

ACCIDENT PREVENTION ACTIVITIES OF THE PUBLIC HEALTH SERVICE

IN 1946, as its first step in the area of accident prevention, the Public Health Service provided checklists to local health department nurses and inspectors to alert housewives to the principal accident hazards in their homes. In the 20 years since, accident prevention has developed in the Service into a medically oriented program concerned with what is now recognized to be a major health problem.

In 1961, the Bureau of State Services of the Public Health Service established the Division of Accident Prevention for administering the program. This month, with Dr. Paul V. Joliet as chief, the division marks its fifth anniversary with renewed effort. Basically, it seeks to reduce the incidence of accidental deaths and injuries and to minimize the consequences of injuries if they occur.

The division has a staff of 153; of this number, 51 are working in regional offices or are assigned to 27 State and territorial health departments to assist in developing programs on accident prevention.

In Washington, D.C., the division maintains a clearinghouse for technical information to support the efforts of 540 poison control centers throughout the country serving physicians dealing with the ingestion of harmful substances; a community services program concerned with prevention of motor vehicle, home, and recreational injuries; an emergency medical services program to improve the quality and availability of ambulance and other emergency care; and an educational program in injury control techniques for workers in public health. The division conducts intramural and contract research related to its programs, and supports, through grants, research concerned with the prevention of accidental injuries. It also provides train-

ing grants that support graduate and post-graduate fellowships in the field of injury control.

Accidental injuries, with subsequent deaths and disabilities, constitute a public health problem of vast proportions. The magnitude is reflected in the following statistics: Accidental injuries rank first in the United States as the cause of death between ages 1 and 35 and fourth as the cause of death (after heart diseases, cancer, and stroke) in all age groups. Each year in the United States, accidents injure 50 million and kill 100,000 persons. Patients injured in accidents occupy 65,000 hospital beds at any given time and require care by 88,000 hospital employees.

The late Dr. Joseph Mountin, as chief of the Bureau of State Services, pioneered in this field of public health. Shortly after World War II, he asked Dr. A. L. Chapman, who in 1961 became the first chief of the Division of Accident Prevention, to take over accident prevention activities in the old States Relations Division. At the end of the forties, the environmental aspects of accidents were heavily emphasized in public health, and the activities were transferred to the Division of Sanitation. In 1949, five people handled the accident prevention activities.

In 1956, Cornell University Medical College received the first Public Health Service grant to conduct research on automotive crash injuries, and for some time Cornell remained the only grantee in this field. Today, in contrast, there are more than 50 active research projects in accident prevention work (fig. 1).

By 1957, increasing attention was focused on the human factors associated with the causation of accidents, and the activities were placed under medical leadership in the newly created Division of Special Health Services. Then in February 1961, after being but a small part of other divisions, the activities concerned with

