications associated with diabetes
- Perforated appendix
- Long-term complications associated with diabetes
- Chronic obstructive pulmonary disease
- Hypertension
- Congestive heart failure
- Dehydration
- Bacterial pneumonia
- Urinary tract infection
- Angina without procedure
- Uncontrolled diabetes
- Adult asthma
- Lower-extremity amputation among patients with diabetes

Indicator Significance

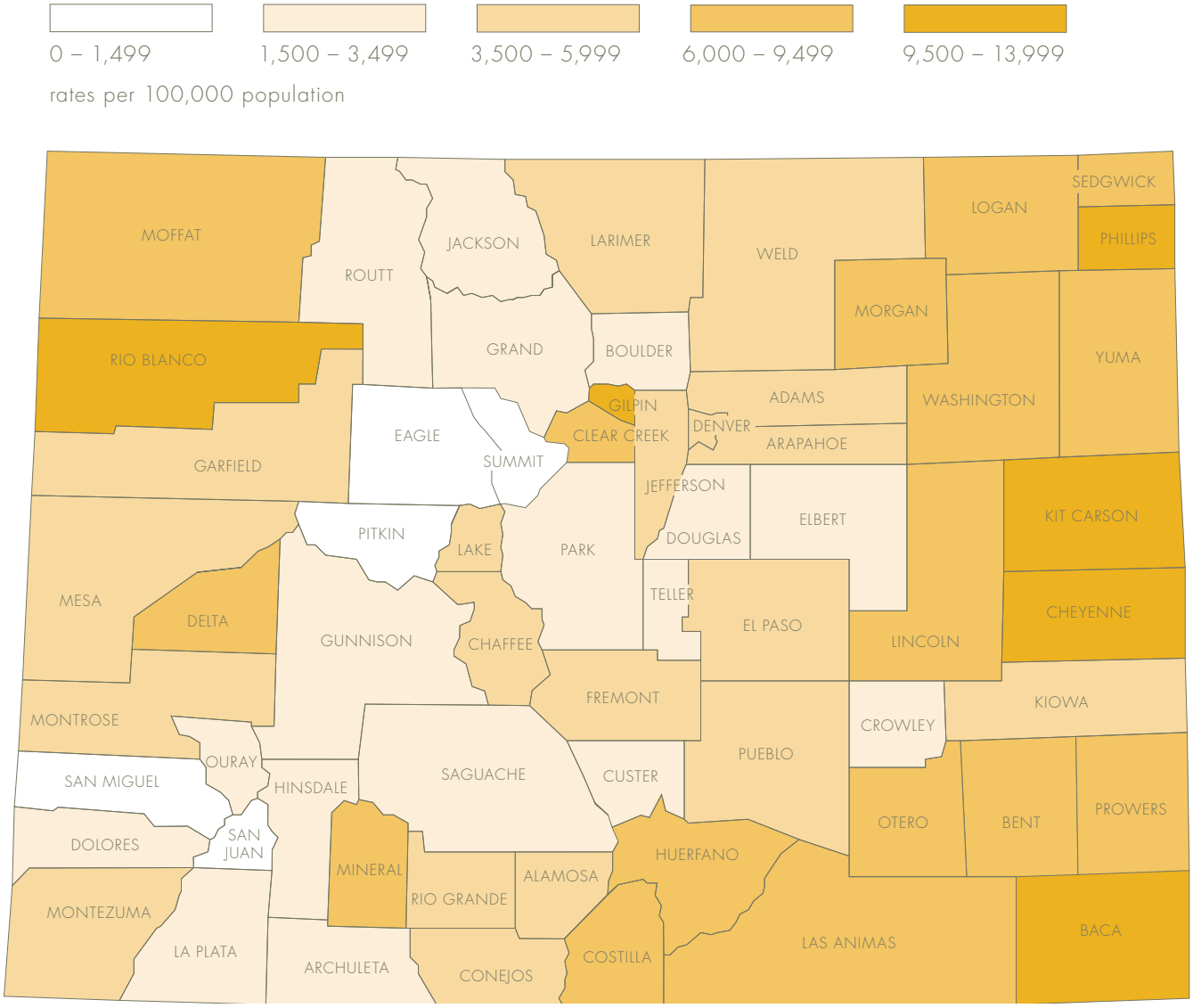
Ambulatory care sensitive (ACS) conditions are those for which a hospitalization could have been avoided if the patient received timely and appropriate outpatient care. Many factors influence ACS hospitalizations, including lack of access to adequate primary care, chronic conditions that are not managed in an outpatient setting, and poor pharmaceutical management, particularly among patients on a multiple drug regimen. There is no agreement in the medical community as to the optimum rate for each ACS condition. Therefore, hospital admission rates for the various ACS conditions should not be construed as a measure of hospital quality, but rather as a potential indicator of lack of adequate access to physician care in the community.[1]

