Death Certification — Continued

Reported by: R Hanzlick, MD, Dept of Pathology and Laboratory Medicine, Emory Univ School of Medicine, Atlanta. Surveillance and Programs Br, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.

Editorial Note: Based on a meeting of experts cosponsored by CDC and the National Committee on Vital and Health Statistics in 1991, recommendations were developed for more accurate and consistent completion of DCs in physician-education programs (4). In particular, the recommendations suggested that, because most physicians are likely to certify only a small number of deaths, educational efforts should be aimed at physicians and institutions most likely to be pronouncing and certifying deaths. The findings in Fulton County characterize physicians and institutions involved in certifying deaths in a defined geographic area and may assist in the design of educational programs to increase the accuracy and completeness of DCs. In particular, these findings indicate that death-certification education efforts may be most effective if they are hospital based and targeted to all hospitals to reach appropriate PP certifiers and focus on the certification of inpatient deaths from natural causes. Because results from this study indicate that MECs certified nearly 20% of all deaths, education efforts for MECs could improve the accuracy and completeness of a substantial proportion of DCs.

Hospital-based efforts could include 1) training in death certification and registration before permanent or resident physician privileges are granted; 2) requiring physicians who certify the cause of death to complete approved training within a specified time after their first death certification; and 3) training a designated group of physicians to certify all deaths in the institution in consultation with the attending physician and after review of the medical record and other documents (5).

#### References

- 1. Kircher T. Autopsy and mortality statistics: making a difference. JAMA 1992;267:1264-8.
- 2. Hanzlick R, Parrish RG. The failure of death certificates to record the performance of autopsies [Letter]. JAMA 1993;269:47.
- 3. Hanzlick R. Improving accuracy of death certificates [Letter]. JAMA 1993;269:2850.
- 4. NCHS. Report of the second workshop on improving cause-of death statistics. (Virginia Beach, Virginia). Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, April 1991.
- 5. National Center for Health Statistics. Physician's handbook on medical certification of death. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, 1987; DHHS publication no. (PHS)87-1108.

## Current Trends

# Adult Blood Lead Epidemiology and Surveillance — United States, Second Quarter, 1993

Quarterly surveillance data from state-based Adult Blood Lead Epidemiology and Surveillance (ABLES) programs are reported for the second quarter of 1993. Previous quarterly summaries included multiple reports for persons received during the quarter (e.g., reflecting follow-up or repeat blood specimens). Counts of persons now exclude such multiple reports and report the highest blood lead level (BLL) obtained

Lead Epidemiology and Surveillance — Continued

during the reporting period. These data provide a better estimate of the number of persons with elevated BLLs in the system and assist with targeted prevention efforts.

Reported by: B Harrell, MPA, Div of Epidemiology, CH Woernle, MD, State Epidemiologist, Alabama Dept of Public Health. N Peterson, MS, C Fowler, MS, Arizona Dept of Health Svcs. A Osorio, MD, S Payne, MS, Occupational Health Surveillance and Evaluation Program, California Dept of Health Svcs. CJ Dupuy, MS, B Jung, MPH, Connecticut State Dept of Health Svcs. M Lehnherr, Occupational Disease Registry; H Howe, PhD, Div of Epidemiologic Studies, Illinois Dept of Public Health. K Choquette, MS, R Currier, DVM, S Jones, MPH, LA Wintermeyer, MD, State Epidemiologist, Iowa Dept of Public Health. E Coe, MPH, K Laranjani, MD, S DeSilva, MD, Health Registries Div, Maryland Dept of the Environment. R Rabin, MSPH, Div of Occupational Hygiene, Massachusetts Dept of Labor and Industries. P Dunbar, MPH, Bur of Child and Family Svcs, Michigan Dept of Public Health. T Ferrara, MD, D Solet, PhD, K Royce, Occupational Health Program, Bur of Risk Assessment, Div of Public Health Svcs, New Hampshire State Dept of Health and Human Svcs. B Gerwel, MD, D Valiante, R Ramaprasad, MS, Occupational Disease Prevention Program, New Jersey State Dept of Health. R Stone, PhD, New York State Health Dept. M Barnett, MS, State Health Div, Oregon Dept of Human Resources. J Gosten, MS, Occupational Health Program, Div of Environmental Health, Pennsylvania Dept of Health. R Marino, MD, A Gardner, Div of Health Hazard Evaluations, South Carolina Dept of Health and Environmental Control. T Willis, D Salzman, DM Perrotta, PhD, Environmental Epidemiologist, Texas Dept of Health. D Beaudoin, MD, G Thompson, Bur of Epidemiology, Utah Dept of Health. L Hanrahan, MS, P Sarow, Div of Health, Wisconsin Dept of Health and Social Svcs. Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

