

Sleep HealthCenters to Provide Occupational Health Services

U.S. HealthWorks, Concentra, Roadside Medical Clinic + Lab and Gordon Trucking have all chosen Sleep HealthCenters to provide comprehensive sleep apnea screening as part of their overall occupational health and employee wellness programs.

Sleep deprivation impacts productivity, but more importantly, it's become a public safety consideration. Concerned about accidents and injuries, companies in industries as diverse as airlines, trucking, healthcare and manufacturing are adding the diagnosis and treatment of sleep disorders to their employee programs.

If you are interested in learning more about our occupational health services or any of our employee wellness programs, please contact us at 877-SLEEP-HC (877-753-3742).



Sleep HealthCenters is a network of sleep medicine centers staffed by experts in the field of sleep medicine.

Our integrated care system provides all the services needed to diagnose and treat patients with the entire array of sleep disorders including obstructive sleep apnea, insomnia, narcolepsy, and restless legs syndrome.

Massachusetts Affiliations: Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, Boston University Medical Group, Faulkner Hospital, Hallmark Health, Marlborough Hospital, Massachusetts Eye and Ear Infirmary, McLean Hospital, Milton Hospital, New England Sinai Hospital, Southcoast Hospitals Group; Connecticut Affiliations: Gaylord Sleep Medicine.

Massachusetts Locations: Bedford, Beverly, Boston, Brighton, Brookline, Framingham, Jamaica Plain, Marlborough, Medford, Milton, North Dartmouth, Stoughton, Weymouth, Worcester; Arizona Locations: Mesa, Phoenix, Scottsdale, Tucson; Connecticut Locations: Hartford, Glastonbury, Guilford, North Haven, Trumbull, Bridgeport; Rhode Island Locations: Cumberland.

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For more information, please contact us at
877-SLEEP-HC (877-753-3742)
or visit our website at:

www.sleephealth.com

Requisition forms available on our website.

★ Discover Sleep

OSA and Trucking

Rochelle Goldberg, MD

Dear Colleague:

The need to sleep is a basic drive that everyone recognizes on a daily basis. What we are learning to recognize is the health and societal cost of insufficient or disrupted sleep. Prior issues of our newsletter have focused on the effect of sleep disorders in causing poor health, by contributing to the development of hypertension, diabetes and stroke. In this issue, we present information on how sleep disorders can affect not only an individual but others as well by impairing performance and increasing the risk of accidents.

Rochelle Goldberg, MD, Sleep HealthCenters' Arizona Regional Medical Director, discusses the added risk when a commercial truck driver has obstructive sleep apnea. Fatigue and sleepiness are major contributors to motor vehicle crashes and the consequences of such a crash are magnified when driving a large commercial truck. Dr. Goldberg is well versed in this area having recently organized and moderated the Sleep Apnea and Trucking Conference 2010 in her role as the Chief Medical Officer of the American Sleep Apnea Association. In addition to examining the impact of OSA on driving performance, Dr. Goldberg reviews the presentations at the conference.

If you have any questions or topics you would like to hear about, please contact me or the staff at Sleep HealthCenters.



Lawrence J. Epstein, MD
Chief Medical Officer
Sleep HealthCenters

The sleepy driver takes on new meaning when that person is at the control of an 18-wheeler. The professional driver, who may be at risk for sleep apnea and sleepiness, is facing more scrutiny by government agencies, occupational medicine providers and the sleep medicine community.

At the hub of much controversy is the driver. There are many questions: how to identify the trucker at high risk for obstructive sleep apnea (OSA), how to make reliable testing available (both by cost and geography for this mobile population), what treatments are possible given compliance documentation requirements, how to support compliance with treatment, and who is responsible for the certification for the commercial driver's license (CDL). Surrounding this is a collection of government guidelines, medico-legal concerns, and concerns within the professional driver organizations.

