Two-hour Training and a Screening Tool to Help Law Enforcement Identify and Manage Older Unsafe Drivers

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A few years ago you might have met Dena Kline. She was 80 years old, five feet tall, and 80 pounds on chemotherapy for bone cancer and taking asthma and pain medication. On February 23, 2007, at 4:00 p.m., she left home southwest of Portland, Oregon, to pick up a prescription. For the next 10 hours, she drove 80 miles. During her trip, she was contacted by law enforcement twice for suspicion of DUI but was released after it was determined she hadn't been drinking. On the morning of February 25, she was reported missing by her daughter. Over the next few days, the sheriff's office conducted a county-wide search—to no avail. Four months later, her car was found in the Willamette River with her body inside. Because law enforcement did not go far enough in determining the extent of her impairment, they allowed her to continue to drive.

While this is an extreme example of unsafe driving in the elderly, it is a real one, and it underscores the need to provide training and screening tools to law enforcement to more effectively identify and manage this problem.

Work addressing this topic, described in this article, builds on an article published previously in *Police Chief* magazine by Joe Farrow and Julie Likes, "California Highway Patrol: Older Driver Safety Task Force."[1] Their work motivated the Training, Research and Education for Driving Safety (TREDS) group at the University of California, San Diego, to collaborate with the California Highway Patrol (CHP) to develop a POST-certified course offering. The CHP made their leaders and officers, including those responsible for training, available for interviews and provided 12 officers of the CHP in the San Diego area for a focus group. The resulting curriculum and screening tool provide a concrete model for how law enforcement and public health organizations can work together to keep the public safe.

More and More "Denas" on the Road

Dena represents only the tip of the iceberg. With the Baby Boomer population reaching retirement age and older, the number of older drivers on the road will grow dramatically. A look at the statistics is startling. In 2007, 37.9 million Americans were over the age of 65[2]—one in eight people. Between 2010 and 2030, the U.S. population age 65 and older is projected to increase by 79 percent, compared to only 12 percent for those younger than 65.[3] By 2050, it is estimated that 88.5 million Americans will be over the age of 65[4]—one in five.

Many older adults are safe drivers, and the majority of them choose to stop driving on their own before they could become involved in a collision or draw the attention of state licensing agencies. However, many impaired individuals continue to drive. In fact, on average, male drivers aged 70 to 74 years will outlive their ability to drive safely by approximately seven years and female drivers of the same age range by approximately 10 years.[5]

To address this problem, the National Highway Traffic Safety Administration (NHTSA) developed an *Older Driver Program Five-Year Strategic Plan 2012–2017*, which addresses the "need [for law enforcement to have] more training and information to help them better assess warning signs and understand what next steps to take and what actions are mandated by laws within their jurisdiction."[6] This need is also documented in California's *Strategic Highway Safety Plan* to improve the safety of older roadway users: "Enhance law enforcement training to recognize older driver behaviors that may necessitate priority drivers' license re-examinations, and provide law enforcement with a broader understanding of older driver sensitivities."[7]

With support from the California Office of Traffic Safety (OTS), the TREDS group partnered with the CHP and the California Department of Motor Vehicles (DMV) to train law enforcement officers to identify signs of cognitive driving impairment and manage those individuals in terms of providing referrals for driving re-examination to the DMV. The TREDS group developed a training curriculum and diagnostic tool based on NHTSA's "Older Driver Law Enforcement Course" released in 2007. CHP Assistant Chief Ike Iketani (retired 2012) and Police Chief Robert Ticer, Avon, CO, served on the NHTSA curriculum committee and advised the TREDS group on course enhancements and modifications including tailoring content specific to California law enforcement policies and procedures.