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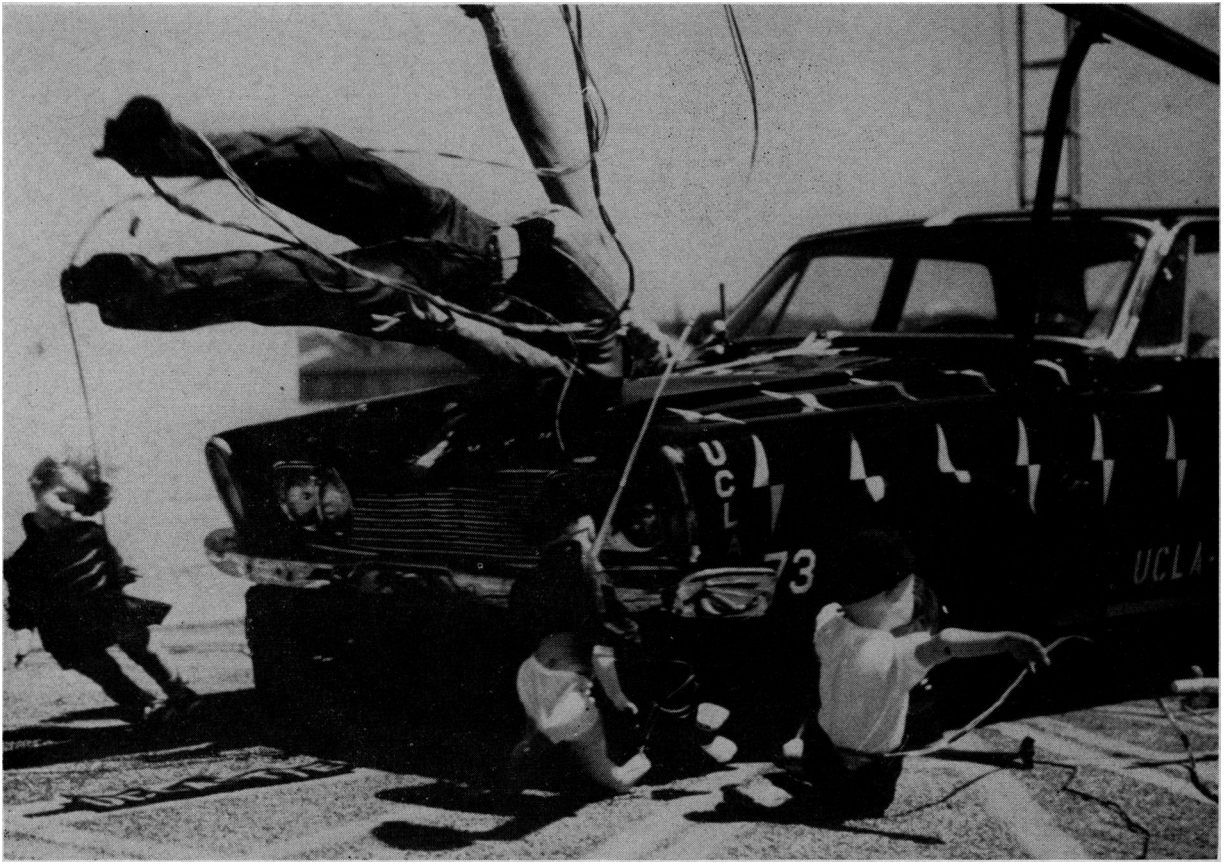


Figure 1. Lifelike dummies, simulating a man and three children, are hit during a 30-mph auto-pedestrian collision research test at the University of California, Los Angeles

the control of trauma gained divisional status, and the Division of Accident Prevention was created to administer the work.

Perhaps the most important achievements by the Public Health Service to date in the field of accident prevention are the establishment of productive research activities in injury control and the welding of accident prevention research and program services into a cohesive operation. Directed research also has contributed substantially to the techniques and control measures now used by public health agencies (fig. 2).

Equally significant are the applications of new knowledge in accident prevention developed through research grants. For example, the potential of seat belts for reducing injuries and preventing deaths was established by research supported in part by the Public Health Service. Subsequently, the Service joined with the American Medical Association and the Na-

tional Safety Council in a public education program. Both the acceptance and the availability of seat belts in the United States have been greatly expanded as a result of this program.

Through its research, assistance to State and local health departments, liaison with industry, and public education programs, the Division of Accident Prevention has helped to eliminate numerous environmental hazards connected with motor vehicles and in homes and such public places as schools and recreation areas.

The division's poison control activities are aimed at reducing the 2,000 deaths a year caused by accidental poisoning and the 500,000 or more ingestions of poisonous materials each year by children. Its educational program in poison control exemplifies effective cooperative action with other Federal agencies, the drug industries, and the schools.

In 1 year the National Clearinghouse for Poison Control Centers, operated within the division, reviews a total of 70,000 case reports of accidental poisoning. From these reports and many other sources, the clearinghouse derives technical information that is used by the Food and Drug Administration, the Department of Agriculture, the Communicable Disease Center of the Service, and thousands of physicians concerned with the treatment of poisoning cases. In the near future the division plans to automate the processing and retrieval of information on poison control.

