## Colorado's Progress toward Year 2000 Objectives

An update from the Survey Research Unit

Two major roles of Public Health are to reduce preventable death and disability and to enhance quality of life. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*<sup>1</sup> sets goals for improving the health of all Americans through health promotion, health protection, and preventive services. To achieve the goals of *Healthy People 2000*, community-wide approaches address issues such as unintentional injuries and food and drug safety. Campaigns aimed at individuals promote healthy lifestyle choices. Examples of Year 2000 Objectives include reducing the percentage of overweight Americans and increasing the percentage of women over 50 who receive breast exams and mammograms.

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BRIEF

Many Year 2000 Objectives can be measured through the Colorado Behavioral Risk Factor Surveillance System (BRFSS). This system, a joint effort of the Colorado Department of Public Health and Environment (CDPHE) and the Centers for Disease Control and Prevention (CDC), collects information through telephone interviews with Colorado adults regarding lifestyle and behavioral factors that affect health. Since 1990, approximately 1800 interviews per year have been completed for the Colorado BRFSS using random-digit-dialing techniques.

This brief is an update of a report published in 1996 that presented Colorado's progress toward the Year 2000 Objectives as measured by the BRFSS from 1990 through 1994<sup>2</sup>. All data are for Colorado residents 18 and older, and all objectives are from *Healthy People 2000*.

Two health behaviors measured by the BRFSS are diet and physical activity — two major factors associated with overweight.<sup>4</sup>

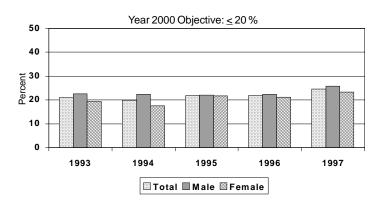
#### Overweight

Objective: Reduce overweight to a prevalence of no more than 20 percent among people age 20 and older.

Being overweight increases risk for chronic diseases such as diabetes, hypertension, and some types of cancer.<sup>3</sup>

Respondents were asked their current height and weight from which a Body Mass Index (BMI=weight(kg)/height(m)²) was calculated. Overweight is defined as a BMI greater than or equal to 27.3 for females and greater than or equal to 27.8 for males. Between 1993 and 1997, Colorado residents met the Year 2000 Objective in 1994 only. The percentage of overweight Coloradans has increased since 1993, reaching a high of 25 percent in 1997.

# Overweight\* Coloradans by gender: BRFSS 1993-1997



#### **Nutrition**

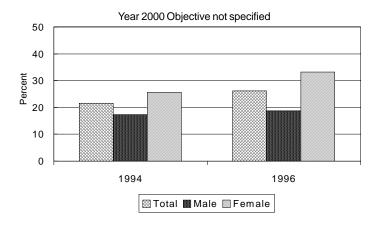
Objective: Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products.

In addition to providing vitamins and minerals, fruits and vegetables are a major source of complex carbohydrates and dietary fiber. Proportionately higher intakes of fruits, vegetables, and grains are associated with several health benefits, including a decreased risk for colon cancer, the second leading cause of cancer death in the U.S.<sup>1</sup>

\*Based on BMI

Questions regarding fruit and vegetable intake were asked on the 1994 and 1996 BRFSS. The percentage of Coloradans who reported eating five or more daily servings of fruit and vegetables increased from 22 percent in 1994 to 26 percent in 1996. The percentage increase among females was much greater than for males, with males continuing to be significantly less likely than females to report eating five or more servings per day.

# Coloradans who ate five or more servings of fruits and vegetables daily, by gender: BRFSS 1994, 1996

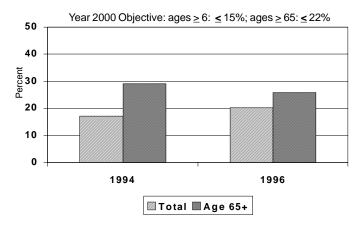


## **Physical Inactivity**

Objective: Reduce to no more than 15 percent the proportion of people over age six, and to no more than 22 percent the proportion of people over age 64, who engage in no leisure time physical activity.

