

**STRATEGIC PLANNING PHASE:
RECOMMENDATIONS FOR ELIMINATING
HEALTH DISPARITIES**

TURNING POINT INITIATIVE



Colorado's



Public Health



Improvement Plan



Colorado Public Health Improvement Plan Colorado Turning Point Initiative August 2001

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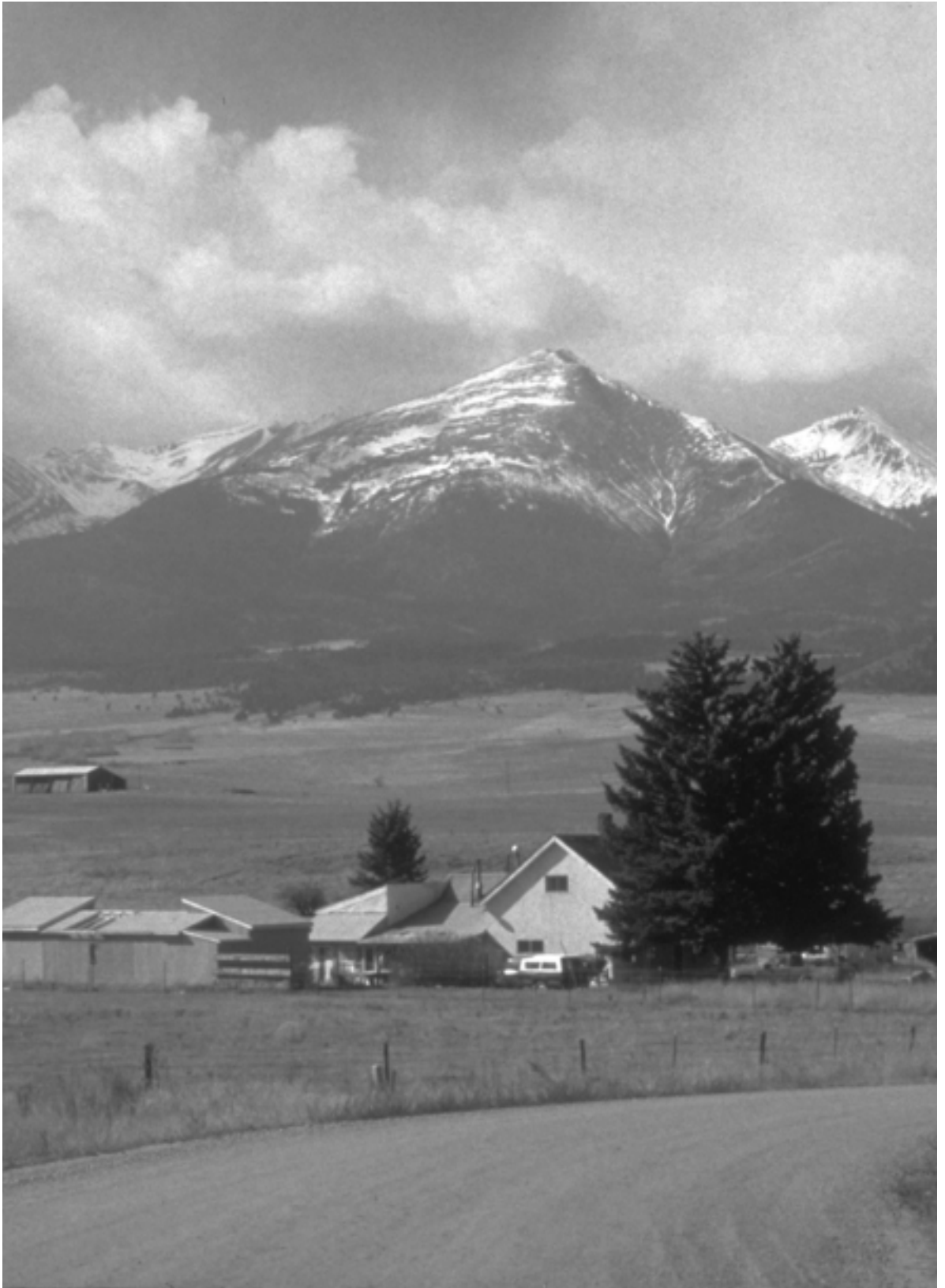
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Background

ALMOST 14 YEARS AFTER THE PUBLICATION of the breakthrough report *The Future of Public Health* by the Institute of Medicine (IOM), some would contend that the U.S. public health system today is not much closer to realizing the goals of the IOM study than it was in 1988. While there have been public health achievements since then, new and more complex challenges have presented themselves. Among these new challenges are an increasingly diverse political constituency, the resurgence and spread of drug-resistant strains of disease-causing microbes, global transmission of new and emerging diseases, the threat of bioterrorism, decreased funding for public health programs and infrastructure, reduced health insurance coverage and overall access to health care, and health disparities. All of these issues present overwhelming challenges to safeguarding the future health of the public.

In the summer of 1999, the Colorado Department of Public Health and Environment (CDPHE) received a Turning Point strategic planning grant from the Robert Wood Johnson Foundation. The purpose of the grant was to facilitate a collaborative process to assess the health of Colorado residents, examine public health systems in Colorado, and then create a state public health improvement plan. This document is one product of that work. Colorado is one of 21 states participating in the National Turning Point Initiative and is guided by the overriding mission to transform and strengthen the public health system to make the system more effective, more community-based, and more collaborative.

A steering committee carried out the strategic planning process with input from workgroups. In examining health status and health systems within Colorado, it became clear that while Colorado is a relatively healthy state, there are still barriers that prevent optimal health for the general population, and there are specific population groups that are disproportionately impacted by disease, disability, and death, especially minority communities. In looking toward the future, public health is likely to face challenges never before seen, where a strong public health infrastructure and visionary leaders will be critical to maintaining the health of

Colorado residents. Through its assessment, the Turning Point Steering Committee determined that many groups in Colorado have a difficult time accessing health care. This is due in part to a lack of insurance coverage and the fact that many rural areas in Colorado have been federally designated as Health Professional Shortage Areas. In terms of public health infrastructure, funding constraints currently prevent expanding the workforce, increasing information and data systems capacity, and enhancing organizational capacity, especially in local agencies.

Through its public health systems assessment, the steering committee determined that the key strategies for improving health status in Colorado include:

- * Increasing the capacity of public health and environmental agencies
- * Increasing the capacity to conduct population-based health status assessment
- * Assuring access to quality health care
- * Assuring access to insurance coverage
- * Eliminating health disparities
- * Promoting leadership development within the public health field and community partners

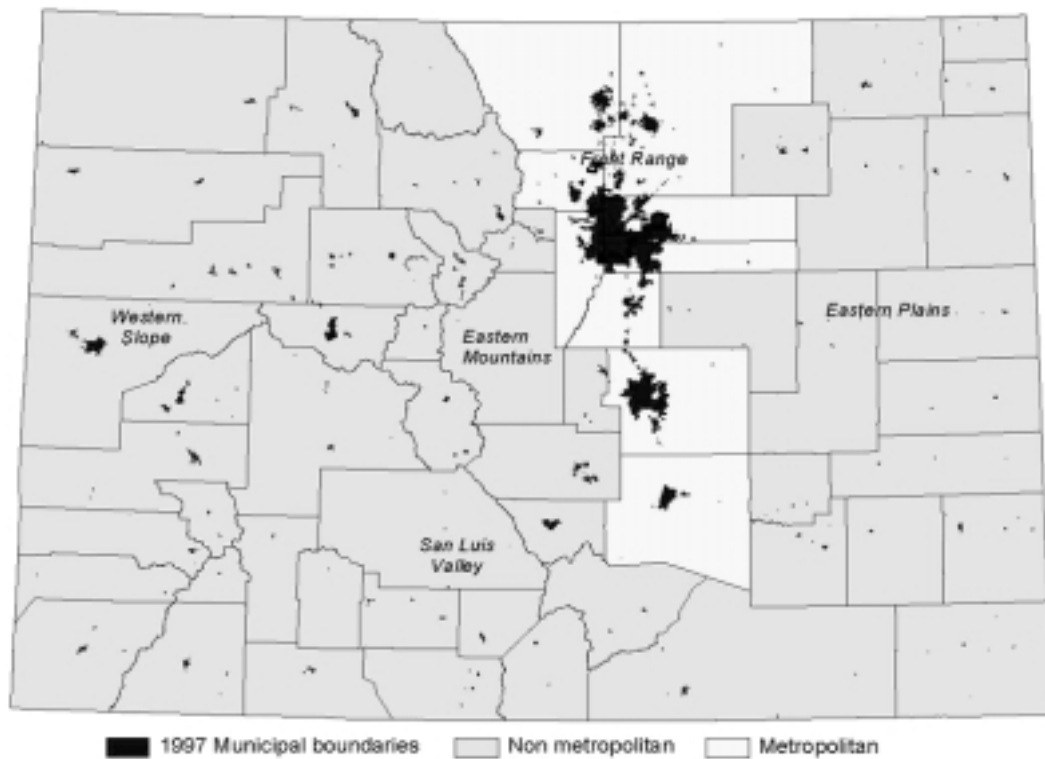
Beyond the steering committee and workgroups, the Turning Point Initiative used key informants, a review of the literature, and national and state data to examine each key strategy area. In this document, a national perspective will be included, as these key strategy areas are not unique to Colorado. This planning process was conducted by a diverse set of partners, many of whom are not from governmental public health agencies. The Colorado Turning Point Initiative believes that maintaining and improving the public's health requires partnerships with many different sectors and communities. This plan is meant to be carried out in collaboration and should be used as a guide. We believe that any person, community, or entity can take a leadership role in mobilizing partners around the recommendations in this plan, and we invite this participation in maintaining the health of our state.



