

Female Fate?



Women drivers face OSA risk based on gender alone

Although obstructive sleep apnea has been typically deemed a sleeping disorder for male truck drivers (given the male-to-female driver ratio), women drivers are at risk just for being female, according to a gender-based study.

Researchers at Pennsylvania State University College of Medicine, the University of Pennsylvania College of Medicine and Autonomous University in Madrid, Spain, explored the prevalence of sleep-disordered breathing in women based on age, body mass index (BMI), and menopause, to see how they weighed next to men.

Edward Bixler, Alexandros Vgontzas, Hung-Mo Lin, Thomas Ten Have, Jennifer Rein, Antonio Vela-Bueno and Anthony Kales conducted a two-phase random sample from the general population. In Phase I, 12,219 women and 4,364 men ranging 20-100 years were interviewed. In Phase II, 1,000 women and 741 men of the Phase I subjects were selected for one night of sleep laboratory evaluation.

The results of the study indicated that, for clinically defined sleep apnea, men had a prevalence of 3.9 percent and women 1.2 percent, resulting in an overall ratio of sleep apnea for men to women of about 3:1. The prevalence of sleep apnea was quite low in premenopausal women (0.6 percent) as well as postmenopausal women with hormone replacement therapy (HRT) (0.5 percent). Further, in these women the presence of sleep apnea appeared to be associated exclusively with obesity (with BMI ≥ 32.3 kg/m²). Postmenopausal women without HRT had a prevalence of sleep apnea that was significantly higher than the prevalence in premenopausal women with HRT (2.7 versus 0.6 percent) and was more similar to the prevalence in men (3.9 percent), although it remained significantly less when controlling for age and BMI.

In conclusion, the combined data indicates menopause is a significant risk factor for sleep apnea in women and that hormone replacement appears to be associated with reduced risk.

Did You Know?

In 1983, there were about 84,000 female truck drivers.

Today, national statistics tout almost 200,000 female truck drivers on the road.

According to the American Trucking Association, female drivers represent 5 percent of the trucking industry.

Women are most attracted to the trucking industry because of its flexible schedule, job availability and competitive salary.

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EDITOR'S NOTE

PPD: Protecting Professional Drivers is a production of Precision Pulmonary Diagnostics, specializing in premium news and analysis on sleep apnea for the commercial trucking industry, and is published 4 times a year.

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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 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,

So they say you have sleep apnea? What does that mean and what happens now? So the good news is that you have been diagnosed and now you can receive proper treatment to help with your sleep apnea condition. I am sure that at first you may have many fears about what all this "sleep apnea" talk means for you, your livelihood and ultimately your future. It is normal to feel anxious and perhaps emotional during and or after your study.

You can expect to receive a call from one of the Precision Pulmonary Diagnostics (PPD) CPAP Management Specialist (CMS) approximately 2 days after your initial diagnosis. The CMS will be calling you to introduce the PPD compliance management program and begin to establish a partnership with you in order to assist you with any issues/problems you may be experiencing with your CPAP treatment and or general issues or questions you may have regarding your diagnosis. The CMS will provide ongoing information and education about sleep apnea and begin the monitoring process.

What is the purpose of CPAP management and how will it help me? The purpose of our CPAP management team of experts at PPD is to help you adjust to your CPAP treatment, and overcome any issues you may experience during or because of treatment. Our team will be at your disposal as long as you are employed with your company and we will manage all of your CPAP treatment needs: from adjustment to treatment issues, monitoring and compliance issues, equipment problems/issues, to data card downloads and compliance DOT letters.

Initially when you begin treatment, you may experience a range of issues including pressure discomfort, dry mouth, congestion or nasal burning, and perhaps the most common issue being mask problems.

For most people, the pressure issue just takes some time getting used to. But for a few drivers, it is necessary to make some pressure changes to the CPAP unit in order to assist the driver in obtaining maximum comfort and treatment adherence. The CMS works very closely with the MD in order to make sure you are receiving proper pressure for treatment.

Dry mouth, congestion or nasal burning usually indicates a lack of humidification. Once you begin using your humidifier properly and have it hooked up to the correct power source if you are using your CPAP in your truck, these symptoms should go away after a few days.

Lastly and possibly the most difficult CPAP treatment obstacle involves finding the proper mask fit. The most common mask styles are nasal, Full Face and Hybrid masks. The sleep technician at the lab most likely assisted in fitting you with a one of the above mask styles. However, for some drivers, it may take a few different mask attempts until you find the one that is the most comfortable for you. You should never develop sores or marks that remain on your face for long periods of time. This usually means that you are over tightening the mask, or have the wrong mask size. A PPD CMS will be able to work closely with you for proper fitting and mask usage.

Our goal first and foremost is to help you achieve the best possible outcome on CPAP treatment, we realize that for most people this situation is hard especially with you being a truck driver, you have many other obstacles to overcome if you are a system/over the road driver and require CPAP treatment while on the road. PPD understands all of your special issues and circumstances, from power issues to weather/climate and personal issues. We are committed to your well being and will work side by side with you as long as it takes to help you achieve the best possible treatment outcomes.

Your questions and concerns are important to us. PPD will be featuring a new monthly question and answer newsletter in which four questions will be chosen to feature in the newsletter. Please email or post mail your questions to: katia@ppdsleep.com or post mail to : PPD/ 8275 El Rio St., Suite 110./ Houston, TX. 77054 .

Safe Travels,

Katia

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CPAP CONCERNS

Answers to common questions about your machine

Do you have questions? Call the Tip Line 24 hours a day, 7 days a week at: 713-520-5864 or toll-free 866-370-3102.

