

Caught in the Middle: The Eye M.D., Visually Impaired Drivers and Road Safety

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With the number of Americans older than age 65 expected to grow by 75 percent between 2010 and 2030, state and federal officials are faced with a dilemma. How do they ensure safety on the roads as more and more people develop low vision? The role played by clinical ophthalmologists will be a challenging one. They must prepare to balance the legal, ethical and public-safety responsibilities of making recommendations to licensing authorities about such patients.

Boomers want to keep their car keys. “The real breaking point will come when the number of adults with visual impairments starts increasing among the baby boomers,” predicted Lylas G. Mogk, MD, director of the Center for Vision Rehabilitation and Research of the Henry Ford Health System in Detroit. Many of these visually impaired boomers will want to continue to drive—and won’t take “no” for an answer. The most obvious piece of vision dogma that stands in their path is the common requirement that drivers have visual acuity of at least 20/40, either naturally or with correction. “It will become very clear publicly that the laws governing driver licensing are not based on anything but a decision sometime in the 1920s that road signs were going to be a certain size and so you had to have visual

acuity of a certain level to see them,” said Dr. Mogk. “There’s much more to driving than vision,” said Walter M. Jay, MD, neuro-ophthalmologist and professor of ophthalmology at Loyola University Medical Center, Maywood, Ill. “There’s a lot of evidence that people can be pretty good drivers at 20/70.”

Five attributes of the safe driver.

The Academy Policy Statement *Vision Requirements for Driving* lists five skill sets needed for safe driving, and calls for more research on how to measure them:

1. The motor ability to scan a rapidly changing environment.
2. The sensory ability to perceive information in this rapidly changing environment.
3. The attentiveness to process multiple pieces of information.
4. The cognitive ability to judge this information in a timely fashion and to make appropriate decisions.
5. The motor ability to execute these decisions in a timely fashion. (See “Further Reading.”)

Moderate vision loss and increased crash risk—researchers struggle to find a definitive link. With so many factors underpinning safe driving, perhaps it should be no surprise that researchers have been unable to show a definitive association between moderate visual loss and the risk of motor vehicle crashes. Lyman and colleagues



SAFE BEHIND THE WHEEL? Drs. Jay and Mogk remind you to look for red flags. These include previous accidents; brain disease or transient ischemic attacks; back pain or arthritis; use of somnolence-inducing medications; and inattention.

reported in 2002 that federal statistics revealed limited or no differences in crash risks between drivers with 20/40 acuity and those with 20/70.¹ In 2009, a Cochrane review of the medical literature failed to find a single controlled study that could be used to support the premise that vision screening of people age 55 and older affects the number of auto crashes, injuries or fatalities.²



Each month, Practice Perfect addresses one of the AAOE’s seven key competencies of practice management.

Tips on When to Act, How to Act

Drs. Jay and Mogk offered tips for handling different types of low vision situations.

If the patient's vision is slightly lower than the state requires but he or she seems cognitively competent: Report this if it is a state requirement but also request that the patient be given the opportunity to take a road test of overall driving ability.

If the patient passes the acuity test but you have another reason to suspect at-risk driving, such as a cognitive or movement deficit: Suggest the patient give up driving voluntarily, send the patient to his or her internist for further assessment, or ask the patient to schedule an evaluation and possible training with an occupational therapist or certified driver rehabilitation specialist. However, Medicare does not cover driver rehab. (In Michigan, for example, driver rehab costs about \$100 per hour.)

If family members are present: Ask if they have concerns. Enlist their help, including hiding the car keys if necessary. Suggest the family report the loved one to the state.

If there is family conflict over the patient's insistence on continuing to drive: Suggest a driver evaluation for this scenario, too, said Dr. Mogk. "I tell the patient, 'If you pass, this will convince your family you can drive safely, and you will feel reassured, too.'"

Some low vision patients may find ways to drive safely. Regulations vary throughout the country, but in about two-thirds of states drivers can be licensed for daytime driving with VA as low as 20/200 in one eye. They use small bioptic telescopes mounted on the top half of a spectacle lens, for quick reading of road signs and traffic lights as they drive. Such low vision drivers show what is possible with help that now is available from specially trained driver rehabilitation specialists, said Dr. Jay. "Driving should be a matter of function, not of age. It isn't that ophthalmologists think that everybody over age 85 shouldn't be driving. It's a matter of their skill sets."

Role of the Eye M.D.

"Ophthalmologists are really caught in the middle of this because, at this point, ours is the only area of medicine that is universally, if inconsistently, regulated by the driver licensing laws," said Dr. Mogk.

Know what is required in your state. Ophthalmologists should understand and comply with state law about reporting visually impaired drivers to authorities, said Dr. Jay. Depending on the state, reporting these drivers might be required, or merely permitted, or strictly prohibited without the patient's permission.

Complicating matters further, the

physician might be forced to go against the patient's wishes, violating HIPAA, in order to prevent possible civil liability for injuries caused by an unreported visually impaired driver. (OMIC advises its policyholders to contact its risk management department to discuss the options in such cases.)

The AMA provides a framework for evaluating driver safety. In a comprehensive report published in 2003—*Physician's Guide to Assessing and Counseling Older Drivers* (see "Further Reading")—the American Medical Association advises assessing patient function in three major areas related to driving ability. These are: 1) visual loss, most of which occurs in the elderly, 2) cognitive problems and 3) motor-sensory impairment, such as muscle weakness and the inability to turn the head. (The Vision, Aging and Driving Instruction Course that Drs. Jay and Mogk have been presenting at the Academy's Annual Meetings is based on this document.)

The AMA *Guide* shows how to screen for functional losses with some simple screening tools, collectively known as the Assessment of Driving-Related Skills (ADReS). The ADReS tests are intended to help primary care doctors uncover broad indicators of functional deficits that, in specialists' offices, might be measured more precisely with complex machinery.

With regard to vision, ADReS recommends testing Snellen UCVA with a wall chart, and screening for visual field defects with confrontation testing. It also contains a state-by-state synopsis, as of 2003, of laws on reporting driver impairment.

Most ophthalmologists probably would refer patients to their primary care physicians if they needed other, nonophthalmic ADReS tests, Dr. Jay said. So the major take-home message the *Guide* has for ophthalmologists is to be alert for cognitive or motor signs that the patient should be evaluated by an internist for driving safety. In some cases the ophthalmologist is required to report these suspicions, too.

Persuading patients to "retire" from driving is a challenge. Because driving cessation is such an emotional issue, the *Guide* includes sample scripts and patient education materials. "I talk to the patients and their families about the difference between being 'legal' and being 'safe' on the road," said Dr. Mogk. She and Dr. Jay agreed that some of the most difficult patients to convince to stop driving are glaucoma patients with large visual field defects, and people with hemianopia after a stroke. These patients tend to overestimate their driving ability and underestimate their vision loss. To drive safely, these patients must become more realistic and must learn to "scan" the environment constantly while driving.

1 McCloskey, L. W. et al. *Age Ageing* 1994; 23(4):267–273.

2 Subzwari, S. et al. *Cochrane Database Syst Rev* 2009;(1):CD006252.

Further Reading

Vision Requirements for Driving is an Academy Policy Statement. (Go to www.aao.org/about, select "Policy Statements" and scroll down.)

Physician's Guide to Assessing and Counseling Older Drivers was written by the AMA in conjunction with the National Highway Traffic Safety Administration. (Go to www.ama-assn.org/ama/pub/category/10791.html.)