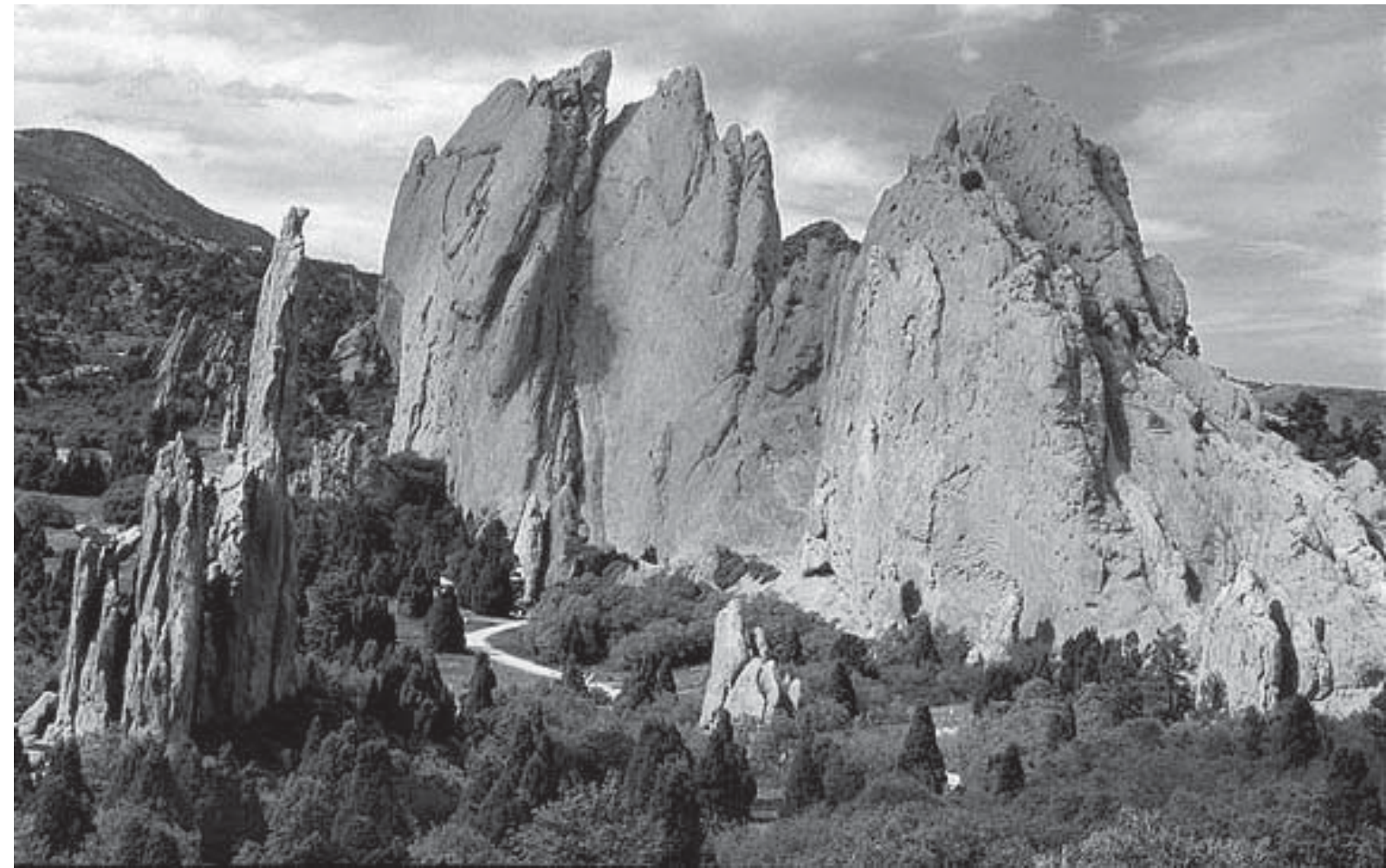


# CANCER & POVERTY



Colorado Department  
of Public Health  
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in Colorado  
1995 - 2002

# **Cancer and Poverty in Colorado: 1995-2002**

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Prepared by the  
Comprehensive Cancer Program  
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The publication of *Cancer and Poverty: 1995-2002* is a continuation of a series of Colorado reports on cancer. This report may be useful to policy makers, healthcare professionals, and community groups to assist in developing and evaluating prevention and intervention strategies, identifying high risk populations, and prioritizing resource allocations for cancer-related services.

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# Table of Contents

List of Figures .....	iv
List of Tables .....	v
Executive Summary .....	1
Introduction .....	3
Data, Methods, and Definitions .....	6
All Cancers Combined and Poverty .....	11
Breast Cancer and Poverty .....	15
Cervical Cancer and Poverty .....	19
Colorectal Cancer and Poverty .....	22
Lung Cancer and Poverty .....	25
Melanoma and Poverty .....	28
Prostate Cancer and Poverty .....	31
References .....	34
Appendix (Tables).....	36



## List of Figures

Figure 1. Percent of Coloradans who are current smokers, have BMI's > 30, have regular to vigorous physical activity, and eat fruits and vegetables five or more times per day, 1995-2000.

Figure 2. Early stage at diagnosis for all cancers by area poverty level, age, gender, and race; 1995-2000, Colorado.

Figure 3. Five-year survival for all cancers by area poverty level, age, gender, race, and stage; 1995-2000, Colorado.

Figure 4. Percent of Colorado females age 40+ who have had a mammogram in the past two years by poverty Level; 1995-2000.

Figure 5. Early stage at diagnosis for breast cancer by area poverty level, age, and race; 1995-2000, Colorado.

Figure 6. Five-year survival for breast cancer by area poverty level, age, race, and stage; 1995-2000, Colorado.

Figure 7. Percent of Colorado females who have had a pap smear in the past three years by poverty level, 1995-2000.

Figure 8. Five-year survival for cervical cancer by area poverty level, age, race, and stage, 1995-2000, Colorado.

Figure 9. Percent of Coloradans over age 50 who have ever had sigmoidoscopy in past five years or a colonoscopy or Fecal Occult Blood Test in the past year, by poverty level; 1995-2000.

Figure 10. Early stage at diagnosis for colorectal cancer by area poverty level, age, gender, and race, 1995-2000; Colorado.

Figure 11. Five-year survival for colorectal cancer by area poverty level, age, gender, race, and stage, 1995-2000; Colorado.

Figure 12. Percent of Coloradans who are current smokers by poverty level, 1995-2000.

Figure 13. Early stage at diagnosis for lung cancer by area poverty level, age, gender, and race; 1995-2000, Colorado.

Figure 14. Five-year survival for lung cancer by area poverty level, age, gender, race, and stage; 1995-2000, Colorado.

Figure 15. Percent of Coloradans who use sun protection by poverty level, 1995-2000.

Figure 16. Early stage at diagnosis for melanoma for non-Hispanic whites by area poverty level, age, and gender; 1995-2000, Colorado.

Figure 17. Five-year survival for melanoma for non-Hispanic whites by area poverty level, age, gender, and stage; 1995-2000, Colorado.



Figure 18. Early stage at diagnosis for prostate cancer by area poverty level, age, and race; 1995-2000, Colorado.

Figure 19. Five-year survival for prostate cancer by area poverty level, age, race, and stage; 1995-2000, Colorado.

## List of Tables (In appendix)

Table 1. Age-adjusted incidence rates for all cancers in Colorado, 1998-2002.

Table 2. Age-adjusted incidence rates for all cancers for male Coloradans, 1998-2002.

Table 3. Age-adjusted incidence rates for all cancers for female Coloradans, 1998-2002.

Table 4. Age-adjusted incidence rates for breast cancer for female Coloradans, 1998-2002.

Table 5. Age-adjusted incidence rates for cervical cancer for female Coloradans, 1998-2002.

Table 6. Age-adjusted incidence rates for colorectal cancer in Colorado, 1998-2002.

Table 7. Age-adjusted incidence rates for colorectal cancer for male Coloradans, 1998-2002.

Table 8. Age-adjusted incidence rates for colorectal cancer for female Coloradans, 1998-2002.

Table 9. Age-adjusted incidence rates for lung cancer in Colorado, 1998-2002.

Table 10. Age-adjusted incidence rates for lung cancer for male Coloradans, 1998-2002.

Table 11. Age-adjusted incidence rates for lung cancer for female Coloradans, 1998-2002.

Table 12. Age-adjusted incidence rates for melanoma in Colorado, 1998-2002.

Table 13. Age-adjusted incidence rates for melanoma for male Coloradans, 1998-2002.

Table 14. Age-adjusted incidence rates for melanoma for female Coloradans, 1998-2002.

Table 15. Age-adjusted incidence rates for prostate cancer for male Coloradans, 1998-2002.

Table 16. Distribution of all Colorado cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 17. Five-year cause-specific cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 18. Distribution of Colorado breast cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 19. Five-year cause-specific breast cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 20: Distribution of Colorado invasive cervix cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 21. Five-year cause-specific invasive cervix cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 22. Distribution of Colorado colorectal cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 23. Five-year cause-specific colorectal cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 24. Distribution of Colorado lung cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 25. Five-year cause-specific lung cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 26. Distribution of Colorado melanoma cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 27. Five-year cause-specific melanoma cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.

Table 28. Distribution of Colorado prostate cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.

Table 29. Five-year cause-specific prostate cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.



## Executive Summary

The purpose of this report is to examine the relationships between poverty, the known risk factors for cancer, incidence rates, early stage diagnosis, and survival with cancer in Colorado. Understanding the influence of poverty on cancer risk and outcomes can assist in separating race and ethnicity factors from poverty factors, and in developing better cancer prevention and control strategies for financially disadvantaged persons in Colorado.

Most kinds of cancer can be prevented and/or detected at an early stage. Approximately two out of every three cancer deaths are caused by smoking, poor diet, obesity, physical inactivity, or failing to use cancer screening tests (12). Many of these factors are known to be related to poverty, which is also a barrier to accessing effective cancer therapies.

*Cancer and Poverty in Colorado: 1995-2002* is a report prepared by the Colorado Comprehensive Cancer Program (CCP) on behalf of the Colorado Cancer Coalition. This report combines information from sources within the Colorado Department of Public Health and Environment and the U.S. Census Bureau. Information on cancer incidence, stage, and survival come from the Colorado Central Cancer Registry; information on cancer-related behaviors and screening come from the 1995-2000 Colorado Behavioral Risk Factor Surveillance System surveys; and information on poverty and population counts comes from the U.S. Census Bureau. This analysis of poverty employed methods similar to those recently used by the National Cancer Institute (19) in a report on poverty and cancer in the United States, in which poverty status of cancer cases was inferred from poverty characteristics of counties or census tracts.

Following is a summary of the major findings of this report:

**All Cancers Combined:** Tobacco use and obesity were both higher among poorer Coloradans. Poorer areas of the state had higher incidence rates of cervical, colorectal, and lung cancers and lower rates of breast, melanoma, and prostate cancers. The poorer the area, the worse the early stage detection, and the lower the survival. These disparities were seen regardless of race/ethnicity, sex, or age.

**Breast Cancer:** Mammogram usage was found to be lower among poorer Colorado women. Poorer areas of the state had lower rates of breast cancer. Among non-Hispanic white women, the stage at detection was very similar across poverty levels, but survival for those diagnosed at the regional stage declined significantly as poverty worsened. Among Hispanic and black women the relationship between survival and poverty was not as strong.

**Cervical Cancer:** Pap smear usage was lower among poorer Colorado women. The poorer the area of the state, the higher the incidence rate of cervical cancer found there.

**Colon and Rectal Cancer:** Colorectal screening was less common among lower income Coloradans, and poorer areas had a higher incidence rate of colorectal cancer. Among Coloradans under age 65, the proportion of colorectal cancers diagnosed early was lower in poorer areas. The poorest areas of the state also showed lower survival rates.

**Lung Cancer:** Tobacco smoking was higher among poorer Coloradans, and the poorer the area of the state, the higher the incidence rate of lung cancer. The proportion of lung cancers diagnosed early, as well as those surviving at least

five years after diagnosis, were very small regardless of poverty, age, sex, or race/ethnicity.

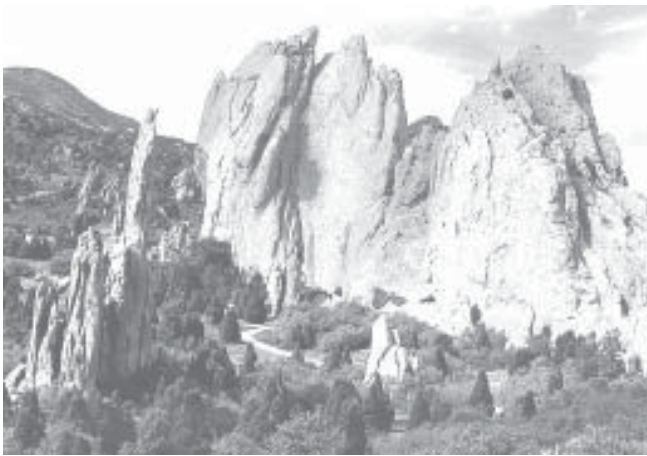
**Melanoma:** While poorer areas of Colorado had lower incidence rates of melanoma, survival rates were worse.

**Prostate Cancer:** More than eight in 10 prostate cancers among Colorado men were detected at an early stage, and a large majority of men survived at least five years after diagnosis. Black men from poorer areas of the state had a lower proportion of cancers diagnosed early than did black men from wealthier areas. While poorer areas of Colorado had lower incidence rates of prostate cancer, men from poorer areas had worse survival rates.

**Conclusions:** This study found substantial relationships between poverty level and cancer-related behaviors, incidence rates, early stage detection, and survival rates in Colorado. Many of the differences in cancer that are apparent between various races/ethnicities are due in large part to poverty. Efforts should be made to reduce health disparities in disadvantaged populations by ensuring that Coloradans, regardless of income, have access to quality health education, cancer screening, and cancer treatment.

# Introduction

The Comprehensive Cancer Program is a project of the Colorado Department of Public Health and Environment that is funded by the Centers for Disease Control and Prevention (CDC). The goal of the Comprehensive Cancer Program is to promote cancer preventive behaviors by working with public and private agencies to set priorities for interventions; conduct public awareness campaigns; establish cancer prevention and control policies; and support community-based projects. The program



coordinates cancer prevention and control efforts across Colorado in collaboration with the Colorado Cancer Coalition, a diverse group of private and public organizations working on cancer prevention and control across the state. The program has produced earlier reports on regional cancer differences in the state. This is a report on cancer and poverty, a factor that cuts across all regions of Colorado.

## Risk Reduction

Cancer is the second leading cause of death in Colorado, after heart disease (10). Although significant progress has been made in reducing cancer mortality rates since 1990, inequalities or disparities remain among racial and ethnic populations in Colorado.

Most cancers develop because of complex interactions between our bodies, our lifestyle and behavior, our genetic makeup, and our environment. Many types of cancer can be prevented. This report focuses primarily on modifiable lifestyle and behavioral risk factors. Once a cancer has developed, outcomes can be substantially improved by early stage detection and quality treatment. In summary, factors important in cancer risk and outcomes include:

1. Cancer prevention through not smoking, eating a healthy diet, avoiding obesity, and increasing physical activity;
2. Cancer early detection through recommended screening tests, such as mammography, Pap tests, and sigmoidoscopy or colonoscopy;
3. Cancer care through obtaining state-of-the-art treatment for cancer.

## Poverty

Numerous studies show that socioeconomic status, race/ethnicity, and gender are important considerations in several different aspects of health status, including cancer outcomes (17). Socioeconomic poverty is an important contributor to the racial/ethnic disparities evident in the burden of cancer.

In 2000, 9.3 percent of Coloradans were living in poverty. While that figure as a whole was lower than the overall U.S. poverty rate of 12.4 percent, wide disparities exist within the state. Poverty rates of census tracts within Colorado ranged from no residents living in poverty to more than half (54 percent) of residents living in poverty (29). Blacks and Hispanics in Colorado

bear a disproportionate burden of poverty compared to non-Hispanic whites, according to recent surveys conducted by the Kaiser Family Foundation (13). Only eight percent of non-Hispanic whites live in poverty, compared to 27 percent of Hispanics and 32 percent of blacks.

## Insurance

Lack of health insurance contributes to health disparities. Uninsured adults are more likely to experience worse cancer outcomes due to diminished access to preventive care, delayed diagnosis, and less complete treatment. The number of uninsured Americans is growing in the United States and in Colorado, and poverty and race/ethnicity are strong predictors of insurance among adults. A Kaiser Family Foundation Report showed that in 2001-2002 an estimated 19 percent of Coloradans aged 19-64, or more than 500,000 adults, lacked health insurance (13). Coloradans living in poverty were least likely to be insured. Forty-one percent of Coloradans living in poverty lacked health insurance, while one-third of Coloradans living at 100 to 200 percent of the federal poverty level did not have health insurance. In contrast, only nine percent of Coloradans with incomes above 200 percent of the poverty level lacked health insurance. Blacks and Hispanics were less likely to be insured than non-Hispanic whites; lack of health insurance was reported by 36 percent of Hispanics, 22 percent of blacks, but only 11 percent of non-Hispanic whites (13). The type of insurance also matters. Many studies show that adults with private insurance get screened for cancer more often and have better outcomes than adults with other types of coverage (6,8,11,16,27,28).

## Scope of this Report

The purpose of this report is to examine the relationships between poverty, the known risk factors for cancer, incidence rates, early stage diagnosis, and survival with cancer in Colorado.

The report focuses on the top six preventable cancers in Colorado—breast, cervix, colorectal, lung, melanoma, and prostate cancers. Cancer statistics were derived from the Colorado Central Cancer Registry for the years 1995-2002. Because individual income data are not reported to the Cancer Registry, the poverty level of the area in which each cancer case resided was used as a surrogate measure of the socioeconomic poverty level for that cancer case. This is the same method used in a recent report on poverty and cancer by the National Cancer Institute (19).

## Outcome Measures

Measures of cancer outcomes include incidence rates, the proportion of cancers diagnosed at an early stage, and cause-specific five-year survival rates. Where appropriate, outcome measures by poverty level are also described within specific groups categorized by race/ethnicity, age, or sex.

