National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

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In reply refer to: H-04-42 and -43

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Of the 291 million individuals living in the United States, approximately 191 million, or 65.6 percent, are licensed to drive. Every year, about 42,000 individuals die in traffic-related crashes. The National Highway Traffic Safety Administration estimated in 2000 that highway crashes cost U.S. society about $230.6 billion a year, with each roadway fatality costing an average of $977,000, and each critical injury crash costing an average of $1.1 million.[1]

The act of driving requires the proper orchestration of sensory/perceptual, cognitive, and motor activities to be performed successfully. Certain medical conditions have been found to negatively affect one or more of these activities, thereby increasing the safety risk of drivers that suffer from them. The extent of the overall impact of medically impaired drivers is not known because data are not available (except for data on alcohol-related accidents) on the number of licensed drivers with high-risk medical conditions or on the number of accidents in which a driver's medical condition was a contributory factor. However, statistics on the number of Americans with one or more of the following high-risk medical conditions offer some perspective on the medical oversight issues that State licensing agencies face: [2]

- Epilepsy: 2.5 million (180,000 new diagnosed cases each year). [3]
- Diabetes: 18.2 million (1 million new cases diagnosed each year in those over 20). [4]
- Sleep Disorders: 50 to 70 million.[5]
- Cardiovascular Disease: 23.5 million (41.7 million additional have hypertension). [6]

[1] L. Blincoe, A. Seay, E. Zaloshnja, T. Miller, E. Romano, S. Luchter, and R. Spicer, *The Economic Impact of Motor Vehicle Crashes*, 2000, DOT 809 446 (Washington, DC: NHTSA, 2000).

[2] See the American Medical Association's *Physician's Guide to Assessing and Counseling Older Drivers* (Chicago 2003), <http://www.ama-assn.org/go/olderdrivers>, for a more exhaustive list of medical conditions and medications that may impair driving.

[3] Epilepsy Foundation <http://www.epilepsyfoundation.org/answerplace/statistics.cfm>.

[4] National Diabetes Information Clearinghouse <http://diabetes.niddk.nih.gov>.

[5] U.S. Department of Health and Human Services, *2003 National Sleep Disorders Research Plan,* National Institutes of Health Publication No. 03-5209 (Washington, DC: HHS, 2003).

- Alzheimer's Disease: 4.5 million (10 percent of those over 65 years and nearly 50 percent of those over 85 years suffer from the disease).[7]
- Arthritis: 40 million (over 7 million report limited activity due to the disease).[8]
- Eye Diseases: 5.5 million–cataracts, 2 million–glaucoma, and 1.2 million–later-stage macular degeneration.[9]
- Alcoholism: 14 million (alcohol linked to 40 percent of all automobile fatalities).[10]

The National Transportation Safety Board's interest in the medical oversight of noncommercial drivers stems from its examination of six noncommercial vehicle accidents in which a driver's medical condition played a role.[11] In one of these accidents, on March 23, 2002, a driver with a history of seizure-related accidents failed to stop his vehicle at a signalized intersection in Frederick, Maryland, resulting in a multiple-vehicle collision that claimed the lives of a father and three children.[12] Evidence indicated that the driver suffered a seizure at the time of the accident. The five other medical impairment-related accidents involved a diabetic driver and four drivers who experienced seizures.

The Safety Board has also investigated a substantial number of commercial vehicle and school bus accidents involving drivers with impairing or potentially impairing medical conditions, such as cardiovascular disease, visual impairment, renal disease, and sleep disorders.

On March 18 and 19, 2003, the Safety Board held a public hearing[13] to discuss the factors that contribute to medically related accidents. Major topics included the:

- Current state of knowledge regarding potentially impairing medical conditions.
- Adequacy of procedures for reporting medically impaired drivers.
- State licensure and oversight of drivers with high-risk medical conditions.
- Programs to increase public awareness of State oversight laws and procedures.
- Rehabilitation and transportation options for medically impaired drivers.

The Safety Board learned during the course of the hearing and has noted in its recent report on the medical oversight of noncommercial drivers[14] that the issues encompassing this subject are complex and will require the close cooperation of Federal, State, and private organizations to

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[6] U.S. Department of Health and Human Services, *Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2001,* Series 10, Number 218 (Washington, DC: HHS, 2004).

[7] National Institute on Aging, *Progress Report on Alzheimer's Disease, 1999,* NIH Publication No. 99-4664 (Bethesda, MD: National Institute on Aging, 1999).