Physical inactivity increases the risk for heart disease, diabetes, colon cancer, high blood pressure, obesity, osteoporosis, muscle and joint disorders, and symptoms of anxiety and depression. Respondents were asked if they had participated in any physical activities or exercises other than their regular job duties in the past month.

# Percent of Coloradans not engaging in leisure time physical activity: BRFSS 1994 and 1996



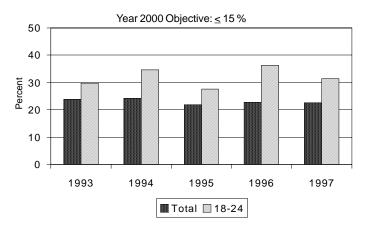
For both years, Coloradans failed to meet the Year 2000 Objectives. Between 1994 and 1996, physical inactivity increased 3 percent for those above age 17, and decreased 3.2 percent for those above age 64.

### **Cigarette Smoking**

Objective: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 20 and older.

According to *Healthy People 2000*, "tobacco use is the leading preventable cause of disease and mortality in the United States (p.136)." Smoking contributes substantially to chronic morbidity and disability, accounts for 30 percent of all cancer deaths, and is associated with low-birth-weight babies. Respondents were asked if they had smoked 100 cigarettes in their entire life and if they currently smoke.

# Current cigarette smoking among Coloradans: BRFSS 1993-1997

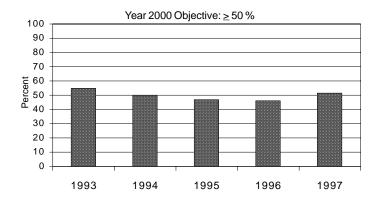


From 1993-1997, the proportion of current smokers in Colorado remained fairly constant, at approximately 23 percent, well above the Year 2000 Objective. Smoking prevalence is consistently highest among those 18-24 years, at approximately 31 percent in 1997.

Objective: Increase to at least 50 percent the proportion of cigarette smokers above age 17 who stopped smoking for at least one day during the preceding year.

Quitting smoking has major and immediate health benefits for smokers of all ages. Within one year of quitting, the excess risk of heart disease caused by smoking is reduced by almost 50 percent. After 10 years, the risk of lung cancer for former smokers drops to less than one-half that of a continuing smoker. In five to 15 years, the risk of stroke for former smokers returns to the level of those who never smoked.<sup>6</sup>

# Current cigarette smoking Coloradans who quit for one day or longer in the past year : BRFSS, 1993-1997



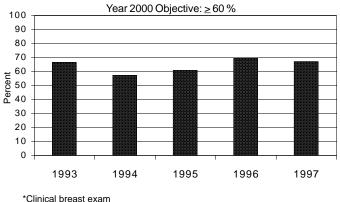
Respondents who reported that they were current smokers were asked if they had stopped smoking for one day or longer during the past year. Colorado residents met or surpassed the goal in 1993, 1994, and 1997.

## Mammography

Objective: Increase to at least 60 percent those women age 50 and older who have received a clinical breast examination (CBE) and a mammogram within the preceding one to two years.<sup>7</sup>

For women in the United States and Colorado, breast cancer is the second leading cause of cancer death.<sup>8</sup> Early detection of cancer using mammograms and clinical breast exams is critical in improving survival. Female respondents were asked if they had ever had a mammogram and, if so, when their last mammogram was performed. The same questions were asked regarding CBEs.

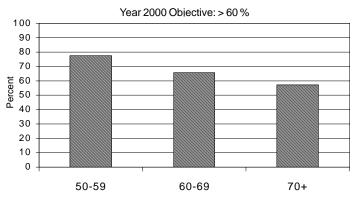
# Women 50 years old and older who had a mammogram and a CBE\* within the past two years: BRFSS, 1993-1997



"Clinical breast exam

Although the percentage of women 50 years old and older who received both a mammogram and a CBE declined to 57 percent in 1994, the percentage has since increased and remains above the Year 2000 Objective, at 67 percent in 1997.