## Language Use

In this report, terms used to describe the racial/ethnic background of groups of people are *non-Hispanic white*, *black*, and *Hispanic*. On a national level, cancer outcomes are also reported for other racial/ethnic groups, such as American Indians, Alaskan Natives, and Asians and Pacific Islanders, but those groups in Colorado are too small to allow for separate analysis by socioeconomic groupings in this report. *Non-Hispanic white* refers to the standard data collection category of white, but not Hispanic. *Hispanic* refers to the standard data collection category of white/Hispanic. The term “*black*” refers to black, regardless of Hispanic identification. The Comprehensive Cancer Program recognizes the difficult issue of using labels with regard to racial/ethnic groups. We acknowledge that not everyone identifies him or herself with these categories, and we respect the importance of cultural differences in how individuals and communities prefer to be

defined. The program also recognizes that race and ethnicity are social categories representing distinct cultures and histories of groups within the United States, and are not categories based on specific biological or genetic differences.



# Data, Methods, and Definitions

## Data Sources

The Colorado Central Cancer Registry of the Colorado Department of Public Health and Environment provided data on cancer incidence, staging, and survival, while the Survey Research Unit of the Department's Health Statistics Section provided data from the Behavioral Risk Factor Surveillance System. The U.S. Census Bureau was the data source for federal poverty levels, the proportion of census block group and zip



code populations living in poverty, and year 2000 population figures for Colorado. The resource for cancer screening recommendations was the *Guide to Clinical Preventive Services, Third Edition*, released by the U.S. Preventive Services Task Force (USPSTF) (32). The task force was organized by the U.S. Public Health Service to make evidence-based recommendations on preventive measures such as screening tests, counseling, immunizations, and preventive medications.

## Cancer Sites

Six cancer sites were selected for this report. Colorectal, female breast, lung, melanoma, and prostate cancers were included because these sites represent the five most commonly diagnosed reportable cancers in Colorado.

Invasive cervical cancer was also studied because it is a highly-preventable cancer. Cancer cases for this study were drawn from the Colorado Central Cancer Registry for the years 1995-2002. From among the 1995-2000 cancer cases, 99,968 were included in stage analyses, while only 68,824 cases were used for the survival analyses, as at least a five-year time period was required to calculate five-year, cause-specific survival rates.

Incidence rates were reported using cases from 1998 to 2002, with 2000 Colorado census figures providing the average population for this time period.

## Socioeconomic Status

Because socioeconomic data such as income and education are not available for individual patients in most state cancer registries, a neighborhood or area indicator of socioeconomic status was used in this analysis. This is the same approach used by the National Cancer Institute and CDC in their recent report on poverty and cancer (*Area Socioeconomic Variations in U.S. Cancer Incidence, Mortality, Stage, Treatment, and Survival, 1975-1999*). Although the U.S. Census Bureau reports many different socioeconomic measures by census block group, poverty rate (the percentage of the population living below the defined federal poverty line) was chosen as the area measure for this study. Poverty lines, the income below which an individual or family is considered to be living in poverty, are updated each year by the U.S. Census Bureau. In 1999, 9.3 percent of Coloradans were living below the poverty line of \$11,156 annual income for two adults. Poverty rates correlate highly with other measures of socioeconomic status, such as educational attainment, unemployment rate, and occupational composition. For example, increases in the unemployment rate are highly

correlated with increases in the county poverty rate, while decreases in median family income are highly correlated with increases in the poverty rate (19).

## Poverty Levels

For this report, poverty rates were categorized into three poverty levels by the proportion of residents in a census block group who were living in poverty in 2000: less than 10 percent, 10-19 percent, or greater than or equal to 20 percent. Areas with a less than 10 percent poverty rate are referred to as “wealthier areas” in this report.

Areas with a poverty rate of greater than or equal to 20 percent have high poverty and are considered federal poverty areas; these areas are referred to as the “poorest” areas in this report. Areas with poverty rates of 10-19 percent are considered to have a middle level of poverty. In this report, areas of Colorado having middle to high poverty rates are called “poorer” areas.

To assign a poverty level to each case, each patient’s address was linked to its respective census block group as defined by 2000 census-designated boundaries. Approximately 90 percent of cases in the Cancer Registry could be linked to a census block group, while eight percent of the cases could only be linked to a zip code. Only two percent of the cases could not be linked to either a block group or to a zip code, so those cases were not included in this analysis.

## Demographics

Colorado data from the U.S. Census Bureau on household income, college graduation rates, and race/ethnicity were analyzed for each poverty level. Estimated median household income in the poorest areas of Colorado was \$23,000; the middle poverty areas had a median household income around \$33,000; and in wealthier areas,

median household income was \$53,000 (2.3 times the income of the poorest areas). Whether or not college graduation was achieved was reported for adults aged 25 and older. The poorest areas had the lowest share of college graduates (12 percent), which increased to 25 percent in the wealthier areas of Colorado. Race/ethnicity also varied significantly by poverty level. The poorest areas had the most diverse composition (eight percent black, 40 percent Hispanic, 48 percent non-Hispanic white), while the wealthier areas were predominately composed of non-Hispanic whites (82 percent).

## Private Insurance of Coloradans with Cancer

Individual insurance information was available for most cases reported to the Cancer Registry since 1998. Coloradans from poorer areas were less likely to have private insurance. Private insurance rates were compared between younger persons (less than 65 years) and those of Medicare age (greater than or equal to 65 years) in the Cancer Registry. Among persons aged less than 65 years, the poorer the area, the lower the proportion having private insurance. This pattern was less apparent among persons of Medicare age, however, as the majority of adults aged greater than or equal to 65 at all poverty levels have health coverage through Medicare.

## Cancer Outcomes

The cancer outcomes studied for this report include age-adjusted incidence rates, the proportion of cancers detected at an early stage, and five-year cause-specific survival rates. Incidence rates measure the number of newly diagnosed primary, malignant cancers for a given period of time per 100,000 persons; early stage detection was defined as the percent of all cancers that were diagnosed at early stages (*in-situ* or localized stage); and five-year cause-specific survival rates measure the proportion of patients surviving at least five years with a

specific cancer (calculated using the NCI's SEER\*STAT software package). In the survival analyses, cases lost to follow-up, those alive at the end of the five-year follow-up period, and those dying of causes other than the underlying cancers, were treated as censored observations. Those dying of unknown causes were excluded from the analysis. Additional details regarding cause-specific survival are available (19). Incidence and survival tables include standard errors and statistical tests comparing the poverty levels. For incidence tables a z-test was used (26), while for survival tables, 95 percent confidence intervals were compared.

All cancer outcome analyses were by poverty level, race/ethnicity, and/or sex. Race/ethnicity groups with adequate case numbers for analysis included non-Hispanic whites, blacks, and Hispanics. For melanoma of the skin, only cases among non-Hispanic whites were analyzed due to the rare occurrence of melanoma among other races/ethnicities. Age was classified as less than 65 years or greater than or equal to 65 years for five of the six cancer sites because most persons aged 65 and older, regardless of income, are eligible for screening and treatment through Medicare. Breast cancer analyses included three categories so that cancers diagnosed in the premenopausal years (age less than 50) could be analyzed separately, while the post-menopausal age groups consisted of women aged 50-64 years, and women aged greater than or equal to 65 years.

## **The Behavioral Risk Factor Surveillance System**

The Behavioral Risk Factor Surveillance System (BRFSS) surveys approximately 2,000 Colorado adults 18 years or older randomly by telephone each year. Data on characteristics such as household income and education are collected, as well as risk behaviors and preventive health practices associated with leading causes of death in the state. In this report, questions on the

following topics were analyzed for the years 1995-2000:

1. Current smoking;
2. Obesity;
3. Physical activity;
4. Fruit and vegetable consumption;
5. Pap tests, mammograms, and colorectal cancer screening tests; and
6. Protection from sun exposure.

Respondents were considered current smokers if they had smoked at least 100 cigarettes in their lives and were smoking at the time of the survey. To determine obesity, reported body weight was converted to a body mass index or BMI, using the formula (*weight in kilograms*)/(*height in meters*)<sup>2</sup>. Obesity is defined as a BMI of 30 or greater. Interviewers asked Coloradans about engaging in recommended levels of physical activity: vigorous-intensity physical activity greater than or equal to three times per week for greater than or equal to 20 minutes each time, or moderate-intensity physical activity greater than or equal to five times per week for greater than or equal to 30 minutes each time. Females aged greater than or equal to 18 were asked about having undergone a Pap smear in the past three years. Women aged greater than or equal to 40 were questioned about having had a mammogram within the past two years. Adults aged greater than or equal to 50 were asked about two of the recommended screening options for colorectal cancer: having had a fecal occult blood test (FOBT) in the past year, or sigmoidoscopy or colonoscopy (endoscopy) in the past five years. Adult Coloradans were surveyed about regularly using sunscreen or protective clothing including a wide-brimmed hat or long-sleeved shirt when outside on sunny summer days for more than an hour.

The survey presented the following categories for annual household income: less than \$10,000; \$10-14,999; \$15-19,999; \$20-24,999; \$25-34,999; \$35-49,999; \$50-74,999; and greater

than or equal to \$75,000. To estimate individual income, reported household income was divided by the number of persons in that household. To determine if a respondent was living in poverty, income was compared to the federal poverty line for that year. For example, the federal poverty line for two adults in 1999 was \$11,156 in annual income (30). This report categorized survey respondents into one of three poverty levels based on income: “in poverty”, “at or near poverty”, or “not in poverty”.

## Data Limitations

The numbers of cancer cases were not equal between each of the three poverty levels and each racial/ethnic group. Some of the subgroups were therefore small, such that the differences between groups could have occurred by chance alone. Due to their small sample sizes, data for American Indian and Asian populations in Colorado could not be separately tabulated or published. For some cancers, small sample sizes also prevented full reporting for black Coloradans.

Consensus does not currently exist on the best measure(s) of socioeconomic status for an individual or population. Individual socioeconomic measures such as income or education were not available for each cancer case in the Cancer Registry. However, the use of area poverty level to characterize individual socioeconomic status has been validated in previous research and used by the National Cancer Institute (19). An advantage of this study is that poverty status was determined at the census block group level, whereas the National Cancer Institute study used counties and census tracts, which are larger and generally less representative of socioeconomic status.

The majority of cancer cases (90 percent) were assigned a poverty level based on census block group. Approximately eight percent of cases could only be coded to zip code, which is a less

precise indicator of a person’s socioeconomic status (17). Approximately two percent of cases were excluded for study due to lack of sufficient address detail for geocoding to zip code or census block group.

While the survey provides reliable estimates of cancer-related behaviors for the state as a whole, it is not a survey of Coloradans in the Cancer Registry. The BRFSS survey used household income to represent poverty status, which is different than the area poverty level used in reporting cancer outcomes, and self-reported estimates of income may be less dependable due to the sensitive nature of questions on income. Telephone surveys cannot reach persons living in households without telephone service, and households without telephones generally have lower incomes than those with telephones.

## Definitions

**Age adjustment** allows rates from one geographic area to be compared with rates from another geographic area that may have differences in age distribution. This adjustment is important because cancer rates vary with age, and age structure differs across different geographic areas. The **age-adjusted incidence rate** for cancer is the number of new cancer cases per year per 100,000 persons, adjusted to the 2000 U.S. standard population.

The **Behavioral Risk Factor Surveillance System (BRFSS)** is an ongoing statewide telephone survey conducted by the Department of Public Health and Environment’s Health Statistics Section. The survey is designed to monitor the prevalence of health behaviors and preventive health practices associated with the leading causes of death in Colorado.

**Cause-specific survival** is also known as disease-specific survival, and is the percentage of patients who have survived a specific disease for a certain

period of time. This report uses five-year cause specific survival to report survival with cancer.

**Census block groups** are smaller units of a census tract, and average approximately 1,000 residents. Several **census blocks** in turn make up each census block group. About 85 residents belong to each census block.

**Census tracts** are relatively permanent statistical subdivisions of a county, designed to be fairly homogeneous in terms of population characteristics, economic position, and living conditions. Census tracts average around 4,000 residents.

**Health disparities** are differences or inequalities in health between different populations. Health disparities have often been reported for different races or ethnicities.

**Poverty level** refers to the percentage of families or individuals in a neighborhood area living below the designated official poverty line. The federal poverty line for one adult in 1999 was \$8,794 and for two adults was \$11,239.

**Poverty areas** have 20 percent or more of the population living below the federal poverty line, and are thought of as poor. For this report, poverty rates were categorized into three poverty levels: less than 10 percent, 10-19 percent, or greater than or equal to 20 percent. Areas with the lowest poverty rate (less than 10 percent) are not considered to be poor, and are referred to as “wealthier areas” in this report. Areas with middle (10-19 percent) to high (greater than or equal to 20 percent) poverty are called “poorer” areas in this report, while areas with high poverty are referred to as the “poorest” areas.

**Sample size** is the number of persons in a study group. In general, a larger sample size yields a more reliable estimate than does a smaller sample size.

**SEER**, the Surveillance, Epidemiology, and End Results Program maintains a large database on cancer incidence and outcomes, collected from representative areas covering 14 percent of the United States population.

**Socioeconomic status** is a term used to classify an individual or population based on one or more indicators, such as income, assets, employment, occupation, and education.

**Staging** is the process of determining how far a cancer has spread. Knowing the stage is important to determine treatment options, and to predict the chance of survival. The National Cancer Institute and the Colorado Central Cancer Registry often report cancers according to four stages: *in-situ*, localized, regional, and distant. The *in-situ* stage is when cancer cells have not yet invaded tissues; localized stage is when cancer cells remain confined to the organ of origin; regional stage is when the cancer cells have spread to nearby organs or lymph nodes; and distant stage is when cancer cells have spread to distant organs or lymph nodes.

A **statistically significant** difference means that the observed difference is not likely a result of chance alone. In this report, *statistical significance* means that the probability that chance alone could have created an observed difference is less than five percent.

## All Cancers Combined and Poverty

The lifetime risk of being diagnosed with cancer in Colorado is approximately one in two for males, and one in three for females (10). In the U.S., nearly two-thirds of all cancer deaths are attributed to tobacco use, poor diet, obesity, lack of exercise, and failure to use cancer screening tests (12).

Screening tests can detect some cancers at earlier stages, improving the chances of treatment success and survival. The American Cancer Society recommends that for individuals undergoing periodic health examinations, a cancer-related check-up should include health counseling and a targeted physical exam based on a person's age (4). The U.S. Preventive Services Task Force, another respected information source on cancer screening, recommends routine screening for specific cancers including breast, cervix, and colon cancer in certain age groups, but has not found sufficient evidence to advise cancer-related check-ups apart from these specific recommendations.

### Smoking, Obesity, Physical Activity, and Diet

According to the National Cancer Institute, smoking causes nearly nine out of 10 lung cancers (21). Tobacco has also been linked to cancers of the mouth, pharynx (throat), larynx (voicebox), esophagus, pancreas, cervix, kidney, and bladder. In the state's Behavioral Risk Factor Surveillance System survey, smoking was less common in Coloradans reporting higher

incomes. Smoking was strongly related to socioeconomic poverty. More than one in three Coloradans reporting incomes near or below the poverty line currently smoked, compared to less than one in five Coloradans reporting incomes above the poverty line (Figure 1).

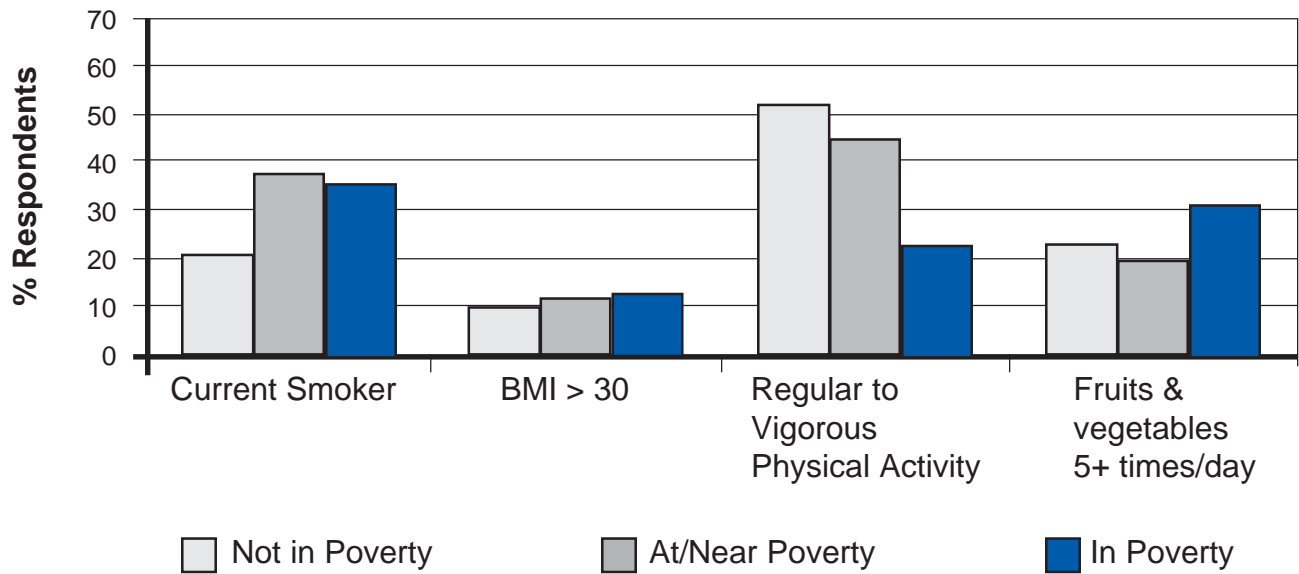
Obesity is a risk factor for cancers of the colon, kidney, uterus, and postmenopausal breast (20). There is a strong relationship between poverty and obesity. Coloradans reporting lower incomes were more likely to have body weights in the obese range than Coloradans reporting higher incomes (Figure 1).