Profile of Colorado

Colorado's population is young, healthy, rapidly growing, and increasingly wealthy, relative to national averages. With a population of approximately 4.3 million, Colorado is home to only 1.5 percent of the United State's population. Colorado's population density is 39.2 persons per square mile compared to the rest of the nation at 77.1.¹ Colorado is a geographically large state with 80 percent of its residents living in 10 metropolitan counties on the east side of the Rocky Mountains. This region is known as the Front Range. The remaining 20 percent of residents are scattered throughout the mountains, eastern plains, and western plains of the state (Figure 1). Colorado consists of 63 counties, 29 of which are considered rural and 23 are considered frontier (less than 6 people per square mile).^{2,3} In November of 2001, Broomfield will become Colorado's sixty-fourth county.

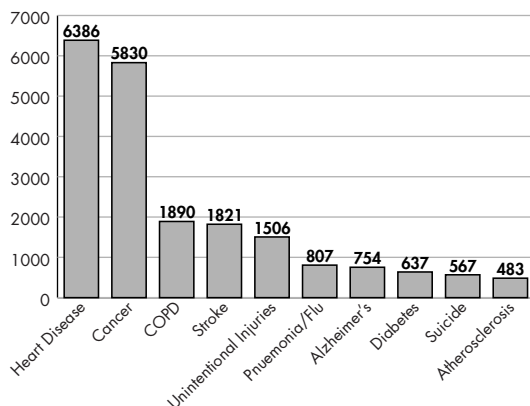
Figure 1: Metropolitan and Rural Regions of Colorado



Health Status

Colorado, by any number of measures, is a healthy state. In 1999, Colorado's age-adjusted death rate for all causes was 801.2 per 100,000 persons, well below the national rate of 881.9.⁴ Colorado's death rate has remained lower than the U.S. rate for the past 16 years.⁵ The fact that this rate has been adjusted for age indicates that the difference between Colorado and U.S. death rates is not due to Colorado's relatively younger population. Many of Colorado's health indicators are better than national health indicators, including leading causes of death. Colorado's death rates are lower than national death rates for chronic disease such as heart disease, cancer, stroke, and diabetes.⁶ Leading causes of death in Colorado are displayed in Figure 2.

Figure 2: Leading Causes of Death, Colorado 1999



Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999*. Denver, CO: June 2001.

From a public health perspective, Colorado has much in its favor. In 1998, the state was declared the third healthiest in the nation. When considering *Healthy People 2000* national health objectives, Colorado exceeded or was close to meeting objectives on such preventive indicators as mammograms and pap smears for women over age 50, reducing a number of infectious diseases such as HIV and gonorrhea, reducing births among teens, and reducing infant deaths.^{7,8}

According to 1998 data, the latest data available nationally, Colorado does have a few health indicators that are poorer than the national average, including the death rates from chronic obstructive pulmonary disease, unintentional injuries, suicide,

atherosclerosis, and Alzheimer's disease. Also, Colorado residents failed to meet the *Healthy People 2000* national health objectives for physical inactivity, smoking, and cholesterol screening.⁹

Demographics

In terms of racial and ethnic composition, minority groups account for 25.3 percent of Colorado's general population, and the number is increasing. The percentage of minorities in Colorado has increased over the past decade, mostly due to a nearly 33 percent increase in the number of Hispanics between 1990 and 2000.¹⁰

Colorado's racial and ethnic composition differs from the national composition in that: the number of Hispanics in Colorado is higher, the number of Asian/Pacific Islanders is lower, and the number of blacks is significantly lower than national numbers. The number of American Indians in Colorado is proportionately similar to the rest of the nation.¹¹

In 1999, Colorado's male to female ratio was 49.6 to 50.4. The median age was 35.7. The percentage of the population over age 65 was 10.1 compared to 12.7 percent nationally, and the percentage of the population over age 85 was 1.2 compared to 1.5 percent nationally.¹²

Poverty

In Colorado, the percentage of people living in poverty has been decreasing since the early 1990s and is below the national rate. In 1999, 8.3 percent of the Colorado population was below the federal poverty level, compared to 11.8 percent nationally. The difference is even more significant for children; 11.2 percent of school-age children in Colorado are below the federal poverty level versus 15.89 percent nationally.¹³

Education

The level of educational attainment for Coloradans is relatively high compared to U.S. average levels. In 1999, 90.4 percent of the population had a high school degree compared to 83.4 percent nationally. Also, 38.7 percent had at least a bachelor's degree, compared to 25.2 percent nationally.¹⁴



Notes

1. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Colorado 2001, State Health Profile* (Atlanta, Ga.).
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3. Colorado Rural Health Center, *Colorado Rural, Frontier, and Urban Counties, 2000 Census* (Denver, 2001).
4. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999* (Denver, June 2001).
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9. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado's Progress Toward Year 2000 Objectives*, Brief No. 26 (November 1998).
10. Colorado Division of Local Government, "Table 3A: Census 2000 Counts of Colorado County Population by Race/Ethnicity and Hispanic Origin," *U.S. Census Bureau: Census 2000 Counts of Colorado Population*, (Denver, April 13, 2001).
11. U.S. Department of Health and Human Services, *Colorado 2000 State Health Profile*.
12. U.S. Department of Health and Human Services, *Colorado 2001 State Health Profile*.
13. Ibid.
14. Ibid.





KEY STRATEGY:

Eliminate Health Disparities

EXECUTIVE SUMMARY

Purpose

The Colorado Turning Point Steering Committee considers working toward the elimination of health disparities as one of the highest priorities for Colorado. Along with its strategic planning process, the Colorado Turning Point Initiative conducted an assessment of health disparities in Colorado by examining health indicators by race and ethnicity, rural residence, gender, and sexual orientation. This report documents the results of this assessment. The committee recognizes that this goal will need a multifaceted approach with many partners and that root causes such as poverty, discrimination, educational opportunities, and access to health care will need to be addressed.

Problem

While Colorado as a whole is a healthy state, this is not true for all of its residents. There are specific population groups in Colorado that are disproportionately affected by disease, injury, disability, and death. The differences in health status between specific groups and the general population are known as health disparities. Groups with health disparities in Colorado include communities of color; the gay, lesbian, bisexual, and transgendered (GLBT) community; and rural communities. Minority communities in general experience higher rates of some chronic diseases, infant mortality, teen fertility, intentional and unintentional injuries, HIV, gonorrhea, and tuberculosis. Minorities are also less likely to have health insurance and access to preventive services. The GLBT community experiences higher rates than heterosexuals of HIV/AIDS, substance abuse, and suicide. They also report that a lack of access to health care and mental health services are major issues. People living in rural areas are less likely to use preventive screening services, exercise regularly, wear seat belts, or be insured. Also, they are also more likely to live in poverty, a risk factor for poor health. Access to health care is a major issue for rural Coloradans due to health professional shortage areas.

Findings

Groups with health disparities in Colorado are similar to those nationally, including minority communities, the GLBT community, and rural communities. The reasons for health disparities are complex. Numerous influences determine the health of an individual and of a community. The literature suggests that in order to achieve the goal of eliminating health disparities, a commitment is required to identify and address the underlying causes. New insights are needed to understand the determinants of disparities. Strategies to eliminate health disparities must then be developed by considering the social, cultural, political, and historical context in which health disparities continue to exist. Leadership from affected communities or organizations that represent those communities is critical in advocating for the social changes needed to impact health disparities.

Colorado Analysis

When considering health disparities by race and ethnicity in Colorado, blacks have the highest overall death rate and the shortest life expectancy. Blacks also have the highest rates of death from heart disease, stroke, Alzheimer's disease, HIV, infant mortality, homicide, nephritis, septicemia, and many cancers. American Indians have the highest death rates of motor vehicle accidents and chronic liver disease. They also have statistically higher rates of HIV and other sexually transmitted diseases, homicide, and diabetes than Caucasians. Hispanics have the highest rates of diabetes, teen pregnancy, cervical cancer, and unintentional injuries. Hispanics also have statistically higher death rates from motor vehicle accidents, chronic liver disease, nephritis, septicemia, homicide, and HIV than Caucasians. Asian/Pacific Islanders in Colorado have generally lower death rates than other racial and ethnic groups, especially for chronic disease. However, some communicable disease rates are higher for this population, including hepatitis B and tuberculosis. Several factors contribute to these disparities and include inequalities in income and education, living environment, access to health care, and racial discrimination.

The GLBT population in Colorado also experiences health disparities. This population is less likely to have access to health care and insurance coverage than heterosexuals and more likely to suffer from depression, drug and alcohol use, AIDS, and possibly other diseases that are preventable through early screening, diagnosis, and treatment. This community also reports that a lack of access to health care and mental health services are major issues due to a lack of health insurance, the fear of provider attitudes toward same-sex orientation, and a lack of health information specific to their community. Also, issues surrounding personal, family, and social acceptance of sexual orientation places a significant burden on mental health and personal safety.

Rural communities experience unique health disparities. There is great disparity in the number of motor vehicle deaths between rural and urban residents of Colorado. Rural and frontier counties tend to have the highest death rates for diabetes and less access to diabetes management services. Rural communities also support a large undocumented or migrant workforce, with specific health needs and cultural differences. Probably the most critical issue for Colorado rural residents is lack of access to health care, as many Colorado counties have been designated federally as Health Professional Shortage Areas.

