



# Estimating the Magnitude of Health Disparities in Riverside County

## Introduction

Health disparities are differences in health outcomes between groups of people. Disparities are caused by variability in environment; access, utilization, and quality of care; education; and other social, cultural, and behavioral determinants. Many of these differences are preventable. As an emerging area of concern, health disparities are measured comparing the health of one group to the health of other groups.

There are many health outcomes where disparities are evident and researchers, along with public health practitioners, have had difficulties understanding and reducing these disparities. One such example is the elevated infant mortality among African Americans. This report will provide an overview of health disparities by examining selected differences in health outcomes between groups in Riverside County. This important subject will continue be discussed in future reports.

## Key Findings

- Eight of the 12 leading causes of death in Riverside County illustrate a disparity between black and white mortality.
- In 2005, heart disease mortality among blacks exceeded that of whites by 47.1 deaths per 100,000 population.
- Hispanics experience mortality due to AIDS at a rate half that of whites in our County.

## Leading Causes of Death and Health Disparities Among Riverside County Residents

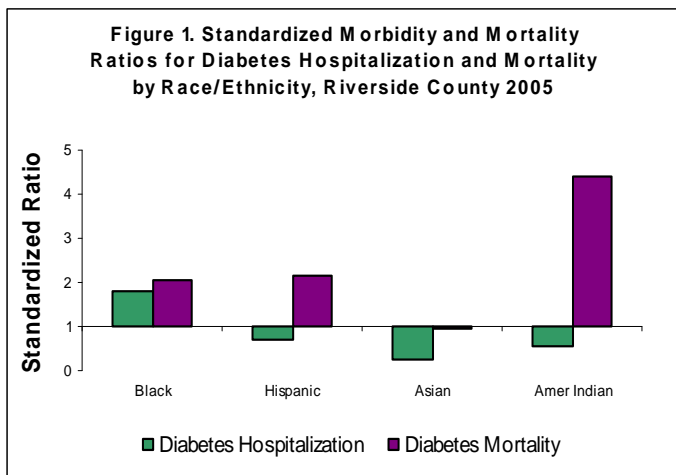
Disparities among racial/ethnic groups were evident for 75% of the leading causes of death in Riverside County. Blacks experience a greater mortality disparity than other racial/ethnic groups. This difference is also reported at state and national levels.

Blacks were seven times more likely and Hispanics were four times more likely to die from homicide than whites. Hispanics also experienced disparities, although not at levels as pronounced as those among blacks.

**Table 1: Mortality Disparities Among Riverside County Residents, Riverside County, 2005**

Countywide Cause of Death Rank	Cause of Death	Age-adjusted Mortality per 100,000			Black and White Rate Ratio	Hispanic and White Rate Ratio
		White	Black	Hispanic		
1	Heart Disease	242.6	289.7	180.8	1.19	0.75
2	Cancer	195.8	206.8	143.1	1.05	0.73
3	Stroke	51.2	57.4	58.9	1.12	1.15
4	COPD	63.9	37.6	23.2	0.58	0.36
5	Unintentional Injuries	37.7	34.9	36.4	0.93	0.96
6	Alzheimer's	34.9	36.1	20.5	1.03	0.58
7	Diabetes	18.2	40.2	42.8	2.20	2.35
8	Influenza and Pneumonia	18.1	21.8	16.9	1.20	0.93
9	Cirrhosis	13.1	11.2	20.8	0.85	1.58
10	Suicide	12.7	4.2	5.1	0.33	0.40
11	Homicide	3.2	21.8	6.7	6.81	2.09
12	AIDS	5.3	9.7	2.7	1.83	0.51

Hispanics were 50% more likely to die of cirrhosis and 15% more likely to die of stroke than whites. Both black and Hispanic deaths due to diabetes have rates twice that of whites. Conversely, Hispanics were 70% less likely to die of COPD and blacks were 70% less likely to commit suicide than whites. Health disparities are of concern since, as the proportion of these racial/ethnic minorities increase in Riverside County, disparities will also increase.



## Standardized Morbidity and Mortality

Among the leading causes of morbidity and mortality, diabetes maintains the greatest disparity. Racial/ethnic minorities, except blacks, experienced lower hospitalization ratios which may indicate under utilization of services. The under utilization, in turn, may explain the higher mortality among these subgroups.

Similar to national data, American Indians and blacks were more likely to die from diabetes compared to whites. Conversely, Asians were less likely to experience diabetes-related mortality compared to their white counterparts.

## Estimating Excess Hospitalizations and Deaths Due to Health Disparities

Standardization methods allow for the calculation of expected hospitalizations and deaths if the population structure of the subgroup is similar to that of whites. Blacks experienced excess hospitalizations and deaths for all examined

**Table 2: Excess and Deficiencies in Hospitalizations and Mortality by Cause, Riverside County, 2005**

Race/Ethnicity	Asthma Hospitalizations	Diabetes Hospitalizations	Diabetes Mortality	Heart Disease Hospitalizations	Heart Disease Mortality
American Indian	-2	-3	5	-45	-4
Asian	-29	-41	-1	-203	-50
Black	168	63	15	-91	47
Hispanic	-72	-137	65	-775	-186

\*Negative values represent fewer deaths or hospitalizations

causes, except heart disease hospitalizations. Among blacks, asthma hospitalizations presented the greatest excess resulting in more than two million dollars spent on the hospitalization for treatment of asthma. Additionally, an excess of 63 hospitalizations resulted in nearly one million dollars spent on diabetes hospitalizations among blacks. Hispanics had an excess of 65 deaths attributed to diabetes, while the excess deaths among blacks and American Indians were 15 and five deaths, respectively. The largest mortality disparity was in heart disease among blacks, with an excess of 47 deaths in 2005. Whites appear to be disproportionately hospitalized for asthma, diabetes, and heart disease, indicating a health care disparity among this reference group. Future directions include comparative analysis of state and national data.

## From the desk of — Eric Frykman, MD, Community Health Agency Director

Health disparities affect not just individuals, but families and the entire community as well. These disparities are not new. Some people may find comfort knowing that there are no new risks threatening Riverside County residents. But for me, this serves as a reminder that everyday, valuable residents in our community die or are hospitalized because they lack access to optimal health care resources, live in a suboptimal environment, and/or are not afforded the best opportunities to improve or maintain their health. This reminder should be a call to action for each of us to do what we can to improve the health and lives of all this great county's residents. Some of these action steps may appear simple: decreasing access to tobacco and other health dangers, and getting children outdoors so they exercise more. Other steps are not so well-known or simple. But through the united efforts of individuals, families, communities, businesses, community-based organizations, and policy-makers, we can improve the health of ALL of Riverside County. This process is not quick nor painless, but I certainly am excited about continuing the fight.

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### References:

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