Evidence shows that physical activity reduces the risk of breast and colon cancers, and several studies have found reduced risk of prostate, lung, and uterine cancers as well (23). There was a strong relationship between poverty and lack of physical activity. Coloradans reporting lower incomes were much less likely to achieve recommended levels of physical activity than those reporting higher incomes (Figure 1).

Populations consuming diets high in fruits and vegetables tend to have a lower overall cancer risk (24). Evidence of protection has been shown for cancers of the lung, colon and rectum, breast, oral cavity, esophagus, stomach, pancreas, uterine cervix, and ovary. Fewer than one in four Coloradans surveyed by the state survey reported eating fruits or vegetables at least five times per day. Respondents who were least likely to get their recommended daily servings were those living at or near the poverty level (Figure 1).



**Figure 1. Percent of Coloradans who are current smokers, have BMI's > 30, have regular to vigorous physical activity, and eat fruits and vegetables five or more times per day, 1995-2000.**

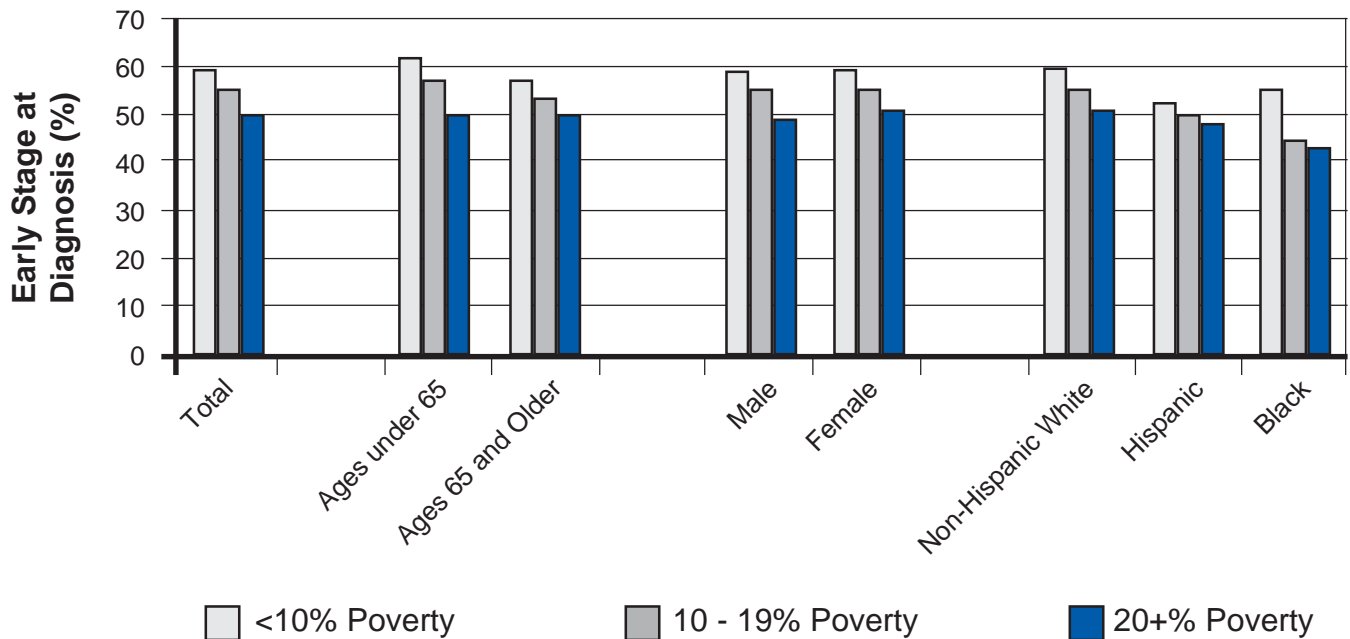


Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

## Incidence

An average of 15,180 malignant cancers per year were diagnosed in Colorado in 1995-2002. The incidence rate in Colorado for 1998 -2002 was 445.8 cases per 100,000 persons. The poorest areas of the state had higher rates of colorectal, lung, and cervical cancers and lower rates of melanoma, breast cancer, and prostate cancer (see Tables 1-15).

**Figure 2: Early stage at diagnosis for all cancers by area poverty level, age, gender, and race; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

### Early Detection

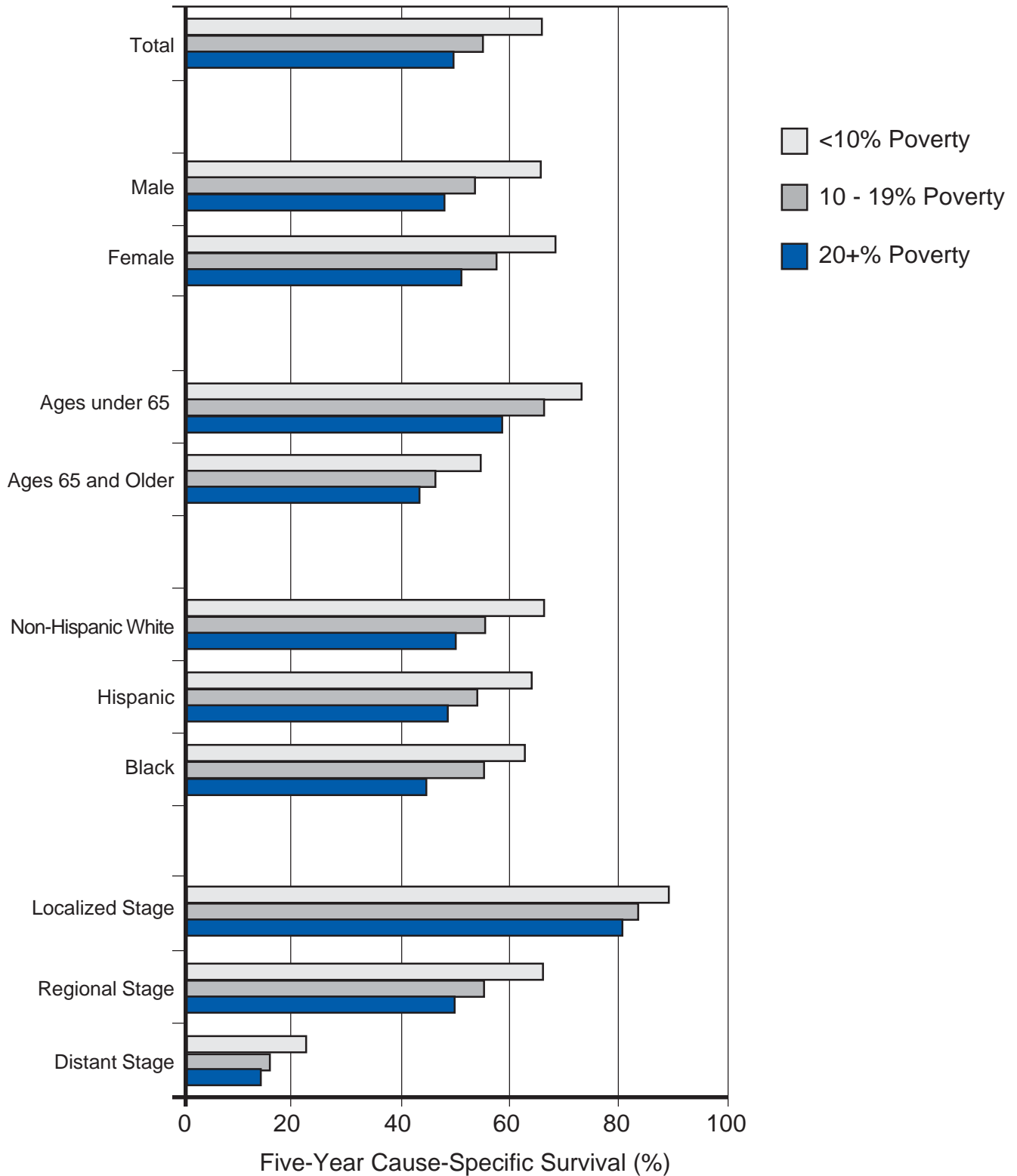
Approximately 57 percent of cancer cases were diagnosed at an early stage in Colorado in 1995-2000 (10). For all cancers combined, a smaller proportion of cancers were diagnosed early in poorer areas, regardless of race/ethnicity, sex or age. Among all cancer cases, early stage detection was worst for blacks from the poorest areas (44 percent of cancers detected early) and best for non-Hispanic whites from wealthier areas (59 percent detected early) (Figure 2).

### Survival

Coloradans with cancer from poorer areas had worse survival for all cancers combined regardless of race/ethnicity, sex, or age. Survival rates were an absolute 8-17 percentage points lower for persons living in poorer areas (Figure 3). Wealthier areas showed a survival advantage within each stage, but the largest poverty gradient was seen for cancers diagnosed at the regional stage. The regional stage is the stage at which treatment differences can have a substantial effect on survival.



**Figure 3: Five-year survival for all cancers by area poverty level, age, gender, race, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

# Breast Cancer and Poverty

Breast cancer is the most common cancer diagnosed among women in Colorado and nationally, and is the second leading cause of cancer-related death, after lung cancer. The lifetime risk of breast cancer for women is one in seven (10).

## Prevention

Age is an important risk factor for developing most cancers, including breast cancer. Individual factors other than age that increase a woman's risk for developing breast cancer include: family history or a personal history of breast cancer; biopsy-confirmed atypical hyperplasia (a type of non-cancerous breast condition); having a first child after age 30; obesity; physical inactivity; drinking one or more alcoholic drinks per day; and taking hormone supplements after menopause (2).

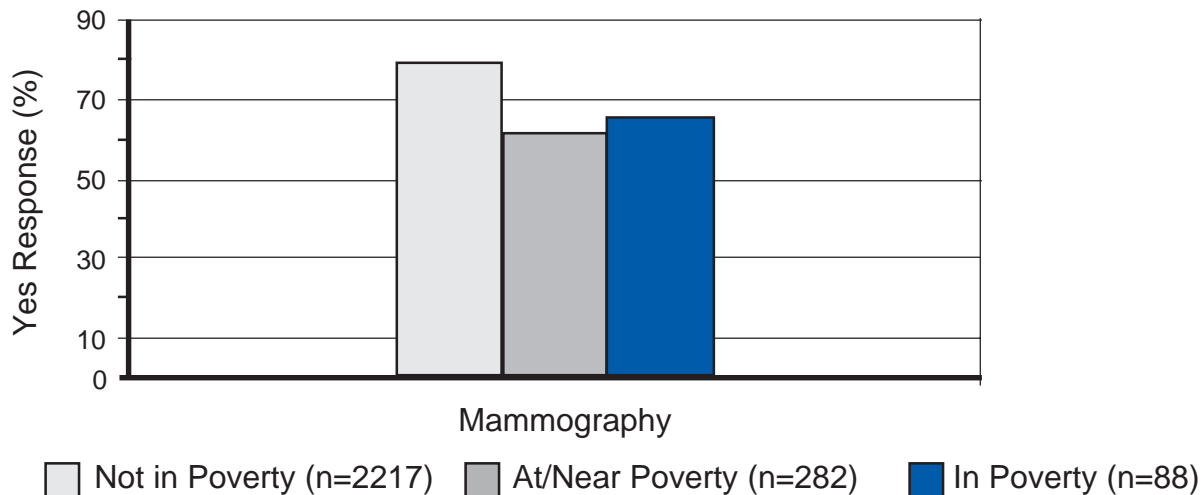


The U.S. Preventive Services Task Force recommends screening mammography, with or without clinical breast examination, every one to two years for women aged 40 and older. Mammography can detect an abnormality before a woman or her doctor can feel it. Detecting breast cancer early saves lives and increases treatment options.

## Mammography and Clinical Breast Exams

In the Colorado Behavioral Risk Factor Surveillance System survey of women aged 40 and older, poorer women were less likely to have up-to-date screening mammograms. Higher income women had screening rates that were 14-18 percentage points above those of women living at/near poverty or in poverty (Figure 4).

**Figure 4: Percent of Colorado females aged 40+ who have had a mammogram in the past two years by Poverty Level, 1995-2000.**



Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

## Incidence

An average of 2,800 malignant breast cancer cases per year are diagnosed in Colorado women. The incidence rate in Colorado for 1998-2002 was 135.2 cancers per 100,000 women. The rate was 138.5 for the wealthier areas of the state, 128.9 for the next poverty level, and 110.1 for the poorest areas (4).

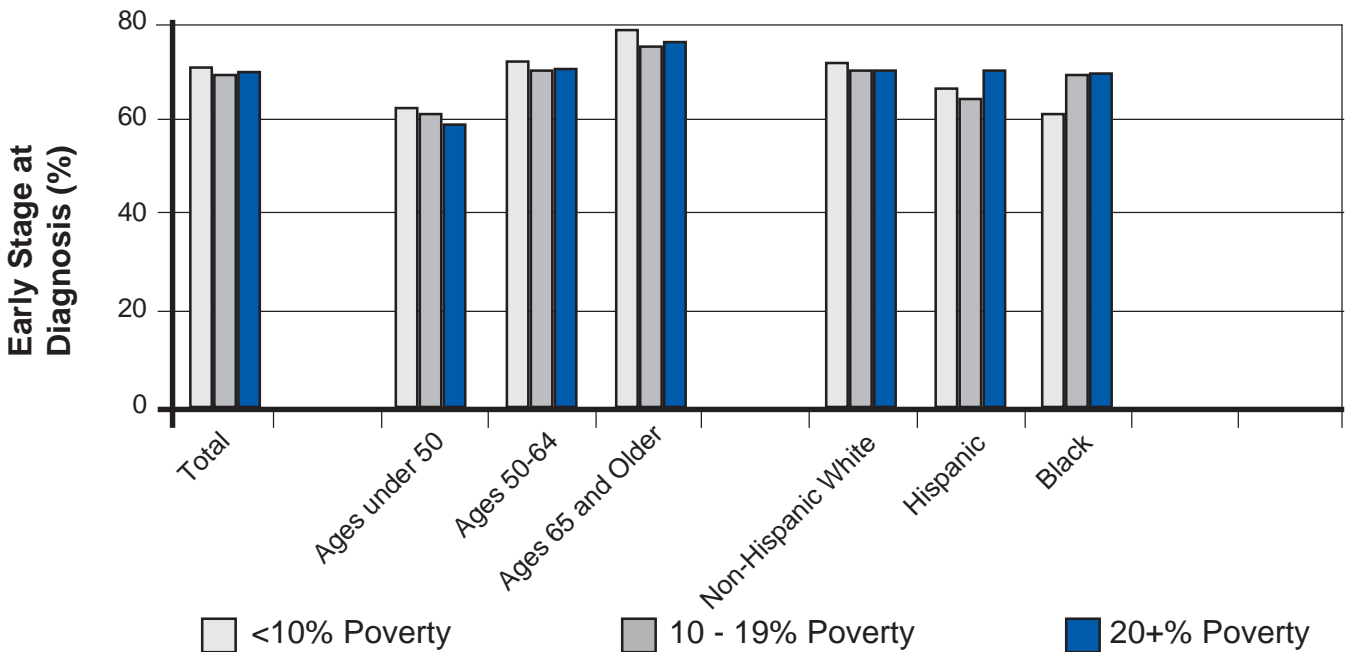
## Early Detection

In 1995-2000, nearly three in four breast cancers in Colorado females were detected at an early, more curable stage (10). For all race/ethnicities combined and non-Hispanic whites, fewer cancers were detected at an early stage in the poorer areas of the state. Findings among black women showed a higher proportion of cancers detected early in the poorer areas of the state, and among Hispanic women, no consistent pattern by poverty level was found. Among all women less than 50 years old, the poorest areas of the state showed the worst early stage

detection, but the proportion of cancers diagnosed early in the older women (50-64 years, greater than or equal to 65 years) did not show a gradient by poverty level (Figure 5).

It is possible that screening programs have improved early stage detection in low-income women of Hispanic or black race/ethnicity. The Colorado Women's Cancer Control Initiative Program at the Department of Public Health and Environment has provided breast and/or cancer screening for low-income and uninsured women aged 40 and older since 1991. Of those women receiving Cancer Control Initiative services, approximately five percent are black and 39 percent are Hispanic. However, the initiative provides this coverage for only about nine percent of eligible women in Colorado. The lack of a poverty gradient among women of Medicare age (greater than or equal to 65 years) may be partially attributable to Medicare benefits. Medicare provides screening, mammography, and treatment for beneficiaries, regardless of income.