[8] R.C. Lawrence, C.G. Helmick, F.C. Arnett, R.A. Deyo, D.T. Felson, E.H. Giannini, S.P. Heyse, R. Hirsch, M.C. Hochberg, G.G. Hunder, M.H. Liang, S.R. Pillemer, V.D. Steen, and F. Wolfe, "Estimates of the Prevalence of Arthritis and Selected Musculoskeletal Disorders in the United States," *Arthritis and Rheumatism*, 41(5) (1998): 778-799.

[9] University of Washington Department of Ophthalmology <http://depts.washington.edu/ophthweb/statistics.html>.

[10] *Traffic Safety Facts 2003: Alcohol*, DOT HS 809 761 (Washington, DC: NHTSA, 2003).

[11] For additional information, read National Transportation Safety Board, *Medical Oversight of Noncommercial Drivers,* Highway Special Investigation Report NTSB/SIR-04/01 (Washington, DC: NTSB, 2004).

[12] National Transportation Safety Board Docket No. Highway-03-IH007.

[13] Information on this hearing, including the full transcript, is available at <http://www.ntsb.gov/events/2003/med_noncomm/default.htm>.

[14] NTSB/SIR-04/01.

create an effective and uniform system that protects public safety while being sensitive to the needs of individual drivers.

In addition to the lack of easily accessible information regarding State oversight laws, concerns about doctor-patient confidentiality and civil suits have been cited as further barriers to physician reporting. Six States currently require physicians to report medically high-risk drivers to the licensing authority. Several physicians at the public hearing voiced concern over mandatory reporting, stating that it infringes on patient privacy, compromises their ability to counsel patients on treatment options, and negatively affects the physician-patient relationship. Mandatory reporting might also discourage patients from seeking treatment or disclosing the extent of their illness to physicians to continue driving. This reluctance on the part of patients could result in untreated or misdiagnosed drivers who then potentially present an even greater threat to all road users.

Other physicians and State license administrators at the public hearing favored mandatory reporting and argued that physicians are generally reluctant to report patients when no requirement exists to do so, even though patients clearly should not be driving. This reluctance was exemplified by the Frederick accident driver's neurologist, who told the Maryland Motor Vehicle Administration Medical Advisory Board that the driver's epilepsy was well controlled and that the driver was "reliable in taking medications," despite medical record entries to the contrary. Research indicates that physicians practicing in States that have mandatory reporting laws are more aware of those laws and are more apt to report high-risk drivers to the licensing authority.[15] Mandatory reporting laws relieve physicians of the burden of assessing driving fitness and deliberating the ethical, legal, financial, and social merits of reporting high-risk patients, making the State licensing agency solely responsible for determining an individual's fitness to drive.

Most States encourage, but do not require, physicians to report medically high-risk drivers to the licensing authority. Research is inconclusive regarding which physician reporting procedure most effectively identifies and removes medically unsafe drivers. Although the few studies that have been conducted indicate that physicians file more reports when a mandatory reporting law is in place, whether the filing is due to the law itself or to a combination of factors, such as the accessibility of reporting information, the presence of immunity laws, or more effective reporting procedures, is unclear. Moreover, no determination has yet been made whether, in States with mandatory reporting, a significant number of medically high-risk drivers are dissuaded from disclosing their condition and symptoms to their physicians.

During the public hearing, witnesses testified that another hindrance to effective medical oversight in some States was the absence of immunity laws to protect physicians who report medically impaired drivers to the licensing authority. The chairman of the Utah Medical Advisory Board, called it a barrier that "encourages non-reporting." According to the *Physician's Guide to Assessing and Counseling Older Drivers*[16] and the Safety Board, 18 States and the District of Columbia still do not offer immunity to physicians or to other health care providers. Moreover, as few as 16 States offer immunity to individuals outside the healthcare field who

[15] G. Cable, M. Reisner, S. Gerges, and V. Thirumavalavan, "Knowledge, Attitudes, and Practices of Geriatricians Regarding Patients With Dementia Who Are Potentially Dangerous Automobile Drivers: A National Survey," *Journal of American Geriatric Society*, 48(1) (2000): 100-2.

[16] See *Physician's Guide to Assessing and Counseling Older Drivers*, <http://www.ama-assn.org/go/olderdrivers>.

report an unfit driver in good faith.[17] In a recent survey[18] sponsored by the National Highway Traffic Safety Administration, State licensing representatives ranked physician immunity from liability among the top five medical oversight components of importance.