Vital to effective health-oriented programs in accident prevention is a professionally competent force of qualified specialists in State and local health departments. One of the important activities of the Division of Accident Prevention is providing orientation and training

of professional health workers in the principles of injury control. Through intensive short courses and seminars, more than 10,000 State and local health department employees have received professional training in the fundamentals of injury prevention.

One of the most promising areas for accomplishment in accident prevention is the provision of emergency medical services required by persons injured in accidents or afflicted with sudden illnesses. In most U.S. communities today, such services are grossly inadequate. Through its emergency medical services program, the division assists States in the improvement of onsite emergency care, safe and expeditious transportation of the injured, and followup of medical care in hospital emergency units.

For long-range benefits, the existing services

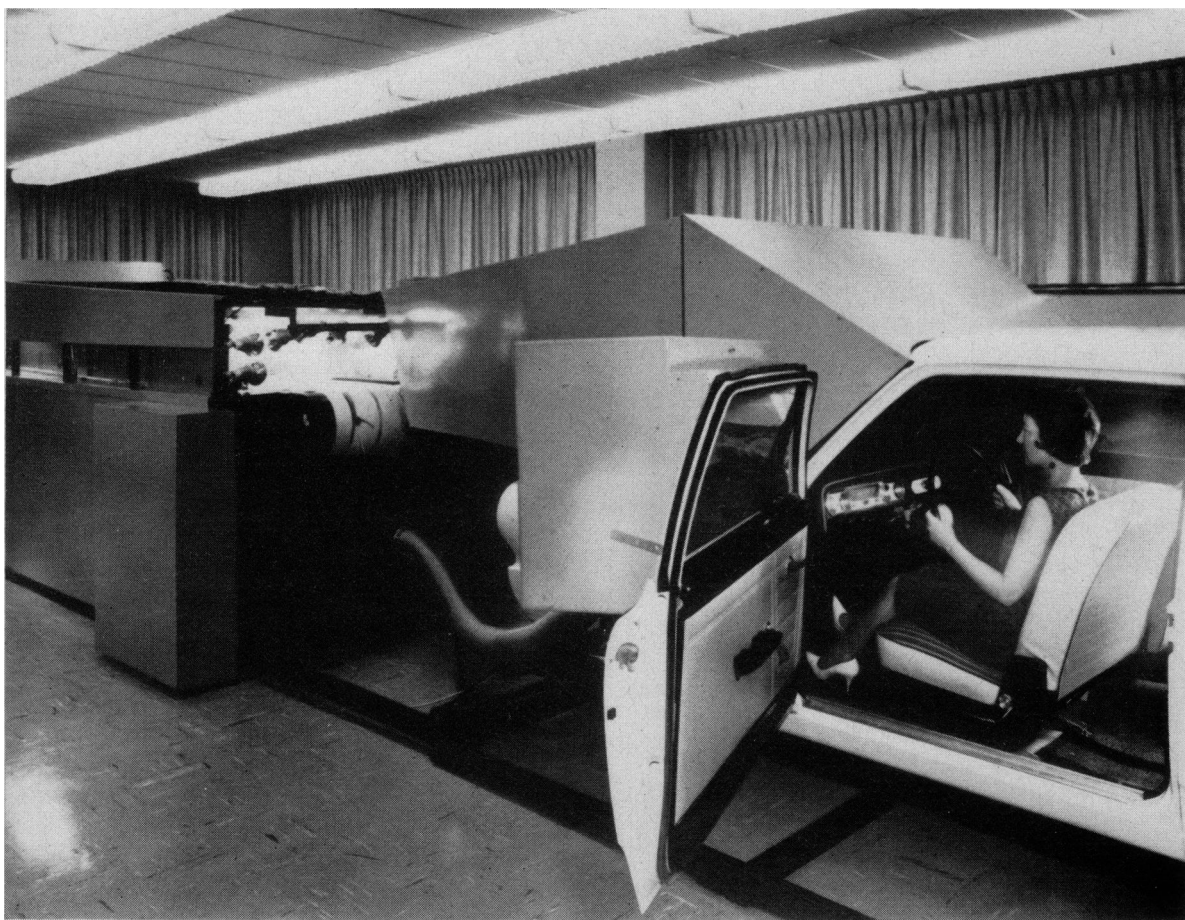


Figure 2. The actions of automobile drivers will be tested by the Public Health Service in this part-task driving simulator



