



Life Expectancy at Birth in Riverside County, 1996-98 compared to 2005-07

Introduction

Life expectancy is one of the oldest, most familiar, and most valuable indicators available for evaluating and comparing the health of different populations. There has been renewed emphasis on life expectancy lately due to a number of highly publicized studies. In particular, a recent study found that if current obesity trends continue, the current generation of children will be the first to live shorter lives than their parents.¹

In addition, it has been widely recognized that Americans have shorter life expectancies than most other developed nations, despite spending significantly more on health care.^{2,3} And, finally, within America, large gaps between the life expectancies of different racial/ethnic groups still remain.³

Key Findings

- Life expectancy has increased significantly for county residents.
- Women have higher life expectancies than men, though life expectancy for men has increased more over the past decade.
- Hispanics have the highest life expectancy.
- Blacks have the lowest life expectancy despite a significant increase over the past decade.

Progress Made, Progress Needed

In the past 10 years, life expectancy has increased overall, and for all sub-groups evaluated in the present study. The life expectancy for all residents significantly increased by 1.38 years from 1996-98 to 2005-07. All sub-groups increased roughly at this same pace, except Black residents whose life expectancy increased nearly 4 years (3.53). While this increase is exceptional, it is somewhat dampened because the 1996-98 life expectancy was so low as compared with peer groups (71 vs. 76 and 79 yrs). In addition, the new estimate still puts the life expectancy of Black residents nearly 3 years below White residents (2.68 yrs), and 5 years below Hispanic residents (5.01 yrs).

Exhibit 1. Life Expectancy by Race for Riverside County Residents, 1996-98 vs. 2005-07

