

“Drowsy Driving – There Ought to be a Law!”

Keynote Address by Senator Richard T. Moore

Annual Sleep and Health Benefit Dinner

Division of Sleep Medicine

Harvard Medical School

Fogg Art Museum, Cambridge

October 5, 2006

The ancient Greek author, Homer, writing in his epic poem, The Iliad, refers at one point in this classic story of events of the Trojan War to “sleep and his twin brother, death.”

Those who conduct research in the field of sleep medicine know all too well that drivers who are drowsy or fatigued may meet both twins. The twins may also appear in professions where lack of sleep by a physician or nurse may endanger those for whom that health professional is responsible. Lack of sleep by the health professional can mean loss of life or serious injury to either a patient or the health professional.

It’s time to separate these twins!

For the better part of the past year, faculty from the Division of Sleep Medicine and experts from the Sleep Research Society have been working with me to turn research into public policy. We have made some progress, but more research and education of policy makers and the public is needed.

During this 2005-2006 session of the Massachusetts General Court, I sponsored five bills based on the work of the Sleep Research Society. In fact, members of the society held a day-long work session at the State House at the beginning of the term to help refine the legislation. The bills are:

- Senate Bill No. 2124, An Act to deter the occurrence of drowsy driving while operating a motor vehicle, also known as “Rob’s Law
- Senate Bill No. 2688, An Act regulating driver education and junior operator’s licenses.
- Senate Bill No. 2282, An Act relative to access to safe quality, affordable, accessible health care – the Senate version of health reform.
- Senate Bill No. 1260, An Act relative to the profession of nursing.
- Senate Bill No. 1263, An Act for an investigation and study to develop proper work rules for resident physicians and interns.

Since the primary focus of my remarks this evening concern the need for legislation to deal with the tragedy of drowsy, or sleep impaired, driving let me begin with a discussion of the need for comprehensive legislation on the topic. Later, I want to bring you up to date on several other bills that concern other areas where sleep deprivation poses a significant deadly threat as well.

Most of us can remember the excitement and elation of the 1980 Winter Olympics at Lake Placid where we witnessed a “Miracle on Ice” as the U. S. Olympic Hockey team won a gold medal. The team had a special place in the hearts of Bostonians because it included several local area athletes among its stars. As radio personality, Paul Harvey, would say, “now, the rest of the story...”

Falling asleep at the wheel killed 66 year-old Herb Brooks, who coached that “Miracle” hockey team, in August of 2003. A few years ago, Jeopardy! host Alex Trebek fell asleep and ran off the road in California, but he was one of the lucky ones - escaping with minor injuries.

Closer to home, on the morning of June 26, 2002, Robert Raneri was riding his motorcycle to work at the Devens Reserve Forces Training Area in Ayer when he was struck and killed by a 19-year-old driver who told police he hadn't slept in about 24 hours because he was up all night playing computer games. Major

Rob Raneri, at the time Provost Marshal of Fort Devens, left a fiancé who, a week later, learned she was carrying his child.

Drowsy driving has been called “a silent tragedy.” But, we can no longer, as a society, remain silent! It causes too many preventable deaths and injuries, and costs millions of dollars in property damage and loss. Those who complain about the high cost of auto insurance need to focus on the causes, and drowsy driving is a significant cause.

The best estimates are that 100,000 auto crashes each year are the result of driver fatigue, with at least 71,000 people injured and 1500 killed. But most experts believe those figures are far too low because there is no uniform method of reporting these accidents among the various states. In Europe—which does measure incidents of drowsy driving—up to 20% of highway crashes are caused by driver fatigue.

The **National Sleep Foundation**, in reporting the results of the 2005 “Sleep in America” poll, noted that 60% of America’s adults who drive or have a license report that “within the past year, they have driven a car or motor vehicle when feeling drowsy. This represents a significant increase from reports in 2000, 2001, and 2002 when the percentage ranged between 51% - 53%. Among the respondents to the 2005 survey, 29% reported having had an accident or near accident at least once a month in the past year.

