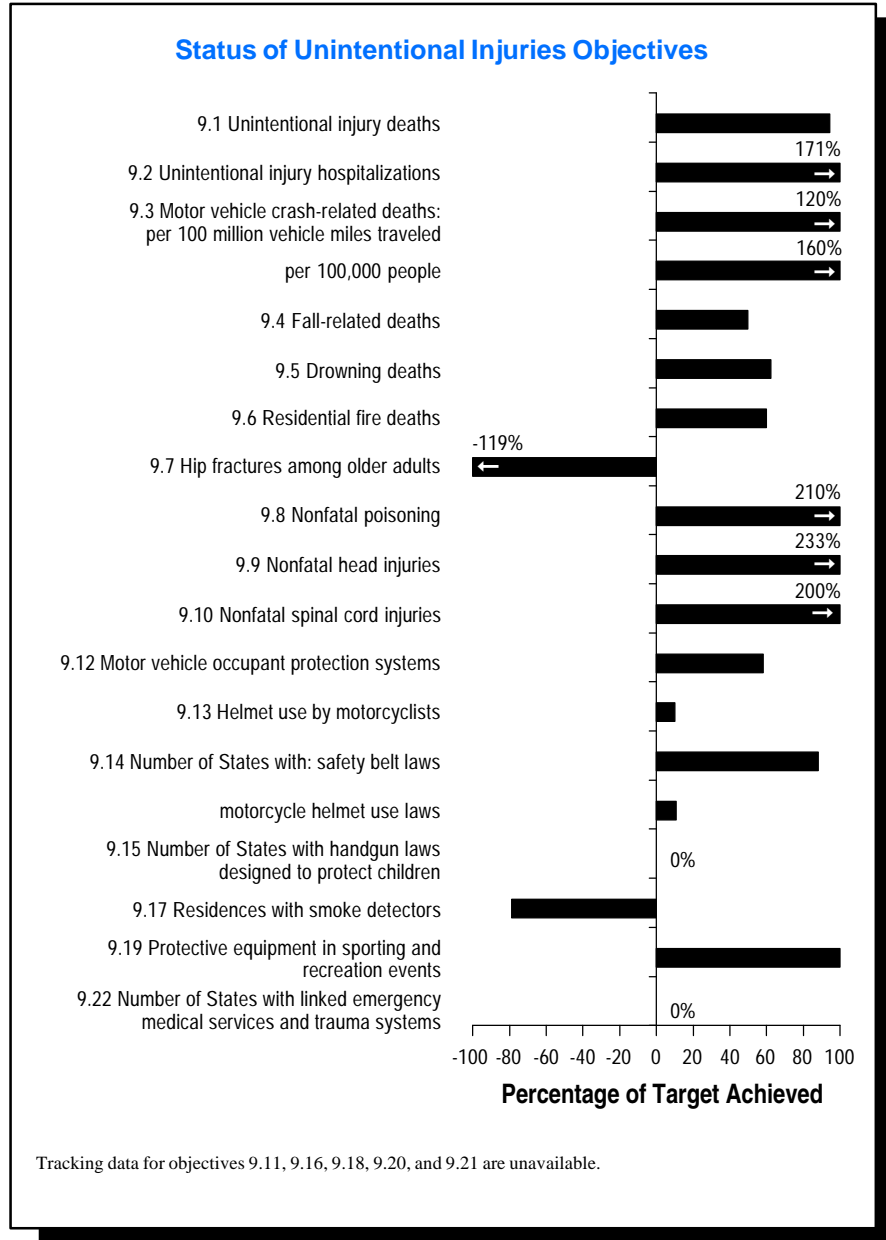


9

Unintentional Injuries



Lead Agency: *Centers for Disease Control and Prevention*

UNINTENTIONAL INJURIES

In 1992 injuries cost \$399 billion in the United States. Included in this figure are lost wages, medical expenses, motor vehicle damage, fire losses, and administrative costs of police, lawyers, and insurers. The National Safety Council estimates that motor vehicle crashes account for 39 percent of these costs; work-related injuries, 29 percent; home injuries, 21 percent; the remaining 11 percent occur at various sites. The opportunities are at hand to prevent the more than 86,000 injury deaths and the suffering that accompanies the more than 145,000 injuries that occur each year.

Most injury research focuses on fatalities because of the availability of data. However, data are needed on the causes and outcomes of both fatal and nonfatal injuries in order to present a complete picture of the extent of the injury problem in the United States. There is inadequate surveillance on injury morbidity, disability, and costs to identify injury risk factors and to evaluate injury prevention programs. Linkage of databases is one promising method of using existing data for research, planning, and evaluation.