Colorado Specifics

Colorado performs relatively well in ACS condition admission rates among Medicare beneficiaries (mostly persons 65 and over), ranking 10th among states. As an indicator of access to primary care, it is useful to look at local variations in ACS rates. Working with admission data from the Colorado Hospital Association, the Colorado Health Institute has analyzed ACS rates for persons of all ages at the county level. The map on the facing page shows that some resort and mountain counties have relatively low rates while most Eastern Plains counties have relatively high rates. The populous Front Range counties tend to fall in the middle. These differences are likely a reflection of the higher rates of uninsurance and a shortage of primary care providers in some rural counties.

Preventable Hospitalizations (continued)

Overall Risk-Adjusted
Rates by County 2005



Text

1. "Aiming Higher: Results from a State Scorecard on Health System Performance," The Commonwealth Fund, <www.commonwealthfund.org/publications/publications_show.htm?doc_id=494551>

Map

2. **Data source:** Colorado Hospital Association, Hospital Discharge Dataset. Map created on April 20, 2007. Software used to analyze Ambulatory Care Sensitive Conditions: Prevention Quality Indicators, Version 3.1 SAS Department of Health and Human Services Agency for Healthcare Research and Quality. Map prepared by the Colorado Health Institute.

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Report Card summary

Life Stage	Grade & Avg. Rank
Healthy Beginnings	C- 27.3
Healthy Children	C- 27.7
Healthy Adolescents	B- 17.1
Healthy Adults	B 13.8
Healthy Aging	A- 9.7

RANK
1 = Best
50 = Worst

GRADING SCALE
A (1 – 10) Excellent
B (11 – 20) Good
C (21 – 30) Average
D (31 – 40) Poor
F (41 – 50) Unacceptable

Appendix I: Indicator summary table

Life Stage	Indicator	Age range	Data Source*
HEALTHY BEGINNINGS	Prenatal care later than the first trimester (%)	women of childbearing ages	Vital Stats
	Smoking during pregnancy (%)	women of childbearing ages	PRAMS
	Low birth weight (%)	births occurred in 2005	Vital Stats
	Infant mortality rate (infant deaths per 1,000 live births)	less than 1 yr	Vital Stats
	All recommended early childhood immunizations (%)	children born between January 2003 and June 2005	NIS
HEALTHY CHILDREN	Children not covered by private or public health insurance (%)	0 – 12 yrs	CPS
	Children living in families with income below the federal poverty level (%)	0 – 12 yrs	CPS
	Children with a regular source of primary care (%)	0 – 17 yrs	NSCH
	Children receiving preventive dental care in last 12 months (%)	1 – 17 yrs	NSCH
	Children who participate in vigorous physical activity (%)	6 – 17 yrs	NSCH
	Overweight children (%)	10 – 17 yrs	NSCH
HEALTHY ADOLESCENTS	Adolescents not covered by private or public health insurance (%)	13 – 17 yrs	CPS
	Adolescents living in families with income below the federal poverty level (%)	13 – 17 yrs	CPS
	Adolescent fruit and vegetable consumption (%)	high school students	YRBS
	Adolescents who participate in vigorous physical activity (%)	high school students	YRBS
	Overweight adolescents (%)	high school students	YRBS
	Adolescent binge drinking (%)	high school students	YRBS
	Adolescent smoking (%)	high school students	YRBS
	Adolescent depression (%)	high school students	YRBS
	Adolescents who attempted suicide (%)	high school students	YRBS
	Adolescent sexual activity (%)	high school students	YRBS
	Adolescent condom use (%)	high school students	YRBS
	Teen fertility rate (births to mothers 15 – 19 per 100,000 population)	15 – 19 yrs	Vital Stats

