

News on sleep apnea for the commercial trucking industry

Why wellness matters



By Christine Schneider, Occupational Health and Wellness Manager, schneiderc@schneider.com

If you have read my articles in the past, you know I like to write real stories drivers have shared with me. I was fortunate to meet Steve Creighton. He's been a professional driver for over 20 years.

Steve was happy to share with me that he has logged over 2 million safe miles in his career. Steve has also trained many drivers in his career. Two of those

drivers have now logged 2 million and 1 million safe miles. It was a pleasure for me to speak to Steve as he shared his personal experience with sleep apnea.

Steve was first diagnosed with sleep apnea in late November 2008 when a survey indicated he could be at risk. Like many drivers, he was not happy when he found out he had sleep apnea and subsequently needed to be treated with CPAP.



Creighton

Steve said he really resisted the treatment at first. The CPAP was unusual; he thought it was hard to get comfortable. He felt it took a good three to six weeks before he started to see changes and feel results. After four months, he really began to see the full benefit of treating his sleep apnea.

Prior to treatment, Steve said he was a light sleeper, restless, had a difficult time falling asleep and found out through the sleep study that he was

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Precision Pulmonary Diagnostics (PPD), provides professional screening for drivers who are at risk for sleep apnea. This is a HIPPA-compliant, online tool customized to a company's requirements.

Once a driver has been diagnosed with sleep apnea, PPD will provide local diagnostic services with the ease of Web-based scheduling and quick, reliable turn-around – from diagnosis to treatment.

Drivers who require treatment will be fitted for and provided with a CPAP mask, flow generator, and heated humidifier for nightly use.

In order to ensure drivers are using their masks correctly, PPD has partnered with a leading manufacturer of CPAP equipment, masks, and the only provider of a patented wireless compliance monitoring system.

The wireless compliance monitoring system provides daily information of CPAP use, efficacy, and allows real-time troubleshooting of any problems your drivers may be experiencing. With this data, we can enhance your drivers' CPAP acceptance and long-term compliance. In short, our protocols can maximize your results and your return on investment.

Dear Readers,

The Federal Motor Carrier Safety Administration recently solicited feedback from two panels – Motor Carrier Safety Advisory Committee and the Medical Review Board (MRB) – concerning regulation and “interim guidelines” for DOT examiners concerning OSA.

While some aspects of the final guidelines are still in debate, they will more than likely include the following:

- A body mass index (BMI) of more than 35 should generate a sleep test (either a PM or an in-lab test).
- Other clinical criteria and co-morbid conditions could generate a sleep evaluation for BMI < 35. Those criteria are yet to be determined.
- A normal (negative) PM study in driver at high-risk for OSA should convert to an in-lab test.
- A 60-day card is recommended to allow the driver to be tested and prove compliance with treatment.
- Objective treatment compliance and effectiveness will be required in treated drivers. Guidelines may favor the 4-hour/70% time rule, but they are purposely staying vague on what “effectiveness” of treatment is (i.e. to stop breathing less than 10 times on treatment?).
- Drivers who stop breathing more than 20 times must be treated.

Right now, the plan is to get these interim guidelines out to the community sometime next month. However, the MRB also stated by March 2012 (about 90 days), it will (re)-propose updated detailed proposed rules to the FMCSA concerning OSA.

We'll keep you posted. Until then...

To good health,

Mark Berger, MD FCCP
Precision Pulmonary Diagnostics LLC



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Sleep disorders plague vets with head trauma or PTSD

Veterans of Iraq and Afghanistan who suffer from post-traumatic stress disorder (PTSD) or head injuries also have high rates of sleep disorders, according to a new study. Researchers at Walter Reed Army Medical Center in Washington, DC, discovered more than half of the 300 soldiers in the study who suffered from PTSD, head injury or both, also had sleep apnea.

The study included 135 soldiers with PTSD, 116 with traumatic brain injury and 66 with both conditions. In the sleep tests performed, 56 percent had sleep apnea. The study also noted blunt head trauma was more closely linked to sleep apnea.

Among the traumatic brain injury victims, 63 percent with blast injuries had insomnia, compared to 40 percent of those with blunt trauma. But only 26 percent of those with blast injuries had sleep apnea, compared to 54 percent of those with blunt trauma.

Among PTSD patients, sleep apnea was more prevalent in those who hadn't

suffered any physical injuries. Among the soldiers with both conditions, 37 percent had battle injuries, whereas 71 percent with PTSD but without sleep apnea had battle injuries.

Overall, the researchers found sleep apnea was more common (78 percent) in patients without traumatic brain injuries.

Sleep apnea among head-injury victims was a surprise, said Dr. Brian Carlin, a pulmonologist and sleep medicine specialist at Allegheny General Hospital in Pittsburgh. Carlin was not involved in the study. Carlin said, in a presumably healthy and relatively fit general population, the rate of sleep apnea is probably four percent to five percent. So, it is a wonder the relationship between head trauma and sleep disorders is so prevalent.

Researchers indicated military and civilian doctors, as well as non-military physicians working with veterans, should keep an eye out for sleep disorders and consider pursuing a comprehensive sleep evaluation if a problem is detected.

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never reaching a level of deep sleep. He said at that time he did not know he felt tired.