**Figure 5: Early stage at diagnosis for breast cancer by area poverty level, age, and race, 1995-2000, Colorado.**



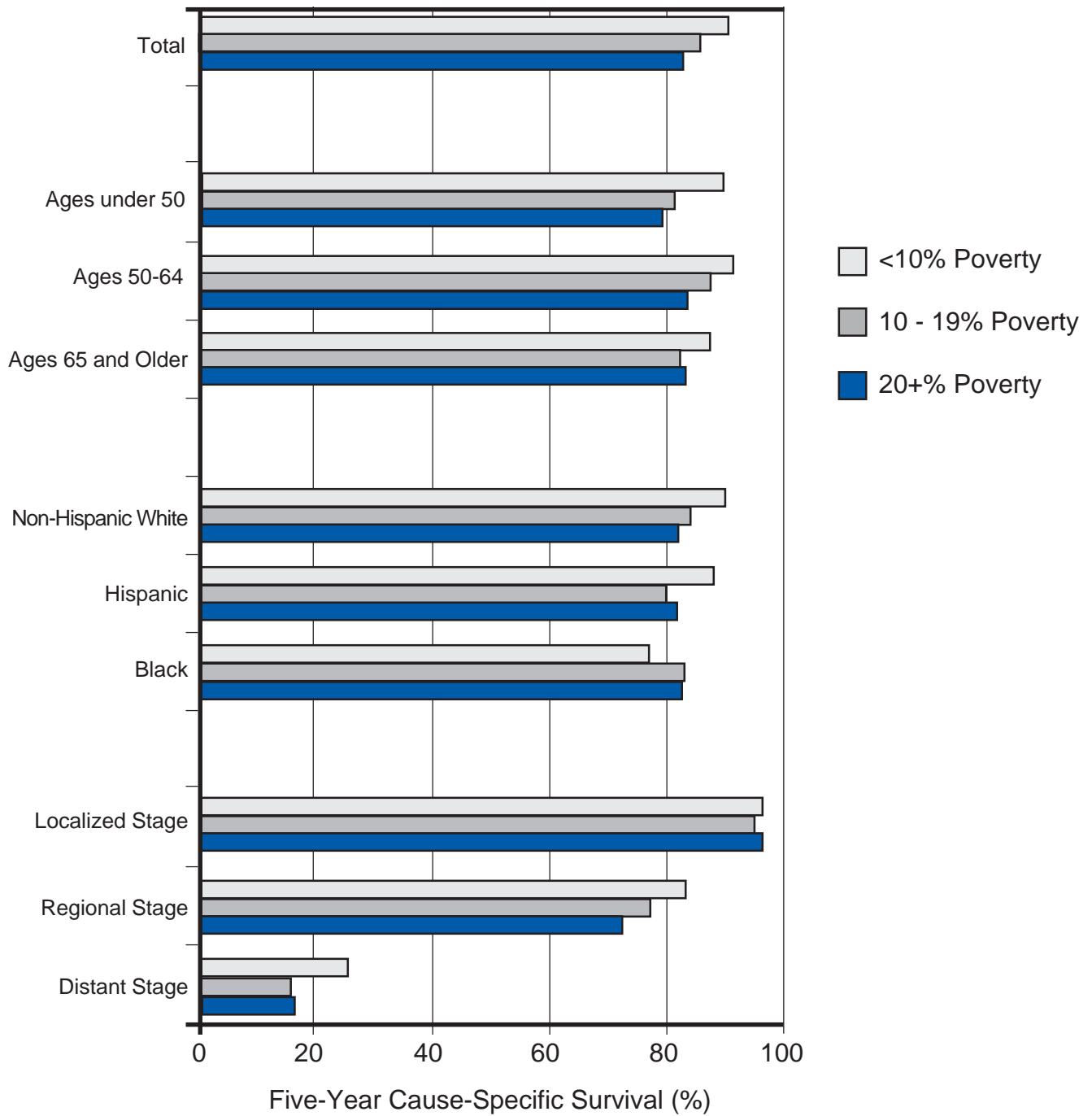
Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

## Survival

Approximately 85 percent of women with breast cancer in Colorado survive at least five years after diagnosis. In this report, survival rates were found to be lower in poorer areas of the state for women of all age groups. Survival differences by poverty level were smallest among women of Medicare age (greater than or equal to 65 years). Among non-Hispanic whites and Hispanics, survival rates were worse in poorer areas of the state. In contrast, black women showed a survival advantage in poorer areas of the state (Figure 6).

For all stages of breast cancer combined, lower survival rates were seen in the poorer areas of Colorado. The association between poverty and worse survival was especially apparent among those women with breast cancer diagnosed at the regional stage. Regional stage breast cancer is a particularly important stage for treatment, as chemotherapy and careful follow-up are usually required to improve breast cancer outcomes (3). For breast cancers diagnosed at the distant stage, survival rates were also worse in the poorer areas, lower by about 10 percentage points (Figure 6).

**Figure 6: Five-year survival for breast cancer by area poverty level, age, race, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

# Cervical Cancer and Poverty

In this report, cervical cancer refers to malignancies that have invaded the thin layer of cells covering the cervix (i.e., not including *in situ* cancers). Before introduction of the Pap screening test more than 50 years ago, invasive cervical cancer was the most common cause of cancer death among U.S. women (7). The lifetime risk of invasive cervical cancer for a female in Colorado is now only one in 140, and cervical cancer is now down to the 11th most commonly diagnosed cancer in females (10).

## Prevention

Major risk factors for cervical cancer include sexual behaviors that increase exposure to the human papilloma virus (HPV), a common sexually transmitted infection that can cause cervical cancer. Cigarette smoking also increases cervical cancer risk.

The U.S. Preventive Services Task Force recommends beginning screening for cervical

cancer with a Pap test at age 21, or within three years of becoming sexually active, whichever comes first. Screening is advised at least every three years, and there is evidence that low-risk older women can probably stop screening after age 65.

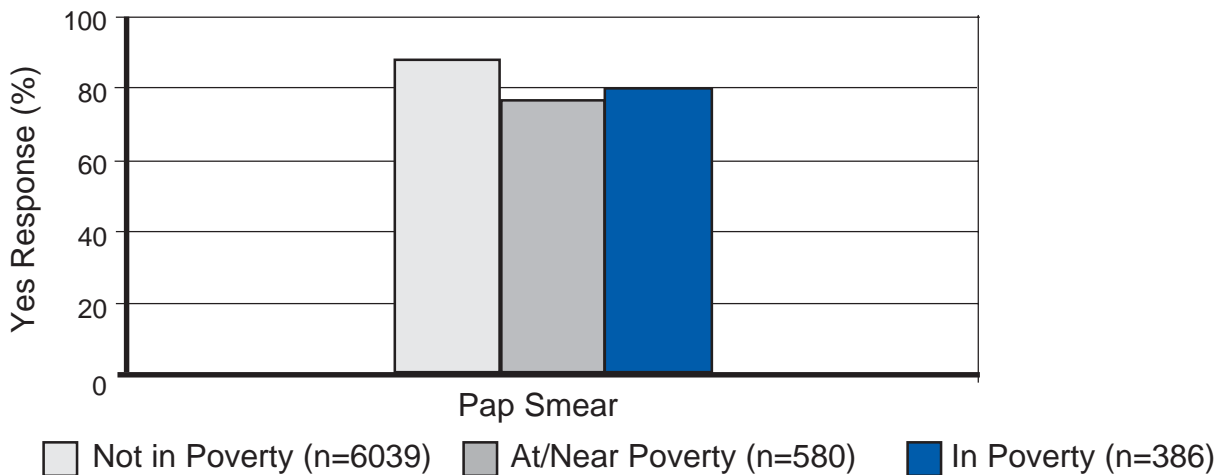
Detection of cervical cancers through screening saves lives, by diagnosing cancers before they become invasive and less treatable. According to the American Cancer Society, nearly 100 percent of females in the U.S. diagnosed with pre-invasive cervical lesions will survive (2).



## Pap Test

In the Colorado BRFSS survey, poorer women were less likely to have had a Pap test within the past three years than women reporting incomes above the poverty level (Figure 7).

**Figure 7: Percent of Colorado females who have had a Pap smear in the past three years by poverty level, 1995-2000.**



Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

## **Incidence**

An average of about 160 cases of invasive cervical cancer are diagnosed each year in Colorado females. The incidence rate in Colorado for 1998-2002 was 7.3 cases per 100,000 females. For the wealthier areas of the state the rate was 6.2, while the rate for the next higher poverty level was 8.4, and the rate for the poorest areas was 10.9. Similar, strong disparities were seen across the three poverty levels for non-Hispanic whites, Hispanics, and blacks (Table 5).

## **Early Detection**

Early stage detection was not calculated for cervical cancer because in-situ cases are not reportable to state cancer registries. Cervical cancers detected at any invasive stage are considered failures of screening and are less treatable. The Colorado Women's Cancer Control Initiative Program has provided cervical and/or breast cancer screening for low-income and uninsured women aged 40 and older since 1991. However, the initiative provides coverage for cervical and/or breast cancer for only about nine percent of eligible women in the state. Of those women receiving initiative services,

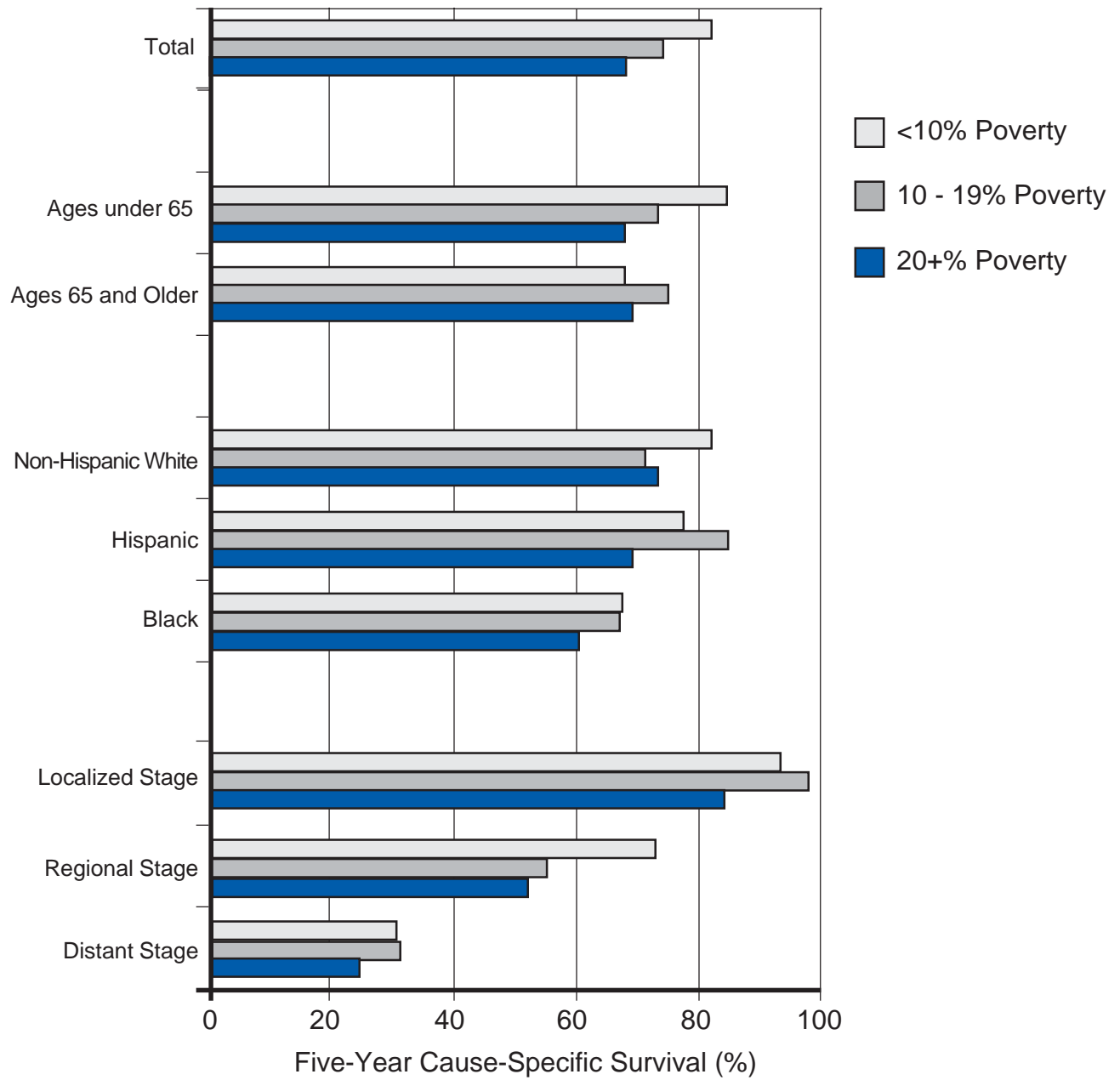
approximately five percent are black and 39 percent are Hispanic.

## **Survival**

Survival rates for Hispanic and black women with cervical cancer were lowest in the poorest areas of Colorado. Among non-Hispanic whites, survival rates were similar in the two poorer areas, and were 9-to-12 percentage points lower than the survival rate in wealthier areas. Among women younger than 65, a gradient of worsening survival with increasing poverty was noted. In contrast, women of Medicare age (greater than 65 years) showed less of an association between poverty and survival (Figure 8).

For all stages and races/ethnicities combined, the worst survival rate with cervical cancer was seen in the poorest areas of the state. This association remained when each stage was considered separately. The greatest difference was noted for women diagnosed at the regional stage, where survival in the poorest areas was 17 percentage points lower than survival in the wealthier areas (Figure 8). Aggressive treatment for cervical cancer can make a particular difference at the regional stage.

**Figure 8: Five-year survival for cervical cancer by area poverty level, age, race, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.



# Colorectal Cancer and Poverty

Colorectal cancer, cancer of the colon or rectum, is the second leading cause of cancer death after lung cancer in Colorado. The cumulative lifetime risk of colorectal cancer is one in 13 for males, and one in 17 for women (10).

## Prevention

The most important risk factor for colorectal cancer is age, as over 90 percent of colorectal cancers occur in persons older than 50 years of age. Other risk factors include family history of colorectal cancer, personal history of colon polyps or inflammatory bowel disease, smoking, obesity, physical inactivity, and low consumption of fruits and vegetables (2,4).



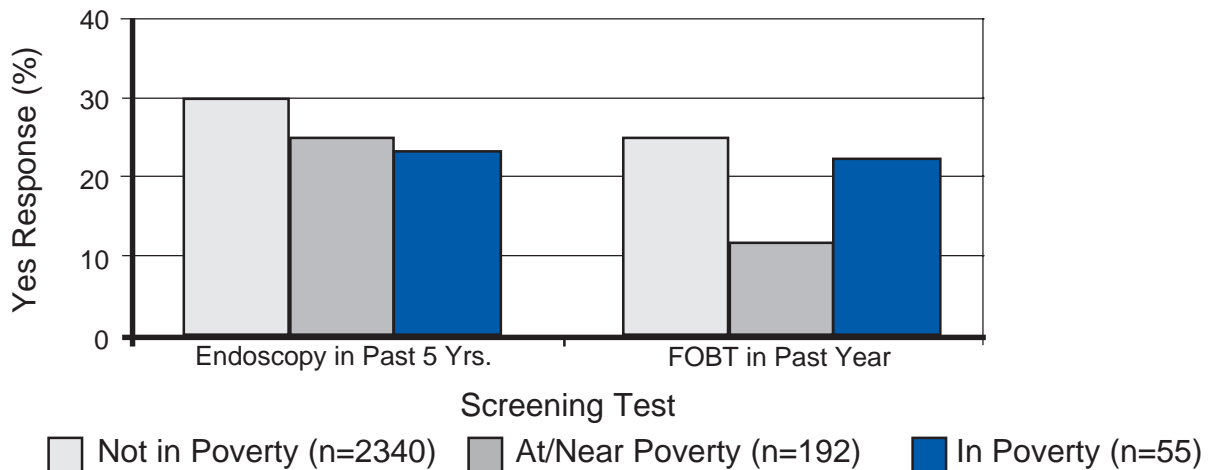
The U.S. Preventive Services Task Force recommends that colorectal cancer screening begin at age 50 for all adults without additional risk factors.

Screening options for colorectal cancer include fecal occult blood testing (FOBT) every year, sigmoidoscopy every five years, double contrast barium enema every five years, or colonoscopy every 10 years.

## Colorectal Cancer Screening

Screening tests can detect colorectal cancer at an early stage, when treatment is more successful. Sigmoidoscopy and colonoscopy (endoscopy) can also detect and remove polyps before they turn cancerous. Coloradans reporting lower incomes were less likely to have undergone

**Figure 9: Percent of Coloradans over age 50 who have ever had a sigmoidoscopy in the past five years, or a colonoscopy or Fecal Occult Blood Test in the past year, by poverty level, 1995-2000.**



Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

recommended screening. A gradient by poverty level was noted for endoscopy (Figure 9).

## Incidence

An average of about 1,700 malignant colorectal cancers per year are diagnosed in Colorado. The incidence rate of colorectal cancer in Colorado for 1998-2002 was 47.6 cases per 100,000 persons. For the wealthier areas of the state the rate was 46.6, the middle poverty level areas had a rate of 48.0, while the poorest areas showed the highest rate, 51.2 (Table 6).

## Early Detection

In 1995-2000, less than half or 45 percent of colorectal cancers in the state were diagnosed at an early, more curable stage (10). A poverty gradient for early stage detection was not noted by race/ethnicity or sex. Among persons younger than 65, the percentage of colorectal cancers diagnosed

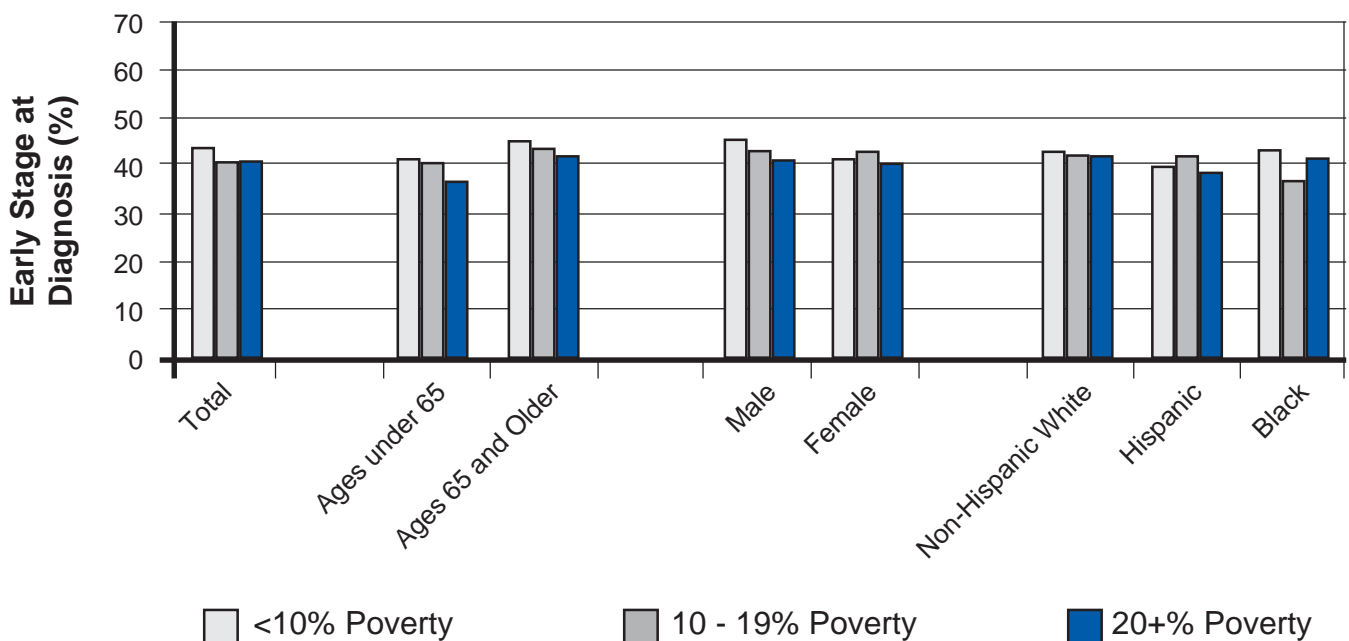
early was lowest in the poorest areas, while early stage detection did not vary much by poverty level among persons of Medicare age (greater than or equal to 65 years old) (Figure 10).

