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## Disparities in Premature Deaths From Heart Disease—50 States and the District of Columbia, 2001

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2 tables, 1 figure omitted

IN 2001, HEART DISEASE ACCOUNTED FOR approximately 29.0% of deaths among U.S. residents; 16.8% of those deaths occurred among persons aged <65 years.<sup>1</sup> Although mortality rates from heart disease have decreased, the decline has not been uniform for all populations.<sup>2</sup> One of the two overall national health objectives for 2010 is to eliminate health disparities among different segments of the U.S. population.<sup>3</sup> To better understand these disparities, CDC analyzed death certificate data for premature deaths from heart disease occurring in 2001. This report summarizes the results of that analysis, which indicated that the proportion of premature heart disease deaths varied by state and was higher among blacks, American Indians/Alaska Natives (AI/ANs), Asians/Pacific Islanders (A/PIs), and Hispanics. Reducing premature death from heart disease and eliminating disparities will require preventing, detecting, treating, and controlling risk factors for heart disease in young and middle-aged adults.

Death certificate data from the 50 states and the District of Columbia (DC) were obtained from the National Center for Health Statistics. Demographic data (e.g., age and race/ethnicity) on death certificates were reported by funeral directors or provided by family members. Heart disease–related deaths were defined as those for which the underlying causes listed on death certificates by a physician or coroner were *International Classification of Diseases, Tenth Revision (ICD-10)*, codes I00–I09, I11, I13, or I20–I51. Premature

deaths were defined as those occurring among persons aged <65 years. Proportions of premature death were calculated for all 50 states and DC.

During 2001, of 700,142 deaths attributed to heart disease, 117,346 (16.8%) occurred among persons aged <65 years. The proportion of premature deaths was greatest among AI/ANs (36.0%) and blacks (31.5%) and lowest among whites (14.7%). Premature death was higher for Hispanics (23.5%) than non-Hispanics (16.5%), and for males (24.0%) than females (10.0%). Hispanic whites (23.3%) had lower proportions than Hispanic blacks (27.5%), and non-Hispanic whites had lower proportions (14.4%) than non-Hispanic blacks (31.5%). The highest proportions of all deaths occurred among persons aged 55–64 years. When premature death was examined by age-specific death rate, mortality increased with age, and rates across all age groups were highest among blacks and lowest among A/PIs.

The proportions of premature heart disease deaths ranged from 12.4% in Rhode Island to 35.7% in Alaska. The 10 areas with the highest proportions were Alaska (35.7%), Nevada (25.4%), Georgia (23.9%), South Carolina (23.8%), Louisiana (22.9%), DC (21.5%), Alabama (21.4%), Tennessee (21.3%), Mississippi (20.7%), and Texas (20.5%). Among males, proportions were highest in Alaska (41.8%) and lowest in North Dakota (18.6%); among females, proportions were highest in Alaska (26.0%) and lowest in South Dakota (6.3%). Within states/areas, racial/ethnic differences in premature death were similar to those observed overall.

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**CDC Editorial Note:** In 2001, approximately 17% of all deaths from heart disease occurred among persons aged <65 years; these deaths occurred disproportionately among certain racial/ethnic minority populations, and demographic

and geographic disparities also persisted. The determinants of these disparities are not clear. Differences by sex might be attributed in part to the cardioprotective effects of estrogen in pre- and perimenopausal women.<sup>4</sup> Specific racial/ethnic variations might reflect differences in demographics, risk factors for heart disease, access to medical and emergency care, or other factors. For example, in the United States, the prevalence of obesity and diabetes is higher for blacks and AI/ANs than whites.<sup>5</sup> The prevalence of cigarette smoking for AI/ANs is nearly double that for whites.<sup>5</sup> Blacks have a higher prevalence of high blood pressure than whites,<sup>5–7</sup> and Hispanics are less likely than whites to have their blood pressure checked,<sup>6</sup> to be aware of having high blood pressure,<sup>7</sup> or to be treated and controlled for high blood pressure.<sup>7</sup> In the United States, greater proportions of blacks, Hispanics, and AI/ANs than whites lack health-care coverage and cite cost as a barrier to obtaining health care.<sup>5</sup>

State variations probably reflect differences in demographics, lifestyles, and risk factors. Among the 10 areas with the highest proportions of premature death, those in the southeast also have high prevalence of high blood pressure,<sup>6</sup> smoking, physical inactivity, and obesity.<sup>8</sup> These risk factors are not as prevalent in DC and Hawaii, which suggests that other risk factors (e.g., dietary factors and elevated serum cholesterol) might be more dominant causes of premature death in those areas.