RANKING								
CO rank	CO ranked value	Best state	Best state value	Year for ranked values	Number of states ranked	CO most recent value	Most recent year for CO	HP 2010 target (age group)
33	21.2%	Iowa	11.8%	2004	42	21.4%	2005	90% receive adequate prenatal care
5	89.4%	Utah	96.1%	2003	19	89.8%	2005	99% abstain
39	9.0%	Alaska & Oregon	6.0%	2004	50	9.3%	2005	5%
17	6.2/1,000	Vermont	4.7/1,000	2003 – 2004	50	6.4/1,000	2005	4.5/1,000
28	80.3%	Massachusetts	86.9%	2006	50	80.3%	2006	90%
44	14.1%	Michigan	4.6%	2004 – 2006	50	14.1%	2004 – 2006	0%
16	14.4%	New Hampshire	6.5%	2004 – 2006	50	14.4%	2004 – 2006	NA
28	45.8%	New Hampshire	61%	2003	50	52.2%	2006	97% (age 0 – 17)
38	70.5%	Vermont	85.7%	2003	50	70.5%	2003	NA
37	57.1%	Alabama	69.2%	2003	50	57.1%	2003	NA
3	9.9%	Utah	8.5%	2003	50	14.8%	2006	5%
41	14.1%	Iowa	5.4%	2004 – 2006	50	14.1%	2004 – 2006	0%
14	10.3%	New Hampshire	5.6%	2004 – 2006	50	10.3%	2004 – 2006	NA
11	19.2%	Rhode Island	25.4%	2005	34	19.2%	2005	75% (all ages)
4	70.1%	New Hampshire	72.1%	2005	39	70.1%	2005	85%
6	9.8%	Utah	5.6%	2005	39	9.8%	2005	5%
33	30.6%	Utah	8.8%	2005	40	30.6%	2005	2%
14	18.7%	Utah	7.4%	2005	40	18.7%	2005	16%
7	25.0%	North Dakota	20.3%	2005	39	25.0%	2005	NA
6	6.7%	Vermont	6.2%	2005	40	6.7%	2005	1%
3	29.5%	New York	29.2%	2005	27	29.5%	2005	NA
3	69.3%	New Jersey	71.2%	2005	32	69.3%	2005	NA
36	43.9/1,000	New Hampshire	18.2/1,000	2004	50	39.3/1,000	2005	43/1,000

Appendix I: Indicator summary table (continued)

Life Stage	Indicator	Age range	Data Source*
HEALTHY ADULTS	Adults not covered by private or public health insurance (%)	18 – 64 yrs	CPS
	Adults who have a regular source of medical care (%)	18 – 64 yrs	BRFSS
	Adult fruit and vegetable consumption (%)	18 – 64 yrs	BRFSS
	Adult physical activity (%)	18 – 64 yrs	BRFSS
	Adult obesity (%)	18 – 64 yrs	BRFSS
	Adult smoking (%)	18 – 64 yrs	BRFSS
	Adult binge drinking (%)	18 – 64 yrs	BRFSS
	Adults with poor mental health (%)	18 – 64 yrs	BRFSS
	Adults with diabetes (%)	18 – 64 yrs	BRFSS
	Adults with hypertension (%)	18 – 64 yrs	BRFSS
HEALTHY AGING	Older adults with a regular source of medical care (%)	65+ years	BRFSS
	Older adults with recommended immunizations (%)	65+ years	BRFSS
	Older adults who participate in physical activity (%)	65+ years	BRFSS
	Older adults who report poor physical health (%)	65+ years	BRFSS
	Older adults who report poor mental health (%)	65+ years	BRFSS
	Older adults reporting limited activity due to poor physical or mental health (%)	65+ years	BRFSS
	Ambulatory care sensitive conditions among Medicare beneficiaries (admissions per 100,000 beneficiaries)	65+ years	MSA files

