Assessment of Obstructive Sleep Apnea Risk and Severity in Truck Drivers: Commentary on the Legal Implications for Ignoring a National Safety Concern

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In the accompanying paper, the authors validated the capabilities of a simple, easy, inexpensive Apnea Risk Evaluation System (ARES) Questionnaire to identify individuals with OSA. Additionally, in a sub-group of transportation workers, the high prevalence of undiagnosed OSA was confirmed.

This commentary considers legal implications of ignoring the health risks of OSA for drivers, employers and clinicians. Given that a substantial portion of current drivers have a high prevalence of suspected undiagnosed OSA sufficient to create a level of somnolence that increases the risk of accidents, coupled with the increase in knowledge about the dangers of undiagnosed OSA in the transportation industry, it is in the best interests of those parties who may be held legally accountable to consider probable legal risks.

As drowsiness is a common symptom of OSA, both common sense and the weight of the evidence suggests that undiagnosed OSA leads to a greater risk of accidents injuring and perhaps killing the driver and/or others. These accidents also cause property damage and loss of economic productivity to a degree often not fully appreciated (e.g., whereas the lost time at work, the costs of defense lawyers in litigation and damage awards or settlements is often recognized, the time taken by driver and management participation in litigation is not). It is thus almost too obvious to state that the best legal strategy as well as the best management strategy is accident avoidance.

Accident avoidance or reduction can occur through diagnosis and treatment of OSA, which can be done in a cost effective way that reduces overall costs to the company, including liability for accidents and the costs of employee health care. In October 2005, Schneider National published a report that provided preventive solutions to potential legal exposure for those who did not begin to address the issue of undiagnosed OSA among commercial drivers. In an abstract presented at the 2006 American College of Chest Physicians meeting and an accompanying white paper, 1 Schneider's reported annual health care savings of over \$5,000, far exceeding previous estimates,²⁻³ and more than covering the cost for OSA diagnosis and treatment. Schneider also reported a 73% reduction in preventable driving accidents among 225 drivers diagnosed and treated for OSA. Assuming each of these prevented accidents cost on average \$75,000,4 the OSA screening program would have generated additional savings of \$57,500 per diagnosed driver. The Schneider data provides use-

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ful and instructive information for others in the transportation industry, demonstrating that diagnosis and treatment is cost effective and reduces preventable accidents.

In the American legal system liability for motor vehicle accidents is determined by individual state law, thus any discussion must be in general terms. Although the general law is somewhat uniform, specific facts and law control each individual case. The potential risks of liability differ significantly for drivers, employers, and clinicians.

Legal Risks for Drivers

In most states, liability for motor vehicle accidents is placed on the driver who has caused the accident. This is the American fault system with liability following fault. The establishment of fault occurs through civil litigation using the legal rules of tort liability. The most likely legal theory brought to establish tort liability for a motor vehicle accident is negligence (the driver was careless). Less common but also important is gross negligence, often referred to as wanton and reckless disregard for the safety of others. Although there are 12 states and the District of Columbia with no fault automobile insurance, most of these states have damage thresholds which, if met, allow fault lawsuits. Meeting these thresholds in trucking accidents is probable.

Proof of ordinary negligence supports claims for compensatory damages including economic loss (e.g., lost wages and hospital bills) and non-economic loss (e.g., pain and suffering). Gross negligence allows claims of punitive damages which are damage-awards often triple or more times the amount of compensatory damages to punish, deter, and make an example of the wrongdoer. It is also true that behavior which satisfies the legal requirements of gross negligence may lead to criminal prosecution of the driver for the felony crime of manslaughter (e.g., involuntary or vehicular manslaughter).

The most likely basis for truck driver liability is negligence. "A person acts negligently if the person does not exercise reasonable care under all the circumstances. Primary factors to consider in ascertaining whether the person's conduct lacks reasonable care are the foreseeable likelihood that the person's conduct will result in harm, the foreseeable severity of any harm that may ensue, and the burden of precautions to eliminate or reduce the risk of harm". § If one fails to be legally careful and thus injures another's person or property, the victim may sue and recover damages from the wrongdoer for negligence. Truck collisions can occur for a variety of reasons and not all involve carelessness on the part of the driver. If a collision is caused by a driver who is both drowsy and aware of the drowsiness then proof of that fact will likely lead to liability and thus responsibility for injuries and damages caused to others. 6-8