Once sleep periods drop below seven hours, most of us become impaired—often as impaired as someone who is drunk. And we know that the odds are greater during hours when we would normally be sleeping.

No one is immune. Surveys by the **National Sleep Foundation** show that nearly 100 million drivers say they have driven while drowsy in just the last year alone; 32 million drivers admit to falling asleep behind the wheel.

What makes drowsy driving so deadly is that people are poor judges of how impaired they are by exhaustion. Cumulative sleep loss—routinely sleeping fewer than six hours a night or having interrupted sleep—can have equally deadly consequences.

Even simple tasks are made much more difficult by exhaustion. An alert person can respond to a visual cue, such as a light turning on, in about a quarter of a second. But it takes anywhere from two to 120 times longer for a tired person. Consider this: At 60 mph, drifting just 4 degrees in your lane can cause a crash in 2 seconds. Sleep experts tell us that many of these crashes are catastrophic because a driver who falls asleep even for a few seconds doesn’t swerve or hit the brakes.

Preventing drowsy driving is a challenge. Educating drivers, especially younger ones, is tough. Technology may offer some promise in a system that can monitor erratic driving and warn drivers before crashes. A third avenue is the legal system —by making fatigued driving a criminal offense. Senate Bill No. 2124 attempts to address all of these challenges.

Senate Bill No. 2124, also known as “Rob’s Law” in memory of Major Raneri, is intended to approach the problem of drowsy driving in more than just a punitive way. There are penalties proposed, but that’s primarily to help us all to understand that this is a serious matter, and without penalties, most people would not take the issue of drowsy driving seriously. Furthermore, we cannot continue to let drowsy drivers get away with murder! A legal slap on the wrist doesn’t bring justice to the victims nor does it serve as a lesson to others that falling asleep at the wheel is criminal negligence.

However, the primary focus of Senate Bill No. 2124 is to begin to educate new drivers, driving instructors and law enforcement about the problem of drowsy driving and the steps that can be taken to prevent serious, even fatal, accidents. In fact, it’s because there is a need for education that “Rob’s Law” provides for the penalties to become effective after there is an opportunity to educate the public about drowsy driving.

Senate Bill No. 2124, “Rob’s Law,” received a public hearing by the Legislature’s Committee on Transportation at the beginning of this year and, in the process, a good deal of media attention. It called for training in recognizing the symptoms of sleep deprivation by driver-educators, police officers, courts, and all new drivers. It also established criminal penalties for vehicular homicide resulting from drowsy driving. The bill was placed in a “study,” a polite way of shelving the bill, primarily because of concern by law enforcement personnel and legislators about the lack of an objective test – comparable to the breathalyzer – that could be used to determine that the driver had reached an unacceptable level of drowsiness.

However, that’s not the end of the story. While the effort to establish penalties for sleep impaired driving will have to wait a bit longer, the effort to promote “Rob’s Law” actually helped to advance a number of its key points in another bill that actually passed the Senate, and is currently pending in the House of Representatives.

Like the mythical Trojan Horse that concealed a powerful fighting force that led to victory over Troy, embedded in the proposed new Junior Operator License law, are important provisions that will, if enacted, lead to a new appreciation of the dangers of sleep deprivation and fatigue for drivers in Massachusetts.

There is certainly strong evidence to suggest that younger drivers are a good place to start. The **National Highway Traffic Safety Administration**, in an extensive study entitled “Drowsy Driving and Automobile Crashes,” has recommended drowsy driving education aimed at new drivers and those who work on shifts as well as the use of rumble strips on highways.