Consequences of Aging on Driving Safety

As people age, they develop a variety of cognitive ailments related to vision, hearing, strength, and mental alertness that can affect their ability to operate a vehicle safely. For example, up to 24 percent of white adults 80 years and older have low vision or blindness.[8] At least one-third of adults over 85 have dementia.[9] Osteoporosis, decreased muscle mass, and underlying health conditions contribute to frailty. One study found that 44 percent of men and 57 percent of women age 65 and older use five or more medications weekly, which can compromise their ability to drive safely.[10]

Common driving errors among this population include inadequate scanning of roadways, drifting or weaving in and out of one's lane, difficulty making left turns or selecting the correct turn lane, failure to yield right of way on turns, inappropriate or delayed stopping, misjudgment of time and distance in stopping, changing lanes without previously signaling, misapplying

the pedal (e.g., pushing the accelerator mistakenly instead of the brake), failure to yield or respond appropriately to road signs and signals, and inability to perceive and respond to a law enforcement officer's signal to pull over.

When stopped by an officer, such a driver can seem "lost" between origin and destination, appear disheveled (e.g., wearing inappropriate clothing for the weather conditions), have difficulty finding documents that the officer requests, have little or no recollection of the traffic violation, and have trouble communicating with the officer.

The officer may notice other signs of impairment by inspecting the vehicle. Are there scrapes and scratches on the outside? Are there notes/reminders to the driver on the inside? Does the vehicle include adaptive equipment to help the driver? Also, does the driver appear forgetful during the conversation or make statements that clearly are not true?

Without tools to undertake a rigorous assessment to identify cognitive impairment, the officer's response can be to treat such a driver with sympathy or compassion: He or she might issue a citation or even just a warning, using rationalizations related to respect for the elderly and concern that the driver is on a fixed income and "can't afford a ticket."

But this problem isn't going to go away. Left unaddressed, it will lead to more serious problems, even tragedy.

Law enforcement officers are trained to be familiar with the DMV (or licensing agency) process for reporting a driver who displays evidence of an inability to safely operate a motor vehicle and, when warranted, are encouraged to report such drivers. In fact, research studies have demonstrated the importance of law enforcement's identifying older drivers for re-examination. For example, a full 80 percent of those age 75 and older referred by law enforcement for re-examination in Maryland ultimately retired from driving due to lack of medical fitness.[11]

TREDS Curriculum

Working with the CHP, the TREDS group developed a two-hour training curriculum. It covers introduction to older drivers; medical conditions (e.g., vision, frailty, cognitive impairment, hypoglycemia, hyperglycemia) and methods for assessment; strategies to employ during traffic contacts (e.g., observation, questioning, use of the screening tool [described later]); communication and referral; use of the DMV reporting mechanism requesting driver re-examination; and community resources for driver evaluation and re-education. This training includes a video that demonstrates how to identify a driver with cognitive impairment, and presents a contact with a traffic violator and use of the screening tool.

Driver Orientation Screen for Cognitive Impairment

To complement the training received and to help officers implement it in their day-to-day traffic work, the TREDS group developed an easy-to-use "prompt card," called the Driver Orientation Screen for Cognitive Impairment (DOSCI), which conveniently fits in an officer's ticket book. It lists nine questions (in English and Spanish) to ask the person stopped for a traffic violation. It includes scoring guidelines and DMV reporting recommendations. Once the officer has ruled out intoxication from alcohol, impairment from prescription medication or illicit drugs, and medical conditions requiring urgent care, these questions (with their point scores) should be asked:

- What is your date of birth? (Month, day, and year must match documents, 1 pt)
- What is your full home address? (Address must match documents, 1 pt)
- What state are we in now? (1 pt)
- What city/town are we in now? (1 pt)
- Without looking at your watch, can you estimate what time it is now? (Answer must be plus or minus one hour of the correct time, 1 pt)
- What day of the week is it? (1 pt)
- What is today's date? (Answer must include month, date, year, 3 pts)

Receiving five or more incorrect answers (out of nine answers/points total) suggests the person is unsafe to drive that day, and the officer should refer to department procedures for alternative transportation and vehicle removal. Supplying three to four incorrect answers suggests the person is *potentially* unsafe to drive and, given the totality of the circumstances, might be referred for a re-examination at the DMV or immediately restricted in the ability to drive. Providing one or two incorrect responses suggests no referral.