Review of Progress

The year 2000 target for reducing unintentional injury deaths was reached in 1993 with 29.2 deaths per 100,000 population. Now the challenge is maintaining that accomplishment. Decreases in unintentional injury hospitalizations per 100,000 have exceeded the target. In part these successes are due to the reductions that have occurred in motor vehicle crash-related deaths and the declining rates of injuries from falls, drowning, fires, and poisonings.

Between 1987 and 1993, there was an overall decline of 13.5 percent in the number of motor vehicle traffic fatalities. The decrease for young people has been even greater—with the rate for children aged 14 and under declining by 15.9 percent and that for people aged 15–24 by 27.2 percent. The growth in vehicle miles traveled continues to outpace the increase in fatalities. Between 1966 and 1993 there was some year-to-year fluctuation in the motor vehicle fatality rate per 100,000 population, but the overall trend has been downward, with a reduction in rate from 19.1 in 1987 to 15.6 in 1993. Part of this success can be attributed to increased use of motor vehicle occupant protection systems—up 56 percent from the baseline. By the end of 1994, 48 States, the District of Columbia, and Puerto Rico had safety belt use laws, and all States had some form of child safety seat law.

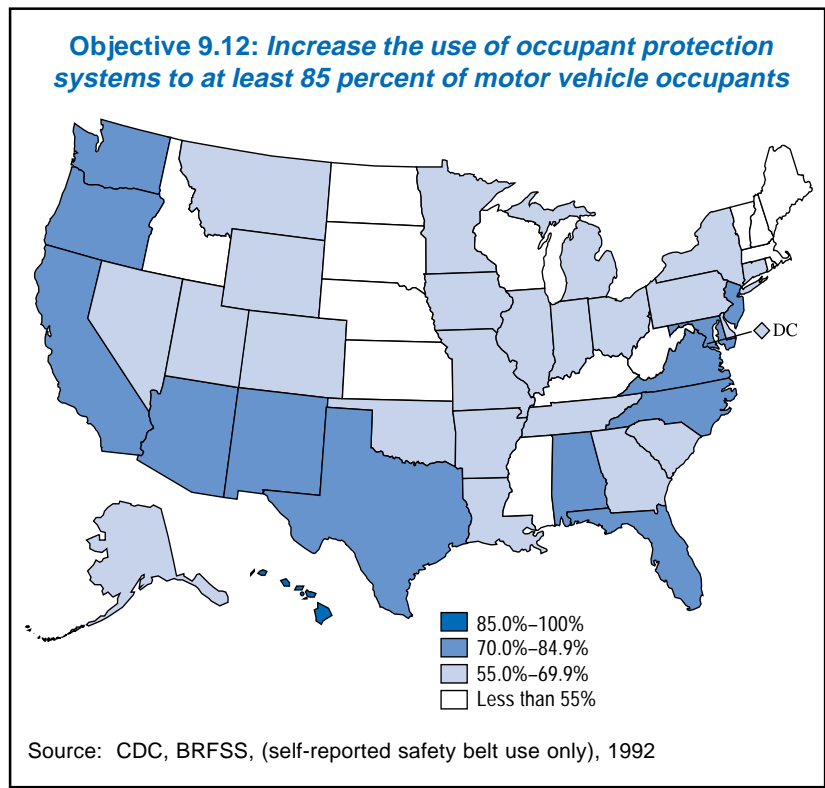
Only Hawaii has reached the year 2000 target for 85 percent use of safety belts in 1993 based on self-reports in the Behavioral Risk Factor Surveillance System. The number of States with motorcycle helmet use laws totaled 25 in 1994. There has been some slight improvement in the use of helmets by motorcyclists—from 60 to 62 percent; but the use of helmets by bicyclists—estimated at 5–10 percent—shows little change from the 8 percent baseline.

A number of objectives are proceeding toward the target. Fall-related deaths (age-adjusted) reached 2.5 per 100,000 population in 1992. Drowning deaths (age-adjusted) declined to 1.6 per 100,000 population in 1992. Residential fire deaths (age-adjusted) were 1.4 per 100,000 population in 1992. Nonfatal poisonings decreased to 66 per 100,000 population in 1993 and have exceeded the year 2000 target. Similarly, nonfatal head injuries declined to 90 per 100,000 population in 1993, lower than the year 2000 target. Nonfatal spinal cord injuries declined to 4.7 per 100,000 population in 1993, passing the year 2000 target.

