

Contact:
Daniel Levendowski, President ABM.
760.720.0099 x 6040

For Immediate Release

Time For the Trucking and Heavy Machinery Industries to Wake Up!

Commentary Advocates Widespread Screening of Truck Drivers for Obstructive Sleep Apnea

Advanced Brain Monitoring's Apnea Risk Evaluation System (ARES™) Proven to Help Companies Increase Employee Productivity; Minimize Litigation Risks

September 5, 2007 – **Carlsbad, California** – For decades, one main safety issue that transportation company executives had to manage was the number of hours a driver spent behind the wheel. After laws were enacted in 2004 mandating that truckers have at least 10 hours of consecutive off-duty time before they qualify for a new work period, it was presumed that these sleep breaks would result in awake and alert drivers. But in recent years, sedentary lifestyle and increased obesity in this workforce has contributed to a growing epidemic of chronic drowsiness and fatigue.

In a recent study published in *Sleep Diagnosis and Therapy* (April – May 2007), the authors found that as many as 50 percent of transportation workers studied had undiagnosed obstructive sleep apnea (OSA), a potentially life-threatening breathing-related sleep disorder that often goes undiagnosed and untreated. The study findings were accompanied by a second article that analyzed the legal ramifications of OSA in the transportation industry. The legal article emphasizes the responsibility drivers now have to ensure they are fit for duty to be socially responsible, avoid tort liability, and possibly even jail time, if they cause an accident. It also identifies steps that employers and clinicians can take to reduce the likelihood of paying punitive damages if a driver has an accident due to OSA.

“Parties in the trucking industry have not paid sufficient attention to the risk of undiagnosed OSA,” stated Donald L. Carper, a professor emeritus in the College of Business at California State University, Sacramento and co-author of the study. “Drivers, their employers and clinicians all have potential legal exposure resulting from undiagnosed OSA. The overall awareness of OSA, its seriousness and attendant risks has reached the point that ignoring this problem will undoubtedly carry a high price in the future.”

The prevalence of undiagnosed OSA has increased within the transportation industry. During the past twelve years, studies have shown significant awareness of OSA within the trucking industry – from employers and employees. This recent study, conducted by Advanced Brain Monitoring, found no significant differences in the prevalence of undiagnosed OSA among pre-hires or transportation managers. Results in both groups were similar to those obtained by researchers at Stanford University during the 1990s. The research suggests the high prevalence of obstructive sleep apnea, combined with an increasingly older and heavier commercial driver population, requires specific and actionable steps to preserve the safety of the US motoring public.

“When it comes to responsible motoring, there is more at stake than just the truck driver’s license,” says Dr. Philip Westbrook, past-president of the American Academy of Sleep Medicine and Chief Medical Officer of ABM. “The simple truth is OSA is a relatively easy and inexpensive disease to diagnose and effectively treat. Immediate cost savings are recognized as a result of improved driver health, more than enough to cover the cost for diagnosis and treatment within six months. Doing nothing is the only inappropriate action given our knowledge of how many undiagnosed OSA drivers are on the road and the increased accident risk they pose.”

Apnea Risk Evaluation System (ARES™) Technology

ABM has developed significant and cost-effective technologies to assist the transportation industry address this potential OSA epidemic. The company has developed and validated the ARES Screener, a questionnaire and statistical analysis that provides an inexpensive and accurate means to identify drivers with the likelihood of having mild, moderate or severe OSA. Specifically:

- For those at-risk of OSA, the ARES Unicorder is worn in the home during sleep to obtain the information necessary for a physician to diagnose OSA. The ARES can be conveniently self applied and worn while the driver is sleeping even in the cabin of a truck. It has been validated in the largest study ever conducted which compared the accuracy of in-home vs. laboratory sleep studies.
- ABM has launched a web-based initiative targeted to the needs of the transportation industry. Drivers can complete the ARES questionnaire on-line to determine if they are at risk for OSA and order an ARES sleep study. Study results can be made available online for download by the driver’s primary care, occupational medicine, or sleep medicine physician.
- The ARES can identify drivers likely to be successfully treated with oral appliances, an alternative to continuous positive airway pressure (CPAP) treatment.

“Loud snoring during sleep combined with daytime drowsiness is an indicator of those who may have undiagnosed OSA,” stated Dr. Westbrook. “Research suggests that anyone suffering from hypertension, diabetes, stroke, heart disease, or depression should have a sleep study to determine if they have undiagnosed OSA.”

The Arguments for Immediate and Widespread OSA Diagnosis and Treatment is Overwhelming

In the commentary, the authors suggest that recent developments have changed the potential legal landscape for those involved in the transportation industry. Specifically:

- Evidence indicates that commercial drivers suffer from a disproportionately higher prevalence of OSA than is currently being diagnosed or recognized.
- A Joint Task Force which included representatives from the American College of Chest Physicians, American College of Occupational and Environmental Medicine and the

National Sleep Foundation made recommendations that placed drivers, employers and physicians on notice about this problem and proposed specific steps that should be taken to reduce preventable accidents attributed to OSA.

- Schneider National, a national trucking concern based in Wisconsin, recently reported that treating drivers for OSA provides health care savings that more than covers the cost of implementing a program.
- Inexpensive, accurate and convenient methods to diagnose OSA are now available.
- Treatment options exist that can reduce the debilitating symptoms associated with OSA.
- Existing case law exists to frame an argument for punitive damages for employers and physicians and criminal convictions for employees if OSA problems are ignored or hidden resulting in truck collisions causing death or other serious harm..

A complete copy of the published articles, “*Assessment of Obstructive Sleep Apnea Risk and Severity in Truck Drivers: Validation of a Screening Questionnaire*” and “*Assessment of Obstructive Sleep Apnea Risk and Severity in Truck Drivers: Commentary on the Legal Implications for Ignoring a National Safety Concern,*” are available at www.b-alert.com .

About Advanced Brain Monitoring

Advanced Brain Monitoring markets patented instrument systems that combine laboratory-level accuracy with the portability, ease of use, and low cost of consumer electronics. These systems can be used to diagnose sleep and neurological disease, and to assess alertness, memory, and other cognitive states. Our expertise is in the design and integration of novel sensors and miniature hardware, and the development of automated algorithms for signal analysis. *Advanced Brain Monitoring* has been awarded over 30 grants or contracts totaling over \$14.2 million from the National Institute of Health, Defense Advanced Research Projects Agency, and Office of Naval Research.

About ARES

The ARES, winner of the Frost and Sullivan’s 2006 Product Innovative Award, is convenient and easy to use, allowing patients to be studied in the comfort of their home. The cost of an ARES study is half of that of a laboratory sleep study.

The ARES was recognized by the Institute of Medicine, a component of the *National Academy of Sciences*, as a technology capable of expanding the adoption of portable monitoring for OSA.

The ARES was recently selected by the National Heart, Lung and Blood Institute and six other components of the *National Institute of Health* (NIH) for the Hispanic Community Health Study. As many as 16,000 participants will be enrolled in a study designed to identify the prevalence and risk factors for a wide variety of diseases, disorders and conditions, including obstructive sleep apnea.