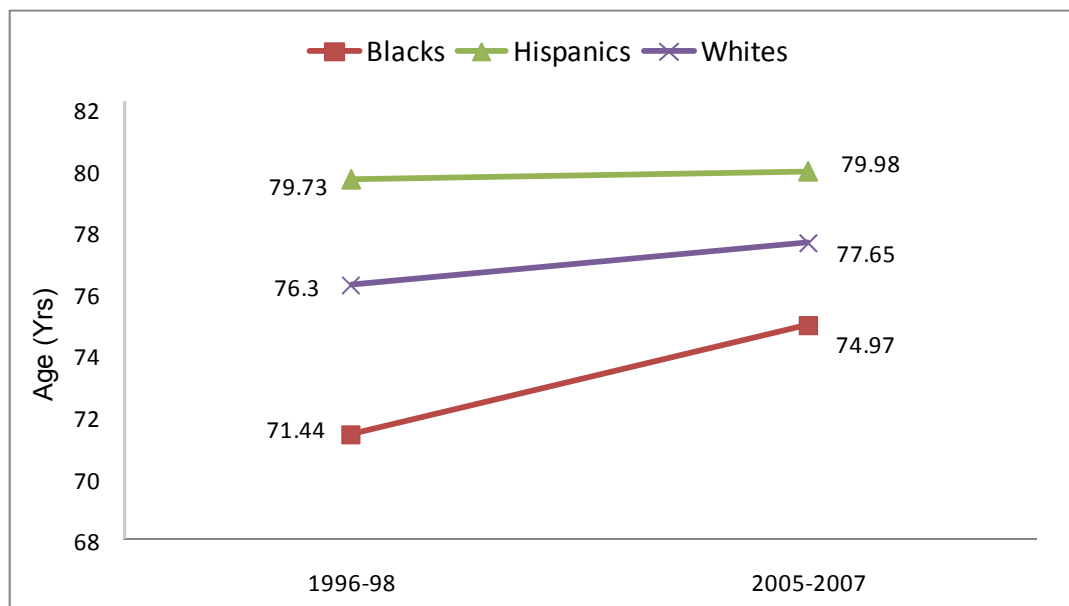


Exhibit 2. Life Expectancy, United States, 2006⁴

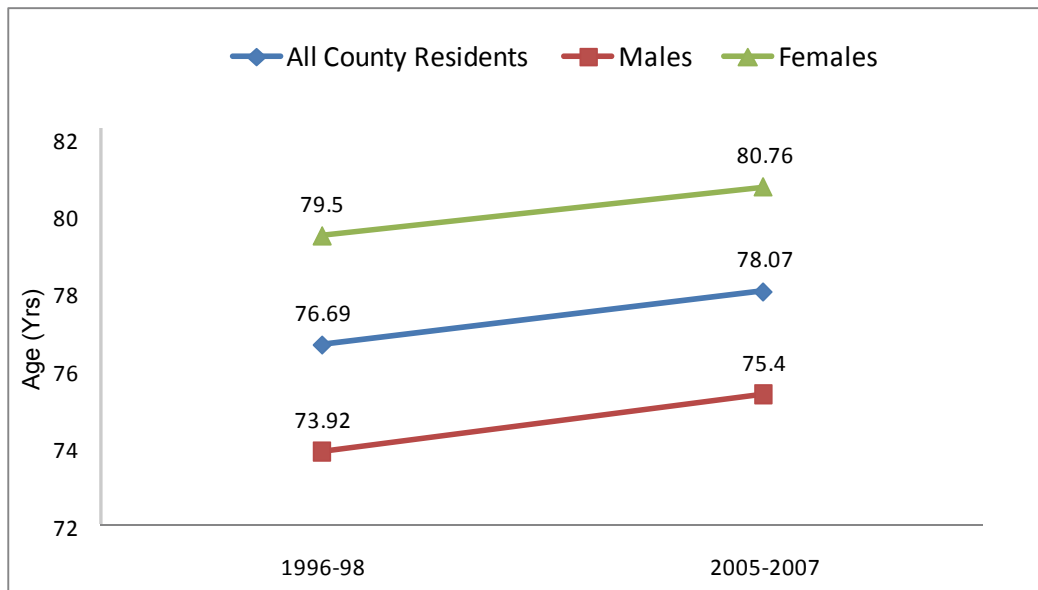
Group	Age (Yrs)
All	77.7
Female	80.2
Male	75.1
Hispanic	NA
Black	73.2
White	78.2



(Continued from page 1)

The life expectancy for Hispanic residents changed the least (0.25 yrs), but it also has been, and remains, significantly higher than other groups. This trend, often called the “Hispanic Paradox”, has puzzled researchers because health and mortality are strongly linked with wealth and education, yet the average income and education among Hispanics (except for Cuban Americans) is below that of Whites.³ This issue will be addressed further in future local studies.

Exhibit 3. Life Expectancy by Sex for Riverside County Residents, 1996-98 vs. 2005-07



Finally, while males and female life expectancies have each increased at roughly the same pace, female residents continue to outlive males by more than 5 years (5.36 yrs). This disparity is seen worldwide, suggesting a biological cause; however, there are many theories and no clear consensus as to why women generally live longer than men.

Methods

Death certificates for all Riverside County residents were grouped into two separate multi-year blocks to give current and historical life expectancy values for use in evaluating change over the past decade. The total population and the number of deaths for each age group within each sub-group was aggregated for each three-year block.⁵⁻⁷ Using three years of data allows for a more reliable estimate of life expectancy when stratified by sex and race. Age-specific death rates were calculated using the Chiang method for creating abridged life tables.⁸ For each time period, life tables were calculated for each sub-group. The corresponding value for life expectancy at birth were compared to identify differences within groups over time. Confidence intervals were used to assess whether significant differences in life expectancy exist among race groups in Riverside County and whether disparities have changed over time at the local level.

From the desk of — David Herfindahl, MD, Deputy Public Health Officer

The reassuring trends regarding life expectancy discussed in this publication may be short-lived. A recent article that appeared in *Circulation* (Urbina EM, 2009; 119; 2913-2919) presents disturbing data showing that obese youth and youth with type II Diabetes Mellitus have significant abnormalities in carotid artery structure and function. In obese youth, these changes are present well before progression to overt Type II Diabetes, a high-risk for future problems. Absent comprehensive lifestyle interventions to reduce obesity in the US there will likely be a decline in life expectancy for our youth.

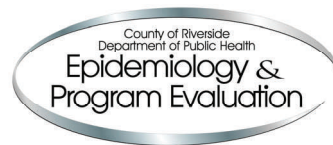
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