The Federal Motor Carrier Safety Administration (FMCSA) sponsored a study in 2002 to assess the prevalence of OSA in Commercial Motor Vehicle (CMV) drivers¹. A Multivariable Apnea Prediction (MAP) questionnaire was used. There were 1,391 responses from the 4,826 questionnaires sent to CDL holders. From these, 406 drivers were selected for sleep testing. In this group, 28% had sleep apnea (17.6% mild, 5.8% moderate, and 4.7% severe). The prevalence of sleep apnea increased with age, BMI and shorter sleep duration (<6 hours of sleep per night). In this study, just over 50% of the drivers were categorized as obese, defined as a BMI >30 kg/m². Using a BMI >33 alone had a sensitivity of 77% and specificity of 70% for identifying those at risk for OSA.

Fatigue and sleepiness are estimated to cause 100,000 police reported crashes each year, resulting in 76,000 injuries and 1,500 deaths². Multiple studies have shown that OSA increases the risk of motor vehicle crashes in the general population, with a 2.52 increased risk in those with OSA com-

pared to those without³. The relationship of sleep apnea severity and crash risk in CMV drivers is less clear. No specific studies have been performed in the commercial driver population to show whether they are at the same crash risk or if their driving experience mitigates the OSA risk.

To address some of the existing questions, the American Sleep Apnea Association (ASAA) organized the Sleep Apnea Trucking Conference 2010 (SATC 2010) this May in Baltimore, MD. The conference was co-sponsored by the FMCSA and American Trucking Associations (ATA). The program brought together public policy stakeholders for OSA and CMV drivers in an effort to increase awareness, present current programs and research in development and stimulate collaborations on this public health issue. The speakers, and over 400 audience members, included those from governmental agencies (regulatory and advisory), professional truckers (Owner Operator Independent Drivers Association, or OOIDA) and major trucking firms. Lawrence J. Epstein, MD, Chief Medical Officer for Sleep HealthCenters presented the medical aspects of OSA and I moderated the day-long program.

Meeting Highlights

Dr. Mary Gunnels (FMCSA Office of Medical Programs) emphasized that there is a large trucking population (400,000 medical examinations monthly) targeted by future regulations. There is increasing awareness of the relationship of obesity and general health concerns, as well as the increased risk for OSA. Sleep apnea and sleep disorders are sources for fatigue, a cause of motor vehicle crashes. The FMCSA is establishing a national registry for medical examiners to standardize the exams. Ongoing training will include new language and education about OSA.

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The FMCSA has announced a request for proposals for a major research initiative, The Commercial Driver Individual Differences Study. Data will be collected from 21,000 CMV drivers to identify 3,000 cases (crashes within the last 3 years) and 3,000 controls to assess driver factors and crash risk. A sub-study of 1,200 undiagnosed drivers at risk for OSA will undergo testing and treatment to develop a cost effective approach and evaluate sleep apnea-crash risk. The identification and treatment of sleep apnea may be cost effective as found in a recent retrospective study. Treatment resulted in reduced costs related to health care, disability and fewer missed workdays⁴.

The National Institute for Occupational Safety and Health's (NIOSH) "Transport Sector Intermediate Goals" includes language relating to the identification of health risk factors and work-related illnesses among commercial drivers. The Trucker Strain Monitor, a 10-item questionnaire, measures work related fatigue and sleep problems. Dr. Karl Sieber (NIOSH) reviewed preliminary information from this study which suggests that increased evaluation for sleep apnea decreases crashes⁵. He also emphasized the importance of monitoring for sleep deprivation in this population.

The medico-legal issues in crash risk and OSA are another area of concern for truckers, the trucking industry, health care providers and government. This discussion focused on liability issues from the individual to the corporation to the medical community. It remains a confusing arena, in part, given the lack of a clear regulatory mandate. It should be noted that, at this time, DOT disqualification takes priority over the Americans with Disabilities Act guidelines. The untreated driver carries not only the risk for crash but personal liability for that

crash and the trucking company is liable as well.

