

**Epidemiologic Evidence and Motor Vehicle Policy Making.** C. W. Runyan and J. A. Earp, *American Journal of Public Health*, 1985, 75(4), 354-357.

After being randomly assigned to receive policy effectiveness information expressed as attributable benefit, attributable risk, or relative risk, 318 graduate students were asked to indicate their preferences for the current voluntary seat belt use policy, a mandatory seat belt policy, or mandatory passive restraints. A control group received no data. Exposure to effectiveness information (any type) was significantly associated with favoring either mandatory seat belts or passive restraints over the current policy. Those exposed to attributable benefit or risk data were more apt to make preregulatory choices than subjects exposed to relative risk data. Attitudes toward government regulation and specific views about personal freedom and policy effectiveness were also found to be significant predictors of policy preference.

**Head and Neck Injuries to Motorcycle and Moped Riders—With Special Regard to the Effect of Protective Helmets.** K. Peter and G. Krantz, *Injury*, 1985, 16(4), 253-258.

In a consecutive series of 132 motorcycle and moped riders killed in 1977-1983 in southern Sweden and examined post mortem, almost half of the fatal injuries of the head and neck occurred remote from the point of impact, namely certain intracranial injuries without fractures, ring fractures of the base of the skull, disruption of the junction of the head and neck and injuries of the cervical spine. Ring fractures of the base of the skull were noticeably more frequent in motorcyclists than in car occupants who died. Injuries occurring remote from the point of impact were often the result of impacts against the anterior part of the head, especially against the face. All 5 riders suffering disruption of the junction of the head and neck were helmeted, which suggests that the helmet may promote such injuries. In some of the cases, no sign of impact against the head could be detected. The inertia of the head, enhanced by the helmet, is supposed to contribute to some of these injuries, which calls into question the protection provided by the helmet.

Fatal head injuries at the point of impact were mostly found on the lateral-posterior part of the head. These injuries were often irrespective of whether or not a helmet was used. The points of impact were found mainly rung around the head. Protective helmets should be improved in order to give better protection against injuries at the site of impact, especially in the above-mentioned area to give better protection of the face and to increase energy-absorbing capacity. Concomitant with these improvements, the helmet's mass must be reduced, otherwise the injuries are likely to be transferred from the site of impact to the occipitocervical junction.

**Simple Models of Fatality Trends Using Employment and Population Data.** S. C. Parttyka, *Accident Analysis and Prevention*, 1984, 16(3), 211-222.

Simple models of traffic fatalities were developed using only the readily available factors of population size (from the Bureau of the Census estimates and projections) and the size of the potential labor force and the number of unemployed workers (from the Bureau of Labor Statistics estimates based upon household surveys). The fatality trends from 1960 through 1982 appear consistent with changes in the numbers of unemployed workers, employed workers, and people not available for the labor force. The long-term (23-year) model using employment factors produces an estimate of 45,158 fatalities in 1982 versus the current estimate of 44,000 fatalities which was derived from preliminary State reports. Short-term (1975-1982) annual fatality trends reflect recent sociological changes. A model based upon the number of unemployed workers and the number of employed workers produces an estimate of 44,709 fatalities in 1982, as compared to the State-reported estimate of 44,000 fatalities. A similar model of teenage (15-19 year old) traffic fatalities produces an estimate of 6,679 fatalities in 1982, as compared to the current estimate of 6,700. The quantification of the relationship between economic factors and the number of traffic fatalities may be useful in understanding the effects of safety programs and other changes to the driving environment. However, the reader is cautioned on three important points about any modeling analysis. First, a model