RANKING								
CO rank	CO ranked value	Best state	Best state value	Year for ranked values	Number of states ranked	CO most recent value	Most recent year for CO	HP 2010 target (age group)
32	19.6%	Minnesota	10.7%	2004 – 2006	50	19.6%	2004 – 2006	0%
32	75.5%	Maine	89.4%	2006	50	75.5%	2006	96% (18 and over)
18	23.0%	Vermont	29.3%	2005	50	23.0%	2005	75% (all ages)
5	83.9%	Minnesota	87.0%	2005	50	83.9%	2005	80% (18 and over)
1	18.4%	Colorado	18.4%	2006	50	18.4%	2006	15% (20 and over)
8	19.5%	Utah	10.6%	2006	50	19.5%	2006	12% (18 and over)
30	18.6%	Tennessee	9.8%	2006	50	18.6%	2006	6% (18 and over)
8	11.8%	Minnesota	9.3%	2006	50	11.8%	2006	NA
2	3.8%	Utah	3.7%	2006	50	3.8%	2006	2.5% (all ages)
2	15.5%	Utah	13.8%	2005	50	15.5%	2005	16% (20 and over)
33	93.4%	Rhode Island	97.1%	2006	50	93.4%	2006	96% (18 and over)
1	62.2%	Colorado	62.2%	2006	50	62.2%	2006	90% (65 and over)
5	74.6%	Minnesota	79.4%	2006	50	74.6%	2006	80% (18 and over)
7	18.2%	Hawaii	15.7%	2006	50	18.2%	2006	NA
5	5.9%	Minnesota	5.0%	2006	50	5.9%	2006	NA
7	19.9%	Wisconsin	11.0%	2006	50	19.9%	2006	NA
10	5,729 /100,000	Hawaii	4,069 /100,000	2003	50	5,729 /100,000	2003	NA

* Data Sources:

BRFSS: Behavior Risk Factor Surveillance System

YRBS: Youth Risk Behavior Survey

NSCH: National Survey of Children's Health

CPS: Current Population Survey

Vital Stats: Vital Statistics System

NIS: National Immunization Survey

PRAMS: Pregnancy Risk Assessment Monitoring System

MSA Files: Medicare Standard Analytic Files

Appendix II: Data source descriptions

Behavior Risk Factor Surveillance System Survey

The Behavior Risk Factor Surveillance System (BRFSS) is a state-based health survey that has been conducted since 1984. By 1994, all states, the District of Columbia, and three territories were participating in the BRFSS. It is a cross-sectional, monthly telephone survey conducted by state health departments. Home telephone numbers are obtained through random-digit dialing and adults 18 years or older are asked to take part in the survey. BRFSS interviewers ask questions related to behaviors that are associated with preventable chronic diseases, injuries, and infectious diseases. The content of the BRFSS questionnaire is determined by the state BRFSS coordinators and the federal Centers for Disease Control and Prevention (CDC). BRFSS data are weighted for the probability of selection of a telephone number, the number of adults in a household and the number of telephones in a household. A final post-stratification adjustment is made for nonresponse and noncoverage of households without telephones. The weights for each relevant factor are multiplied together to get a final weight. Since 2002, in Colorado, over 4,000 interviews have been conducted annually in English and Spanish.[1]

Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is one component of the Youth Risk Behavior Surveillance System developed by CDC in collaboration with representatives from multiple federal, state, and local departments of education and health. The national sampling frame includes both public and private high schools, though only public high schools are surveyed in Colorado. High schools are randomly selected in proportion to enrollment size. To enable a separate analysis of data for African-American and Hispanic students, certain schools were over-sampled. Individual classrooms are randomly selected within each sampled school and all students in sampled classrooms are surveyed. In the 2005 national sample 13,953 questionnaires were completed in 159 schools with an overall response rate of 67 percent. The 2005 Colorado sample yielded 1,498 responses from students in 29 public high schools with an overall response rate of 60 percent. Forty states participated in the 2005 YRBS.