In another study, this one by the **American Automobile Association Foundation** conducted in North Carolina it was recommended that “drivers be educated to recognize the symptoms of drowsiness and the necessity of stopping driving once they recognize these symptoms in themselves. They must be convinced,” the report goes on, “that drowsy driving is as dangerous and “wrong” as driving drunk. While certain segments of the population – shift workers, persons with sleep disorders, persons taking certain medications – are at increased risk of a sleep-related crash, the results of the study clearly show that the majority of drivers in sleep-related crashes simply receive too little sleep.”

The landmark provisions that are part of the proposed Junior Operator Law , (Senate Bill No. 2688) would put Massachusetts in the front rank of states that take the scourge of drowsy driving and sleep deprivation seriously

The bill provides that:

- The importance of adequate sleep for young drivers would become part of the driver’s license exam and would be the focus of the new, tougher driver education curriculum required by the law. Section 6 states that *“The examination shall also include questions relative to the importance of obtaining adequate sleep and about recognizing the signs of driver impairment associated with drowsiness and sleep disorders and about appropriate countermeasures to driving drowsy.”*
- Police officers will be trained in techniques to recognize the impact of fatigue among young drivers who, a recent North Carolina study, determined comprised 55% of all sleep related accidents. Section 14 adds to police training *“education to recognize the signs of reduced alertness from sleep deprivation or sleep disorders.”*
- The hours that drowsy driving among young drivers is especially hazardous – **Midnight to 5 A.M. are, in Section 7**, a time that junior operators must not drive unless accompanied by a parent.
- The Junior Operator bill (Section 25) also calls for a public awareness campaign to help youthful operators and their parents become familiar with the new requirements of the JOL. The public awareness campaign is required to include *“information on the major causes of accidents among new drivers, including sleep deprivation.”*
- A new commission would be established to study and make recommendations to the Legislature *“on the impact of drowsy driving on highway safety and the effects of sleep deprivation on drivers while operating on the highways, adjacent parking areas and other areas.”* Of special note regarding this commission, is that its area of study is not limited to junior operators, but to all

drivers of any age. It will include legislators, prosecutors, chiefs of police, the registrar of motor vehicles, ***and three appointees of the governor who shall be members of the medical or academic community with expertise in sleep deprivation research, and another member who represents victims who have been injured or killed by drowsy drivers.*** The scope of the commission's study would include determining scientific and legal standards or other evidence that could be used by police officers and the courts in determining the effects of sleep deprivation on drivers, the appropriate sanctions for operating while sleep deprived, and the training requirements to be followed by licensed driver education programs and police training programs with respect to the recognition of the symptoms of sleep deprivation on drivers.

While these changes in motor vehicle law will help to separate the twins of sleep and death, at least on our highways, there is other legislation that has been developed in the current session, and that is being readied for the new session that begins in January that will make sleep into a friend among medical professionals such as medical residents and nurses.

For those in our health care professions, sleep can be a friend to those who need rest and time to recover from the stress of their profession. As the Bible notes, "Sweet is the sleep of the laborer," (Ecclesiastes 5:12).

The Senate actually adopted standards for medical residents and interns as part of its version (Section 44 of Senate Bill No. 2822) of the state's landmark health care reform legislation. However, our inability to gain agreement from House conferees to retain this provision resulted in it being dropped from the final version.

A less aggressive version, (Senate Bill No. 1263) calling for a study of the issue of sleep deprivation among residents and interns, is still pending in the Senate Committee on Ways and Means.

The recently published study in the Journal of the American Medical Association (September 6, 2006) by Landrigan, Barger, Cade and Ayas, could serve as a key point of research for any legislative study. The study, as many here know, demonstrated that 84% of interns reported work hours in violation of the standards established by the Accreditation Council for Graduate Medical Education. Those standards, set limits for residents at 80 hours per week.

The study demonstrates that pressures from employers, supervising physicians, and the health care system make it unlikely that voluntary compliance with even these most generous standards, can be achieved without the force of law or regulation.