Figure 3. A doll, struck against a glass door, illustrates the hazards of ordinary glass doors in modern homes

in many localities will need to be completely overhauled. The division's immediate objective is to bring much-needed professional medical supervision to these services. Initial steps include assessments of the status of emergency medical services in each State and upgrading the skills of ambulance attendants. The Division of Accident Prevention is proceeding concurrently with evaluations of emergency medical services and support for improving the skills of personnel in these services.

Injuries from burns create a special problem in accident prevention because of complications rooted in the financing of extremely expensive care, the establishment of highly specialized facilities required for saving the lives of victims of severe burns, and the need for improved therapeutic measures. The division is increasing its efforts in this area.

To prevent or minimize burn injuries, the division encourages the production and use of flame-retardant fabrics. Its community services program moved promptly in taking advantage of advanced technology in this field by stimulating the early experimental use of flame-retardant fabrics in night clothing for young children and elderly persons, and for bedding and other uses in nursing homes.

An important phase of the division's efforts to reduce the 20 million injuries that occur annually in home accidents is its assistance to industries concerned with the design and production of various types of consumer products. Included are such items as power lawnmowers, glass doors and panels used in homes and buildings, and refrigerators or other appliances in which children might be trapped (fig. 3).

For specific types of injuries, patterns of

occurrence are identified through epidemiologic investigations and surveillance over the accident spectrum. Surveillance teams of trained epidemiologic investigators in the field—the first such team was formed in Denver in 1965—will help the division increase its capabilities for prompt identification of injury causes. Early findings, for instance, showed that motorcycle accidents and carbon monoxide poisoning in camping trailers accounted for substantially more injuries than had been suspected.

The broad problem of accidental injuries remains a great challenge to the health professions and is being given increased recognition by professionals in many branches of public health. Effective control requires the skills of many disciplines and professional specialties. The health

professions are faced by an educational task of great magnitude which must be a part of comprehensive program services in injury prevention.

Under Secretary of Health, Education, and Welfare Wilbur J. Cohen, in April 1963, forcefully stated to the House Subcommittee on Public Health and Safety: "The history of the advancement of medical science illustrates over and over that the major obstacle to progress has often been a tendency to regard the problem—whatever it is—as unconquerable. . . . This has been the case with accidents. . . . On the basis of our admittedly brief experience in treating accidents as a health problem we know that many, and probably most . . . accidental deaths and injuries can be prevented."

Ipecac Syrup To Be Sold Without Prescription

Ipecac syrup in small quantities will be sold without prescription to make it readily available for first aid use, under medical supervision, to induce vomiting in certain kinds of poisoning.

In January 1964 the Food and Drug Administration restricted ipecac syrup to prescription labeling because of reports of adverse effects when used for therapeutic purposes without medical supervision. Further information and medical opinions showed the need for an exception from that requirement to make the product easily available as a first aid measure.

The FDA stated that the syrup may be sold without prescription if it is packaged in 1-fluid ounce containers with labels bearing, along

with other required information, the following in a prominent and conspicuous manner.

1. A statement conspicuously boxed and in red letters: "For emergency use to cause vomiting in poisoning. Before using, call physician, the Poison Control Center, or hospital emergency room immediately for advice."

2. A warning: "Warning—Keep out of reach of children. Do not use in unconscious persons. Ordinarily this drug should not be used if strychnine, corrosives such as alkalis (lye) and strong acids, or petroleum distillates such as kerosene, gasoline, coal oil, fuel oil, paint thinner, or cleaning fluid have been ingested."

3. Usual dosage: 1 tablespoon (15 milliliters) in persons over 1 year of age.