Now, Steve says, "I know what good sleep is. I feel the health benefits of really resting and I wake up ready to go." Steve said he does not leave home without his CPAP and even packed it to take along on a cruise. He is rightfully proud of the fact of almost 100 percent compliance, using his CPAP close to eight hours each night.

Steve offered to be on the mentor list Schneider maintains with the help of Precision Pulmonary Diagnostics, LLC. He acknowledges getting used to sleep apnea treatment may take some time, but knows there are multiple health benefits. Steve would like to help other drivers learn how to get a great night sleep. "I'm thankful to Schneider for looking out for us."

As part of our Wellness benefits, testing and treatment of sleep apnea is covered 100 percent under preventive care in the Schneider medical plan when you use an in-network provider. Company drivers who do not carry the Schneider medical plan can take advantage of payment plans at a greatly reduced rate.

I want to thank Steve for sharing his story. Too many drivers have a fear of a diagnosis of sleep apnea for no reason. Treatment can have huge impacts on your health and productivity as well as your personal safety. If you have questions on sleep apnea or would like help as you get used to a new diagnosis, contact Schneider's Occupational Health department 800-558-6701, Ext. 592-8709.

Obesity in your throat?



Special exercises may decrease OSA symptoms

Obesity is one of the symptoms of sleep apnea, so it's no wonder one of the first things doctors instruct their patients to do is lose weight. Why? Excess pounds around your waist, also means excess weight on muscles you can't see like your throat, neck, soft palate and jaw. Excess fat makes these muscles weak and vulnerable to collapse when you sleep, as well as causing a narrow air passage.

To strengthen the muscles and lose fat around the breathing muscles, sleep apnea exercises are encouraged. These exercises are not meant to cure the condition but act as adjuvant therapy. Before starting any specific exercise, visit your doctor to find out which muscles are weak and need work. For instance, if your throat muscles collapse during sleep, then you need to do throat exercises. If your tongue recedes

backward blocking air flow during normal breathing, you need to do tongue exercises.

Also keep in mind, it can take three months or more to see or feel any improvement but can easily be done in little time and included with any other weight loss regime.

Toning the tongue

According to clinical studies, tongue exercises done 30 minutes every day reduces neck circumference, decreases snoring and reduces a sleep disorder by almost 39 percent. These exercises also help in strengthening jaw muscles. Improvements are visible about 3-9 weeks.

Exercises for the tongue

- Place the tip of your tongue on your soft palate and slide it backward repeatedly.
- Hold tongue lightly between the teeth and swallow five times.
- Hold pencil between the teeth for ten minutes just before bedtime.
- Chew gum before bedtime until jaw feels tender.





Are you compatible with your sleeping partner?

Did you marry the right sleeping partner? Research from the Better Sleep Council found 1 in 3 couples say their partner's sleep habits affect their own sleep. Their issues range from snoring and restlessness to hogging covers and being too hot.

Similarly, the National Sleep Foundation (NSF) discovered a spouse loses about 49 minutes of sleep if his/her spouse snores. Over time, the sleep-deprived spouse could be at risk for health issues like chronic illness, reduced immune function, cardiovascular disease and impaired mental capabilities.

Bad sleep patterns can also impact how happy couples are in their marriage. NSF found about one of every two couples who were unhappy in their marriage also said they slept less today than five years ago. In addition, one in every three people with sleep issues say those issues caused marital discord.

Improve your sleep experience:

- Sleep under different blankets
- Put twin mattresses on a king size frame or use a pillow barrier to create separate sleep spaces
- Make your bedroom a dark, cool, quiet place to sleep without the TV
- Purchase a calm-sounding alarm clock if one person has to wake before the other

You can also indulge in separate bedrooms, which is more common than you think. According to sleepcare.com, one in up to 12 percent of married Americans sleep alone. And the trend may be growing. The National Associate of Home Builders anticipates more than 60 percent of custom homes built by 2015 will have two master bedrooms. And furthermore, a British study claimed separate beds may be the secret to a happy marriage. If you are well rested, you are better able to focus and communicate. All the more reason to get your zzzz's.

\$3.8M grant examines OSA's role in arrhythmia

Case Western Reserve University School of Medicine has received a \$3.8 million grant from the National Heart, Lung, and Blood Institute (NHLBI) to study sleep apnea as a possible cause of atrial fibrillation (AF), the most commonly diagnosed type of arrhythmia, or irregular heart rhythm.

AF is characterized by an abnormally rapid heart rate that can inhibit blood flow, and raise the risk of stroke and heart failure.

The five-year, NHLBI grant will enable researchers to study how sleep apnea produces functional and structural changes in the heart that may well contribute to the development of AF.

The researchers seek to clarify the extent by which the frequency of stopped breathing, the type of sleep apnea and reduced oxygen supply are associated with PAF, independent of any structural abnormalities in the heart.

Throughout their study, researchers will assess how changes in cardiac structure, inflammation, or autonomic nervous system dysfunction are involved in the relationship between sleep apnea and PAF, identifying if patterns of AF differ in patients with sleep apnea.

The research findings could identify key outcomes for clinical trials and ultimately bolster evidence for considering sleep apnea as a potential target for new strategies to reduce AF-related morbidity including stroke, heart failure and also death.