Recommendations

General recommendations include supporting culturally appropriate leadership entities in building the capacity to take on long-term, statewide advocacy for the elimination of health disparities. Also critical is the investigation of root social causes of health disparities and the development of a comprehensive, systemic approach to the elimination of health disparities.

Recommendations for the public health field and its partners include providing outreach and direct services targeted to populations of health disparities and developing a more diverse workforce. Outreach and service delivery strategies should use nontraditional means to reach the affected population. Also, services should be provided in a culturally competent manner, enhanced with translation and interpretation services by a culturally competent workforce.

Recommendations specific to environmental health include working in partnership with the public health field, especially to link environmental indicator data to health outcomes. These partnerships are especially relevant when investigating cumulative impacts (air, water, hazardous waste, etc.) to identify communities that may be experiencing a disproportionate impact of pollutants.

Finally, it is recommended that affected communities be recruited as active participants in the practice of public health. Public health and its partners should ensure collaboration and diverse participation from rural, minority, and GLBT communities on boards and commissions, as well as promote leadership development for minority health professionals, rural health professionals, and health professionals within the gay, lesbian, bisexual, and transgendered community.



Health Disparities

Over the past century, advances in medical science have led to substantial improvements in the nation's health. However, not everyone is benefiting. There are still disparities in health status among different segments of the population. Nationally, the elimination of health disparities is one of two *Healthy People 2010* goals. The *Healthy People 2010* document is a set of national health objectives to be achieved over the first decade of the twenty-first century. The objectives were developed by a consortium of partners, led by the U.S. Department of Health and Human Services. According to *Healthy People 2010*, health differences occur by gender, race or ethnicity, education or income, disability, rural residence, and/or sexual orientation.

Along with its strategic planning process, the Colorado Turning Point Initiative conducted an assessment of health disparities in Colorado by examining health indicators by race and ethnicity, rural residence, and sexual orientation. The results of this assessment are described here. The Initiative recognizes that working toward the elimination of health disparities will be a long-term endeavor that will require a multifaceted approach with many partners. Root causes such as access to health care, poverty, discrimination, and educational opportunities will need to be addressed. The Colorado Turning Point Steering Committee considers working toward the elimination of health disparities as the highest priority for the Colorado Turning Point Initiative. To this end, the Initiative was recently awarded a Robert Wood Johnson grant to build capacity and leadership in working toward this goal over the next four years.

Data Issues

This report explores health disparities using Colorado data, by comparing health outcomes of different groups. In addition, when available, *Healthy People 2010* objectives or Colorado 2010 goals will be provided. (The availability of Colorado 2010 goals varies by state program.) These goals and objectives are targets for the entire population, either national or state, as opposed to specific racial/ethnic or gender groups and, therefore, should be interpreted accordingly. Data availability

varies by year depending on the data source. In most cases, 1999 is the latest data available.

Unless otherwise noted, all data have been age adjusted to the year 2000 population standard. To analyze small groups by race and ethnicity or to examine less common diseases, multiple years of data have been combined for a five-year annual average rate. In some cases, data for American Indians or Asian/Pacific Islanders are not available.

Labels of racial and ethnic groups are used throughout this report. The terms *Caucasian* and *white* refer to the standard data collection category of white/non-Hispanic. The term *Hispanic* refers to the standard data collection category of white/Hispanic. Terminology around sexual orientation is provided under the section "Health Disparities Among the Gay, Lesbian, Bisexual, and Transgendered Community."

Colorado Turning Point recognizes the difficult issue of using labels when discussing race and ethnicity. It is hard to gain consensus on the preference of categories such as "people of color/minority," "American Indian /Native American," "African American/black," "Hispanic/Latino(a)," and "Caucasian/white." We acknowledge that not everyone identifies himself or herself with these categories, and we very much respect the importance of cultural differences in how communities prefer to be defined.

In this report, many health indicators will be categorized by race and ethnicity. In accordance with health disparities reports from the Centers for Disease Control and Prevention, Colorado Turning Point also recognizes that race and ethnicity are social constructs representing distinct histories and cultures of groups within the United States; they are not valid biological or genetic categories.

Colorado's Health Status

Colorado, by any number of measures, is a healthy state. The rapidly growing population, currently at 4.3 million, is generally young, well educated, and has a median income above the national average.^{1,2} From a public health perspective, Colorado has much in its favor. In 1998, the state was declared the third healthiest in the nation. When considering *Healthy People 2000*



national health objectives, Colorado exceeded or was close to meeting objectives on such preventive indicators as mammograms and Pap smears for women over age 50, cholesterol screenings, reducing a number of infectious diseases such as HIV and gonorrhea, reducing births among teens, and reducing infant deaths.^{3,4} In 1999, Colorado's age-adjusted death rate for all causes was 801.2 per 100,000 persons, well below the national rate of 881.9.⁵ Colorado's death rate has remained lower than the U.S. rate for the past 16 years.⁶ The fact that this rate has been adjusted for age indicates that the difference between Colorado and U.S. death rates is not due to Colorado's relatively younger population.

Although Colorado as a whole is a healthy state, this is not true for all of its residents. There are specific population groups in Colorado that are disproportionately affected by disease, injury, disability, and death. The difference in health status between groups is known as health disparities. Groups with health disparities in Colorado that are examined here include communities of color; the gay, lesbian, and bisexual community; and rural communities.

Health Disparities in Minority Communities

Nationally, blacks, Hispanics, American Indians, and, to a lesser degree, Asians, have higher rates of disease, disability, and death compared to Caucasians.⁷ According to *Healthy People 2010*, in the United States, race and ethnicity are risk markers that correlate with other determinants of health such as poverty, less education, a lack of access to quality health care services, and living in environments with greater risk of exposure to biological and environmental agents of disease.⁸ In addition, many researchers now hypothesize that race-associated differences in health outcomes are due in part to the effects of racism, discrimination, and systemic biases that have resulted in multiple barriers to optimal health.⁹ Health disparities are evident in Colorado's minority populations and in many cases mirror the disparities nationally.

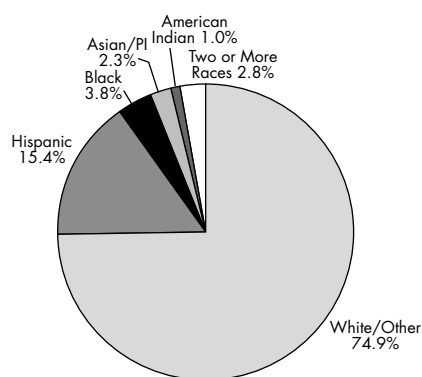
Colorado's Population by Race/Ethnicity

In terms of racial and ethnic composition, minority groups account for 25.3 percent of Colorado's general population, and the number is increasing. The percentage of minorities in Colorado has increased over the past decade, mostly due to a nearly 33 percent increase in the number of Hispanics between 1990 and 2000. Population figures are provided in Figure 1 (percentages do not add to 100 due to rounding).¹⁰

Colorado's racial and ethnic composition differs from the national composition as follows: The number of Hispanics in Colorado is higher, the number of Asian/Pacific Islanders is lower, and the number of blacks is significantly lower than national numbers. The number of American Indians in Colorado is proportionately similar to the rest of the nation.¹¹

Colorado has two other notable population characteristics: Indian reservations and a migrant workforce. The Ute Mountain and Southern Ute Indian Reservations are located in the southwest corner of the state in the counties of Montezuma, La Plata, and Archuleta.¹² Colorado's migrant workforce is mostly of Hispanic origin, working mainly in resort and agricultural areas of the state.¹³

Figure 1: Colorado's Population by Race/Ethnicity, 2000



Source: Colorado Division of Local Government, "Table 3A: Census 2000 Counts of Colorado County Population by Race/Ethnicity and Hispanic Origin," U.S. Census Bureau: *Census 2000 Counts of Colorado Population*, Denver, April 13, 2001.



Health Indicators by Race and Ethnicity

Blacks

When comparing health outcomes by race and ethnicity in Colorado, blacks have the highest overall death rate and the shortest life expectancy.¹⁴ Blacks also consistently experience higher morbidity and mortality rates of disease and disability than Caucasians and other racial and ethnic groups. According to Colorado data, blacks have the highest rates of death from heart disease, stroke, Alzheimer's disease, HIV, infant mortality, homicide, nephritis (inflammation of the kidneys), septicemia (infection of the blood), and cancer (overall), plus cancers of the lung, breast, and prostate.¹⁵ Nationally, blacks have disproportionately high rates of asthma, which has been linked to living in urban settings (asthma rates are not available for Colorado).¹⁶ It should be noted that in Colorado, blacks do have the lowest rate of death from automobile accidents, and there has been a substantial decline in the teen fertility rate during the 1990s.^{17,18}

American Indians

In Colorado, American Indians have the highest death rates from motor vehicle accidents and chronic liver disease. They also have statistically higher rates of HIV and other sexually transmitted diseases, homicide, and diabetes than Caucasians. American Indians do have the lowest death rate of stroke, compared to other racial and ethnic groups, and comparatively low rates of other chronic diseases such as heart disease and cancer.¹⁹ National data show that violent crime against American Indians is high and increasing, while crime against other groups has decreased.²⁰