# Women 50 Years old and older who had a mammogram and a CBE\* within the past two years, by age group: BRFSS, 1997



\*Clinical breast exam

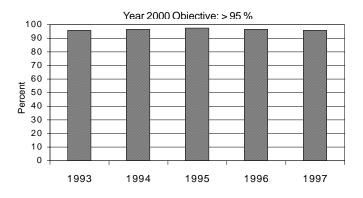
The percentage of women who receive mammograms and CBEs is highest for those in the 50-59 age group, at 77 percent, and lowest in the 70+ age group, at 57 percent.

### **Pap Tests**

Objective: Increase to at least 95 percent the proportion of women 18 and older with an intact uterine cervix who have ever received a Pap test, and increase to at least 85 percent those who received a Pap test within the preceding one to three years.

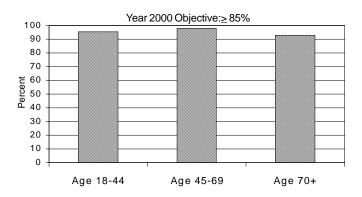
Cervical cancer is another commonly diagnosed cancer among women and the Pap smear is an effective screening test. Many experts attribute the decline in cervical cancer mortality in the 1970s and 1980s to widespread use of the Pap test for early detection. Female respondents were asked if they had ever received a Pap test and, if so, if they had received one in the past three years.

## Women 18 and older who have ever had a Pap test: BRFSS, 1993-1997



Colorado women continue to meet the 95 percent objective.

Women 18 and older who had a pap test within the past 3 years, by age group:
BRFSS, 1997



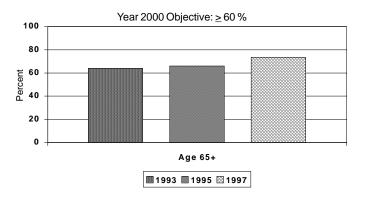
All three age groups successfully met the objective requiring that at least 85 percent of women receive a pap test within one to three years, with those 18-44 years reporting 95 percent, those 45-69 years reporting 98 percent, and those above age 69 reporting 93 percent. This is a substantial improvement from 1994 when women above age 69 fell short of the 85 percent objective.

#### Influenza Immunization

Objective: Increase to at least 60 percent the proportion of those over 65 years of age who have received influenza immunization in the past year.

Elderly persons are at increased risk for complications of influenza. If they become ill with influenza they are more likely than the general population to require hospitalization. Moreover, more than 90 percent of the deaths attributed to pneumonia and influenza during U.S. influenza epidemics occurred among persons above age 64. Vaccinating elderly persons is the most effective measure for reducing the impact of influenza.<sup>9</sup>

Coloradans 65 years old and older who had a flu shot in the past year: BRFSS, 1993, 1995, and 1997



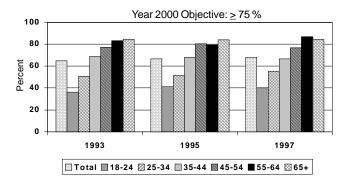
Coloradans met the Year 2000 Objective for each of the three years. The percentage of those above age 64 who had a flu shot in the past year increased from 64 percent in 1993 to 74 percent in 1997.

### **Cholesterol Screening**

Objective: Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding five years.

High blood cholesterol is a major risk factor for coronary heart disease (CHD), which is the most frequent cause of death in the United States. <sup>10</sup> Blood cholesterol measurement identifies individuals in need of treatment for high blood cholesterol, and provides an opportunity to educate and recommend lifestyle changes to reduce the risk of CHD. Respondents were asked how long it had been since their blood cholesterol was checked.

# Coloradans who had their blood cholesterol checked within the past 5 years: BRFSS, 1993, 1995, and 1997



For each of the three years, Coloradans below age 45 failed to meet the 75 percent objective, while those 45 and older met the objective.

