



TRAFFIC TECH

Technology Transfer Series

DOT HS 811 839

September 2013

Licensing Procedures and Older Drivers

Background

People 65 and older are the fastest growing demographic group in the United States. This is cause for concern given that the youngest and oldest drivers have the highest crash rates *per unit of distance traveled*, with rates increasing for older drivers beginning around age 70.

The driver licensing process provides an opportunity to identify risky older drivers *before* they are involved in a crash and to intervene to reduce their risk.

This study explored licensing processes across the United States and conducted in-depth case studies on four States with novel processes not common nationwide. The project aimed to document benefits and unintended consequences of licensing policies intended to reduce risk for older drivers.

Approach

The research team reviewed the current literature to catalogue State driver license renewal policies and procedures in order to identify States with processes that might improve older drivers' safety. They selected four "emphasis States" for in-depth study based on their implementation of licensing policies or procedures that were not widely used that had the potential to improve older drivers' safety.

The in-depth reviews consisted of discussions with State-level licensing agency management, license examiners and administrative staff, and older drivers who had recently completed the license renewal process.

Results

The literature review highlighted the increased risk, based on number of miles driven, of adults 75 and older for overall crashes, fatal crashes, and crashes involving side impacts in comparison to their younger counterparts. The literature noted that some older adults changed their driving habits to compensate for age-related functional changes. Older drivers have reported driving more slowly, braking earlier, and limiting driving under potentially risky conditions such as nighttime, poor weather, and rush hour.

License renewals provide an opportunity for State licensing staff to screen older drivers and to flag for evaluation those

with functional limitations that could impair their driving ability. Methods to identify risky drivers varied from State to State and included in-person renewal, shorter renewal periods, vision tests, and road tests. The four States selected for case studies based on novel practices were Illinois, Iowa, Kansas, and New Hampshire.

Emphasis States

Licensing policies in the emphasis States included both age-based and general renewal policies. For example, Illinois allowed drivers under 75 to renew via mail every other cycle, but required in-person renewal every cycle for those 75 and older. Unique components in some States included training programs tailored to older drivers (New Hampshire and Illinois), shortened renewal cycles of 2 years and 1 year as drivers aged (Illinois), sensitivity training for licensing staff (Iowa), and written tests for all renewals (Kansas). Three of the emphasis States housed medical review units in the licensing agencies, and all four had provisions for local driving tests in a person's home community that allowed a driver to obtain a restricted license without passing the standard driving test.

Discussions with licensing staff indicated that each State's personnel felt that their policies and procedures had a positive impact on older adult drivers.

Older adults who the research team interviewed were satisfied with their States' efforts to ensure the safety of older adults operating motor vehicles. While they recognized the degradation of their driving abilities, older adults were reticent to cease driving, thereby giving up a level of independence.

Crash Rates

Researchers analyzed crash data from NHTSA's State Data System, as well as from State records. Analysts initially calculated rates as crashes per 1,000 *licensed drivers*; however, they realized that, in some States, the reported number of licensed drivers in some age groups was greater than the estimated population of that age group. The research team decided to focus also on crash rates per 1,000 *people* as a more reliable measure. The team used population-based crash rates because they were comparing older drivers in empha-

sis States to those in comparison States, as opposed to comparing rates for older and middle-aged drivers. The team assumed similar exposure levels for older drivers across the States in the study.

The crash rate plots (crashes per 1,000 population) show very similar patterns across all States evaluated. Figure 1 shows rates for the emphasis States and Figure 2 for the comparison States. All of the States experienced a downward trend in crash rates with age. In some of the States, the curve began to flatten around age 70, but all showed a steep drop in crashes per 1,000 people 85 and older. These reduced rates may be largely due to decreased driving exposure with increased age. The analyses did not reveal an effect of licensing policies in the emphasis States.

Figure 1. Emphasis States: Crashes per 1,000 population

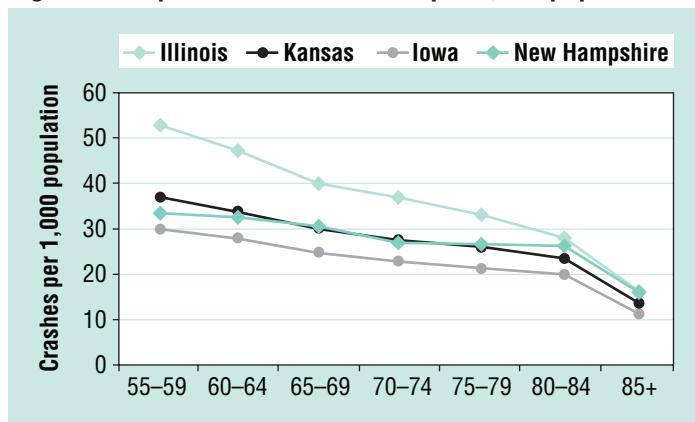
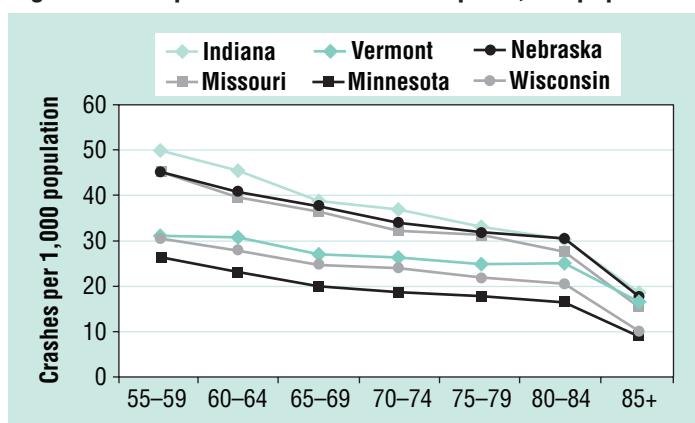


Figure 2. Comparison States: Crashes per 1,000 population



Discussion

This study did not reveal significant differences in crash rates indicating clear advantages in policies and procedures among emphasis States. State licensing staff indicated that they believed the shorter renewal intervals and in-person renewals provided a safety benefit. Older adults generally voiced support for State procedures and were willing to complete screenings, though many asserted that their years of driving experience compensated for any degradation in functional abilities in terms of driving performance.

Decreasing crash rates by age group suggest that the current systems have been relatively successful in identifying problematic older drivers, supporting interventions to reduce their risk. States with mandatory road tests (New Hampshire and Illinois) had increasing crash rates per *licensed* driver in the older age categories. Anecdotal evidence suggests that many older adults who have stopped driving continue to renew their licenses in States with relatively simple renewal requirements such as renewal by mail or online. These people may be less inclined to renew their licenses in States that require a road test. This would increase the crash rate per licensed older driver in those States because people with licenses who did not drive (so had no risk of crashing) were not included when calculating the crash rate. This would account for the increased crash rate for *licensed* driver, without a similar effect on the rate per population.

How to Order

Download *Safety Outcomes of Licensing Procedures for Older Drivers* (91 pages plus appendices), prepared by Dunlap and Associates, Inc., Stamford, CT, from www.nhtsa.gov.



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