## Survival

Persons with colorectal cancer from the poorest areas of the state showed the worst survival rates, regardless of race/ethnicity, sex, or age. The greatest disparities by poverty level were noted among males and persons younger than 65, where each group showed survival rates that were 16 percentage points lower in the poorest areas compared to the wealthier areas (Figure 11).

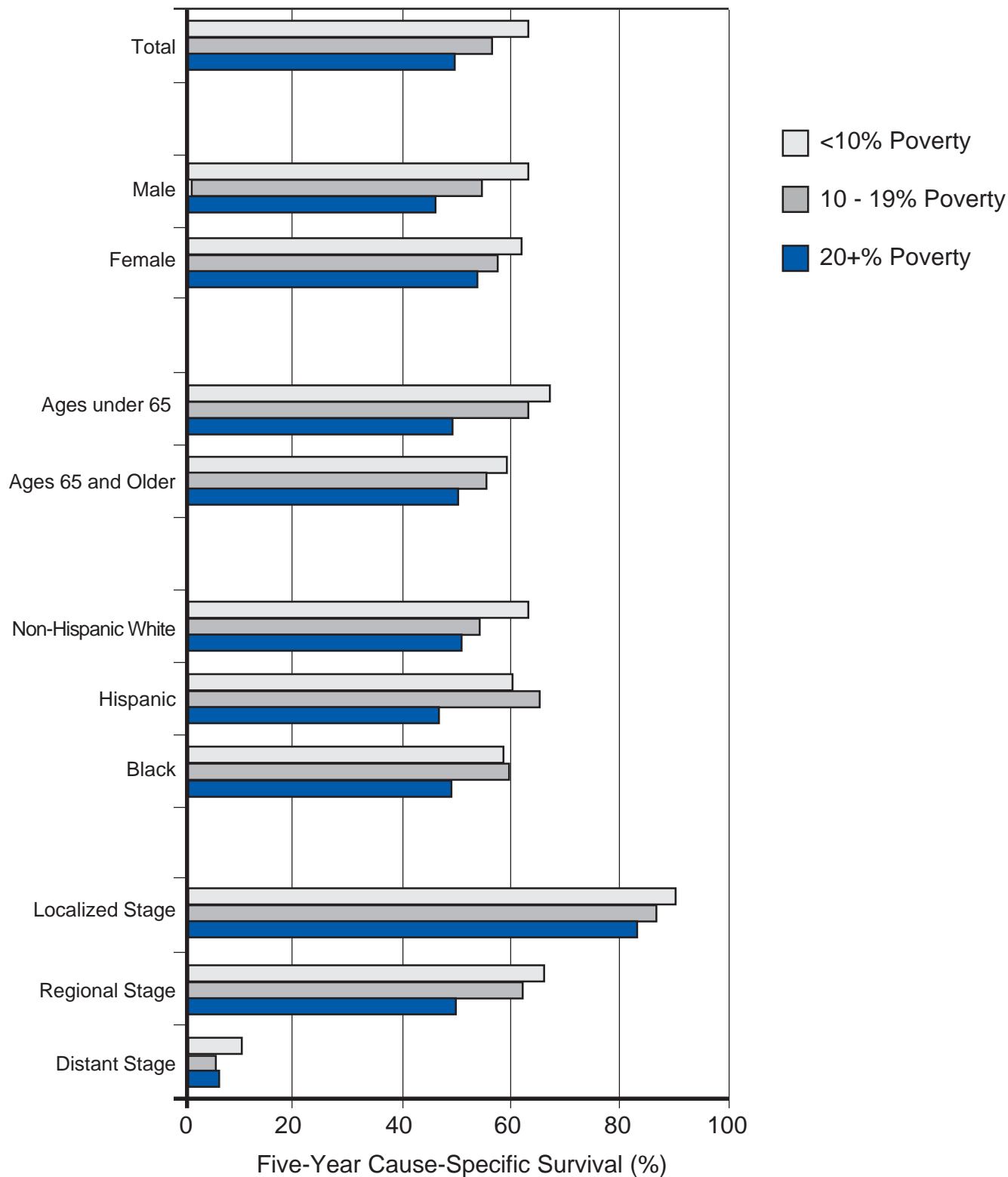
The largest poverty gradient was seen for cases diagnosed at the regional stage, a stage where the completeness of chemotherapy and treatment has been shown to make a big difference in survival (Figure 11).

**Figure 10: Early stage at diagnosis for colorectal cancer by area poverty level, age, gender, and race; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

**Figure 11: Five-year survival for colorectal cancer by area poverty level, age, gender, race, and stage; 1995-2000, Colorado.**



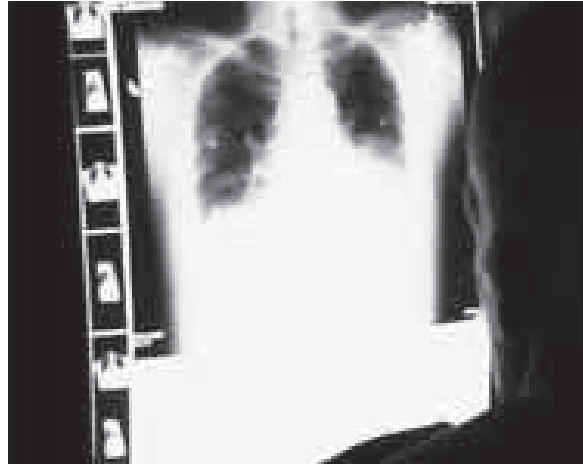
Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

# Lung Cancer and Poverty

Each year, more men and women in Colorado die from lung cancer than any other type of cancer. The lifetime risk of developing lung cancer is one in 10 for men, and one in 17 for women (10).

## Prevention

The single most important risk factor for the development of lung cancer is smoking. Smoking is directly responsible for nearly 90 percent of lung cancer cases (22). Heavy smokers, those using more than two packs a day, die from lung cancer at 15-to -25 times the rate of persons who have never smoked (9). Exposure to second-hand or “passive” tobacco smoke increases the risk of lung cancer in nonsmokers. Avoiding tobacco smoke is the best way to prevent lung cancer. Ten years after quitting smoking, the risk of death from lung cancer is nearly cut in half (21).



concludes that the evidence is insufficient to recommend either for or against screening asymptomatic persons for lung cancer with low dose computerized tomography, chest x-ray, sputum cytology, or a combination of these tests. Currently, studies are underway to determine whether screening high-risk individuals with low-dose, computerized tomography before they have symptoms can reduce lung cancer deaths.

## Smoking

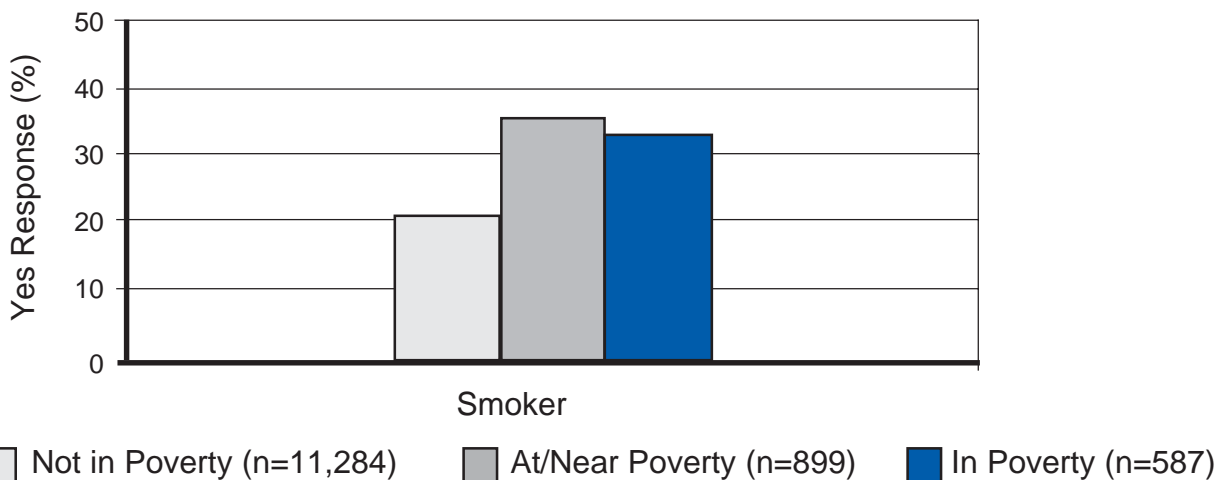
Smoking was less common among Coloradans reporting higher incomes. More than one in three Coloradans with incomes near or below the poverty level were current smokers, compared to less than one in five Coloradans reporting incomes above the poverty level (Figure 12).

Symptoms of lung cancer usually do not appear until the cancer is advanced, making detection at an early stage difficult. The U.S. Preventive Services Task Force

## Incidence

An average of almost 1,900 malignant lung cancers per year are diagnosed in Colorado. The incidence

**Figure 12: Percent of Coloradans who are current smokers by poverty level, 1995-2000.**



Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

rate in Colorado for 1998-2002 was 53.6 cases per 100,000 persons. For the wealthier areas of the state, the rate was 50.0, while the rate for the middle poverty areas was 60.8, and the poorest areas had the highest rate of 61.4. The same trends across poverty levels were seen for males and females, separately, with lung cancer rates that were an absolute 14-31 percent higher in the two poorer areas compared to the wealthier areas (9).

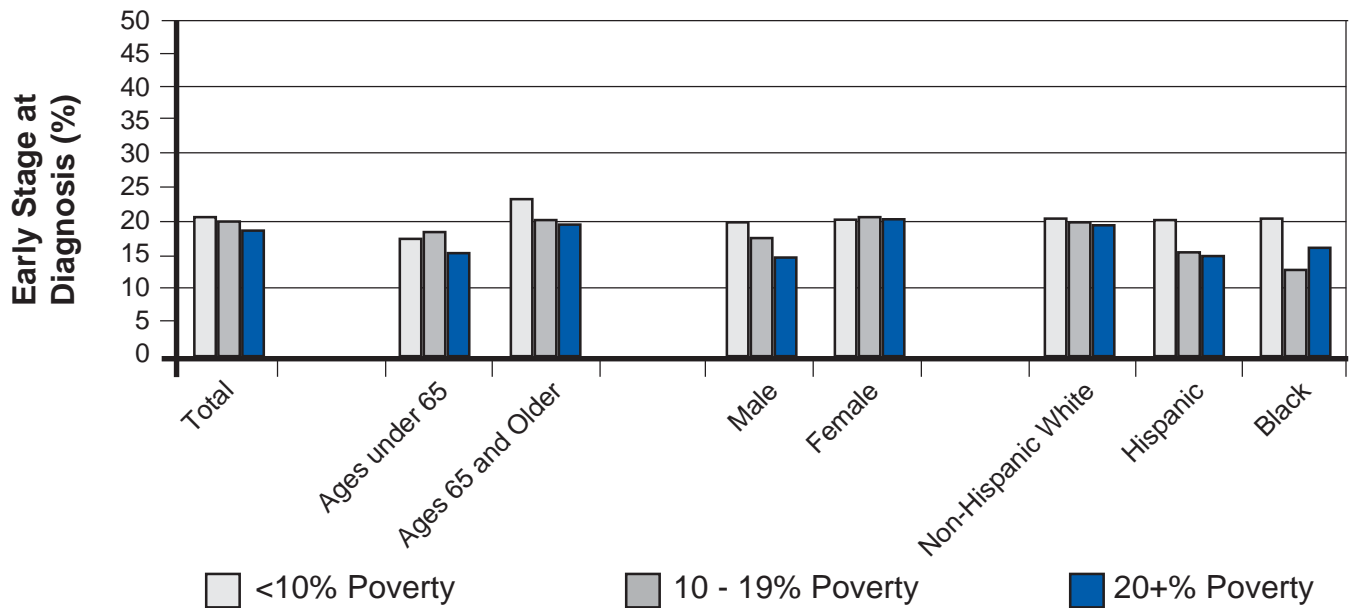
### Early Detection

In 1995-2000, only about one in five lung cancers in Colorado (approximately 20 percent) were diagnosed at an early, more curable stage (10). The proportion of lung cancers diagnosed at an early stage was very small regardless of poverty level, race/ethnicity, sex, or age. The subgroup having the worst early stage detection was black men from middle poverty areas, where only 12 percent or about one in eight lung cancers were detected early (Figure 13).

### Survival

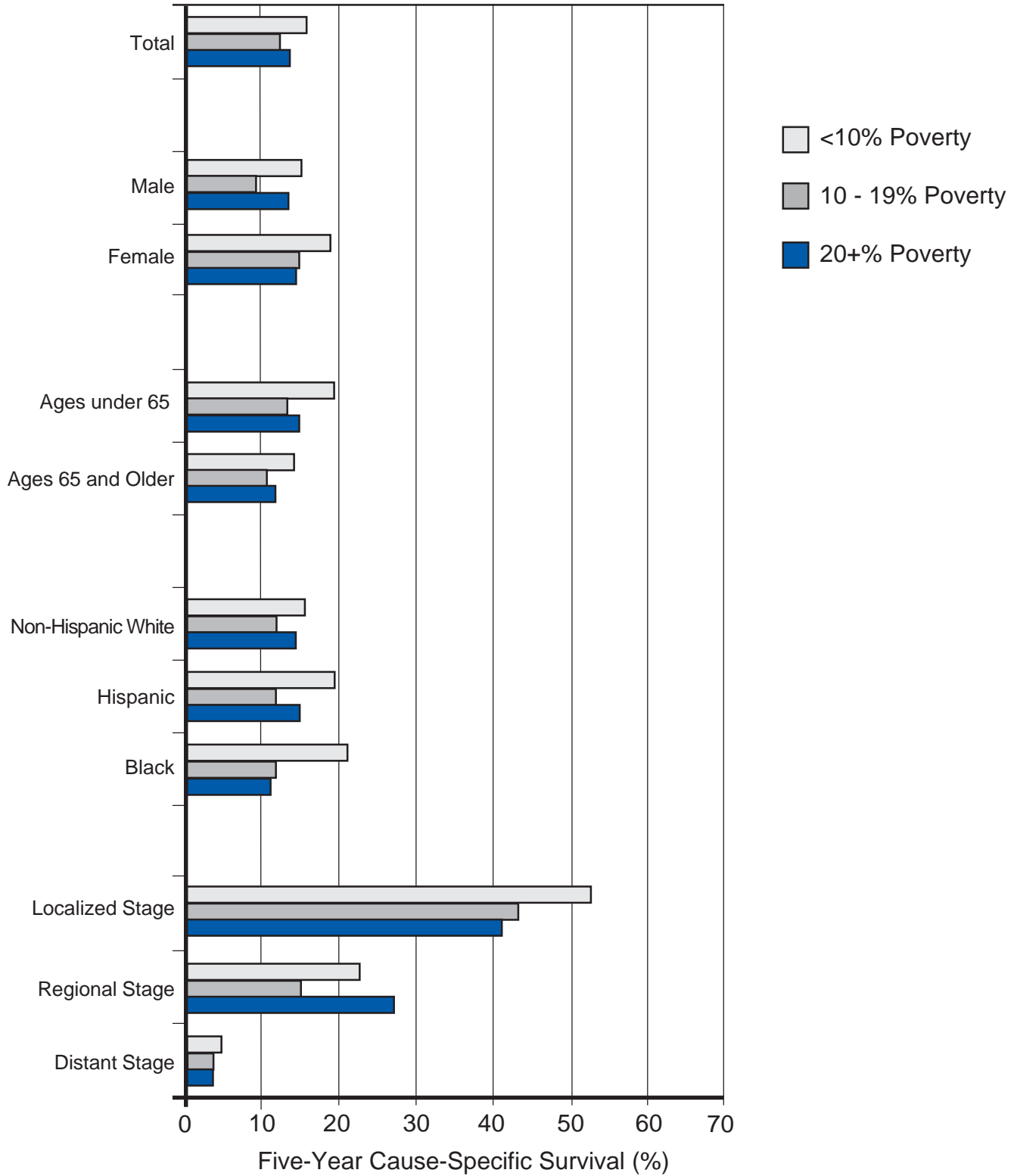
In part because lung cancer is usually not detected until an advanced stage, survival rates were very low regardless of race/ethnicity, sex, or age. For all stages combined, only 12-21 percent of Coloradans with lung cancer survived five years after diagnosis. The middle poverty areas showed the worst survival rates; only 12 percent of non-Hispanic whites, Hispanics, and blacks in these areas survived five years or longer with lung cancer (Figure 14). A poverty gradient for survival with lung cancer diagnosed at the localized stage was noted. No association between poverty level and survival was noted for lung cancers detected at the regional stage (Figure 14).

**Figure 13: Early stage at diagnosis for lung cancer by area poverty level, age, gender, and race; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

**Figure 14: Five-year survival for lung cancer by area poverty level, age, gender, race, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

## Melanoma and Poverty

Melanoma is the most deadly form of skin cancer. Basal and squamous cell skin cancers occur much more frequently but are highly curable.



Nationally, and in Colorado, the incidence rate of melanoma is rising faster than most other cancers. Melanoma was the fifth most commonly diagnosed cancer among all ages in Colorado in 1996-2000. The lifetime risk of being diagnosed with melanoma in Colorado is approximately one in 35 for males and one in 61 for females (10). Since melanoma is primarily a disease of fair-skinned persons, only statistics for non-Hispanic whites were displayed for this report, due to the very small number of cases among other races/ethnicities.