Additional questions that the officer can ask include the following:

- Where are you coming from and where are you going?
- Will you please spell your name?
- Do you have an emergency contact? What is that person's name and phone number?

The officer can also listen for telling comments the driver might make like a family member getting upset when he "got lost the last time."

This information provides concrete documentation of the interaction and provides a way to track the history of what might be the beginning of a pattern of unsafe driving. This information is important not only to law enforcement and the DMV but also to the driver's family, physician, and others working to keep the individual safe.

Results from Training

The TREDS team used their curriculum and the DOSCI screening tool in 43 training sessions to train 717 law enforcement officers in the CHP across four counties in southern California (San Diego, Orange, Imperial, and Riverside). An additional two trainings were delivered to 27 officers representing San Diego-area law enforcement agencies. The training was completed in two hours, with one 10-minute break, and

incorporated into regularly scheduled in-service training days in settings familiar to the officers.

To provide a variety of relevant perspectives, the training was delivered by a health educator, a physician, a retired law enforcement officer, and a DMV administrator. The training methods included PowerPoint slides with basic information, review of the screening tool, a video clip to demonstrate the questions an officer should ask of an apparently impaired driver, other traffic video clips and case examples with discussion of whether the officers should request the DMV to issue a re-examination, pictures of what impaired conditions look like, and question-and-answer sessions.

Questionnaires were administered with voluntary, anonymous participation before and after the training. Pre-training questions addressed basic demographics, confidence in identifying impairment in older drivers, experience with older drivers, assessment practices, DMV reporting practices, and referrals. Post-training questions addressed understanding of the curriculum, perceived changes in confidence when dealing with cognitively impaired older drivers, intention to assess and report when indicated, and intention to use the screening tool. Of the 717 officers trained, 658 (92 percent) completed the pre-training questionnaire and 700 (98 percent) completed the post-training questionnaire.

In the pre-training questionnaire, 573 officers reported low levels of driver referral to the DMV, with only 3 percent (19/573) reporting at least once a month, 45 percent (257/573) once every three-six months, and 43 percent (244/573) once a year or every few years; 9 percent (53/573) responded they had never reported.

Both questionnaires surveyed officers' ability to recognize cognitive impairment in drivers. Interestingly, in the pre-training questionnaire, 72 percent "agreed or strongly agreed" that they were confident in their ability. However, post-training, 70 percent stated their ability to recognize impairment had increased by at least 50 percent. This is not surprising, as identifying mild dementia in older adults is difficult and can easily go unnoticed with minimal conversation and when officers have not received training on how to assess drivers for this condition.

Officers stated the training heightened their awareness of conditions that can impact driving in older adults, which increased their confidence to ask more questions.

Other noteworthy results included that

- 90 percent stated they were "likely or very likely" to use the screening tool to assess older drivers for cognitive impairment
- 93 percent stated the results of the screening tool will help document suspected impairment when referring drivers to licensing agencies
- 93 percent "agreed or strongly agreed" they had a better understanding of community resources available to older drivers
- 94 percent stated the training was useful and effective

The questionnaires included an area for additional comments where many participants stated that training on this topic should be required. They also reported a previous lack of awareness of this problem, increased confidence in interacting with older drivers as a result of the training, and an interest in sharing information about the training and the screening tool with their commanding officers and peers.

They also reported that the subject matter fit in well with other officer training. The mixed media, multi-speaker format kept the officers' attention, and the inclusion of a variety of perspectives provided credibility in the breadth of material covered. Inclusion of the DMV administrator among the speakers proved especially important because many of the officers had been unclear on reporting protocols. The majority of veteran officers—those with more than 15 years' experience—rated the training highly.