Hispanics

Hispanics, when compared to other racial and ethnic groups in Colorado, have the highest rates of diabetes, teen pregnancy, cervical cancer, and unintentional injuries. Hispanics also have statistically higher death rates from motor vehicle accidents, chronic liver disease, nephritis, septicemia, homicide, and HIV than Caucasians. However, Hispanics tend to have comparatively low death

rates from many chronic diseases including cerebral vascular disease (which leads to stroke), heart disease, and cancer.²¹ This is especially true for recent immigrants of Hispanic origin before they become acculturated to the U.S. diet and sedentary lifestyle.²²

Asian/Pacific Islanders

Asian/Pacific Islanders in Colorado have generally lower death rates than other racial and ethnic groups, including Caucasians. For example, they have the lowest death rates from heart disease, chronic obstructive pulmonary disease, suicide, chronic liver disease, pneumonia, and influenza.²³ However, some communicable disease rates are higher for this population than other racial and ethnic groups, including hepatitis B and tuberculosis, especially for recent immigrants.²⁴ Also, social factors exist that can prevent optimal health for Asian/Pacific Islanders, such as the increasing number of non-English-speaking immigrants who have a difficult time accessing health care; the cultural fear of Western medicine institutions and procedures, resulting in the avoidance of prevention and screening services; and the increase in chronic disease for Asian immigrants as they become acculturated to a less healthy diet and sedentary lifestyle.^{25,26}

Caucasians

Caucasians tend to die from chronic diseases that are associated with aging. Death rates of cancer, heart disease, and cerebrovascular disease are statistically higher than in Hispanics, American Indians, and Asian/Pacific Islanders. However, Caucasians have a comparatively low incidence and/or death rates of unintentional injuries including automobile accidents, HIV, and other sexually transmitted diseases, tuberculosis, homicide, teen pregnancy, chronic liver disease, and septicemia. Caucasians have the longest life expectancy when compared to Hispanics and blacks (data for other groups are not available). It should be noted there is a disparity for Caucasians in the suicide rate, which is statistically higher than any other racial or ethnic group.²⁷

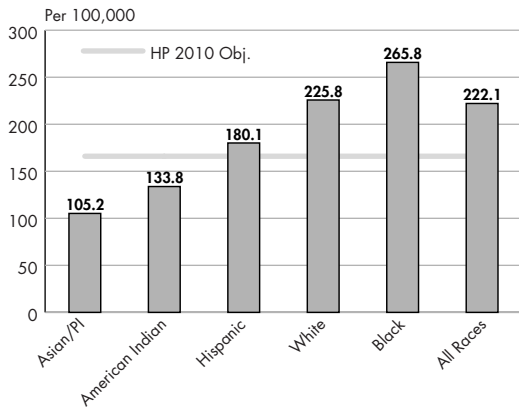


Chronic Disease Indicators

Heart Disease

Both nationally and in Colorado, heart disease is the leading cause of death among all racial and ethnic groups. In Colorado, the death rate from heart disease is statistically highest for blacks, at 2.5 times the rate of Asian/Pacific Islanders, who have the lowest rate (see Figure 2).²⁸ Caucasians have the second highest rate. The *Healthy People 2010* target for heart disease is 166 deaths per 100,000 persons.

Figure 2: HEART DISEASE: Age-Adjusted Death Rate by Race/Ethnicity, Colorado Annual Average, 1995–1999

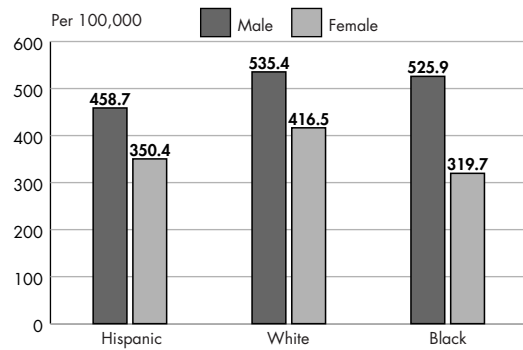


Source: Colorado Department of Public Health and Environment, Health Statistics Section, Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.

Cancer

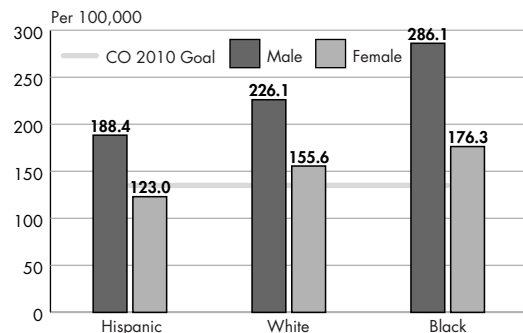
Both nationally and in Colorado, cancer is the second leading cause of death among all racial and ethnic groups. Minority populations have lower survival rates than Caucasians for most cancers, and although incidence rates of cancer overall tend to be highest for Caucasians, death rates are statistically highest for blacks (see Figures 3 & 4).^{29,30} In examining a five-year average during the late 1990s, blacks had the lowest percentage of early detection for cancer, at 48.8 percent compared to Hispanics at 50.8 percent and Caucasians at 57.6 percent.³¹ The Colorado Cancer Prevention Coalition has developed 2010 goals for cancer deaths based on Colorado data and the *Healthy People 2010* objectives. The Colorado 2010 goal for overall cancer deaths is 135 per 100,000 persons.³²

Figure 3: CANCER: Age-Adjusted Incidence Rates by Race/Ethnicity and Gender, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Colorado Central Cancer Registry, Data Set, *Age-Adjusted Incidence and Mortality Rates for Selected Causes of Cancer Death by Gender and Race/Ethnicity, Annual Average 1995–1999, by Race and Ethnicity*, prepared for the Colorado Turning Point Initiative, Denver, June 14, 2001.

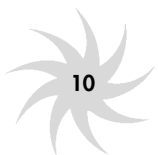
Figure 4: CANCER: Age-Adjusted Death Rates by Race/Ethnicity and Gender, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, Data Set: *Deaths, Crude Death Rates and Age-Adjusted Death Rate for Selected Causes of Cancer Death by Gender and Race/Ethnicity, Colorado Residents, 1995–1999 Combined*, prepared for the Colorado Turning Point Initiative, Denver, June 2001.

Specific Cancer Sites

- * **Lung cancer:** Black males have the highest death rate from lung cancer, with a rate that is twice as high as Hispanic males and 1.3 times higher than Caucasian males.³³
- * **Prostate cancer:** Blacks have the highest incidence of prostate cancer and the highest death rate, which is 2.6 times higher than Hispanics and 2.0 times higher than Caucasians.^{34,35}

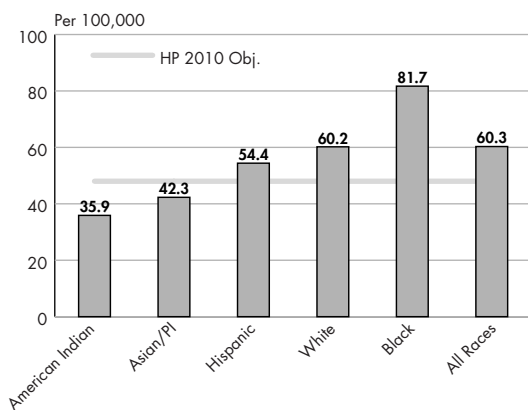


- * **Breast cancer:** Caucasian women have the highest incidence rate of breast cancer; however, black women have the highest death rate, approximately 1.5 times higher than Caucasian women and 2.0 times higher than Hispanic women.^{36,37} Breast cancer tends to be diagnosed at later stages in black women.³⁸
- * **Cervical cancer:** Hispanic women in Colorado have the highest incidence rate of cervical cancer, at 2.2 times higher than Caucasians and 2.0 times higher than blacks. Hispanic women also have the highest death rate at 1.8 times higher than Caucasians and 1.3 times higher than blacks.^{39,40} Considerable evidence suggests that screening can significantly reduce the number of cervical cancer deaths. According to *Healthy People 2010*, minority women have traditionally been less likely to get screened.⁴¹
- * **Colorectal cancer:** African Americans have the highest death rate of colon cancer, which is 30 percent higher than Hispanics and 20 percent higher than Caucasians. Access to health care is critical in order to detect and treat this disease in its earliest stage.

Cerebrovascular Disease

Cerebrovascular disease (leading to strokes) is the fourth-leading cause of death in Colorado. The death rate of stroke is statistically highest in black Coloradans, at 2.3 times the rate of American

Figure 5: STROKE: Age-Adjusted Death Rates by Race/Ethnicity, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.

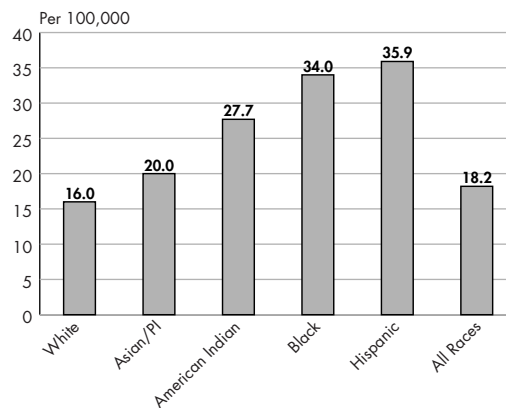
Indians who have the lowest rate, and approximately 1.4 times higher than Caucasians (see Figure 5).⁴² The *Healthy People 2010* target is 48 stroke deaths per 100,000 persons.