The YRBS is a self-administered, anonymous questionnaire covering behaviors related to injuries and violence; tobacco, alcohol and drug use; sexual behaviors that result in HIV infection, other sexually transmitted diseases and unintended pregnancies; dietary behaviors and physical activity. Local school parental permission procedures are followed before survey administration.[2]

The National Survey Of Children's Health and the Colorado Child Health Survey

The National Survey of Children's Health (NSCH) is conducted every five years by CDC's National Center for Health Statistics (NCHS). Using a random-digit-dial sampling frame, the survey interviewed an average of 2,000 parents or guardians of children under 18 in each state in 2003 and the first half of 2004.

The annual Colorado Child Health Survey (CHS) was initiated in 2004 through a partnership between the Colorado Department of Public Health and Environment (CDPHE) and several other sponsoring programs and organizations throughout the state. This survey was designed to fill a data gap about children's health that existed in Colorado for children ages 1 – 14 years. In addition, the survey monitors Colorado's progress towards selected population health targets including HP 2010 and goals set in the Maternal and Child Health Block Grant.

The survey is a special supplement to the BRFSS survey and is conducted by telephone using random digit dialing. After an adult respondent completes the BRFSS, the interviewer asks whether there are children in the household within the target ages of 1 – 14 years. If there are, respondents are asked if they are willing to be contacted at a later date to complete the Child Health Survey. Topic areas of the survey include the child's physical activity, nutrition, access to health and dental care, behavioral health, school health, injury and other health-related areas. The survey is administered on a rolling basis over the course of a calendar year. At the end of each calendar year, data are cleaned and weighted to reflect the general population of children in Colorado ages 1 – 14 years. Approximately 1,000 surveys are completed each year.[3]

The physical activity and overweight indicators for the Healthy Children life cycle are measured by both the NSCH and the CHS. Data for all states are from the NSCH; the more recent values, shown in this report are from the CHS.

Current Population Survey

The Current Population Survey (CPS) is conducted by the U.S. Census Bureau annually. Respondents are drawn from the civilian non-institutionalized population and from military personnel who live in households with at least one other civilian adult. In March of each year, CPS asks respondents about their insurance status and their income for the entire past calendar year. To obtain this information, the interviewer visits the sample address to determine if the sample unit exists, if it is occupied and if a responsible adult will provide the requested information. If someone at the sample unit agrees to the interview, a telephone survey is conducted at a scheduled time. Interviewers will complete an in-person interview with households that do not have a telephone or who have poor English language skills.

The specific questions to be asked appear on a computer screen, and the interviewer has been trained to ask each question exactly as it is worded. Based upon the response entered by the interviewer, the computerized questionnaire determines the next question to be asked. Completed interviews are electronically transmitted to a central processor where the responses are edited for consistency, imputations are made for missing data, and various codes are added. Based on the probability of selection, a weight is added to each responding household and person record so that estimates of the population match the population projections made by the Census Bureau. Statistical considerations require that averages be calculated from multiple years of data to produce stable estimates. In general, statewide data are reported as two-year averages.[4]

Vital Statistics System

The data included in the Vital Statistics System are provided through contracts between CDC's National Center For Health Statistics (NCHS) and vital registration systems operated in the various jurisdictions for events such as births, deaths, marriages, divorces and fetal deaths. In the United States, legal authority for the registration of these events resides individually with the 50 states, two cities (Washington, DC, and New York City), and five territories (Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands). These jurisdictions are responsible for maintaining registries of vital events and for issuing copies of birth, marriage, divorce and death certificates.

Standard forms for the collection of the data and model procedures for the uniform registration of the events are developed and recommended for nationwide use through cooperative agreements between state jurisdictions and NCHS. Data related to births and causes of death for Colorado can be found at the Colorado Department of Public Health and Environment's Web site.[5]

National Immunization Survey

The National Immunization Survey (NIS) is sponsored by CDC's National Immunization Program (NIP) and conducted jointly by NIP and CDC's National Center for Health Statistics (NCHS). The NIS is a list-assisted random-digit-dialing telephone survey followed by a mailed survey to children's immunization providers that began data collection in April 1994 to monitor childhood immunization coverage.