A driver who falls asleep at the wheel is not negligent as a matter of law in many states.⁶ In other states, if a driver falls asleep and a wreck results the "driver bears the burden of showing that he was not negligent in damaging the vehicle". Teven in states where the driver is not liable as a matter of law, the full statement of the legal rule provides its limitation. "The operator of a motor vehicle is not ordinarily chargeable with negligence because he becomes suddenly stricken by a fainting spell or loses consciousness from an unforeseen cause, and is unable to control the vehicle. In other words, fainting or momentary loss of consciousness while driving is a complete defense to an action based on negligence if such loss of consciousness was not foreseeable". 6 The key concern is: was the loss of consciousness or alertness foreseeable? If a driver is drowsy, or having trouble staying awake and/or has had reoccurring episodes of drowsiness then an accident that results from any of these conditions could be characterized as foreseeable. "If you feel drowsy at any time of the day or night, you are sleep deprived". 9 "Drowsiness is the last step before falling asleep, not the first. In any hazardous or potentially hazardous situation such as driving, the onset of drowsiness should be regarded as a red alert- a powerful signal to get out of harm's way instantly".9

It is clear that the drowsy truck driver is dangerous and is creating a risk both to self and others. The likelihood of liability is high. The number of hours driven by professional drivers combined with the nature of the vehicle driven, both as challenging to operate and as a more dangerous projectile, exacerbates the risk.

Among those behaviors suggesting the driver is taking an unreasonable risk is continuing to drive when drowsy no matter the cause,⁸ of not seeking medical assistance upon awareness of frequent daytime drowsiness, and not answering questions at medical examination honestly, especially regarding drowsiness and snoring. Behaviors which could lead to gross negligence include deception in either answering questions about daytime drowsiness or snoring, or deception in participation in a testing process to determine OSA. An example of gross negligence would be a driver with daytime drowsiness who is diagnosed with OSA by his or her primary care physician, and declines treatment and fails to disclose either at the DOT physical or when tested for OSA using drug type test fraud (i.e., has a friend appear at the sleep lab to take the test in the drivers instead or if using an at home device has another wear the portable device.)

Furthermore, failure to comply with treatment for diagnosed moderate to severe OSA could be considered as reckless disregard for the safety of others. The National Highway Safety Administration report on Medical Conditions and Driving stated that for all drivers "patients with moderate to severe obstructive sleep apnea documented by sleep study who are non-compliant with treatment should not drive any type of motor vehicle." Continuing to do so would be argued by any injured party as callous and reckless behavior or gross negligence. ¹⁰⁻¹³

Gross negligence can also lead to criminal charges against a driver [14]. In a recent Kansas case, a semi-truck driver struck and killed a member of a road construction crew. The driver was convicted of involuntary manslaughter, a felony criminal charge. The evidence at trial did not show that the driver had logged excessive hours preceding the accident nor had he stayed up late the previous evening and blood samples after the accident were negative for alcohol or drugs. He did how-

ever, become drowsy and continue to drive. "When asked if he had excessive daytime sleepiness prior to the collision, he stated, "Well, now it appears that way, yes. At the time I just figured daytime drowsiness was normal." At the conclusion of his testimony, the driver stated that he had no idea that he was falling asleep or at risk for doing so at the time of the accident. He said he would not have driven if he had known that he was placing others at risk." Three months after the accident, he was diagnosed with sleep apnea.¹⁵

In a current case (February 2007), the driver of a semi-trailer was ordered to stand trial on two counts each of involuntary manslaughter and aggravated battery for the deaths of a mother and daughter in a collision. It is alleged that he was coping with sleep apnea and had ignored a recommendation from an examining doctor to have follow-up exam for sleep apnea. It is also alleged that he went to another doctor, made no mention of sleep apnea at his license renewal and was given a two-year medical certificate thereby retaining his commercial license. ¹⁶

Legal Risks for Employers

Employers are liable for accidents caused by their driver employee in two broad ways. The first is the more likely and is called vicarious liability under the legal doctrine of *respondeat superior*. It is a general rule of American law that employers are vicariously liable for employee acts occurring during the course of performing employment tasks. The second legal risk is less common but should be of particular concern. It is negligence occurring generally, either in hiring or supervision of an employee or independent contractor including liability of the motor carrier for harm to the public caused in the operation of the equipment operated under the carrier's DOT number. ^{17–19}

For the doctrine of *respondeat superior* to apply, three conditions must be satisfied: (1) the engaged person must be an employee rather than an independent contractor, (2) the complained behavior must have occurred during the scope of the engaged person's employment, (3) the employee was careless. If all three conditions are met the employer is liable no matter the level of care engaged in by the employer. The doctrine is liability without fault. There are several legal justifications offered for the doctrine, but the most common is that those who gain the economic benefit from employment activity should be legally required to absorb the negative economic consequences as well.