Diabetes Mellitus

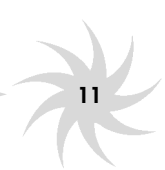
Hispanics, blacks and American Indians have a genetic predisposition to diabetes. These groups are also less likely than Caucasians to have access to health care, including diabetes management services. This contributes to an increased risk of minority populations experiencing complications from diabetes, including visual impairment, lower extremity amputations, and kidney failure.^{43,44} The Colorado death rate for diabetes is highest in Hispanics, at 2.5 times the rate of Caucasians. The rate of diabetes deaths in blacks is more than twice as high as the rate of Caucasians, and the rate for American Indians is 1.7 times the rate of Caucasians (see Figure 6).⁴⁵

According to *Healthy People 2010*, the reasons for disparities in diabetes are complex. Genetic susceptibility, a greater prevalence of risk factors, lower socioeconomic status, and less access to health care services may potentially explain some of these differences.⁴⁶

Figure 6: DIABETES: Age-Adjusted Death Rates by Race/Ethnicity, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.



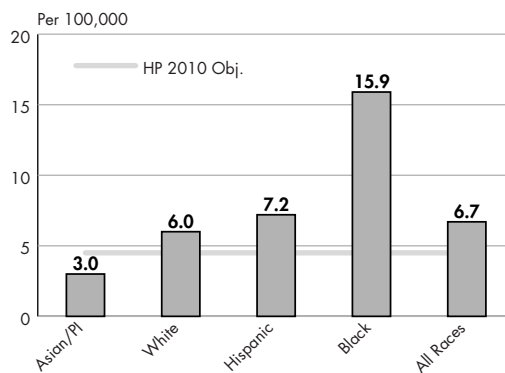
Maternal and Child Health Indicators

Infant Mortality

Infant mortality is defined as death before age one. The leading causes of infant mortality are congenital anomalies (birth defects), short gestation (premature birth), and sudden infant death syndrome (SIDS).⁴⁷ Colorado ranks below the national average, with a 1999 rate of 6.7 infant deaths per 1,000 live births, compared to the national rate of 7.2.⁴⁸

In both Colorado and the United States, the greatest disparity in infant mortality exists for black infants. In Colorado, the black infant death rate is 5.3 times higher than the Asian/Pacific Islander rate and 2.7 times higher than the Caucasian rate. Hispanics have the next highest rate, almost 2.5 times higher than the Asian/Pacific Islander rate (see Figure 7).⁴⁹ Five-year data are not available for American Indians. The *Healthy People 2010* target for infant deaths is 4.5 per 1,000 live births.

Figure 7: INFANT MORTALITY RATES: by Race/Ethnicity, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.

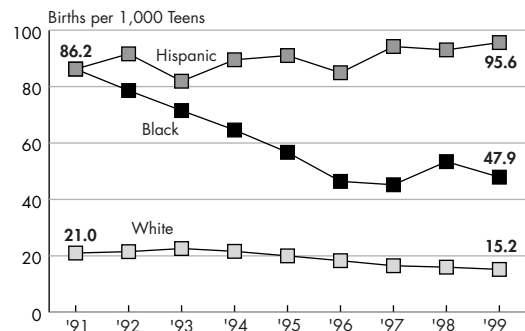
It is difficult to determine exact causes of racial and ethnic disparities in infant mortality. Some research suggests that the high rates of infant mortality among black women are not attributable to poverty because black women have problematic birth outcomes regardless of their socioeconomic position, faring worse than Caucasian women at

every economic level. This disparity persists even among the most highly educated black women. In addition, Hispanic women at comparable socioeconomic levels have better pregnancy outcomes than black women, including lower rates both of infant mortality and low birth-weight babies.⁵⁰

Teen Fertility

The overall teen fertility rate (ratio of live births per 1,000 population) in Colorado has been declining since 1992. The decline has been most dramatic among black teens, decreasing 45 percent between 1991 and 1999. The fertility rate for Hispanic teens increased by 11 percent during the same time period. Hispanic teens ages 15 to 17 have had the highest teen fertility rate since 1992, when the rate for black teens began a dramatic decrease. In 1999, the fertility rate for Hispanic teens was more than six times higher than Caucasian teens and twice the rate of black teens (see Figure 8).^{51,52,53,54}

Figure 8: TEEN FERTILITY RATES: Ages 15–17, Colorado, 1991–1999

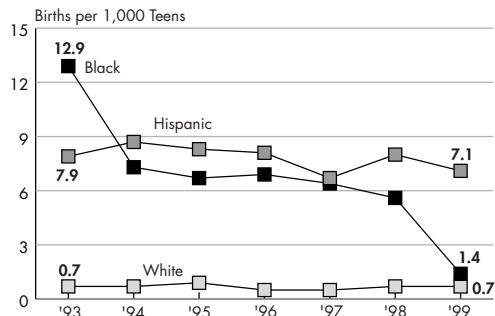


Source: Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1993, 1995, 1998, 1999*, Denver, published in 1994, 1997, 2000, and 2001.

Colorado's very young teens, ages 13 to 14, experienced similar trends during the 1990s. The fertility rate of 13- to 14-year-old black teens decreased eightfold between 1993 and 1999. The rate for very young, Hispanic and Caucasian teens remained stable.^{55,56,57} The 1999 fertility rate of 13- to 14-year-old Hispanic teens was 10 times higher than the rate of Caucasian teens, and 5 times higher than the rate of black teens (see Figure 9).



Figure 9: TEEN FERTILITY RATES: Ages 13–14, Colorado, 1993–1999



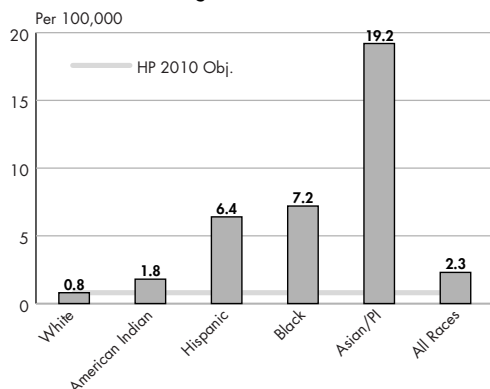
Source: Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1995, 1998, 1999*, Denver, published in 1997, 2000, and 2001.

Communicable Disease Indicators

Tuberculosis

Tuberculosis (TB) is the leading cause of death from contagious disease in the world and therefore subject to intense surveillance. Although not a very common disease in Colorado, TB incidence is monitored for indications of outbreaks among various populations in the state. Many TB cases are seen in recent immigrants, especially those from Mexico and Vietnam.⁵⁸ The Asian/Pacific Islander population has the highest rate, which is 24 times higher than Caucasians. Blacks have the second highest rate, which is nine times higher than Caucasians, and Hispanics have the third highest rate, which is eight times higher than Caucasians (see Figure 10).⁵⁹

Figure 10: TUBERCULOSIS: Incidence Rates by Race/Ethnicity, Colorado Annual Average, 1996–2000

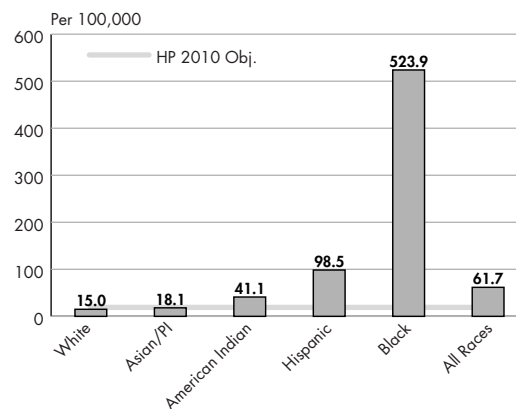


Source: Colorado Department of Public Health and Environment, Division of Disease Control and Epidemiology, Tuberculosis and Refugee Health Programs, Data Set: *Average Annual TB Case Rates, 1996–2000, per 100,000*, prepared for the Colorado Turning Point Initiative, Denver, June 2001.

Gonorrhea

The gonorrhea rate, both nationally and in Colorado, has been declining in all racial and ethnic groups; however, great disparities still exist. In 1999, the gonorrhea rate for blacks was 35 times higher than the rate of Caucasians. The rate among Hispanics was 6.5 times higher than Caucasians, and the rate among American Indians was 2.9 times higher than Caucasians (see Figure 11).^{60,61} Of particular interest is the magnitude of the disparity for the black community. Blacks have a higher number of cases than Caucasians, even though they account for less than 5 percent of Colorado's population.⁶²

Figure 11: GONORRHEA: Case Rates by Race/Ethnicity, Colorado, 1999

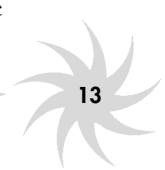


Source: Colorado Department of Public Health and Environment, Division of Disease Control and Environmental Epidemiology, *Sexually Transmitted Diseases in Colorado, Surveillance Report: 1999*, Denver, 2000.

The Healthy People 2000 objective for gonorrhea was to reduce the incidence to 225 new cases per 100,000 persons. Nationally, there has been such a dramatic decrease in the incidence of gonorrhea that the *Healthy People 2010* target has been set at 19 new cases per 100,000 persons.

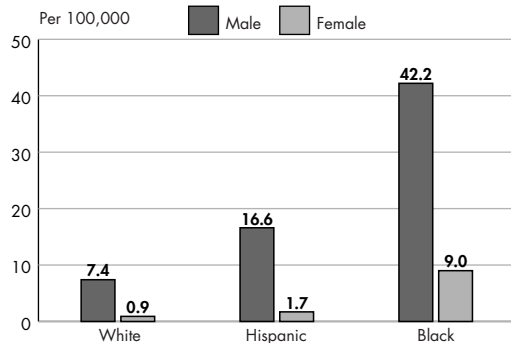
HIV/AIDS

Of the HIV cases diagnosed in Colorado during 1998–1999, black males had the highest rate of HIV, in fact six times higher than Caucasian males. The HIV rate for Hispanic males was twice as high as Caucasian males. The same disparity exists among females. The rate for black females was eight times higher than Caucasian females, and the



rate for Hispanic females was almost twice as high (see Figure 12).⁶³ Because HIV may not produce symptoms for many years, these HIV case data only represent people who have tested positive for HIV as opposed to the actual number infected.