TABLE 1. Reports of elevated blood lead levels (BLLs) in adults — 20 states,\* second quarter, 1993

Reported BLL (μg/dL)	Second quarter, 1993		Cumulative	Cumulative
	No. reports	No. persons	reports, 1993 <sup>†</sup>	reports, 1992§
25-39	4,053	1,975	19,332	15,279
40-49	1,061	442	5,349	4,288
50-59	257	120	1,346	1,289
≥60	161	77	746	585
Total	5,532	2,614	26,773	21,441

<sup>\*</sup>Alabama, Arizona, California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, and Wisconsin.

#### Notice to Readers

#### Update: Polio Eradication — the Americas, 1993

On September 7, 1993, the Pan American Health Organization (PAHO) announced that 2 years have elapsed since the occurrence of the last case of poliomyelitis associated with wild poliovirus isolation in the Americas (Peru, August 1991). This achievement is a milestone in the global eradication of poliomyelitis. The only

<sup>&</sup>lt;sup>†</sup>Cumulative totals for 1993 reflect first-quarter data from 16 states (Alabama, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, South Carolina, Texas, Utah, Vermont, and Wisconsin) and second-quarter data from 20 states.

<sup>§</sup>Cumulative totals for 1992 reflect first- and second-quarter data from 12 states (Alabama, California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, New Jersey, New York, Oregon, Texas, and Wisconsin).





MORBIDITY AND MORTALITY WEEKLY REPORT

- 669 Physical Activity and the Prevention of Coronary Heart Disease
- 672 Handwashing and Glove Use
- in a Long-Term-Care Facility675 Alcohol Use and Aquatic Activities
- 683 Characteristics of Death Certifiers and Institutions Where Death is Pronounced
- Fulton County, Georgia, 1991Adult Blood Lead Epidemiology and
- Surveillance
- 685 Notices to Readers

### Effectiveness in Disease and Injury Prevention

# Public Health Focus: Physical Activity and the Prevention of Coronary Heart Disease

Coronary heart disease (CHD) is the leading cause of mortality in the United States: each year, CHD is newly diagnosed in approximately 1.5 million persons and accounts for an estimated \$47 billion in direct and indirect health-care costs (1). Multiple risk factors associated with CHD include genetic susceptibility, elevated serum cholesterol, low levels of high-density lipoprotein cholesterol, cigarette smoking, uncontrolled hypertension, obesity, diabetes mellitus, and physical inactivity (2). This report summarizes information about the potential efficacy and cost-effectiveness of physical activity promotion as a strategy for preventing CHD.

### **Efficacy and Attributable Risk**

Mild to moderate levels of physical activity (e.g., walking, gardening, yardwork, and dancing) can help prevent CHD. In 1987, a review of 43 epidemiologic studies concluded that moderate to vigorous physical activity reduces risk for CHD (3). Two thirds of the studies documented a substantial inverse relation between physical activity and risk for CHD. In addition, the risk for CHD was increased nearly twofold for persons who were physically inactive (relative risk=1.9; 95% confidence interval=1.4–2.5), a level comparable to the relative risks associated with increased systolic blood pressure (2.1), cigarette smoking (2.5), and elevated serum cholesterol (2.4) (4). A subsequent meta-analysis (5) and results from other longitudinal studies (6) support the role of physical inactivity as a strong and independent risk factor for CHD.

Based on a national survey in 1985, 56% of men and 61% of women in the United States either never or irregularly engaged in physical activity (7). Specifically, 25% of men and 30% of women reported no leisure-time physical activity during the preceding month, and an additional 31% of men and women reported irregular physical activity. Of the 36% of men and 32% of women who were regularly active during leisure time, 8% of the men and 7% of the women reported participating in vigorous and intense activity (7).

An estimate of the population-attributable risk for CHD mortality associated with physical inactivity among a selected group of men from 1977 through 1985 was