Possible employer liability under either theory cannot reasonably be eliminated, but liability can be reduced. Elimination of liability would mean that neither employer nor employee is ever careless causing harm to themselves or others. This is a worthy goal but attainment defies all knowledge about human behavior. However, an employer who is proactive in reducing the probability of harm to others is more likely to do so than one who simply ignores risks. Such proscriptive behavior also reduces the probability of gross negligence verdicts and thus potential awards against the employer for punitive damages.

In this context, being proactive includes establishing programs to reduce the likelihood of driver accidents caused by negligence related to undiagnosed, untreated or inappropriately treated OSA. The damages obtainable by a victim of an employee's negligence under the doctrine of *respondeat superior* are compensatory damages. If death or severe injury occurs compensatory damages can be very high. However, *respondeat superior* liability without proof of an employer's wrongful behavior does not support claims for punitive damages.

Workers compensation is the ordinary compensation available to an injured driver.

It is often difficult to motivate an employer to spend money on prevention but the evidence is compelling that accidents are expensive and reducing OSA will reduce accidents. 20-22 In addition diagnosing and treating OSA should significantly save on overall health costs for the OSA driver and in most cases the ultimate health costs are paid by the employer usually in health premiums. Failing to create a prevention program can often be attributed to a business being unable to decide the benefits of a program and how to implement them. When, whether, where and how do we start? Pre-employment, renewal DOT physicals, annualized physicals, questionnaire screening, accident history, employer observation, location phasing, age and weight indicators, optional health fairs are but some of the possible options for an employer program. Comprehensive programs could include compliance monitoring and perhaps vigilance or fitness for duty testing. 20 Given that accidents by negligent drivers will cause liability for the company any action taken that reduces accidents will reduce liability. Inaction is the only truly inappropriate decision given the developing knowledge of how many undiagnosed OSA drivers are on the road and the increased accident risk they pose. Attention by the Insurance industry to the problem of OSA has begun and a Loss Prevention note by Liberty Mutual recommends some modest employer behaviors to reduce accidents caused by undiagnosed or treated drivers.²¹

OSA testing and treatment programs instituted by Schneider National, Jet Express, Inc and Suttles Truck Leasing, Inc., all test and treat current drivers, as well as use pre-employment testing. These companies modified their medical interview for employees and used additional techniques to identify likely undiagnosed OSA drivers. Each program description suggested use of education and support of the OSA drivers as an important part of the prevention strategy. The Schneider National Study acknowledged an important challenge to their, and probably any, diagnosis and treatment program. "Despite all of the previously mentioned initiatives, drivers' concern over possible loss of income and job security remained as significant impediments in implementing widespread driver cooperation". In the study results which accompany this commentary, there were substantial differences in the mean responses of pre-hires and managers for the Epworth scores, frequency of snoring, waking up choking and told stopped breathing (Table 2). The pre-hires appeared more "normal" than the healthy control data presented in Table 1 and the distribution of OSA risk also appeared biased. These findings suggest that the questions included in the DOT medical evaluation report form may be inadequate in identifying those with a high risk of OSA and suggest the possibility of less candor by the pre-hires. Using screening tests which rely primarily on subjective assessments such as the Epworth Sleepiness Scale that allow less than candid responses, and do not properly weigh anthropomorphic and co-morbidity factors to identify OSA risk, for this population may be inadequate.

A strong program to counter this reluctance could include education about OSA health and safety risks, financial support for diagnosis and treatment including a program to follow-up on treatment compliance, speedy testing and treatment, and short term disability insurance assistance and waivers. In addition, an education program about OSA and its signs and symptoms to increase awareness for occupational health pro-

fessionals and medical examiners accompanied with a caution about the possible reluctance of all drivers to be candid in making complaints and answering all questions posed by these professionals related to drowsiness.

