

NHTSA and CDC Team Up To Study Injury

The high incidence of injuries caused by traffic accidents prompted NHTSA's involvement in the Centers for Disease Control program

Injury is the primary cause of death and disability of children and young adults in the United States. It is estimated that costs of up to \$100 billion were incurred in 1984 by 140,000 deaths caused by injury and 70 million nonfatal injuries. More work years are lost to injury than to any other health problem. Despite this loss, injury is not recognized by the public as a major health problem and has consistently received considerably less federal research funding than have other health problems, such as cancer and heart disease (Figure 1).

Pilot Program

In 1985 the National Academy of Sciences Committee on Trauma Research recommended a three-year pilot program of research on injury epidemiology, injury prevention, injury biomechanics, acute care, and rehabilitation. This project, which featured the creation of the Division of Injury Epidemiology and Control (DIEC) within the Centers for Disease Control (CDC, an agency of the Department of Health and Human Services), was funded in an unusual manner: primary funding came from NHTSA and secondary funding from CDC general appropriations. NHTSA's involvement was a logical outgrowth of the high percentage of injuries caused

by traffic accidents, but the wide applications of the planned research and the contrasting research styles of NHTSA and DIEC (task-specific versus basic) were considered sufficient reasons to give CDC control of the project. Original funding was set at \$10 million per year for three years, although changes were later introduced (Table 1).

TABLE 1 DIEC Budget During Pilot Program

Source	Funds (\$ millions)		
	1986	1987	1988
NHTSA	10.0	10.0	6.5
DHHS	—	—	1.4
CDC	1.3	1.3	1.4

Research Strategy

DIEC's initial research strategy focused on epidemiology, surveillance, data analysis, and documentation as necessary elements in the foundation of the planned national injury control program. Another major portion of the organization's efforts involved extramural grants. Because of the program's three-year pilot status, a single round of applications for three-year grants was solicited. These grants were of two types: awards for Injury Prevention Research Centers, defined as "units in academic institutions that would work toward an interdisciplinary approach to the injury problem," and subsidies for investiga-

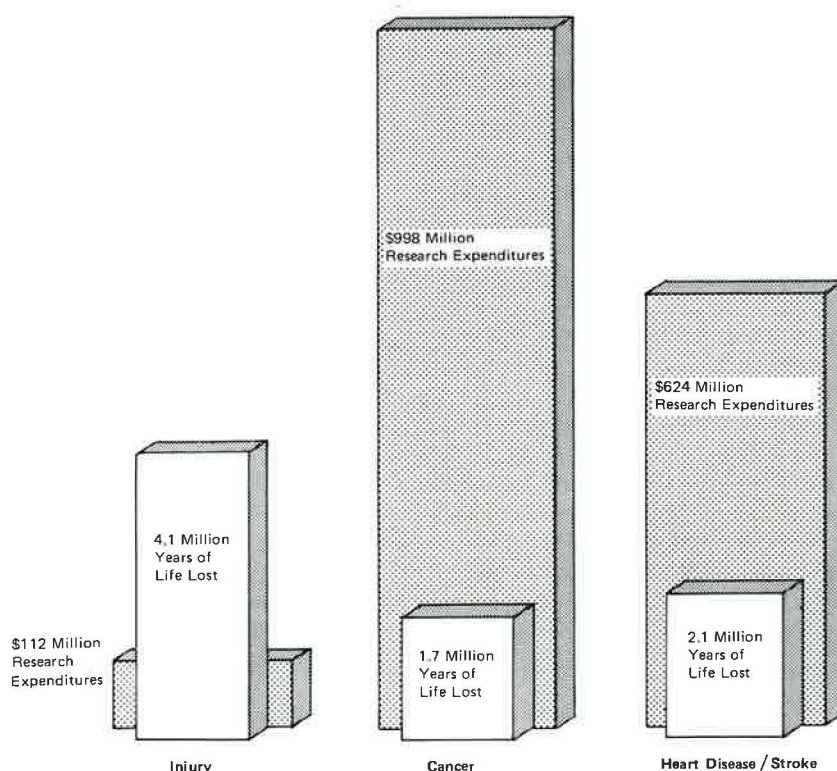


FIGURE 1 Years of life lost (before retirement) and federal research expenditures for major causes of death in the United States (reprinted with permission from Injury Control, © 1988 by the National Academy of Sciences, Washington, D.C.).

tor-initiated R&D projects. The number of proposals received (39 for centers and 381 for R&D projects) far exceeded expectations. After peer review and secondary review by NHTSA and CDC staff, grants were awarded to 4 Injury Prevention Research Centers (see box) and 31 R&D projects.