The officers confirmed that some of their reluctance to address this issue in the past had been due to their "respect for elders" and concern with missing the opportunity to address "more important violators" if more time was spent with older drivers during traffic stops. By the end of the training, the officers recognized the importance of their role in protecting older drivers and others on the road from preventable tragedy.

Next Steps

Further studies will be necessary to determine the usefulness of the training and screening tool in the field. Next steps include expanding training to other geographic areas and law enforcement agencies and development of an abbreviated version of the training that can be shown in 15-20 minutes during shift change briefings. For more information and how to obtain the training and screening tool, please contact treds@ucsd.edu or call 858-534-9330.

Conclusion

Age-related driving impairment is a serious and growing public safety problem, and law enforcement can play a key role in identifying and referring impaired drivers to the DMV. The curriculum described in this article has been evaluated by the California Commission on Peace Officer Standards and Training (POST) and approved for two Continuing Professional Training credits. ❖

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Notes:

[1]Joe Farrow and Julie Likes, "California Highway Patrol: Older Driver Safety Task Force," Police Chief Magazine 74, no. 4 (April 2007): 148–151, http://www.policechiefmagazine.org/magazine/index.cfm?fuseaction=display_arch&article_id=1161&issue_id=42007 (accessed October 4, 2013).

[2]Administration on Aging, *A Profile of Older Americans: 2008* (Washington, D.C.: U.S. Department of Health and Human Services, 2009), http://www.aoa.gov/AOARoot/Aging_Statistics/Profile/2008/docs/2008profile.pdf (accessed October 4, 2013).

[3]Population Division, U.S. Census Bureau, table 2. Projections of the Population by Selected Age Groups and Sex for the United States: 2010 to 2050 (NP2008-T2), August 14, 2008.

[4]Carlos M. Gutierrez, John J. Sullivan, and Cynthia A. Glassman, *The Statistical Abstract of the United States, 2009,* table 10. Resident Population Projections by Sex and Age: 2010 to 2050.

[5]Daniel J. Foley et al., "Driving Life Expectancy of Persons Aged 70 Years and Older in the United States," *American Journal of Public Health* 92, no. 8 (August 2002): 1284-1289, http://web1.ctaa.org/webmodules/webarticles/articlefiles/driving_life.pdf (accessed October 4, 2013).

[6]National Highway Traffic Safety Administration, *Older Driver Program Five-Year Strategic Plan 2012-2017,* HS 811 432 (Washington D.C.: U.S. Department of Transportation, 2010),10, http://www.nhtsa.gov/staticfiles/nti/pdf/811432.pdf (accessed October 4, 2013).

[7]"Challenge 9: Improve Safety for Older Roadway Users," in *California Strategic Highway Safety Plan* (Sacramento, CA, California Department of Transportation, September 2006), 28, http://www.dot.ca.gov/hq/traffops/survey/SHSP/SHSP_Final_Draft_Print_Version.pdf (accessed October 4, 2013).

[8]Nathan Congdon et al., "Causes and Prevalence of Visual Impairment among Adults in the United States," *Arch Ophthalmol* 122, no. 4 (April 2004): 477-85.

[9]Joan Lindsay et al., "More Than the Epidemiology of Alzheimer's Disease: Contributions of the Canadian Study of Health and Aging," *Canadian Journal of Psychiatry* 49, no. 2 (February 2004): 83-91.

[10]David W. Kaufman et al., "Recent Patterns of Medication Use in the Ambulatory Adult Population of the United States: The Slone Survey" *JAMA* 287, no.3 (January 2002): 337-344.

[11]Carl A. Soderstrom et al., "Pursuit of Licensure by Senior Drivers Referred by Police to a State Licensing Agency's Medical Advisory Board," *Association for the Advancement of Automobile Medicine* 54 (January 2010): 351-358.