### Prevention

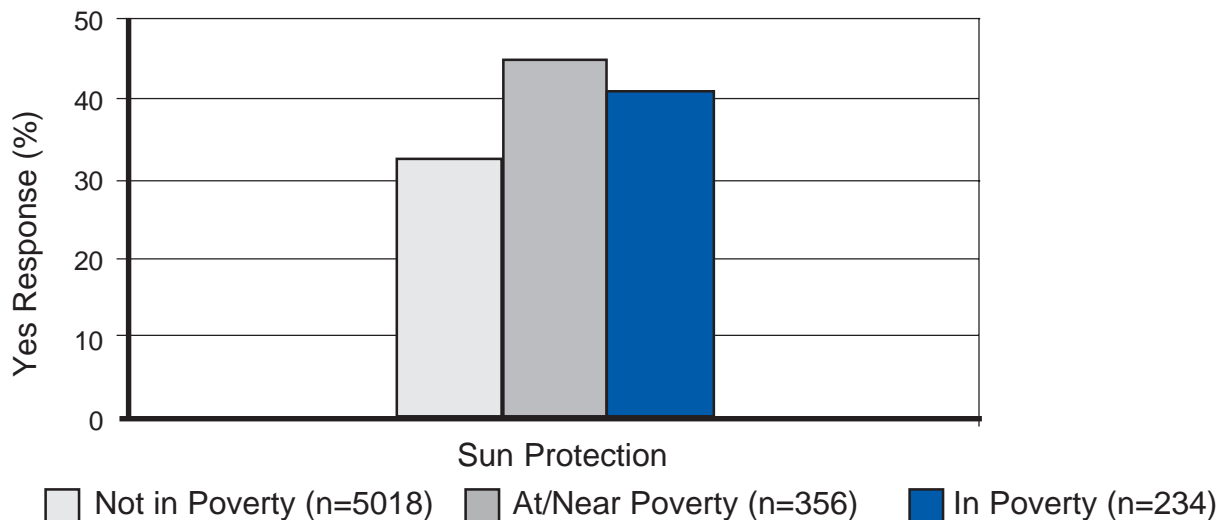
Overexposure to ultraviolet radiation in sunlight is believed to be a contributing factor to some cases of melanoma. Other risk factors include fair skin that burns easily, a family history of melanoma, and having many moles or atypical or unusual looking moles. Numerous organizations encourage sun-protection behaviors to prevent skin cancer, such as limiting sun exposure especially during midday, avoiding tanning facilities, wearing protective clothing when outdoors, and applying sunscreen with a sun protection factor of SPF 15 or higher (1,2,32).

The U.S. Preventive Services Task Force concluded there is insufficient evidence to recommend for or against routine total-body skin examinations by clinicians for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer.

### Sun Protection

Adults with lower incomes were more likely to report regular use of sun protection than higher income respondents. These differences may be due in part to a greater proportion of lower-income persons working in outdoor settings (Figure 15).

**Figure 15: Percent of Coloradans who use sun protection by poverty level, 1995-2000.**



Source: Health Statistics Section, Colorado Department of Public Health and Environment, June 2004.

### Incidence

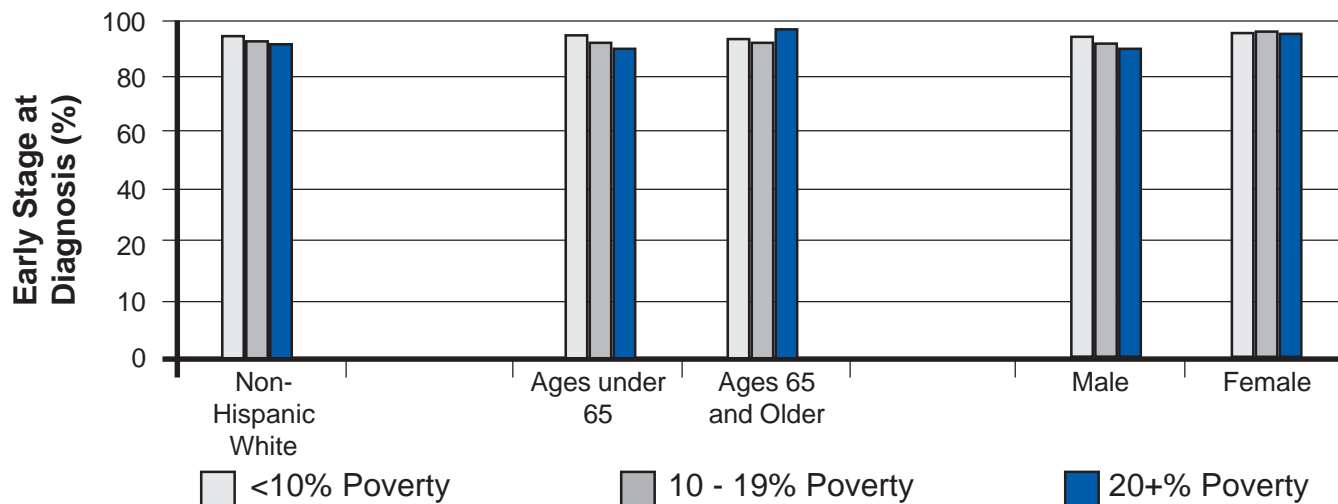
From 1995-2000, an average of 750 malignant melanomas of the skin per year were diagnosed in Colorado. Almost all of these cases occurred in non-Hispanic whites. The incidence rate of melanoma in Colorado in 1998-2002 was 22.7 cases per 100,000 persons. For the wealthier areas of the state the rate was 23.0, while the

middle poverty areas had a rate of 20.4, and the rate in the poorest areas was 15.7 (Table 12).

### Early Detection

Different staging systems are in use for melanoma. Approximately 95 percent of melanomas in non-Hispanic whites were classified as “early” (*in situ* or localized) stage at detection regardless of poverty level (Table 26).

**Figure 16: Early stage at diagnosis for melanoma for non-Hispanic whites by area poverty level, age, and gender; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

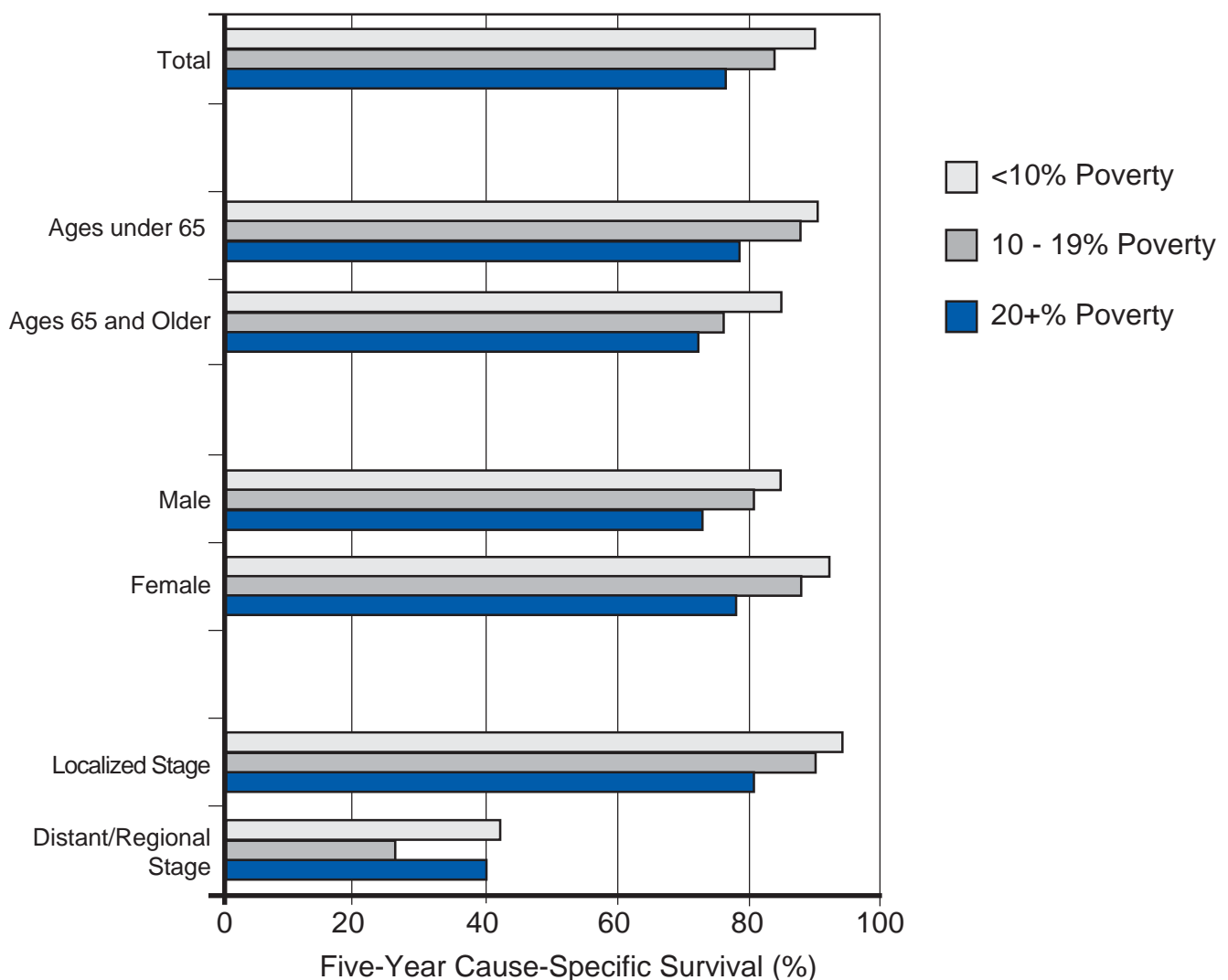


## Survival

For all stages of melanoma combined, survival declined as poverty worsened. Survival rates were lowest in the poorest areas regardless of age or sex; survival rates by age or sex were from 11-13 percentage points lower in the poorest areas compared to the wealthier areas (Figure 17).

Variations in cancer survival are generally due to stage at the time of diagnosis, and differences in access to state-of-the-art treatment. For analysis by stage, regional and distant stage were combined to achieve sufficient numbers to display survival. Within the localized stage, the survival rate was significantly lower for the poorest areas of the state (84 percent) compared to the wealthier areas (94 percent) (Figure 17).

**Figure 17: Five-year survival for melanoma for non-Hispanic whites by area poverty level, age, gender, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

# Prostate Cancer and Poverty

Prostate cancer is the most common cancer diagnosed in Colorado males, and is the second most common cause of cancer death, after lung cancer. In Colorado, the lifetime risk of being diagnosed with prostate cancer is about one in five, although the chance of dying from prostate cancer is much smaller (10).

## Prevention

The most important risk factor for prostate cancer is age. More than 75 percent of prostate cancers in the U.S. are diagnosed in men older than age 65 (32). Other risk factors include black race, and family history of prostate cancer, where history of prostate cancer in one first-degree relative may double risk. Eating a high fat diet may also increase risk (2,10).

The U.S. Preventive Services Task Force concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using prostate specific antigen (PSA) testing or digital rectal examination (DRE).

The U.S. Preventive Services Task Force found good evidence that PSA screening can detect early-stage prostate cancer, but found only mixed and inconclusive evidence that early detection improves health outcomes. Screening is associated with potential harms, including frequent false-positive results and unnecessary anxiety, biopsies, and potential complications of treatment of some cancers that may never have affected a patient's health.

## Screening

No behavioral data related to prostate cancer was presented in this report, as the Behavioral Risk Factor Surveillance System Survey has incomplete data on PSA testing in Colorado men in the years 1995-2000.



## Incidence

Prostate cancer incidence rates increased considerably in the 1980s and early 1990s in the U.S. and in Colorado, due to an increase in the number of men getting screened with the prostate specific antigen (PSA) test. Wide adoption of the PSA test led to many more prostate cancers being detected at an earlier stage than before screening was available (2,10). In 1995-2000, an average of 2,360 malignant prostate cancers per year were diagnosed in Colorado. The incidence rate in 1998-2002 was 159.7 cases per 100,000 men. For the

wealthier areas of the state, the rate was 161.2, for the middle poverty areas it was 152.3, and the poorest areas had a rate of 129.3.

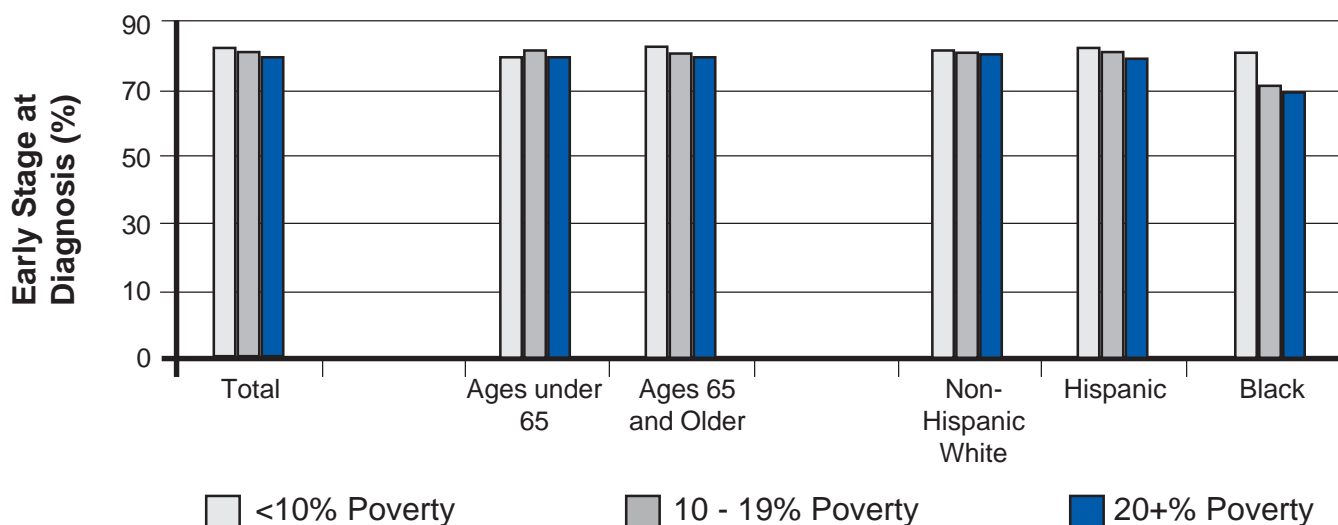
## Early Detection

During 1995-1999 in Colorado, more than eight in 10 prostate cancers were diagnosed at an early, more curable stage (10). In this report, the proportion of prostate cancers diagnosed early among non-Hispanic whites was very similar regardless of poverty level. Early stage detection for Hispanics and blacks did, however, vary by

poverty level. Among Hispanic men, the proportion of cancers diagnosed early was seven percentage points lower in the poorest areas of the state compared to the wealthier areas. Black men in Colorado showed the greatest disparity by poverty level; the proportion of cancers diagnosed

early in the poorest areas was 12 percentage points lower than in the wealthier areas of the state (Figure 18). The proportion of prostate cancers diagnosed early did not vary much by poverty level for either age group (Figure 18).

**Figure 18: Early stage at diagnosis for prostate cancer by area poverty level, age, and race; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

## Survival

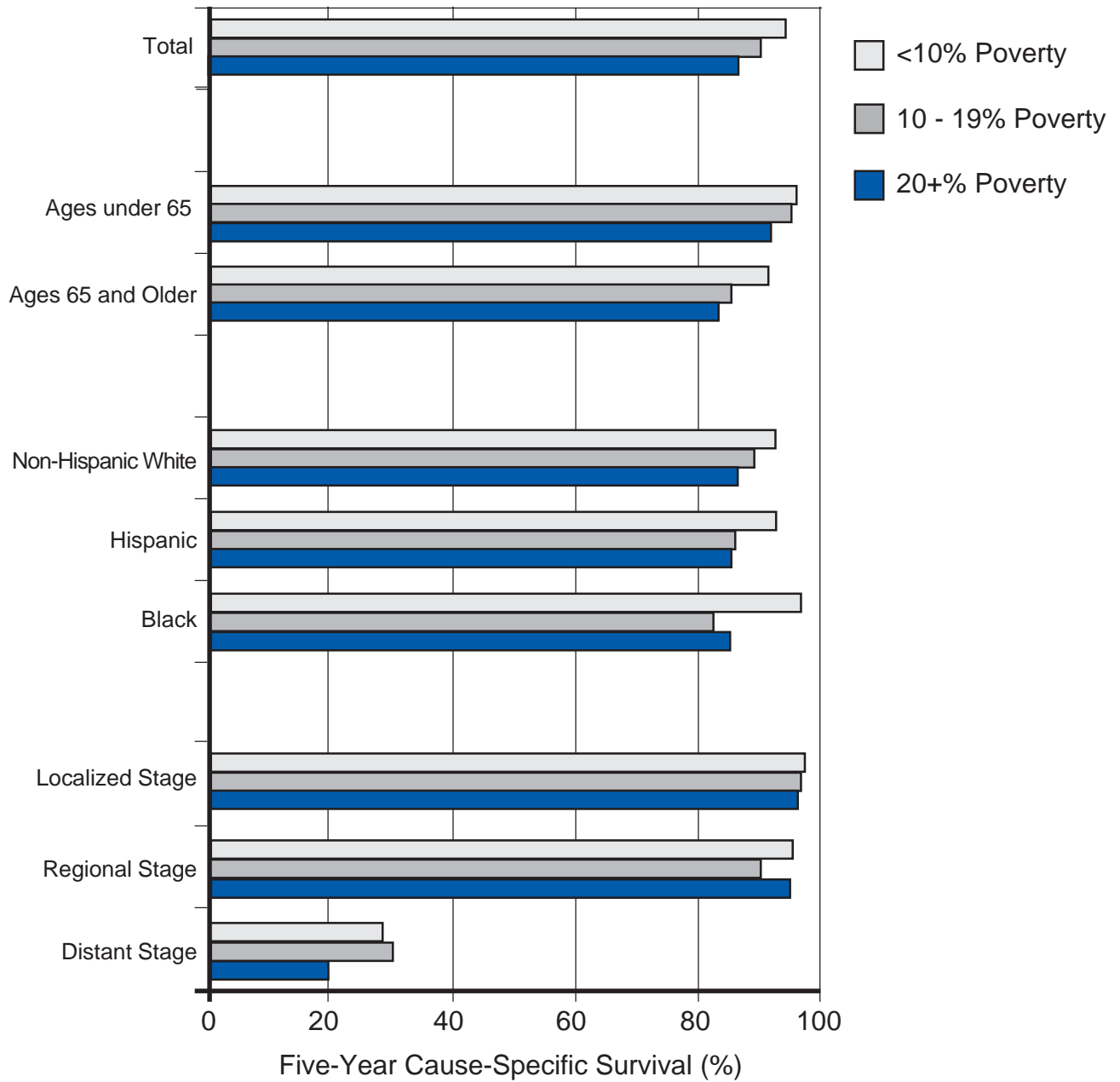
For all stages combined, a gradient of declining survival with worsening poverty was noted. Men in the two poorer areas of the state had lower survival rates than men in wealthier areas, and this was noted for non-Hispanic whites, Hispanics, and blacks. The survival disparity by poverty level was worst among black men, whose survival rates were an absolute 12-14 percentage points lower in the two poorer areas of the state compared to the wealthier areas (Figure 19).