The DIEC intramural research, development, and outreach programs were equally active. Several of these projects, such as international efforts to revise injury codes, are particularly important to highway transportation. The proposed changes in the injury code not only would improve the accuracy of records kept on the type, number, and severity of crash-related injuries but also would allow better comparative studies of specific types of injuries and improve the capability to conduct studies of countermeasure effectiveness. DIEC also stressed the need for standardized trauma registries for each state.

Program Review

The NAS was asked to review the pilot program in 1987. The review committee commended the project's accomplishments and noted that although there were certain deficiencies, most of them could be attributed to "extremely limited resources." Specific changes recommended by the committee included the following:

- Yearly grant solicitations;
- Addition of biomechanics, acute care, and rehabilitation to the original slate of epidemiology, biometrics, and program development;
- Increased emphasis on trauma systems and treatment in the extramural program;
- Formation of an advisory council to guide the CDC injury control unit in addressing policy issues and identifying research needs;

- Organization of DIEC as an institute within CDC (analogous to the CDC National Institute for Occupational Health);

- Provision of sufficient funding on a continuing basis through DHHS, with joint funding for interagency projects, such as those of interest to NHTSA; and

- Review of the injury control program every three to five years.

Congress and DHHS consider the completed three-year pilot program to have been a success. The program is now funded through DHHS at \$20 million per year. NHTSA has contributed \$1.75 million for biomechanics projects in 1989. Although NHTSA no longer has formal authority over half of the grant program, DIEC and NHTSA will continue to work together on injury control programs for vehicle crash injuries.

In spring 1989 CDC provided some \$15 million in injury control grants and contracts. Of this amount, \$4.5 million is meant to fund as many as nine Injury Prevention Research Centers, and \$5.9 million will be used to underwrite 30 to 40 R&D projects. Another \$4 million will be used to help as many as 15 state and large city governments to build health agency capabilities in injury surveillance, prevention, and control, and the balance is dedicated to supporting 5 to 7 model nonfatal accident surveillance demonstration programs of state public agencies. Proposals were received in mid-June, and awards are expected in September.

For more information on the Injury Prevention Research Program, contact either Arthur Schletty, Deputy Director, Division of Injury Epidemiology and Control, Centers for Disease Control, Room 1076, 2858 Woodcock Blvd., Atlanta, Georgia 30341 (telephone 404-488-4690) or Lou Lombardo, National Highway Traffic Safety Administration, NRD-10, Washington, D.C. 20590 (telephone 202-366-4862).

Injury Prevention Research Centers

New England Injury Prevention Research Center, Boston, Massachusetts

Participants Harvard schools of Public Health, Medicine, and Government; Boston University School of Medicine and College of Engineering; Massachusetts Department of Public Health; The Educational Development Center, Inc.

Emphasis Injury prevention among children, youths, and young adults, including unintentional childhood injuries, violence and intentional injuries to youths, and motor vehicle-related accidents of youths.

Neural Trauma Research Center, Detroit, Michigan

Participants Wayne State University: Bioengineering Program, Neuroscience Program of the School of Medicine, departments of Community Medicine, Rehabilitation Medicine, and Neurosurgery.

Emphasis Neural injury; coordinating expertise in biomechanics, neurophysiology, neuropharmacology, and rehabilitative psychology.

Harborview Injury Prevention Center, Seattle, Washington

Participants University of Washington: Harborview Medical Center, School of Public Health and Medicine.

Emphasis Trauma care, research and research training, community injury control, rehabilitation research and training, and injury prevention.

University of North Carolina Injury Prevention Research Center, Chapel Hill

Participants University of North Carolina: Highway Safety Research Center, Center for Health Promotion and Disease Prevention, schools of Public Health and Medicine.

Emphasis Traffic and other injuries; injury research, training, and dissemination programs.