Frankly, I am tired – yes, tired – of hearing older physicians tell me that they went through these grueling shifts in their training and, if they could do it, we shouldn't coddle the current crop of residents and interns. First, the patient acuity today is much worse than even twenty years ago. Patients are sicker when they finally arrive in the hospital. The worst cases regularly go to the teaching hospitals where most residents and interns work. With the fact that senior citizens will double in the next ten years – and aging brings on more illnesses and conditions – the workload is far more intense than it was in earlier times.

Second, one might reasonably ask these veteran physicians how many patients they may have killed or injured in the process of obtaining their resident training working well in excess of the current standard of 80 hours per week.

I am convinced that physicians, nurses, and direct care health workers must conform to limits of hours worked and time off, just as we expect airline pilots, truck drivers, and others to do to avoid sleep impairment. If the profession can't regulate itself, and it seems that they can't, government will have to step in to protect patients and the health professionals themselves.

In addition to asking the Senate Ways and Means Committee to favorably report Senate Bill No. 1263, I contacted the Boards of Registration in Medicine and Nursing asking them to review this matter from the regulatory perspective.

The Board of Registration in Medicine responded recently that they share our concern regarding resident work hour limits, and are prepared to work with us to act upon the findings reported in JAMA.

Nancy Achin Audesse, the Board's Executive Director wrote to me on September 18th,

“As you know, the Board of Registration in Medicine has been revising its regulations. While the current process is already underway, the Board plans to begin another round of revisions next spring to address matters of acupuncture, medical records and matters involving medical residents. It would be a great opportunity to look at additional topics such as medical residency training programs.”

She continues, “The Board of Registration in Medicine began looking at resident issues last year. In addition to resident working hours as part of that program, we are also concerned with the issue of resident supervision. Over a quarter of our major incident reports highlight lack of adequate resident supervision to the cause of medical errors.

“We (the Board) formed a working group comprised of Graduate Medical Education Directors, Designated Institution Officers, Medical Residents, and others to begin the discussion on medical resident issues. As a result of that working group, all residency training programs must meet certain standards if they wish to have longer limited licenses for their residency training programs. We plan to reconvene the working group to develop those standards and perhaps compliance on resident working hours could be discussed.”

Director Audesse went on to invite me or a staff member to become part of that working group, and I would be pleased to encourage her to add representation from the Sleep Research Society or the Division of Sleep Medicine, if there is interest in participating.

What may be needed, and an area where the Sleep Research Society can provide further help, is to help develop an effective method of tracking work hours and reporting work hours to an oversight agency. I expect that we would also need to include some sort of “whistle-blower” protection for those who might file complaints against employers or supervisors.

There is also a growing body of academic research on the issue of sleep deprivation among nurses. In my redraft of legislation (Senate Bill No. 1260) to enhance the nursing profession, I have included sections to limit both mandatory and voluntary over-time and work hours and to require recovery periods between shifts. This bill has been caught up in the debate over mandatory nurse-staffing ratios, but it is also an important step that needs to be taken.

In view of the shortage of nurses, and the growing shortage of physicians in some fields, we will actually need to evaluate the work schedule of all direct care workers – physicians, physicians in training, nurses, and others so that setting limits on one class of health professionals doesn't unfairly increase the work load on other participants in the health care system.

There is still a possibility, though admittedly the proverbial clock is ticking, that either the sleep provisions of the Junior Operator bill or the study for resident physician work hours legislation could make it through in the remaining days of the current session. However, I will make one promise to you tonight, I will continue to press this issue in the Legislature as long as it takes to get positive action to effectively address the problem of drowsy driving! There will be a law! And I intend to push for tougher work hour limits for medical residents and nurses as well.

You can, individually and collectively, help to make these bills stronger by your continued research and you can help to get them passed by your continued advocacy with legislators, the media, and the public. I need your help – the motoring public needs your help on this life or death issue. I also need your help – the patients of Massachusetts need your help – if we are to save lives of doctors, nurses, and patients. The motto: “First, Do no harm,” should be amended by adding...get adequate sleep.

Thank you.