The target population for the NIS is children between the ages of 19 and 35 months living in the United States at the time of the interview. Data from the NIS are used to produce timely estimates of vaccination coverage rates for all childhood vaccinations recommended by the Advisory Committee on Immunization Practices (ACIP). Estimates are produced for the nation and for each of 78 Immunization Action Plan (IAP) areas, consisting of the 50 states, the District of Columbia, and 27 large urban areas. The official estimates of vaccination coverage rates from the NIS are rates of being up-to-date with respect to the ACIP recommended numbers of doses of vaccines. Vaccinations included in the survey are: diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); poliovirus vaccine (polio); measles-containing vaccine (MCV); Haemophilus influenzae type b vaccine (Hib); hepatitis B vaccine (Hep B); varicella zoster vaccine, pneumococcal conjugate vaccine (PCV), hepatitis A vaccine (Hep A), and influenza vaccine (FLU).[6]

Pregnancy Risk Assessment Monitoring System

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a state-specific, population-based telephone and mail survey that collects data on maternal attitudes and experiences before, during and immediately following pregnancy. Findings from the PRAMS survey are used to develop and assess perinatal health programs in public and private health care settings. In September of 1996, the Colorado Department of Public Health and Environment was awarded a grant from CDC to establish PRAMS in Colorado, and data collection began in the spring of 1997. Currently, there are 23 states participating in the PRAMS project. While each state's project is slightly different, data collection procedures and instruments are standardized to permit comparisons of data among the PRAMS states. PRAMS uses a combination of two data collection approaches: statewide mailings of the surveys and telephone follow-up with women who do not return the survey by mail. Birth certificate data is also included for CDC reporting. The written questionnaires and telephone interviews can both be completed in Spanish when necessary. Approximately 240 women in Colorado will receive the survey each month, with an expected response rate of at least 70 percent. Data collected from women who gave birth in a given year are generally available for analysis and dissemination by late summer of the following year. The data are weighted annually for each state to adjust for nonresponse, noncoverage, and sampling fractions. The annual weighted data sets contain data from all three sources.[7]

Medicare Standard Analytic Files and Ambulatory Care Sensitive Conditions

The Centers for Medicare and Medicaid Services (CMS) makes an annual Standard Analytic File of 5 percent of Medicare admissions available to qualified researchers. These files have been stripped of data elements that might permit identification of beneficiaries.[8] The Ambulatory Care Sensitive (ACS) Condition rates for Medicare beneficiaries used in the Colorado Health Report Card are the same as those used in the Commonwealth Fund's recent report on state health system performance, *Aiming Higher*.[9] A standard method for calculating ACS Condition rates has been developed by the Agency for Health Care Research and Quality.[10]

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2. Colorado Department of Public Health and Environment, Health Watch, July 2006 No. 60, <www.cdphe.state.co.us/hs/pubs/yrbs2006final.pdf>

   Centers for Disease Control and Prevention, Youth Risk Behavior Survey, <www.cdc.gov/HealthyYouth/yrbs/index.htm>
3. National Center for Health Statistics, National Survey of Children's Health, Centers for Disease Control and Prevention, <www.cdc.gov/nchs/about/major/slaits/nsch.htm>

   Colorado Department of Public Health and Environment, Child and Adolescent Health, <www.cdphe.state.co.us/hs/yrbs/ChildHealth.html>
4. U.S. Census Bureau, Current Population Survey, <www.bls.census.gov/cps/cpsmain.htm>
5. Colorado Department of Public Health and Environment, Vital Statistics System, <www.cdphe.state.co.us/hs/vs/>
6. Centers for Disease Control and Prevention, National Immunization Survey, <www.cdc.gov/nis/>
7. Colorado Department of Public Health and Environment, Pregnancy Risk Assessment Monitoring System, <www.cdphe.state.co.us/hs/prams/>
8. Centers for Medicare & Medicaid Services, <www.cms.hhs.gov/LimitedDataSets/01_Overview.asp#TopOfPage>
9. The Commonwealth Fund, <www.commonwealthfund.org/publications/publications_show.htm?doc_id=494551>
10. Agency for Healthcare Research & Quality, <www.qualityindicators.ahrq.gov/pqi_overview.htm>

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