Hip fractures among older adults have increased and are moving away from the year 2000 target. In 1993 the rate of hip fractures had increased to 841 per 100,000 people over the age 65. Primary care providers can help prevent injuries by routinely inquiring and counseling patients about their activities at home and in automobiles. Yet a 1992 Primary Care Provider Survey showed that the percent of clinicians routinely inquiring or counseling about these matters was generally low. Among nurse practitioners 15 percent reported that they routinely inquired and 17 percent routinely advised older adults (65 years and older) on the prevention of falls at home; family physicians, 7 percent and 15 percent respectively; and internists, 10 percent and 17 percent.

Among pediatricians, 45 percent reported that they routinely inquire about safety belt/child seat use, while 58 percent reported that they routinely advised patients about safety belts/child seats. The findings for other providers were: nurse practitioners, 29 percent and 32 percent; pediatricians and family physicians, 16 percent and 29 percent respectively; and obstetricians/ gynecologists, 6 percent and 18 percent.

The number of States with handgun design laws to protect children remains at zero. The number of residences with at least one functional smoke detector on each habitable floor appears to have declined between 1989 and 1993. However, comparability of baseline and current data suggest that such conclusions be drawn with some degree of caution. No national data currently are available to track the objectives on the incidence of secondary conditions associated



with head and spinal cord injuries; injury prevention instruction in schools; fire suppression sprinkler installation; or the number of States with design standards for roadway safety. The language of some of these objectives was modified to make them more trackable.

1995 Revisions

Three new objectives have been added to this priority area. One seeks to increase the number of States that require cyclists to use bicycle helmets. As of 1994, nine States required helmets for bicycle riders. The second is a new objective in the Violence and Abusive Behavior priority area being added as a shared objective in Unintentional Injuries. This new objective seeks to enact laws in 50 States requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors. No States had such laws in place in 1994. The third objective added seeks the requirement of graduated driver licensing systems (learner's permit, intermediate license, and full license) in all 50 States. In 1994, 26 States had graduated licensing systems.

Special population targets have been added to several objectives: Mexican-American males to objective 9.1 to reduce high unintentional injury death rates; black males to objective 9.2 to reduce rates of hospitalization for nonfatal unintentional injuries; Mexican Americans to objective 9.3 to reduce high rates of motor vehicle crash deaths; American Indians/Alaska Natives to reduce deaths from falls and fall-related injuries, from drownings, and fires; and American Indians/Alaska Natives and Puerto Ricans to objective 9.6 to reduce residential fire deaths.

The year 2000 targets for objective 9.3 and the special population targets for children and youth were revised to be more challenging. The baseline and target revisions for American Indians/Alaska Natives have been expanded to include all American Indians/Alaska Natives, not just those living in Reservation States. Objective 4.1, to reduce fatal motor vehicle crash deaths that involve alcohol, is being added as a shared objective to this priority area.

The language in objective 9.11 was amended to be more focused. Similarly, objective 9.12 puts specific attention on safety belt and appropriate child safety restraint use. Further action is needed at the Federal, State, and local levels to increase use rates of both safety belts and child restraint systems. Because the 1993 Federal Motor Vehicle Safety Standard requires inflatable restraints (air bags) in the front seat driver and passenger positions of new passenger cars and light trucks sold in the United States, the language on occupant protection systems related to inflatable safety restraints has been dropped. By the year 2000, the phased-in requirement of this standard will cover 100 percent of all new light vehicles. As older vehicles are replaced by new vehicles, in time, all light vehicles in use will be equipped with inflatable restraints.

A new special population target has been established for use of child restraint systems among children aged 4 and younger involved in potentially fatal crashes. The 1988 baseline for this new subobjective shows that less than half of the children in this age group (48 percent) were in child safety seats.

Language changes were made to objective 9.14, adding the word universal to modify helmet, and covering adults as well as minors. Head injury due to motorcycle crashes is a problem for all people regardless of age or seating position. Laws governing all motorcycle occupants significantly increase helmet use and are more easily enforced than age-specific laws. The National Highway Traffic Safety Administration's latest survey (November 1991) indicated that helmet use was nearly 100 percent at sites with helmet use laws governing all motorcycle riders compared with only 34–54 percent at sites with no helmet use laws or laws limited to minors. Data on crashes in States where only minors are required to wear helmets show that fewer than 40 percent of the fatally injured minors were wearing helmets.

In objective 9.20, the target has been revised from 30 to 50 States since the Federal Highway Administration will revise the Manual on Uniform Traffic Control Devices by 1997. The revisions will address the need to improve visual stimuli and safety for older drivers and pedestrians. Minimum levels will be established for retro-reflectivity of highway signs and pavement markings, thereby improving the safety of the roadways.