Survival rates were similar among younger men (less than 65 years) regardless of poverty level. Men of Medicare age (greater than or equal to

65 years) in the two poorer areas of the state had significantly lower survival rates compared to wealthier areas (Figure 19).

Variations in survival are likely due to the combined effects of stage at the time of diagnosis and differences in treatment. Survival rates with localized prostate cancer were very similar regardless of poverty level, with over 96 percent surviving at least five years after diagnosis. No pattern between survival and poverty level was noted for cancers diagnosed at the regional stage. Survival rates for prostate cancers diagnosed at the distant stage were lowest in the poorest areas of the state (Figure 19).

**Figure 19: Five-year survival for prostate cancer by area poverty level, age, race, and stage; 1995-2000, Colorado.**



Source: Colorado Central Cancer Registry, Colorado Department of Public Health and Environment, June 2004.

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## APPENDIX

### All Cancers Incidence Rates

**Table 1: Age-adjusted incidence rates for all cancers in Colorado, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	53360	443.2	1.96	439.4	447.0
Non-Hispanic White	50414	468.1	2.12	463.9	472.3
Hispanic	2939	414.3	8.73	397.2	431.4
Black	982	444.5	16.61	411.9	477.1
<b>10-19% Poverty</b>	19565	446.5	3.20	440.3	452.8
Non-Hispanic White	17230	<b>491.2</b>	3.76	483.8	498.6
Hispanic	2334	407.0	9.06	389.2	424.8
Black	685	444.7	17.73	410.0	479.5
<b>20+% Poverty</b>	7671	<b>420.8</b>	4.84	411.3	430.3
Non-Hispanic White	5733	<b>528.4</b>	7.07	514.5	542.3
Hispanic	1938	<b>373.9</b>	8.85	356.6	391.3
Black	585	443.2	18.60	406.7	479.7

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 2: Age-adjusted incidence rates for all cancers for male Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	26910	507.1	3.26	500.7	513.5
Non-Hispanic White	25488	534.0	3.49	527.2	540.8
Hispanic	1416	462.7	14.58	434.1	491.3
Black	555	536.8	29.41	479.2	594.4
<b>10-19% Poverty</b>	9812	<b>519.5</b>	5.31	509.1	529.9
Non-Hispanic White	8642	<b>568.3</b>	6.14	556.3	580.3
Hispanic	1169	471.1	15.39	440.9	501.3
Black	374	573.7	32.10	510.8	636.6
<b>20+% Poverty</b>	3892	494.6	8.09	478.7	510.5
Non-Hispanic White	2887	<b>617.6</b>	11.57	594.9	640.3
Hispanic	1005	435.7	14.81	406.7	464.7
Black	333	566.9	32.63	503.0	630.9

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 3: Age-adjusted incidence rates for all cancers for female Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	26450	399.9	2.48	395.0	404.8
Non-Hispanic White	24926	423.4	2.70	418.1	428.7
Hispanic	1523	380.7	10.86	359.4	402.0
Black	427	370.4	19.99	331.2	409.6
<b>10-19% Poverty</b>	9753	402.5	4.11	394.4	410.6
Non-Hispanic White	8588	<b>444.6</b>	4.88	435.0	454.2
Hispanic	1165	368.1	11.30	346.0	390.3
Black	311	356.3	20.68	315.8	396.8
<b>20+% Poverty</b>	3779	<b>376.8</b>	6.22	364.6	389.0
Non-Hispanic White	2846	<b>476.5</b>	9.26	458.4	494.7
Hispanic	933	<b>334.0</b>	11.21	312.0	356.0
Black	252	343.4	21.75	300.8	386.0

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

## Breast Cancer Incidence Rates

**Table 4: Age-adjusted incidence rates for breast cancer for female Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	9476	138.5	1.44	135.7	141.3
Non-Hispanic White	8972	147.7	1.57	144.6	150.8
Hispanic	504	117.6	5.74	106.4	128.9
Black	141	106.4	9.80	87.2	125.6
<b>10-19% Poverty</b>	3047	<b>128.9</b>	2.35	124.3	133.5
Non-Hispanic White	2711	144.7	2.82	139.2	150.2
Hispanic	336	103.7	5.85	92.2	115.2
Black	100	111.6	11.41	89.2	134.0
<b>20+% Poverty</b>	1055	<b>110.1</b>	3.42	103.4	116.8
Non-Hispanic White	825	146.4	5.24	136.1	156.7
Hispanic	230	<b>82.6</b>	5.52	71.8	93.4
Black	74	100.2	11.72	77.2	123.2

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race



## Cervical Cancer Incidence Rates

Table 5: Age-adjusted incidence rates for cervical cancer for female Coloradans, 1998-2002.

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	457	6.2	0.29	5.6	6.8
Non-Hispanic White	400	6.4	0.32	5.8	7.0
Hispanic	56	9.4	1.41	6.6	12.2
Black	8	4.6	1.66	1.4	7.9
<b>10-19% Poverty</b>	197	<b>8.4</b>	0.60	7.2	9.6
Non-Hispanic White	137	<b>8.0</b>	0.69	6.7	9.4
Hispanic	60	<b>14.9</b>	2.01	11.0	18.8
Black	11	10.7	3.28	4.3	17.1
<b>20+% Poverty</b>	108	<b>10.9</b>	1.07	8.8	13.0
Non-Hispanic White	56	<b>10.6</b>	1.45	7.8	13.4
Hispanic	52	<b>15.4</b>	2.22	11.5	19.8
Black	9	11.7	3.92	4.0	19.4

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

## Colorectal Cancer Incidence Rates

Table 6: Age-adjusted incidence rates for colorectal cancer in Colorado, 1998-2002.

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	5280	46.6	0.65	45.3	47.9
Non-Hispanic White	4956	48.3	0.70	46.9	49.8
Hispanic	324	54.2	3.34	47.7	60.8
Black	115	61.6	6.71	48.5	74.8
<b>10-19% Poverty</b>	2091	48.0	1.05	45.9	50.1
Non-Hispanic White	1832	<b>51.0</b>	1.20	48.7	53.4
Hispanic	258	50.1	3.29	43.7	56.6
Black	73	48.3	5.90	36.7	59.9
<b>20+% Poverty</b>	918	<b>51.2</b>	1.69	47.9	54.5
Non-Hispanic White	667	<b>59.8</b>	2.34	55.2	64.4
Hispanic	251	51.6	3.34	45.1	58.2
Black	64	49.0	6.22	36.8	61.2

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race

**Table 7: Age-adjusted incidence rates for colorectal cancer for male Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	2705	53.8	1.09	51.7	55.9
Non-Hispanic White	2524	55.5	1.16	53.2	57.8
Hispanic	181	62.5	5.25	52.2	72.9
Black	55	55.1	9.45	36.6	73.6
<b>10-19% Poverty</b>	1028	56.5	1.78	53.0	60.0
Non-Hispanic White	885	59.4	2.01	55.5	63.3
Hispanic	142	63.1	5.85	51.6	74.6
Black	36	53.4	9.80	34.2	72.6
<b>20+% Poverty</b>	471	<b>61.8</b>	2.89	56.1	67.5
Non-Hispanic White	333	<b>72.4</b>	3.98	64.6	80.2
Hispanic	138	61.1	5.53	50.3	71.9
Black	39	69.5	11.77	46.4	92.6

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race

**Table 8: Age-adjusted incidence rates for colorectal cancer for female Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	2575	41.2	0.82	39.6	42.8
Non-Hispanic White	2432	42.9	0.87	41.2	44.6
Hispanic	143	46.0	4.18	37.8	54.2
Black	60	64.4	9.17	46.4	82.4
<b>10-19% Poverty</b>	1063	42.1	1.30	39.6	44.7
Non-Hispanic White	947	45.0	1.49	42.1	47.9
Hispanic	116	41.0	3.92	33.3	48.7
Black	37	44.1	7.38	29.6	58.6
<b>20+% Poverty</b>	447	43.2	2.07	39.1	47.3
Non-Hispanic White	334	<b>50.7</b>	2.89	45.0	56.4
Hispanic	113	43.4	4.14	35.3	51.5
Black	25	<b>34.3</b>	6.89	20.8	47.8

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

## Lung Cancer Incidence Rates

**Table 9: Age-adjusted incidence rates for lung cancer in Colorado, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	5605	50.0	0.68	48.7	51.3
Non-Hispanic White	5362	52.7	0.73	51.3	54.1
Hispanic	242	43.3	3.05	37.3	49.3
Black	120	67.8	7.07	53.9	81.7
<b>10-19% Poverty</b>	2613	<b>60.8</b>	1.19	58.5	63.1
Non-Hispanic White	2363	<b>67.4</b>	1.39	64.7	70.1
Hispanic	250	<b>52.9</b>	3.48	46.1	59.7
Black	102	74.9	7.64	59.9	89.9
<b>20+% Poverty</b>	1081	<b>61.4</b>	1.87	57.7	65.1
Non-Hispanic White	868	<b>81.3</b>	2.78	75.9	86.8
Hispanic	213	45.2	3.16	39.0	51.4
Black	88	69.6	7.48	54.9	84.3

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 10: Age-adjusted incidence rates for lung cancer for male Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	3040	62.2	1.18	59.9	64.5
Non-Hispanic White	2915	65.2	1.26	62.7	67.7
Hispanic	124	56.2	5.83	44.8	67.6
Black	68	85.0	13.12	59.3	110.7
<b>10-19% Poverty</b>	1381	<b>75.2</b>	2.04	71.2	79.2
Non-Hispanic White	1245	<b>82.7</b>	2.35	78.1	87.3
Hispanic	136	65.7	6.05	53.8	77.6
Black	58	97.6	13.56	71.0	124.2
<b>20+% Poverty</b>	613	<b>81.3</b>	3.31	74.8	87.8
Non-Hispanic White	481	<b>105.0</b>	4.80	95.6	114.4
Hispanic	132	63.3	5.78	52.0	74.6
Black	53	93.6	13.30	67.5	119.7

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 11: Age-adjusted incidence rates for lung cancer for female Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>	2565	41.5	0.82	39.9	43.1
Non-Hispanic White	2447	43.7	0.89	42.0	45.4
Hispanic	118	35.6	3.48	28.8	42.4
Black	52	55.5	8.35	39.1	71.9
<b>10-19% Poverty</b>	1232	<b>50.6</b>	1.45	47.8	53.4
Non-Hispanic White	1118	<b>56.3</b>	1.71	53.0	59.7
Hispanic	114	43.4	4.16	35.3	51.6
Black	44	57.1	8.74	40.0	74.2
<b>20+% Poverty</b>	468	<b>47.5</b>	2.22	43.2	51.9
Non-Hispanic White	387	<b>64.7</b>	3.38	58.1	71.3
Hispanic	81	31.2	3.51	24.3	38.1
Black	35	49.0	8.30	32.7	65.3

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

## Melanoma Incidence Rates

**Table 12: Age-adjusted incidence rates for melanoma in Colorado, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>					
Non-Hispanic White	2646	23.0	0.45	22.1	23.9
<b>10-19% Poverty</b>					
Non-Hispanic White	712	<b>20.4</b>	0.77	18.9	21.9
<b>20+% Poverty</b>					
Non-Hispanic White	172	<b>15.7</b>	1.22	13.3	18.1

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 13: Age-adjusted incidence rates for melanoma for male Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>					
Non-Hispanic White	1500	28.3	0.76	26.8	29.8
<b>10-19% Poverty</b>					
Non-Hispanic White	400	25.5	1.28	23.0	28.0
<b>20+% Poverty</b>					
Non-Hispanic White	95	<b>19.8</b>	2.05	15.8	23.8

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 14: Age-adjusted incidence rates for melanoma for female Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>					
Non-Hispanic White	1146	18.9	0.56	17.8	20.0
<b>10-19% Poverty</b>					
Non-Hispanic White	312	17.0	0.98	15.1	18.9
<b>20+% Poverty</b>					
Non-Hispanic White	77	<b>13.8</b>	1.62	10.6	17.0

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

## Prostate Cancer Incidence Rates

**Table 15: Age-adjusted incidence rates for prostate cancer for male Coloradans, 1998-2002.**

Poverty Level & Race	Count	Rate	Standard Error	95% Confidence Intervals	
				Lower	Upper
<b>&lt;10% Poverty</b>					
Non-Hispanic White	8602	161.2	1.81	157.7	164.8
Hispanic	8189	169.5	1.94	165.7	173.3
Black	411	146.0	8.04	130.2	161.8
Black	246	215.8	16.97	182.5	249.1
<b>10-19% Poverty</b>					
Non-Hispanic White	2806	<b>152.3</b>	2.90	146.6	158.0
Hispanic	2516	166.9	3.34	160.4	173.5
Black	290	132.9	8.26	116.7	149.1
Black	127	198.4	18.47	162.2	234.6
<b>20+% Poverty</b>					
Non-Hispanic White	969	<b>129.3</b>	4.19	121.1	137.5
Hispanic	748	164.2	6.01	152.4	176.0
Black	221	<b>107.1</b>	7.50	92.4	121.8
Black	101	176.7	18.12	141.2	212.2

Bolded numbers denote Z-test statistical significance with regard to <10% poverty group by race.

**Table 16: Distribution of all Colorado cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of Total	In-Situ %	Localized %	Stage of Disease			"Early" % <sup>1</sup>
					Regional %	Distant %	Unknown %	
<b>&lt; 10% Poverty</b>								
All Races	64852	100%	7.9	43.0	17.7	18.0	13.4	58.8
Non-Hispanic White	59542	92%	8.1	43.3	17.4	17.9	13.3	59.3
Hispanic	3345	5%	6.6	38.6	20.6	19.3	14.8	53.1
Black	1141	2%	4.6	43.1	20.2	18.4	13.6	55.3
<b>10-19% Poverty</b>								
All Races	24957	100%	7.0	39.1	17.9	20.1	15.9	54.8
Non-Hispanic White	21023	84%	7.4	39.5	17.4	19.7	15.9	55.8
Hispanic	2772	11%	4.8	37.0	20.3	21.1	16.8	50.2
Black	820	3%	3.4	35.9	20.7	26.1	13.9	45.6
<b>20 + % Poverty</b>								
All Races	10158	100%	5.6	36.3	18.6	22.9	16.6	50.2
Non-Hispanic White	6814	67%	6.0	37.5	17.8	22.1	16.7	52.2
Hispanic	2324	23%	5.0	35.1	20.3	23.5	16.2	47.8
Black	828	8%	5.1	32.0	19.2	27.8	15.9	44.1

**Table 17: Five-year cause-specific survival rates (%) for all cancers and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	5-Yr Cause-Specific Survival %	2*SE	Regional (Count)	%	2*SE	Distant (Count)	%	2*SE
<b>&lt; 10% Poverty</b>												
All Races	44716	64.6	0.5	22331	88.3	0.5	9480	63.3	1.2	9233	22.2	1.0
Non-Hispanic White	40810	64.8	0.6	20577	88.2	0.6	8512	63.5	1.2	8394	22.1	1.1
Hispanic	2419	62.6	2.3	1067	89.1	2.3	591	63.0	4.9	533	24.9	4.2
Black	853	62.1	3.9	407	87.8	3.9	205	61.9	8.6	173	16.8	7.1
<b>10-19% Poverty</b>												
All Races	17043	<b>55.2</b>	0.9	7626	<b>83.5</b>	1.1	3616	<b>54.4</b>	2.0	3992	<b>15.9</b>	1.4
Non-Hispanic White	14137	<b>55.4</b>	1.0	6431	<b>83.8</b>	1.2	2926	<b>54.3</b>	2.2	3275	<b>15.4</b>	1.5
Hispanic	2033	<b>53.9</b>	2.6	837	<b>81.4</b>	3.4	490	56.1	5.4	482	17.2	4.2
Black	617	55.2	4.7	252	85.7	5.5	142	53.5	9.9	171	18.7	7.3
<b>20 + % Poverty</b>												
All Races	7065	<b>50.2</b>	1.4	2896	<b>80.8</b>	1.9	1538	<b>49.7</b>	3.1	1873	<b>14.5</b>	2.0
Non-Hispanic White	4619	<b>51.3</b>	1.8	1979	<b>82.1</b>	2.2	954	<b>49.0</b>	3.9	1184	<b>13.6</b>	2.5
Hispanic	1699	<b>49.2</b>	3.0	662	<b>78.8</b>	4.0	400	<b>48.0</b>	6.4	458	17.2	4.5
Black	609	<b>45.4</b>	4.7	215	<b>76.1</b>	7.2	143	55.0	9.8	186	14.0	5.8

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race..

