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Brief about older driver safety prepared by Elizabeth Dugan, PhD and Nina M. Silverstein, PhD

In 2007 there were 38 million adults age 65 and older, and 30 million were licensed drivers. In just a decade (1996-2006) the number of older drivers increased by 18%. Due to gains in human longevity and the aging of the baby-boom cohort the number of older drivers is expected to *double* in the next twenty-five years. Our current policies do not fit the new reality of an aging society.

However, in many ways a large influx of older drivers is a good thing. Older drivers are more likely to wear seatbelts, to drive fewer miles per year, to adjust their driving patterns to maximize safety by avoiding high risk driving situations, and very rarely drive under the influence.

Figure 1. Driver Involvement Rates in Fatal Crashes by Age and Sex, 2000

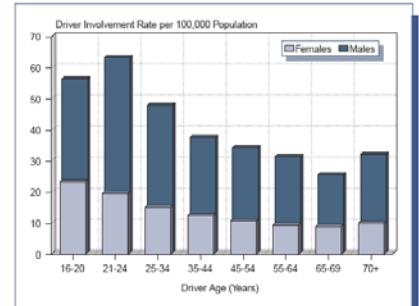
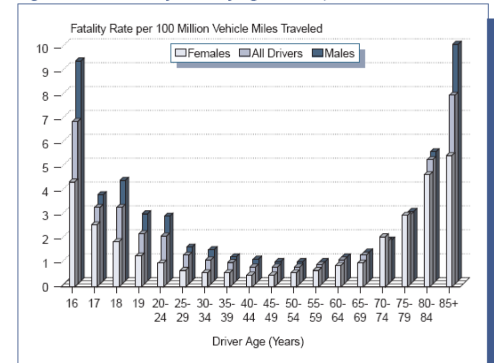


Figure 1 (NHTSA 2007 fact sheet on older drivers) shows the impressive downward trend with age in the rate of involvement in crashes – the 16-20 age group and 20-24 have the highest, and there is a trend down until the oldest age group (70+) which ticks up slightly.

Due to genetic, behavioral, and environmental factors the rate of aging and impairment varies markedly for humans. According to the Centers for Disease Control, 33% of adults age 65 and older report activity limitation due to a chronic disease (http://www.cdc.gov/nchs/data/hus/hus08.pdf#058) . For adults age 75 and older the percentage with impairment rises to 41%. With advancing age the risk for chronic disease and frailty increases. This impacts crash survival rates.

Figure 3. Driver Fatality Rates by Age and Sex, 1996



As seen in Figure 3 (NHTSA 2004), when involved in a crash the oldest drivers have the highest fatality rates.

States rely on two mechanisms to detect medically impaired, unsafe drivers: licensing procedures and medical reporting procedures.

<u>Licensing</u>. Currently in MA an operator's license is earned by passing a 25-item written test, a vision test (field vision, basic colors), and a road test. A license is valid for 5 years and then must be renewed. One renewal may occur via internet, so it is possible to have a single vision test for ten years of driving. Currently, the licensing renewal form for Massachusetts asks drivers to self report if they: 1.) have a medical condition that may interfere with safe driving or 2.) take medication that may interfere with safe driving. Drivers who answer "yes" must provide certification from a

medical professional that they are “safe to operate.” We see problems in this approach. For it to be effective, the driver must a) recall all medical conditions and medications, b) evaluate whether these conditions and medications will have an impact on safe driving, and c) be willing to report something that may terminate their driving privileges.

Medical reporting: MA has a volunteer medical advisory board (MAB), but the specialties represented are not comprehensive and their role is limited. The current MAB guidelines are limited (i.e., no dementia guideline). The medical reporting form is available via RMV website. Liability protection is not provided to health care providers who report unfit drivers.

Opportunities to improve the current approach:

Licensing
1. Require in-person renewals *Grabowski DC et al, Elderly Licensure Laws and Motor Vehicle Fatalities JAMA. 2004;291:2840-2846* found that in-person license renewal was related to a significantly lower fatality rate among the oldest old drivers. More stringent state licensure policies such as vision tests, road tests, and more frequent license renewal cycles were not independently associated with additional benefits.
2. Revise the renewal form (Other states, such as Maine, provide a checklist of medical conditions known to have an impact on critical driving skills.)
3. Develop and pilot-test a “tiered” approach to increased monitoring. California is pilot-testing this approach now. The approach devotes resources to testing and monitoring those most at-risk. First tier, in-person renewals every 5 years. Second tier, drivers with known risk factors (e.g., at-fault crash in past 5 years, warnings or tickets past 5 years, medical report of major physical or cognitive decline) get more monitoring (more frequent renewals) and increased testing (RMV: vision, written, road test; or at specialized driving clinics: full multidisciplinary assessment including road test). Instead of relying on an arbitrary age to trigger this monitoring, resources are directed toward those most at-risk.

Medical Reporting
1. Provide immunity protection for health care professionals who report medically unfit drivers. Fear of liability is a barrier to reporting. (Bill H2241 addresses this.)
2. Provide training and continuing education to health care providers and other professionals on medical fitness and critical driving skills. Physicians, especially primary care physicians are expected to handle many complex geriatric issues with no training. Driving fitness assessment and discussion skills are sorely needed. (UMass Boston Gerontology faculty are taking steps to establish a Center dedicated to this.)
3. Strengthen the medical advisory board (broaden disciplines and professions appointed), charge them to establish comprehensive evidence-based guidelines, update as evidence requires; make forms and protocols available for download via RMV site. (Bill H2241 addresses this.)
4. Provide protections for those reported (speedy appeal process, access to reports, referral to specialized driving clinics that may assist with rehabilitation and retraining.)

Alternative Transportation
1. Transitioning from the driver's seat to the passenger's seat would be less traumatic if accessible, affordable, dignified transportation alternatives existed.
2. Older drivers are a significant consumer group. Research shows when a person retires from driving there is a significant cut in discretionary spending, volunteerism, and an increased risk for social isolation and depressive symptoms. Beyond the human dignity issue, keeping such persons engaged has economic benefits for the Commonwealth.
3. Have information available at the RMV to assist with driving cessation and the transition to mobility options. Train RMV counter staff to provide information and referral when indicated.

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Additional Resources:

Older Drivers Program, National Highway Traffic Safety Administration reports available online: (http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.31176b9b03647a189ca8e410dba046a0/)

Dugan E. The Driving dilemma: The complete resource guide for older drivers and their families. (2006; Harper Collins:NY).

Grabowski DG Campbell CM Morrisey MA. Elderly licensure laws and motor vehicle fatalities. Journal of the American Medical Association (2004);291:2840-2846.

Stutts J Wilkins J. Driver licensing policies and practices: Gearing up for an aging society. Project Summary report to the AAA Foundation for Traffic Safety, June 2009.

Government Accounting Office report on older driver safety.