The findings in this report are subject to at least two limitations. First, underlying cause of death data are subject to errors in the certification of cause of death. Second, racial/ethnic populations have different proportions of persons at younger ages,<sup>9</sup> which might account for the different proportions of premature deaths. In 2001, approximately 86% of non-Hispanic whites were aged <65 years, compared with 92% of non-Hispanic blacks, 94% of AI/ANs, 92% of A/PIs, and 95% of Hispanics.<sup>1</sup> Although death rates vary by race/ethnicity, heart disease is the leading

cause of death for all racial/ethnic minority populations except A/Pis, for which it is the second leading cause of death.<sup>9</sup>

Risk factors for heart disease include high blood pressure, elevated serum cholesterol levels, smoking, diabetes, physical inactivity, and obesity. Premature death from heart disease can be reduced by preventing or treating these risk factors. Public health professionals should focus efforts on prevention and risk reduction at all ages, and particularly at younger ages among racial/ethnic minorities. Further analysis of state data should be conducted to identify county-level disparities, which might aid public health agencies in allocating resources more effectively. The proportion of deaths among persons aged <65 years and the high prevalence of the major risk factors in the general population underscore the need for aggressive public health efforts. Improved health promotion and primary and secondary prevention strategies are needed to decrease the burden of heart disease and eliminate health disparities in the population.

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## Heterosexual Transmission of HIV—29 States, 1999-2002

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2 figures, 1 table omitted

WORLDWIDE, THE MAJORITY OF HUMAN immunodeficiency virus (HIV) infections result from heterosexual transmission.<sup>1</sup> To characterize heterosexual transmission of HIV infections in the United States, CDC analyzed data for 1999-2002 from the 29 states\* that have met CDC standards<sup>2</sup> for name-based HIV/acquired immunodeficiency syndrome (AIDS) reporting for ≥4 years.† This report summarizes the results of that analysis, which indicated that heterosexually acquired HIV infections represented 35% of all new HIV cases; 64% of heterosexually acquired HIV infections occurred in females, and 74% occurred in non-Hispanic blacks. To decrease the number of new heterosexually acquired HIV infections, especially among certain minority populations, culturally targeted education and prevention programs should be provided, and barriers to HIV care and prevention services should be removed.

The analysis included persons aged ≥13 years with HIV; infections were categorized as either heterosexually acquired‡ or nonheterosexually acquired. Heterosexually acquired HIV infections were further categorized as diagnosed with AIDS (i.e., during the same calendar month) or diagnosed without AIDS. New diagnoses of HIV infections were examined for 1999-2002. Data were adjusted for reporting delays, and HIV-exposure data were adjusted for reclassification of cases initially reported with no mode of exposure into categories according to his-

torical patterns of reclassification.<sup>3</sup> CDC calculated confidence intervals (CIs), taking into account adjustments for reporting delays and reclassification to exposure categories, and variance estimates were derived from monthly data submissions to CDC.<sup>4</sup>

During 1999-2002, a total of 101,877 HIV infections were diagnosed in the 29 states and reported to CDC, including 36,084 (35%) acquired through heterosexual contact. Among states, the median prevalence of heterosexually acquired HIV infections was 27% (range: 13%-47%).

The proportion of females was greater among persons with heterosexually acquired HIV infections (64%; 23,205 of 36,084) than the proportion of females among persons exposed through injection-drug use, blood products, transfusions, and undetermined modes of exposure (36%; 6,661 of 18,732). Among age groups, prevalence for heterosexually acquired HIV infections was greatest (35%) among persons aged 30-39 years.

Non-Hispanic blacks accounted for 26,748 (74%) of persons with heterosexually acquired HIV infections. A total of 5,257 (15%) were non-Hispanic white; 3,498 (10%) were Hispanic; and <1% were Asian/Pacific Islander or American Indian/Alaska Native. By comparison, among persons with nonheterosexually acquired HIV infections, non-Hispanic blacks accounted for 29,607 (45%), and non-Hispanic whites accounted for 26,731 (41%). During 1999-2002, an overall increase in heterosexually acquired HIV infections from 8,925 (95% CI=8,606-9,243) in 1999 to 9,156 (95% CI=8,713-9,600) in 2002 was not statistically significant.

Among the 36,084 persons with heterosexually acquired HIV infections, 7,395 (20%) received a concurrent diagnosis of AIDS. Diagnosis of HIV/AIDS was more common among males (25%; 3,223 of 12,879) than among females (18%; 4,172 of 23,205).

Females accounted for 89% of heterosexually acquired HIV infections among persons aged 13-19 years. Fe-