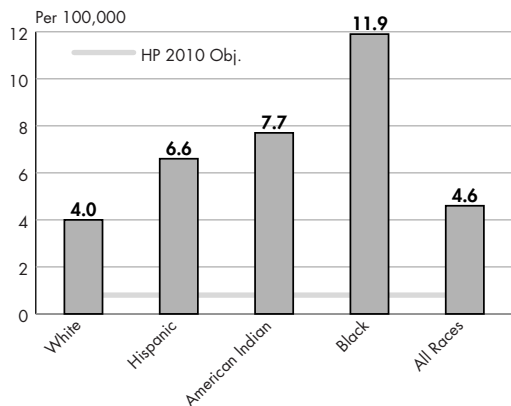
Figure 12: HIV: Average Annual Case Rates by Gender and Race/Ethnicity, Colorado, 1998–1999



Source: Colorado Department of Public Health and Environment, Division of Disease Control and Environmental Epidemiology, *HIV and AIDS in Colorado, Monitoring the Epidemic (through December 31, 1999)*, Denver, 2000.

The AIDS death rate of blacks is three times higher than Caucasians; the AIDS death rate of American Indians is nearly twice as high as Caucasians; and the death rate for Hispanics is more than 1.5 times higher than Caucasians (see Figure 13).⁶⁴ The *Healthy People 2010* target for AIDS deaths is 0.8 deaths per 100,000 persons.

Figure 13: AIDS: Age-Adjusted Death Rates by Race/Ethnicity, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section. Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.

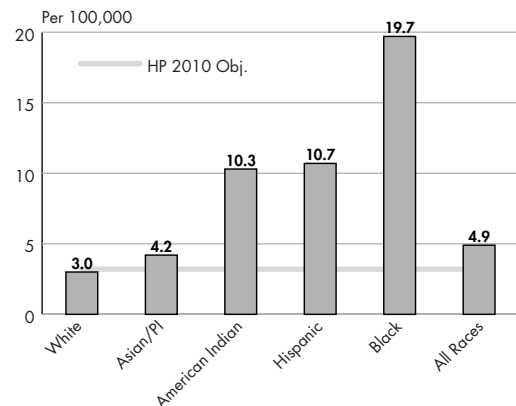
Healthy People 2010 explains the disparity in sexually transmitted disease (STD) rates by stating that “while certain sexual behaviors may increase a person’s risk for an STD, it is important to remember that for STDs, race and ethnicity in the United States are risk markers that correlate with poverty, a lack of access to quality health care services, illicit drug use and living in communities with a high number of STD cases.”⁶⁵ Also, according to the Institute of Medicine, “Access to high-quality health care is essential to preventing the spread of STDs, but often the groups with the highest STD rates are the same groups in which access to services is most limited, including adolescents and minority populations.”⁶⁶

Intentional and Unintentional Injuries

Homicide

Disparities in homicide rates vary greatly by race/ethnicity. The rates for blacks, American Indians, and Hispanics are significantly higher than the rate for Caucasians. According to Colorado data, the homicide rate among blacks is more than 6.5 times higher than Caucasians; the rate among Hispanics and American Indians is approximately 3.5 times higher than Caucasians; and the rate among Asians is nearly 1.5 times higher than Caucasians (see Figure 14).⁶⁷ The *Healthy People 2010* target for homicide is 3.2 deaths per 100,000 persons.

Figure 14: HOMICIDE: Age-Adjusted Death Rates by Race/Ethnicity, Colorado Annual Average, 1995–1999



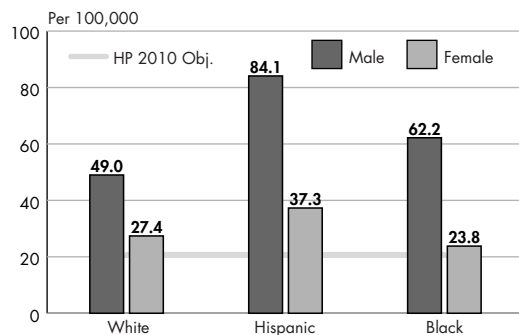
Source [Figure 14]: Colorado Department of Public Health and Environment, Health Statistics Section, Colorado Vital Statistics, Data Set, *Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.



Unintentional Injuries

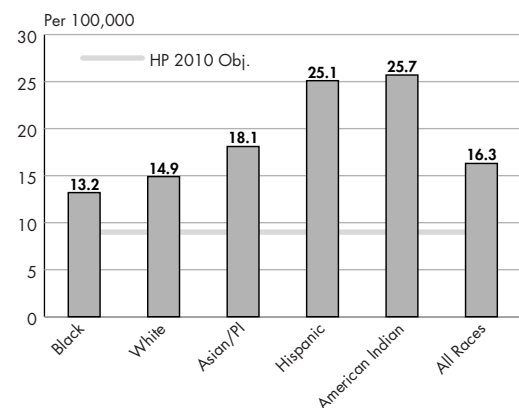
Hispanics consistently have the highest death rate from unintentional injuries when compared to blacks and Caucasians. There is also a disparity by gender. In 1999, the rate for Hispanic males was 1.7 times higher than Caucasian males and 1.3 times higher than black males. In 1999 the rate for Hispanic females was 1.6 times higher than black females and approximately 1.4 times higher than Caucasian females (see Figure 15).⁶⁸ The *Healthy People 2010* target for unintentional injuries is 20.8 deaths per 100,000 persons.

Figure 15: UNINTENTIONAL INJURIES: Age-Adjusted Death Rates by Race/Ethnicity and Gender, Colorado, 1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999*, Denver, June 2001.

Figure 16: MOTOR VEHICLE DEATHS: Age-Adjusted Death Rates by Race/Ethnicity, Colorado Annual Average, 1995–1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, Data Set, Leading Causes of Death and Death Rates by Race/Ethnicity: Colorado Residents, Annual Average, 1995–1999*, prepared for the Colorado Turning Point Initiative, Denver, May 2001.

Automobile Accidents

Automobile accidents account for the greatest number of unintentional injuries. There is a disparity by race/ethnicity in the rate of deaths from automobile accidents. American Indians and Hispanics statistically have the highest death rates, nearly twice as high as blacks and approximately 1.7 times higher than Caucasians. Asian/Pacific Islanders also have statistically higher rate than blacks and Caucasians (see Figure 16).⁶⁹ The *Healthy People 2010* target for motor vehicle deaths is 9.0 deaths per 100,000 persons.

Motor vehicle deaths are recorded by a person's county of residence and not the county in which the accident occurred.

Factors That Contribute to Health Disparities Among Communities of Color

Income and Education

Inequalities in income and education underlie many health disparities in the United States. Income and education are intrinsically related and often serve as proxy measures for each other. In general, population groups that suffer the worst health status are also those that have the highest poverty rate and the least education.⁷⁰

Living Environment

The quality of residential living is a factor in a person's health. Inner cities and reservations may lack basic neighborhood amenities and services, and many have deteriorating physical environments. The concentration of poverty is higher, the crime rate is higher, and well-paying, skilled jobs are scarce. Minorities are more likely than Caucasians to live in these types of environments.⁷¹ According to the U.S. Environmental Protection Agency, health disparities may also result from increased exposure to environmental hazards such as landfills, increased auto traffic, industrial facilities, toxics and other organic pollutants that are in close proximity to many low-income and minority neighborhoods.⁷²

Access to Health Care

Minorities also face disadvantages in gaining access to health care. Health insurance coverage is less common among minorities; minorities are more likely than Caucasians to perceive discrimination in the delivery of their health services; and research shows that people receive differential treatment based on race.^{73,74,75} For example, two studies showed that Hispanics and blacks were substantially under-treated for pain from bone fractures and that postoperative pain was poorly managed. In other studies, blacks with chronic renal failure were less likely to be evaluated for a renal transplant and less likely to be thoroughly evaluated for coronary artery disease. This outcome was true even when controlling for income.^{76,77}

Racial Discrimination

Racial discrimination is a social factor that influences personal health on many levels and appears to be a leading cause in the development of health conditions that can lead to illness. Stress experienced by minorities related to a lifetime of discrimination can adversely affect physical and mental health. Also, historical injustices such as the U.S. Public Health Service's Tuskegee Syphilis Experiment (1932–1972) have created distrust of government systems and may discourage some minority populations from seeking care or taking part in government health programs. In the Tuskegee experiment, black men were unknowingly withheld treatment for syphilis so the disease's progression could be studied.⁷⁸ According to the Grant Makers in Health report, *Strategies for Reducing Racial and Ethnic Disparities in Health*, the history of slavery and segregation are at the root of the substandard neighborhoods, housing, employment opportunities and education opportunities and health care services that many minorities face and that influence health.

The factors that contribute to health disparities among minority communities are complex. There is an array of critical influences that determine the health of an individual and of communities. The literature suggests that in order to achieve the goal of eliminating health disparities, a commitment to identifying and addressing the underlying causes is required. New insights are needed to understand the determinants of racial and ethnic disparities.

Strategies to eliminate health disparities must then be developed by considering the social, cultural, political, and historical context in which health disparities continue to exist.