The Safety Board addressed this issue in its report[19] on a 1999 motorcoach crash in New Orleans, Louisiana, and recommended that the National Conference of State Legislatures:

> Safety Recommendation H-01-27
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> Make members aware of the importance of establishing immunity laws for the good-faith reporting of potentially impaired commercial drivers by all individuals and of ensuring that the medical community and the commercial transportation industry are familiar with these laws.

The National Conference of State Legislatures complied with the Safety Board's recommendation and published an article on its Internet publication, *Transportation Notes*, highlighting the Board's recommendations.

The Safety Board appreciates the National Conference of State Legislatures' efforts but if model legislation were available to protect those who report medically unsafe drivers to the licensing authority, it would encourage and assist the States in enacting such laws. The Safety Board concluded that the absence of laws that allow for the good-faith reporting of medically impaired drivers could hinder the effectiveness of State oversight systems.

Among the first to respond to an accident, emergency medical technicians (EMTs) are trained in lifesaving procedures and the identification of certain medical conditions. They are required in most States to submit a report on the medical treatment they administer for each accident, which is sent to the medical record-keeping agency of the State and kept confidential. Licensing agencies do not have access to these reports. Because EMTs are witnesses to crash scenes, have the background to identify some impairing medical conditions, and have a close working relationship with law enforcement officers and emergency room physicians, EMTs can be an invaluable source for the reporting of medically impaired drivers. However, according to the National Association of Emergency Medical Technicians, no formal mechanism is in place for EMTs to report medically impaired drivers. The Safety Board concluded that EMTs are a trained and potentially valuable, but underutilized, resource in the reporting of medically impaired drivers.

The Safety Board appreciates that many of the same arguments made against physician reporting, such as impingement upon patient confidentiality and the possible refusal of treatment, can be made regarding EMTs. However, because EMTs are in a position that allows them to make a causal determination regarding medical impairment in an accident, their participation is essential in ensuring an effective State medical oversight program and in reducing the 42,000 annual traffic-related fatalities. Because EMTs work closely with law enforcement and

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[17] *Update of Medical Review Practices and Procedures in U.S. and Canadian Commercial Driver Licensing Programs,* DT FH61-95-P-01200, Federal Highway Administration (Washington, DC: FHWA, 1997).

[18] K. Lococo and L. Staplin, *In-Depth Study to Identify Best Practices for Licensing Drivers With Medical and Functional Impairments and Barriers to Their Implementation*, contract #DTNH22-02-P-05111, National Highway Traffic Safety Administration (2004).

[19] National Transportation Safety Board, *Motorcoach Run-Off-the-Road, New Orleans, Louisiana, May 9, 1999*, Highway Accident Report NTSB/HAR-01/01 (Washington, DC: NTSB, 2001).

physicians, States might be able to employ reporting procedures established for those groups to route EMT driver impairment information to the proper licensing authorities.

Therefore, the National Transportation Safety Board recommends that the National Committee on Uniform Traffic Laws and Ordinances:

> Work with the National Association of Attorneys General to develop a model law that provides immunity from liability for any person (such as a healthcare worker, an emergency medical technician, a family member, or a concerned citizen) who, in good faith, reports a driver with a potentially impairing medical condition, and also encourage the States to include this law in their statutes. (H-04-42)
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> Develop model legislation, in conjunction with the National Association of Emergency Medical Technicians and the National Association of State EMS Directors, that allows information gathered by emergency medical technicians concerning the potential medical impairment of accident-involved drivers to be conveyed to the State licensing authority. (H-04-43)

The Safety Board also issued safety recommendations to the U.S. Department of Transportation, the National Highway Traffic Administration, the American Association of Motor Vehicle Administrators, the Commission on Accreditation for Law Enforcement Agencies, the Liaison Committee on Medical Education, the American Osteopathic Association, the Association of American Medical Colleges, and the Federation of State Medical Boards.

Please refer to Safety Recommendations H-04-42 and -43 in your reply. If you need additional information, you may call (202) 314-6177.

Chairman ENGLEMAN CONNERS, Vice Chairman ROSENKER, and Members CARMODY, HEALING, and HERSMAN concurred in these recommendations.

Original Signed

By: Ellen Engleman Conners
Chairman