The liability risk causing greatest concern to many employers is punitive damages. For an employer to be liable for punitive damages, the injured victim (plaintiff) needs to show egregious wrongful behavior by the employer. Punitive damages are important to avoid not only because they are high but because they garner substantial adverse publicity and are often not covered by liability insurance. In the appellate court cases involving drivers being either drowsy or falling asleep punitive damages were awarded in most cases. "One striking aspect of the reported cases involving alleged driver fatigue is the apparently high proportion of cases in which punitive damages have been awarded" (in truth there are not a large number of these cases undoubtedly because many settle and are not reported in the legal literature). ²³

Beginning a program to diagnose and treat OSA raises a dilemma for a company because it shows that the company has recognized a problem and if an OSA related accident occurs then the company did not prevent it. The argument that will be made by plaintiff lawyers is that if the harm occurs, the company obviously did not do enough. It is true that knowledge of a problem that can be reasonably prevented suggests that a company should take action towards a solution and failing to do so can be argued as negligence. The rebuttal is not whether the company prevented every problem. It is whether the company acted responsibly to deal with a problem. If the company did so then the employer cannot have acted in a way that is callous and irresponsible without regard for the general public and any claim for punitive damages should be unsuccessful. Callous and egregious behavior is proven by knowledge of danger and by a failure to act, which is construed by a jury as a ratification of the careless behavior of the driver by the employer. Such a finding would satisfy the requirement that the employer's behavior is willful, wanton and reckless and could support employer punitive damage liability for the acts of employees or independent contractors.^{24–26}

Legal Risks for Clinicians

A primary risk for a clinician is a malpractice action brought by the injured driver or a wrongful death action brought by his or her family related to failure to diagnose OSA when the driver was a cooperating patient. As information about OSA becomes more readily available it is reasonable to assume that clinicians will be expected to observe and ask appropriate questions related to the possible incidence of the syndrome. Obese, middle age men are obvious candidates for simple questions about snoring and drowsiness for both the patient and the patient's family. A number of the validated questionnaires can assist significantly with screening likely OSA candidates.

Lawsuits have been brought against clinicians by employers when the employer's were held liable under the doctrine of *respondeat superior* for highway accidents of their drivers. These lawsuits allege negligence by an industrial health professional in certifying as fit to drive, a driver that is later determined to have been unfit to drive a commercial vehicle. ^{27,28} As more information about diagnosis and risk of OSA becomes available the standard of care expected of medical providers will increase.

It is also possible that clinicians performing DOT physicals could be sued for negligence by injured third persons if they do not appropriately investigate patients who report obvious symptoms or present likely physical precursors of OSA. Earlier we discussed that in Schneider National program they observed reluctance on the part of some drivers to fully cooperate in diagnosis and treatment of OSA. The data in this study suggest that questions like those used in the DOT examination report can understate the assessment of the risk of OSA (Table 2). As discussed earlier in this commentary, precautions may need to be taken to integrate more sophisticated means to assess the risk of OSA as a precaution against ignorance, reluctance, and or deception.

Less likely but also possible is the liability to third parties that could occur for failure to follow through to determine that compliance with treatment for OSA has occurred or to determine if the selected treatment method is effective. Indeed, if a physician were to certify that treatment had occurred when it had not, it could lead to claims of gross negligence and punitive damages.

Conclusions

A number of recent developments have changed the potential legal landscape for those involved in the transportation industry. First, evidence indicates that commercial drivers suffer from a disproportionately higher prevalence of OSA than is currently being diagnosed or recognized. Second, the Joint Task Force recommendations have placed drivers, employers and physicians on notice about this problem and propose specific steps that should be taken to reduce preventable accidents attributed to OSA.^{17–19} Third, a recent study suggests that treating drivers for OSA provides health care savings that more than covers the cost of implementing a program. Fourth, inexpensive, accurate and convenient diagnostic methods exist. Fifth, treatment options exist that reduce the risk associated with OSA for drivers. Sixth, existing case law exists to frame an argument for punitive damages for employers and physicians and criminal convictions for employees and employers if OSA problems are ignored or hidden. The word to the wise is "deficio gero vestrum periclitatus" which roughly translates as "fail to act at your peril."

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