These issues also create some confusion for the Occupational Medicine provider. In a survey of the Academy of Occupational and Environmental Medicine membership, there were mixed responses on the importance of screening for OSA (high vs. low priority)⁶. Screening tools ranged from published guidelines⁷ to self devised review of systems. Dr. Natalie Hartenbaum (OccuMedix) discussed BMI screening cut-points (BMI >30 vs. BMI >33), another area of debate. Despite this, she emphasized that medical examiners must consider OSA in the DOT screen and not "look the other way". The one-month wait period for treatment response raised audience concerns about balancing patient safety against job/employment security. Dr. Hartenbaum reminded the audience that this is similar to medical recommendations for the person with newly-diagnosed diabetes or coronary artery disease.

The program concluded with speakers from Schneider National and J.B. Hunt, trucking companies that have successfully initiated screening and treatment programs. The representative for OOIDA addressed the particular concerns facing the individual owner-operator who may not have the safety net of industry support for costs of diagnosis, treatment, and out-of-service time following the diagnosis. Bob Stanton, co-coordinator, Truckers for a Cause chapter of the Alert Well And Keeping Energetic (A.W.A.K.E.) support network, reviewed the after-diagnosis challenges of life on the road with PAP.

In summary, the association of OSA, fatigue and crash risk is largely accepted, but the magnitude within the trucking industry and solution remains elusive. The Sleep Apnea and Trucking Conference

raised many issues regarding sleep and appropriate healthcare for truckers. Who is responsible for clarifying rules for identification of at-risk truckers? Who will cover costs of screening programs, diagnosis, and treatment? Who is responsible for monitoring compliance and ultimate medical clearance? Accessibility to testing and treatment is another challenge for this mobile population. Other acknowledged concerns include limited treatment options. CPAP is the only acceptable non-invasive therapy with objective adherence, and documentation of treatment-related improvements in fatigue and accident risk. How do all of these issues affect the industry-employed vs. independent owner operator? Besides the public health and safety issues, individual concerns remain regarding employment risk.

While no major decisions were reached, there was general consensus that more dialogue is needed. Although the regulatory bodies plan a continued search for objective data for future decision-making, there was no response to the audience concerns for when that definitive language might be available. Many voiced the need to "do this again," focusing on sleep-related health of the professional driver (trucker, bus driver) and others with links to public safety concerns. However, with a majority of Americans getting inadequate sleep, drowsy driving issues extend beyond OSA in the professional driver. Future policies need to reflect these high risk health and safety issues.

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Rochelle Goldberg, MD, FAASM, FCCP, DABMS

Regional Medical Director, Sleep HealthCenters of Arizona, Immediate Past-President and Chief Medical Officer, American Sleep Apnea Association

Dr. Goldberg is a full time sleep medicine physician. She has extensive experience in all aspects of care for adult and pediatric patients with sleep disorders. She has been involved in NIH and industry sponsored sleep research and has a special interest in sleep education as well. She has contributed to peer review literature and is a regular presenter at local, regional and national sleep meetings. She has served on numerous committees for the American Academy of Sleep Medicine and is a member of the Sleep Network for the American College of Chest Physicians. She is a current board member and the immediate past-President and Chief Medical Officer of the American Sleep Apnea Association. She recently served as moderator of the Sleep Apnea Trucking Conference in Baltimore, MD, in May 2010.



Case Study

DT is a 54 year-old truck driver who originally presented with fatigue, poor sleep and snoring. His work hours average 5AM to 7PM and include both local and over-the-road trucking. He tries to go to bed at 7PM to get up at 4AM for work. He awakens 3-4 times nightly. He is aware of snoring but has not had a witness to comment on apnea. Daytime sleepiness is most obvious in the afternoons. His Epworth score of 6 is not indicative of sleepiness. He denies other sources for sleep disturbance such as restless legs syndrome symptoms, pain or abnormal sleep behaviors. He has hypertension and Wegener's disease. He takes Benicar and prednisone. His weight had increased 20 pounds over 5 years. His blood pressure is 140/90 with a BMI of 32kg/m2 and neck circumference of 19 inches.