Health Disparities Among the Gay, Lesbian, Bisexual, and Transgendered (GLBT) Community

The gay, lesbian, bisexual, and transgendered population is a priority population of the Colorado Turning Point Initiative and Healthy People 2010. This is a population that is less likely to have access to health care and insurance coverage than heterosexuals and more likely to suffer from depression, drug and alcohol use, AIDS, and possibly other diseases that are preventable through early screening, diagnosis, and treatment. Healthy People also states that the issues surrounding personal, family, and social acceptance of sexual orientation places a significant burden on mental health and personal safety.

Terminology Used to Describe Sexual Orientation

Terminology is important in understanding diverse cultures. According to Kaiser Permanente's Provider Guide on Cultural Competence, the following terms are generally used to describe sexual orientation:

- * **GLBT community:** Many times the gay, lesbian, bisexual, and transgendered community is referred to as the GLBT community.
- * **Gay:** A gay man is an individual whose primary emotional and sexual attraction is to men. A self-identified gay man doesn't necessarily limit sexual behavior to men. Occasionally, gay men may engage in sex with a woman. The term *gay* is sometimes used to refer to the larger GLBT population or an individual of any gender.
- * **Lesbian:** A lesbian is a woman who has primary emotional and sexual attraction to other women. Sometimes lesbian women engage in sexual behavior with men, although they self-identify as lesbian.
- * **Bisexual:** Bisexual men and women have sexual and emotional attraction to both genders. This group is often shunned by both heterosexuals and homosexuals for complex reasons:

Bisexuality may be viewed as a nonentity—a transitional stage from heterosexuality to homosexuality or vice versa, or a denial of one’s homosexuality. There seems to be more of a stigma for bisexual men than women due to rigid expectations of male sex roles in society.

- * **Heterosexual:** A heterosexual is an individual who has a primary emotional and sexual attraction to the opposite sex. Self-identified heterosexuals may occasionally engage in sexual contact with the same sex but do not identify as being homosexual or bisexual.
- * **MSM (Men who have Sex with Men):** This is a term used in the scientific literature, especially with regard to HIV prevention, to describe a particular behavior without labeling the individual. As stated before, men may engage in sex with other men without identifying themselves as gay or bisexual.
- * **Gender identity:** At birth, babies are assigned a “socially defined” gender based on reproductive anatomy. Gender identity refers to a person’s innate perception of their gender, which may or may not be consistent with their anatomical sex. Gender identity is distinct from sexual orientation. For example, a person whose gender identity is male and who may date women exclusively may identify as heterosexual, even though his assigned birth gender was female.
- * **Transgendered:** Transgendered individuals have a strong sense of incongruity between their biological sex and gender identity. The transgendered person may receive hormonal treatment without a plan for sex reassignment surgery or they may actively seek surgery to become genitally congruent with their gender identity. Transgendered individuals may also identify as being heterosexual, homosexual, or bisexual and may experience discrimination based on their sexual orientation as well as gender identity.⁷⁹

Overview of the Problem

Examining health issues within the GLBT community can be difficult, as many times available data on this population is limited. Traditionally, research constraints have existed including nonstandard definition of sexual orientation; the use of small non-probability sampling methods based on convenience samples; a lack of culturally diverse samples; a lack

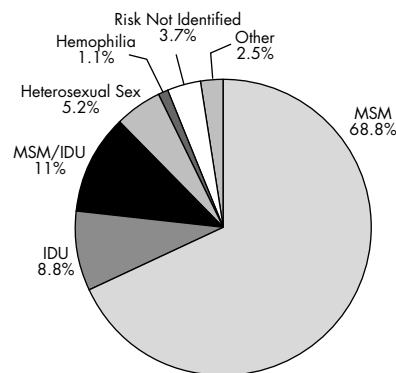
of controlled studies with comparison to other samples, such as heterosexuals; and a lack of longitudinal studies. It wasn’t until the AIDS epidemic in the early 1980s that the research community was forced to examine sexual orientation and associated behaviors of gay men. Recently, the National Institutes of Health increased attention to the needs of lesbian and bisexual women and racial and ethnic minorities within the GLBT community. However, many pressing questions remain unanswered regarding violence, psychosocial issues, morbidity, mortality, and hormonal therapies.⁸⁰

Gay Men

According to *Healthy People 2010*, major health issues for gay men include HIV infection, AIDS, and other sexually transmitted diseases, substance abuse, depression, and suicide. Gay male adolescents are two to three times more likely than their heterosexual peers to commit suicide.⁸¹

HIV is a major health issue for men who have sex with men. In assessing disparities by risk exposure category, HIV is most prevalent in this group. Surveillance by exposure category is important for program planning and targeting HIV prevention and intervention. In Colorado, MSM are disproportionately affected by HIV, accounting for 79.8 percent of cases (eleven percent of these men also have the risk factor of intravenous drug use, or IDU). All other modes of acquisition are significantly lower than this group (see Figure 17).^{82,83}

Figure 17: AIDS by Risk Category, Cases Reported Through 3/31/01, Colorado



Source: Colorado Department of Public Health and Environment, Division of Disease Control and Environmental Epidemiology, HIV/STD Surveillance Program, *HIV and AIDS in Colorado: Monitoring the Epidemic Through March 30, 2001*, Denver, August 2000.



The group “Other” includes HIV exposure from hemophilia, mother with risk for HIV infection, of transfusion recipient

According to Coloradans Working Together to Prevent HIV/AIDS, the pervasive social prejudice against gay men has made HIV prevention efforts challenging, especially primary prevention efforts that focus on behavior change. Because discrimination and social isolation is virtually endemic to the experience of being gay in the United States, some men who engage in sex with other men do not identify with being gay or with being at risk for HIV. Other gay men may not seek health care, including preventive services and/or HIV testing, for fear of having to disclose their sexual orientation. Finally, the shame and isolation that many gay men experience is many times internalized as fatalism and hopelessness, possibly resulting in the belief that “all gay men get HIV eventually.”⁸⁴

In a 2000 client survey of Colorado men who have sex with men, respondents overwhelmingly listed gay-friendly providers as of major importance for them in seeking HIV prevention services. They also listed free or low cost service availability as another important factor.⁸⁵

Lesbians

Healthy People 2010 states that there is some evidence to suggest that lesbians have higher rates of smoking, obesity, alcohol abuse, and stress than heterosexual women. According to the literature, a common health issue for lesbians is a lack of culturally competent health care and preventive services. Lesbians are less likely than heterosexual women to see a health care provider for regular mammograms and screening for cervical cancer.^{86,87} Due to the secrecy with which many lesbians feel they must live, fear of revealing their sexual orientation to their provider may keep them from seeking these services. Some lesbians report that they have experienced negative provider attitudes toward same-sex orientation. Others have expressed discomfort at provider assumptions that they are heterosexual, and they describe being offered services inappropriately such as birth control. Also, because lesbians are less likely than heterosexual women to visit a doctor for reproductive health services, there is less opportunity for a provider to encourage screening.^{88,89}

The literature also raises questions about whether lesbians are at increased risk of developing breast cancer than heterosexual women. Some evidence suggests that lesbians may have more risk factors than heterosexual women such as delayed childbearing, nonchildbearing, and higher alcohol consumption rates. Additionally, lesbians who are estranged from their families because of their sexual orientation may not have access to accurate information about breast cancer history in their family.^{90,91}

The Gay, Lesbian, Bisexual and Transgendered Community

In 1999, the Gay, Lesbian, Bisexual and Transgendered Community Center of Colorado conducted focus groups to gain better insight into the health needs of Colorado’s GLBT community. The data collected revealed that the most common barriers to people in the GLBT community being able to take care of themselves were related to a lack of health insurance, a lack of money to pay for health care services, and a lack of health-related information specific to the gay community.⁹²

Mental health services were identified as a need for this community, yet most individuals reported not being able to “afford the luxury of seeing a therapist.” Mental health services are many times viewed as a “last resort” after one has tried to solve their own problems. Focus group participants identified depression and substance use and abuse as major mental health issues, describing the stigmatization of being gay, bisexual, or transgendered as a “mental burden.” They also talked about suicide as a problem, especially among teens.⁹³

The environment of clubs and bars was another problem identified. These were listed as the most frequent places available to socialize for the GLBT community. This environment leads to increased alcohol consumption, increased potential for unsafe sex, and being exposed to unusual amounts of second hand smoke.⁹⁴

The GLBT community in general is less likely to have health insurance coverage than heterosexuals. Systemic heterosexual bias affects the health care coverage of many GLBT individuals in committed relationships. The majority of employers and insurance companies deny health care coverage to GLBT committed partners.⁹⁵

Some providers are now evaluating their service delivery models and how to modify services to this population's needs, especially with regard to outreach and screening. For example, Kaiser Permanente has created guidelines of culturally competent health care for GLBT clients.⁹⁶ In focus groups conducted by the Gay, Lesbian, Bisexual, and Transgendered Community Center of Colorado, the GLBT community reported that while they do not necessarily favor being served by a doctor who is gay, most believe it is critical to access a medical doctor who is "gay friendly," that is, aware of the different health issues that the GLBT community faces without prejudice toward the community or their lifestyle.⁹⁷

Health Disparities by Rural Residence

Geographically, Colorado is a large state with 80 percent of its residents living in 10 metropolitan counties on the east side of the Rocky Mountains. This region is known as the Front Range. The remaining 20 percent of residents are scattered throughout the mountains, the Eastern Plains, and the Western Slope. Of Colorado's 63 counties, 29 are considered rural and 23 are considered frontier (with less than 6 people per square mile).^{98,99}

According to nationwide *Healthy People 2010*, people living in rural areas are less likely to use preventive screening services, exercise regularly, wear seat belts, or have health insurance. In addition, residents of rural counties are more likely to live in poverty—a risk factor for poor health—than those living in metropolitan areas.¹⁰⁰ Surveys of rural areas within Colorado indicate similar health issues.

