

# Potential Human and Economic Cost-Savings Attributable to Vision Testing Policies for Driver License Renewal, 1989–1991

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**ABSTRACT:** *Purpose.* This study assessed the impact of vision-related relicensing policies on traffic fatalities in the United States. There is a limited empirical basis for state vision testing policies for relicensing. Furthermore, it is uncertain whether contemporary vision standards for driver licensing achieve their implicit goal of protecting the public's health, or inappropriately restrict the mobility of competent drivers. *Methods.* The 48 contiguous states and the District of Columbia were the "subjects" in this investigation. During the study period (1989 to 1991), 10 states did not require vision testing for driver license renewal. Multiple regression modeling was used to assess the impact of vision-related relicensing policies on traffic safety and to estimate the number of avoidable vehicle occupant fatalities and corresponding economic costs associated with traffic crashes involving older drivers ( $\geq 60$  years). The primary data source for this investigation was the Fatal Accident Reporting System (FARS) database. *Results.* Vision-related relicensing policies were significantly associated ( $p < 0.05$ ) with lower vehicle occupant fatality rates of older drivers. According to the final regression model, approximately 222 fewer vehicle occupant fatalities ( $-12.2\%$ ) associated with older drivers would be expected for the 3-year period if mandatory vision testing policies had been in effect in 8 of the 10 states without such policies. Conservatively, those avoidable deaths represent an estimated \$31 million in avoidable economic costs. *Conclusions.* State-level mandatory vision testing for relicensure may enhance traffic safety and reduce the economic burden of fatal crashes. Vision testing requirements should be maintained by jurisdictions with such requirements, and jurisdictions without such requirements should consider the potential traffic safety benefits of vision testing for driver license renewal. (*Optom Vis Sci* 1998;75:103–118)

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