### Summary

Coloradans continued to meet or made progress in meeting several of the Year 2000 Objectives between 1993 and 1997. The percentage of Coloradans eating five or more servings of fruits and vegetables daily has increased since 1994, although males continue to be less likely than females to eat five or more servings per day. Colorado women over age 49 have met the Year 2000 Objective for mammograms and CBEs since 1995. Although women 70 and older continue to have lower percentages for mammograms and CBEs than women between the ages of 50 and 69, their percentage is increasing. The percentage of Colorado women who have ever had a Pap smear has remained constant as well, and remains above the Year 2000 Objective. In addition, the percentage of women over age 69 who have had a Pap smear in the past three years has increased since 1994, so that women in this age group now meet the Year 2000 Objective. Finally, Coloradans over age 65 meet the objective for influenza immunization.

Colorado residents failed to meet the Year 2000 Objectives for overweight, physical inactivity, smoking, and cholesterol screening. The percentage of overweight Coloradans has steadily increased since 1990. The prevalence of physical inactivity among Colorado adults changed only slightly between 1994 and 1996. While adults over 64 became more active, those age 18 to 64 became less active. For all Coloradans, the proportion of current smokers in Colorado has remained over six percent higher than the Year 2000 Objective throughout the 1990s. Smoking prevalence is highest among Coloradans 18 to 24 years, at approximately twice the Year 2000 Objective. The proportion of current smokers who quit for one day or longer in the past year remained close to or above the Year 2000 Objective over the five year period. Since attempts at quitting smoking are highly predictive of eventual success, increased attention must be given to relapse prevention and the maintenance of abstinence so that more Coloradans stop smoking permanently. While the percentage of Coloradans who have had their cholesterol checked has been increasing, the 68 percent who had had their cholesterol checked within the past five years in 1997 still falls short of the Year 2000 Objective of 75 percent. In order to achieve the Year 2000 Objectives, these four areas need to be addressed in Colorado.

#### References

<sup>1</sup>U.S. Department of Health and Human Services. 1990. <u>Healthy People 2000: National Health Promotion and Disease Prevention Objectives</u>. Washington, D.C.: U.S. Government Printing Office.

<sup>2</sup>Health Statistics Section, Colorado Department of Public Health and Environment. 1996. "Trends in Behavioral Risk Factors: Tracking Colorado's Progress toward Year 2000 Objectives."

<sup>3</sup>Centers for Disease Control and Prevention. 1989. "Perspectives in Disease Promotion and Health Promotion Prevalence of Overweight—Behavioral Risk Factor Surveillance System, 1987." MMWR 38(24): 421-3.

<sup>4</sup>National Center for Health Statistics. 1997. "More Americans of all Ages are Overweight." 1997 News Release. Public-use documentation. Http://www.cdc.gov/nchswww/releases/97news/97news/fatmmwr.htm. July 30, 1998.

<sup>5</sup>Centers for Disease Control and Prevention. 1997. "Monthly Estimates of Leisure-Time Physical Inactivity—United States, 1994." MMWR 46(18): 393-7.

<sup>6</sup>Centers for Disease Control and Prevention. 1997. "Smoking Among U.S. Adults." Division of Media Relations.

<sup>7</sup>U.S. Department of Health and Human Services, Public Health Service. 1995. "Healthy People 2000 Midcourse Review and 1995 Revisions." Washington, D.C.: U.S. Government Printing Office.

<sup>8</sup>Finch, Jack, John Berg, Robin Bott, Huilin Feng. 1997. <u>Cancer in Colorado 1991-1995</u>. CDPHE-Colorado Central Cancer Registry.

<sup>9</sup>Centers for Disease Control and Prevention. 1997. "Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP)." MMWR 46 (No. RR-9).

<sup>10</sup>Centers for Disease Control and Prevention. 1990. "Progress in Chronic Disease Prevention State-Specific Changes in Cholesterol Screening and Awareness — United States, 1987-1988." MMWR 39(18): 304, 312, 314.

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