Colorado Data

Specific health disparities vary by region and data representing specific regions are limited. Periodically, the Health Statistics Section at the Colorado Department of Public Health and Environment conducts targeted surveys in specific areas of the state to better determine the prevalence of health behaviors related to specific demographics such as rural counties or regions.

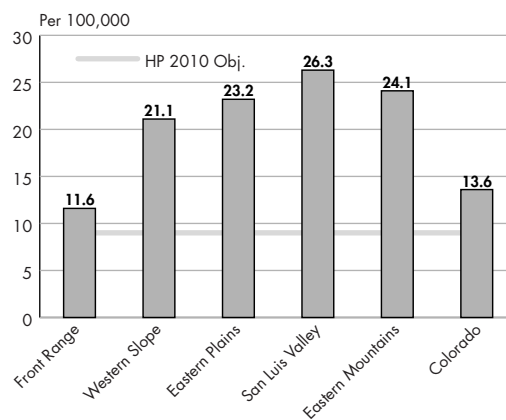
A 1995 survey and report of Colorado's Eastern Plains region (18 counties) indicated that the teen fertility rate and age-adjusted death rates of chronic

obstructive pulmonary disease, motor vehicle deaths, and diabetes were statistically higher when compared to the rest of the state, as were the proportion of overweight persons and proportion of people who do not wear a seatbelt.^{101 102} A 1997 survey of the San Luis Valley (six counties in the south central area of the state) revealed that this region had statistically higher mortality rates for cardiovascular disease, unintentional injuries, motor vehicle injuries, pneumonia/influenza, diabetes, chronic liver disease/cirrhosis, and homicide.¹⁰³ A 1997 report on behavioral risk factors and mortality rates of Delta County, a rural county in the Western Slope region, revealed that statistically, this county's residents had less health insurance, were less likely to have had their blood cholesterol checked, were less likely to wear a seat belt, or to have seen a dentist in the past year, as compared to the rest of the state.¹⁰⁴

Motor Vehicle Deaths

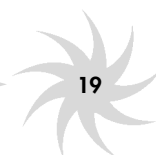
In general, there is great disparity in the number of motor vehicle deaths between rural and metropolitan residents of Colorado as indicated in Figure 18. Of the regions listed in the graph, the Eastern Plains, San Luis Valley, and Eastern Mountains are rural, in addition to many areas within the Western Slope region. Colorado Behavioral Risk Factor Surveillance data indicate that rural residents are less likely to wear their seat belts than those living in suburban or urban areas of the state.¹⁰⁵

Figure 18: Motor Vehicle Accidents, Age-Adjusted Death Rates by Colorado Region, 1999



Source: Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999*, Denver CO, June 2001.

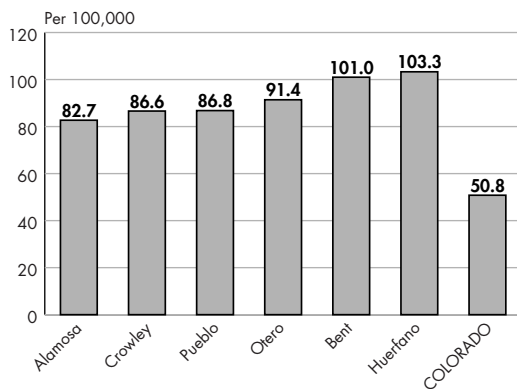
Note: Motor vehicle deaths are recorded by a person's county of residence and not the county in which the accident occurred.



Diabetes

Colorado counties with the highest death rates for diabetes tend to be rural or frontier such as Huerfano, Bent, Otero, Alamosa, and Crowley (see Figure 19).¹⁰⁶ Lack of access to health care services is a major challenge to diabetes management in Colorado. For example, self-management of diabetes is a recognized strategy for preventing complications; however, 81 percent of certified diabetes educators are located in areas along the Front Range.¹⁰⁷

Figure 19: Diabetes-Related, Age-Adjusted Death Rates by County, 1994–1998 Average



Source: Colorado Department of Public Health and Environment, Chronic Disease Section/Health Statistics Section, *Diabetes Mortality in Colorado Residents as Assessed from Death Certificate Data, 1994–1998*. Denver, CO, 2000.

Note: This data was age-adjusted to the 1940 population standard.

The Federal Bureau of Primary Health Care has designated many of Colorado's rural and frontier areas as Health Professional Shortage Areas (HPSAs). This designation means that there is less than one primary care physician for every 3,500 people in the county or area. Twenty-two of Colorado's 53 rural and frontier counties are designated as Health Professional Shortage Areas in their entirety, and 17 rural counties have been partially designated.¹⁰⁸ In addition to a lack of primary care, timely access to emergency services and the availability of specialty care effect the health status of rural and frontier populations.¹⁰⁹

Many rural counties in Colorado also have an undocumented or migrant workforce, with specific health needs and cultural differences. Language barriers are an issue, especially with more

Hispanic, Chinese, and Russian families moving to the less expensive, rural areas to carry out service jobs. Finally, elevated lead levels are an issue for rural residents due to the contributing factors of poverty, older rental units, and people using private water systems.¹¹⁰

Recommendations

The following recommendations were derived from the literature, the Turning Point Steering Committee, the Colorado Department of Health and Environment Health Disparities Work Group, the Colorado Association of Local Public Health Leaders, and the Colorado Minority Health Forum.

Public Health and its Partners

- * Support a culturally competent leadership entity in taking on long-term, statewide advocacy for the elimination of health disparities.
- * Investigate root social causes of health disparities and take a comprehensive, systemic approach to the elimination of health disparities.
- * Convene many diverse and nontraditional partners to eliminate of health disparities, including not only affected communities but also foundations, business, and civic planning agencies.

Public Health and Health Care Delivery Systems

- * Work to increase access and use of health care services by underserved populations including minority communities, the GLBT community, and rural communities. Efforts should focus on culturally competent care, increasing health insurance coverage, and reducing health professional shortage areas.
- * Focus on and target services to populations with health disparities, assuring that services are provided in a culturally competent manner.
- * Work to increase the cultural competence of the public health, environmental health, and health care workforces through training and the development of policies that support cultural competency.

- * Create recommendations or standards for implementing translation and interpretation services for limited English-speaking clients.
- * Develop and use innovative outreach and service delivery models to reach the medically underserved communities (for example, mobile health care vans, school-based health centers, and store fronts).
- * Consider health disparities and access to care issues with regard to mental health and oral health services.
- * Advocate for physician incentives to practice in health professional shortage areas.

Environmental Health Agencies

- * Work with public health agencies as partners toward the elimination of health disparities.
- * Investigate cumulative impacts of air pollution, water pollution, and hazardous waste, even where no standards, laws, and regulations are being broken, to determine communities that may be experiencing a disproportionate impact of pollutants.
- * Involve affected communities in all stages of environmental protection.
- * Work toward improving the interface between environmental health and public health, especially with regard to data linkage of environmental indicators to health outcomes (e.g., asthma incidence in urban settings, exacerbated by air pollution).
- * Enhance community outreach, especially to gain input into local environmental projects (e.g., supplemental environmental projects as a result of environmental penalties).
- * Reach out to disenfranchised communities (those not engaged in political or governmental processes) to educate them about government systems and how to contact the appropriate agency with environmental concerns.
- * Continue to take a leadership role in bringing together communities and industry to negotiate solutions outside of regulation.

Research Entities

- * Enhance data collection and health assessment with a focus on groups most affected by health disparities.

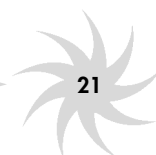
- * Investigate the basis of observed race-associated differences in health outcomes.
- * Investigate the determinants of disparities in the GLBT community.
- * Investigate behavioral aspects of health in rural communities and then target communities in a culturally relevant manner, especially with regard to seat belt use, preventive health services, diet, and exercise.
- * Improve data collection by race and ethnicity; report health indicators in as many racial and ethnic groups as possible. (This may require combining multiple years of data to determine issues in small populations such as blacks, American Indians, and Asian/Pacific Islanders).
- * Interpret race-related findings instead of controlling for race or trying to explain it as a confounding variable, and then conduct follow up research if findings from initial research are unclear.
- * Acknowledge diversity within racial and ethnic groups and measure culture when possible.

Foundations

- * Foundations should examine their role in funding initiatives that are working toward the elimination of health disparities.

Recommendations for Participation of Affected Communities in the Practice of Public Health

- * Public health and environmental health agencies and the health care field should develop strategies to increase the diversity of their workforces to better serve communities with health disparities. This may involve partnering with universities and developing mentoring programs or internships. Developing recruitment and retention strategies is also important.
- * The public health field should assure diverse participation from rural, minority, and GLBT communities on boards and commissions by inviting and accommodating the needs of these communities to meet after-hours or to be compensated for travel.
- * The public health field and its partners should promote leadership development for minority health professionals, rural health professionals,



and health professionals within the gay, lesbian, and bisexual community.

- * The public health field and its partners should collaborate with affected communities and support leadership development within those communities by offering opportunities and compensation for participation, plus facilitating involvement in leadership development programs.

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