\* = not displayed due to insufficient numbers

**Table 18: Distribution of Colorado breast cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of total	In-Situ %	Stage of Disease				"Early" % <sup>1</sup>
				Localized %	Regional %	Distant %	Unknown %	
<b>&lt; 10% Poverty</b>								
All Races	12393	100%	16.7	53.2	23.5	2.8	3.8	72.7
Non-Hispanic White	11396	92%	16.6	53.7	23.1	2.7	3.8	73.1
Hispanic	638	5%	18.0	46.4	29.3	3.0	3.3	66.6
Black	186	2%	14.0	45.2	29.6	7.0	4.3	61.8
<b>10-19% Poverty</b>								
All Races	4282	100%	15.2	51.0	24.9	4.0	4.9	69.6
Non-Hispanic White	3663	86%	15.1	51.8	24.4	3.7	5.0	70.5
Hispanic	425	10%	14.1	45.6	30.6	5.6	4.0	62.3
Black	131	3%	17.6	46.6	25.2	5.3	5.3	67.7
<b>20 + % Poverty</b>								
All Races	1515	100%	15.3	52.1	24.2	4.2	4.2	70.4
Non-Hispanic White	1062	70%	14.5	52.9	23.0	4.8	4.8	70.8
Hispanic	314	21%	15.9	52.9	26.4	3.2	1.6	69.9
Black	117	8%	21.4	43.6	28.2	1.7	5.1	68.5

<sup>1</sup> "Early" = *in-situ* + localized proportion of staged cancers



**Table 19: Five-year cause-specific breast cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	5-Yr Cause-Specific Survival			Distant (Count)	%	2*SE		
					%	2*SE	Regional (Count)					
<b>&lt; 10% Poverty</b>												
All Races	8455	89.2	0.8	5461	96.0	0.7	2480	83.4	1.9	272	25.9	6.9
Non-Hispanic White	7766	89.4	0.9	5066	96.1	0.7	2234	83.5	2.0	246	26.5	7.2
Hispanic	435	87.7	3.7	243	97.5	2.3	164	83.4	6.9	15	32.8	29.6
Black	130	76.3	9.0	69	88.9	8.8	47	69.0	19.4	9	*	*
<b>10-19% Poverty</b>												
All Races	2862	84.2	1.7	1728	95.0	1.4	905	<b>77.0</b>	3.6	131	15.0	7.6
Non-Hispanic White	2428	84.8	1.9	1490	95.4	1.5	751	<b>77.1</b>	3.9	106	16.8	8.8
Hispanic	307	79.8	5.7	161	91.1	5.8	116	77.2	9.7	18	13.7	17.7
Black	86	83.3	9.8	50	93.1	7.7	28	79.0	20.5	5	*	*
<b>20 + % Poverty</b>												
All Races	1045	<b>82.7</b>	2.9	651	95.7	2.1	311	<b>71.1</b>	6.7	53	15.4	13.4
Non-Hispanic White	735	<b>82.7</b>	3.5	462	95.5	2.6	204	<b>72.2</b>	8.1	43	*	*
Hispanic	216	81.8	6.8	135	96.3	3.6	71	60.5	17.2	8	25.7	35.3
Black	79	83.2	9.6	44	97.6	4.7	31	78.0	16.1	2	*	*

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers

**Table 20: Distribution of Colorado invasive cervix cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level and Race	Total Count	% of total	In-Situ %	Localized %	Stage of Disease		
					Regional %	Distant %	Unknown %
<b>&lt; 10% Poverty</b>							
All Races	558	100%	NA	62.0	26.3	8.2	3.4
Non-Hispanic White	460	82%	NA	63.7	25.0	7.6	3.7
Hispanic	68	12%	NA	55.9	29.4	11.8	2.9
Black	12	2%	NA	33.3	41.7	25.0	0.0
<b>10-19% Poverty</b>							
All Races	264	100%	NA	51.1	34.5	10.6	3.8
Non-Hispanic White	173	66%	NA	49.1	33.5	12.1	5.2
Hispanic	69	26%	NA	52.2	40.5	7.2	0.0
Black	11	4%	NA	63.6	18.2	9.1	9.1
<b>20 + % Poverty</b>							
All Races	135	100%	NA	61.9	24.6	9.7	3.7
Non-Hispanic White	62	46%	NA	62.9	25.8	9.7	1.6
Hispanic	61	45%	NA	62.3	23.0	9.8	4.9
Black	8	6%	NA	62.5	37.5	0.0	0.0

NA = not available

**Table 21: Five-year cause-specific invasive cervix cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	%	5-Yr Cause-Specific Survival		Distant (Count)	%	2*SE		
						Regional (Count)	%					
<b>&lt; 10% Poverty</b>												
All Races	485	81.0	4.4	308	93.4	3.5	128	40	71.7	10.5	30.9	15.6
Non-Hispanic White	394	81.3	4.9	260	93.5	3.9	97	29	69.8	12.5	27.1	17.6
Hispanic	62	77.9	12.8	34	92.3	10.5	19	8	69.6	26.4	46.0	37.4
Black	12	65.8	27.8	4	75.0	43.3	5	3	77.8	39.2	*	*
<b>10-19% Poverty</b>												
All Races	232	73.3	6.9	122	97.7	3.2	82	25	56.4	12.8	31.4	19.9
Non-Hispanic White	149	68.9	9.0	77	98.5	2.9	51	19	51.9	16.3	24.6	20.5
Hispanic	63	83.5	10.1	32	100.0	0.0	26	5	69.1	19.6	*	*
Black	9	65.8	39.8	6	71.4	48.3	2	0	*	*	*	*
<b>20 + % Poverty</b>												
All Races	112	68.4	10.8	72	83.8	11.9	26	11	54.3	21.8	24.8	30.0
Non-Hispanic White	48	71.6	15.0	32	88.2	12.9	12	4	46.2	35.2	*	*
Hispanic	56	67.9	16.8	36	81.7	21.0	11	6	57.1	32.8	38.2	46.5
Black	6	60.0	43.8	3	50.0	70.7	3	0	*	*	*	*

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers

**Table 22: Distribution of Colorado colorectal cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of total	In-Situ %	Stage of Disease			Unknown %	"Early" % <sup>1</sup>
				Localized %	Regional %	Distant %		
<b>&lt; 10% Poverty</b>								
All Races	6357	100%	6.2	34.5	35.0	18.4	5.9	43.3
Non-Hispanic White	5754	91%	6.2	35.1	34.9	18.1	5.8	43.8
Hispanic	368	6%	7.3	29.1	38.0	19.3	6.2	38.8
Black	140	2%	7.9	32.1	27.9	22.1	10.0	44.4
<b>10-19% Poverty</b>								
All Races	2660	100%	6.3	32.6	35.8	17.0	8.3	42.5
Non-Hispanic White	2224	84%	6.5	32.8	35.7	16.7	8.4	42.8
Hispanic	321	12%	5.3	33.3	34.3	18.4	8.7	42.3
Black	85	3%	4.7	28.2	43.5	18.8	4.7	34.6
<b>20 + % Poverty</b>								
All Races	1134	100%	5.6	31.5	35.7	18.9	8.3	40.5
Non-Hispanic White	728	64%	5.4	32.8	33.9	17.6	10.3	42.6
Hispanic	278	25%	5.4	29.9	39.2	20.9	4.7	37.0
Black	102	9%	9.8	30.4	33.3	21.6	4.9	42.3

<sup>1</sup> "Early" = *in-situ* + localized proportion of staged cancers

**Table 23: Five-year cause-specific colorectal cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	%	2*SE	5-Yr Cause-Specific Survival Regional (Count)	%	2*SE	Distant (Count)	%	2*SE
<b>&lt; 10% Poverty</b>												
All Races	4447	61.6	1.8	1601	90.8	1.9	1755	66.7	2.8	916	9.2	2.4
Non-Hispanic White	4013	61.9	1.9	1468	90.8	2.0	1573	67.0	3.0	819	8.8	2.5
Hispanic	263	60.3	7.5	82	92.7	6.3	114	64.2	12.8	53	8.8	8.7
Black	95	58.6	12.5	32	84.3	18.1	33	68.0	19.9	24	19.4	18.7
<b>10-19% Poverty</b>												
All Races	1822	57.3	2.9	635	87.9	3.4	718	61.6	4.6	360	4.7	3.1
Non-Hispanic White	1508	56.0	3.2	531	86.7	4.0	585	60.4	5.1	301	5.0	3.4
Hispanic	226	64.9	7.4	79	91.5	7.4	92	68.8	12.3	43	*	*
Black	65	59.6	14.2	18	100.0	0.0	30	66.6	18.4	14	*	*
<b>20 + % Poverty</b>												
All Races	776	<b>49.7</b>	4.6	258	83.7	6.1	305	<b>50.6</b>	7.8	162	4.9	4.9
Non-Hispanic White	487	<b>51.3</b>	5.7	176	84.0	7.3	175	<b>53.3</b>	10.0	94	2.5	4.6
Hispanic	197	46.0	9.9	59	84.4	12.0	87	43.7	15.4	46	4.1	10.2
Black	73	47.8	13.8	22	87.4	17.3	30	37.4	23.6	17	*	*

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers

**Table 24: Distribution of Colorado lung cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of total	In-Situ %	Stage of Disease			Unknown %	"Early" % <sup>1</sup>
				Localized %	Regional %	Distant %		
<b>&lt; 10% Poverty</b>								
All Races	6281	100%	0.1	17.9	19.6	49.9	12.5	20.6
Non-Hispanic White	5836	93%	0.1	18.0	19.3	50.2	12.5	20.7
Hispanic	255	4%	0.0	17.6	21.6	47.5	13.3	20.4
Black	123	2%	0.0	18.7	22.8	46.3	12.2	21.3
<b>10-19% Poverty</b>								
All Races	2965	100%	0.1	16.6	19.0	49.6	14.7	19.5
Non-Hispanic White	2534	85%	0.1	17.1	18.5	49.5	14.7	20.2
Hispanic	265	9%	0.0	13.6	19.2	49.4	17.7	16.5
Black	125	4%	0.0	10.4	25.6	53.6	10.4	11.6
<b>20 + % Poverty</b>								
All Races	1321	100%	0.0	15.1	19.3	51.1	14.5	17.7
Non-Hispanic White	955	72%	0.0	15.4	19.8	49.0	15.8	18.3
Hispanic	223	17%	0.0	13.9	18.8	56.1	11.2	15.7
Black	122	9%	0.0	15.6	17.2	58.2	9.0	17.1

<sup>1</sup> "Early" = *in-situ* + localized proportion of staged cancers

**Table 25: Five-year cause-specific lung cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	%	5-Yr Cause-Specific Survival 2*SE	Regional (Count)	%	2*SE	Distant (Count)	%	2*SE
<b>&lt; 10% Poverty</b>												
All Races	4543	16.4	1.4	760	52.7	4.5	916	22.6	3.4	2477	4.0	1.1
Non-Hispanic White	4187	16.1	1.4	700	52.0	4.7	831	22.6	3.5	2297	3.9	1.1
Hispanic	200	19.5	7.4	35	55.4	19.0	46	28.4	16.7	101	*	*
Black	96	21.3	9.6	16	75.4	25.6	24	16.8	20.8	47	*	*
<b>10-19% Poverty</b>												
All Races	2149	<b>11.9</b>	1.8	333	43.5	7.1	448	<b>14.7</b>	4.3	1142	2.5	1.2
Non-Hispanic White	1815	<b>11.7</b>	2.0	287	45.5	7.5	367	<b>13.1</b>	4.6	970	2.0	1.2
Hispanic	202	12.0	5.8	27	31.3	23.4	44	18.8	12.0	103	5.8	6.4
Black	97	12.0	8.0	11	26.0	41.3	28	19.6	17.5	54	4.6	6.3
<b>20 + % Poverty</b>												
All Races	973	13.7	2.8	138	41.4	10.8	204	27.2	7.1	545	2.5	1.9
Non-Hispanic White	695	14.1	3.3	100	41.2	12.3	150	26.0	8.3	374	3.1	2.6
Hispanic	171	15.1	7.2	23	60.4	24.0	34	30.2	16.2	103	0.0	0.0
Black	89	11.6	8.7	13	*	*	17	35.5	26.4	57	3.2	6.0

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers

**Table 26: Distribution of Colorado melanoma cancer cases by stage of disease at diagnosis, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of total	In-Situ %	Stage of Disease			Unknown %	"Early" % <sup>1</sup>
				Localized %	Regional %	Distant %		
<b>&lt; 10% Poverty</b>								
All Races	4335	100%	28.2	63.3	2.5	2.1	3.9	95.2
Non-Hispanic White	4204	97%	28.4	63.2	2.5	2.0	3.8	95.3
Hispanic	102	2%	27.5	63.7	1.0	4.9	2.9	93.9
Black	10	0%	10.0	70.0	10.0	0.0	10.0	88.9
<b>10-19% Poverty</b>								
All Races	1268	100%	25.7	62.4	2.8	3.1	6.1	93.8
Non-Hispanic White	1211	96%	26.2	62.3	2.6	3.1	5.9	94.0
Hispanic	51	4%	15.7	64.7	5.9	3.9	9.8	89.1
Black	3	0%	0.0	100.0	0.0	0.0	0.0	100.0
<b>20 + % Poverty</b>								
All Races	344	100%	24.4	62.8	2.9	3.5	6.4	93.2
Non-Hispanic White	317	92%	23.3	63.4	3.2	3.5	6.6	92.9
Hispanic	20	6%	40.0	50.0	0.0	5.0	5.0	94.7
Black	3	1%	33.3	66.7	0.0	0.0	0.0	100.0

<sup>1</sup> "Early" = *in-situ* + localized proportion of staged cancers



**Table 27: Five-year cause-specific melanoma cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	%	5-Yr Cause-Specific Survival			Distant (Count)	%	2*SE
						2*SE	Regional (Count)	%			
<b>&lt;10% Poverty</b>											
All Races	2156	88.3	1.8	1899	93.7	1.5	96	59.4	75	18.6	10.1
Non-Hispanic White	2087	88.3	1.8	1842	93.7	1.5	93	58.4	69	16.3	9.9
Hispanic	52	87.9	10.6	44	92.9	10.0	1	*	5	60.0	43.8
Black	6	100.0	0.0	4	100.0	0.0	1	*	0	*	*
<b>10-19% Poverty</b>											
All Races	603	<b>83.0</b>	3.8	508	90.3	3.4	28	*	30	*	*
Non-Hispanic White	566	83.3	3.8	477	90.7	3.3	25	*	28	*	*
Hispanic	33	85.9	15.5	27	93.1	13.3	3	*	2	*	*
Black	3	*	*	3	*	*	0	*	0	*	*
<b>20 + % Poverty</b>											
All Races	178	<b>74.5</b>	8.7	147	<b>80.8</b>	8.8	9	*	8	49.0	42.5
Non-Hispanic White	169	<b>76.3</b>	8.8	138	<b>83.5</b>	8.8	9	*	8	49.0	42.5
Hispanic	5	40.0	43.8	5	40.0	43.8	0	*	0	*	*
Black	2	*	*	2	*	*	0	*	0	*	*

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers

**Table 28: Distribution of Colorado prostate cancer cases by stage of disease at detection, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	% of total	In-Situ %	Localized %	Stage of Disease Regional %	Distant %	Unknown %	"Early" % <sup>1</sup>
<b>&lt;10% Poverty</b>								
All Races	9485	100%	0.0	69.8	11.0	3.6	15.6	82.7
Non-Hispanic White	8747	92%	0.0	69.8	10.8	3.6	15.8	82.9
Hispanic	421	4%	0.0	67.0	11.9	5.2	15.9	84.4
Black	254	3%	0.0	74.8	15.0	2.0	8.3	81.5
<b>10-19% Poverty</b>								
All Races	3254	100%	0.0	65.2	8.1	6.6	20.0	81.6
Non-Hispanic White	2742	84%	0.0	65.3	8.2	6.0	20.4	82.1
Hispanic	334	10%	0.0	65.3	5.1	9.3	20.4	82.0
Black	149	5%	0.0	64.4	12.1	12.1	11.4	72.7
<b>20 + % Poverty</b>								
All Races	1197	100%	0.1	61.5	8.2	7.4	22.8	79.8
Non-Hispanic White	790	66%	0.0	61.6	6.6	7.2	24.6	81.7
Hispanic	280	23%	0.4	62.5	9.6	7.1	20.4	78.9
Black	119	10%	0.0	58.8	16.0	9.2	16.0	70.0

<sup>1</sup> "Early" = *in-situ* + localized proportion of staged cancers

**Table 29: Five-year cause-specific prostate cancer survival rates (%) and standard errors (SE) by stage of disease, race/ethnicity, and area poverty level, 1995-2000.**

Poverty Level & Race	Total Count	%	2*SE	Localized (Count)	%	2*SE	5-Yr Cause-Specific Survival			Distant (Count)	%	2*SE
							Regional (Count)	%	2*SE			
<b>&lt;10%</b>												
All Races	7790	93.5	0.7	5853	97.6	0.6	954	94.7	1.8	279	26.8	6.8
Non-Hispanic White	7156	93.4	0.8	5391	97.5	0.6	857	95.0	1.8	254	23.8	7.0
Hispanic	353	93.2	3.3	248	97.1	2.7	47	95.4	6.4	20	60.9	23.3
Black	227	96.5	2.9	173	100.0	0.0	38	97.0	5.9	5	*	*
<b>10-19%</b>												
All Races	2584	<b>88.6</b>	1.6	1851	96.8	1.1	229	89.7	5.1	183	27.5	9.1
Non-Hispanic White	2161	<b>89.3</b>	1.7	1552	96.8	1.2	196	91.4	5.0	140	27.1	10.5
Hispanic	270	86.9	5.1	197	96.6	3.1	14	90.5	18.1	26	36.8	25.6
Black	126	<b>83.2</b>	8.1	84	97.4	5.1	17	77.5	23.3	14	13.6	23.5
<b>20 + %</b>												
All Races	948	<b>85.6</b>	3.0	641	96.5	2.0	91	94.8	6.1	76	20.1	11.1
Non-Hispanic White	610	<b>85.8</b>	3.9	416	97.5	2.2	48	92.4	10.4	49	18.8	13.0
Hispanic	222	86.4	5.9	154	95.1	4.9	23	95.5	8.9	17	18.8	24.8
Black	108	<b>85.1</b>	8.5	68	96.9	4.4	18	100.0	0.0	9	15.0	26.4

**Bolded** numbers denote statistical significance with regard to < 10% poverty group by race.

\* = not displayed due to insufficient numbers