The diagnosis of possible sleep apnea was reviewed with him and a split night sleep study planned. DT expressed an interest in pursuing the diagnosis because he knew his employer was going to start screening employees for sleep apnea. He also wanted to get it done because he was concerned about his health.

The polysomnogram confirmed severe sleep apnea with an AHI of 33/hour of sleep and nasal CPAP at 13cm H2O successfully eliminated the OSA. Equipment was prescribed for nightly use. He was concerned about how to use it while on the road but was shown how to transport the device and use it in his truck cab. He was monitored closely for the first week and had some difficulty tolerating the device in the beginning. By the end of the first month he was wearing it almost every night for most of the night.

In his most recent office follow-up, he continues to demonstrate good PAP compliance. He maintains a similar sleep and work schedule. He has lost 27 pounds (despite continued prednisone 5mg daily). His Epworth score remains low at 5. Good compliance with PAP is supported by his PAP compliance card, with an average 5.5 hours nightly and 70% of the nights greater than 4 hours. He is very satisfied with his sleep and daytime function. He remains motivated to continue his treatment and weight loss. He shares the concern for the "politics" of the trucker with sleep apnea and is concerned about regulations in this field, but hopes that more of his work associates will get evaluated.

CEO Corner

In this issue of Discover Sleep, Rochelle Goldberg, MD, Sleep HealthCenters' Regional Medical Director and immediate past-president of the ASAA (American Sleep Apnea Association) talks about OSA in commercial truck drivers and what lies ahead for the trucking industry.

Truckers are a unique population and Sleep HealthCenters is working with several large occupational health companies and trucking companies to provide services to truckers with sleep apnea. Occupational health and wellness programs are a natural extension for Sleep HealthCenters, which has a long tradition of offering comprehensive programs for the diagnosis, treatment and follow-up care of its patients.

Services for the commercial driver population include identification of those at high risk for OSA, diagnosis with limited channel testing and/or in-laboratory studies, followed by initiation of therapy and long term management, focusing on measurement and assurance of compliance with therapy and improvement in outcomes. The goal is to provide high quality care in a manner designed to take into account the needs and lifestyle of the commercial driver.

Sleep HealthCenters is proud to announce our partnership with the Boston University Medical Group to help develop and manage their sleep center at 930 Commonwealth Ave in Brookline.



Paul S. Valentine
President and Chief Executive Officer

Sleep HealthCenters will perform diagnostic sleep studies and offer PAP therapy treatment alongside the BU sleep specialists. We are pleased to bring these additional sleep medicine services to the Boston University Medical Group patients and referring provider network.

Sleep HealthCenters has also expanded its collaboration agreement with Faulkner Hospital and Brigham and Women's Physicians Organization to jointly promote the existing sleep medicine program at Faulkner Hospital. Sleep HealthCenters will continue to work with Faulkner Hospital and Brigham and Women's Physicians Organization (BWPO) by providing comprehensive sleep medicine services. The expanded collaboration will include sleep health education, physician training and programs to increase patient awareness of sleep disorders within the community.

We are happy to continue to provide sleep medicine services to your patients. Please do not hesitate to contact us if you have any questions.

For more information about Sleep HealthCenters, please visit www.sleephealth.com.

Tufts Health Plan Changes Regulations for Sleep Study Eligibility

Tufts Health Plan has selected a benefits management company to provide sleep management services for its members. Providers must now request prior authorization for sleep studies and related PAP therapy through the benefits management company rather than through Tufts Health Plan. Providers may no longer fax authorization requests for those services to Tufts Health Plan. If you have questions about these new regulations, please contact Tufts Provider Services at 888-884-2404.

Sleep HealthCenters can continue to provide services for your patients. The simplest way to navigate through these changes is to have Sleep HealthCenters manage the process and paperwork by having your patient evaluated by a Sleep HealthCenters sleep specialist prior to the sleep study. Simply check off the Consultation and Management option on the Sleep HealthCenters requisition form and submit as usual.

If you have additional questions or need assistance completing the requisition form, please contact us at 877-SLEEP-HC (877-753-3742).