Help! My CPAP unit won't start.

Check grey power cord for tight connections. Are you using your CPAP unit with a 200Watt Pure Sine Wave Inverter? Is the air filter in the back of your CPAP unit clean? You must empty your humidifier chamber when not in use. CPAP units damaged by water will need to be replaced by the driver. Make sure there are no kinks in your air hose. LCD screen displays an error message indicating Call Service. Please call PPD for assistance (Mon-Friday, 8 a.m.-5 p.m., CST). Your unit may need replaced.

My mask is leaving red marks/ sores on my face or I am experiencing high leak from my mask. Can this be remedied?

Try loosening the straps on your mask. You may also wish to use the mask fit feature on your CPAP unit. This feature delivers air pressure for a 3 minute period, prior to starting treatment, during which you can check and adjust your mask fit to minimize leaks. *Note: please make sure the mask setting on your screen is the same as the mask that you are using.* To start your mask fit feature: With your mask on your face, hold down the start/stop button for at least 3 seconds until the air pressure delivery begins. You will see a series of stars rating your mask fit. (Excellent, Very good, Good, poor etc.) These star ratings are supposed to guide you in making mask adjustments if necessary. If you continue to experience pain or high leak with you mask, please call PPD you may need another mask model.

My CPAP unit shuts off in the middle of the night. How can I fix this?

Make sure your air filter is clean and unobstructed. If using your humidifier, make sure you are hooked up to a hard wired inverter to obtain enough power to run both your CPAP and humidifier unit. During treatment, if using high air pressure with a high humidifier setting it may drain your power source. Do not have several other appliances or electronic equipment connected in your truck. Call PPD to discuss this problem. Make sure your power source is making



a tight connection with your unit. Make sure no air hose kinks that could obstruct the air flow from your CPAP unit.

My CPAP unit continues to run even after I turn it off. What is wrong?

Your unit will continue to run (hum) for approx. 30 minutes after you shut it off in order to dry the unit of any excess moisture.

I'm not getting enough pressure.

You may be in Ramp/Settling time- wait for the machine to build up or change the Ramp/Settling time by using the downward arrow key on your CPAP key pad. Make sure your air filter is clean and unobstructed. Make sure your power source is working. Make sure your hose is properly connected to your unit and your mask. Your treatment requirements may have changed- please call PPD for further assistance in troubleshooting this issue.

I'm experiencing too much pressure.

There may be a High Leak from your mask. Turn your CPAP unit off and restart to reset the pressure back to your ramp/settling time. Make sure you adjust your mask properly to reduce mask leaks. If your LCD screen displays, " High Leak in Last Session"- press the exit button until

the message disappears. Place mask on your face, turn unit on and breath into mask for a few minutes until the message resets itself. If you are having trouble obtaining a good mask fit, or you continue to experience mask leaks call PPD during normal business hours to obtain further assistance. If you continue to have pressure issues, please contact PPD.

I am waking up with a dry mouth/ allergies/bloody nose during or after CPAP treatment. What's wrong?

You may experience dryness of the nose, mouth and or throat as well as sneezing and or runny nose during the course of treatment. Make sure that your humidifier is turned on and that you are using your CPAP unit/humidifier with the proper power source. If you are only using a DC 12 converter that plugs into the cigarette lighter to power your unit and humidifier, you will not obtain enough power to run the humidifier adequately. Make sure that your humidifier dial is turned up (turn to the right to increase humidification) if you continue to experience dryness or congestion.

How do I download my data card?

Your data card is located in the front pocket of your black or blue CPAP carrying case. 1) Once you have found your data card you will need to make sure that you replaced the cover to the back of your CPAP unit after you removed your transmitter device. This is important, because the cover guides your data card and without it- your data card may get stuck inside the CPAP unit. 2) Slide the data card into the back of your unit with the writing facing upward and the arrow pointing toward the unit. 3) Your LCD screen will prompt you with the following message: "card inserted, please wait"- "copy complete, please remove card". 4) Once you see the "please remove card" message- remove the card- place back in the folder and mail to PPD. You should have a pre-addressed envelope- if not, our address is: 8275 El Rio, Suite 110/ Houston, TX. 77054.

Is your snore more than just noise?

Many have the misconception that snoring and apnea are the same thing. This is not true. What causes snoring? Vibration of the tissues due to air turbulence as the airway narrows. This may be a sign of someone suffering from apnea, but not all snorers are apneics.

With obstructive sleep apnea (OSA), the throat and tongue muscles relax and sag obstructing the airway, making breathing labored and noisy. Pressure to breathe builds, making the diaphragm and chest muscles work even harder. The greater the effort, the more the walls collapse. When breathing is halted, the snoring noise is broken by a pause until the sleeper gasps for air and awakens.

A few of the medical and dental conditions that can lead to snoring or sleep apnea are:

- Overweight
- A small retruded jaw

- Sedatives
- Allergies
- Alcohol before retiring
- Airway obstruction

Snoring and OSA have had many methods of treatment applied throughout the years. The techniques may vary; however, the majority of sufferers benefit by following the simple guidelines of:

- Diet if you are overweight
- Get regular exercise
- Avoid alcohol prior to retiring
- Avoid sleeping pills
- Take only over-the-counter medications that have been approved by your physician
- Sleep on your side

If you have attempted these treatments with no success, you may have a serious sleep condition. Contact your company's program coordinator or PPD to set up a sleep screening and for possible treatment.

SLEEP QUIZ

Answering these simple questions may be the first step to a restful night's sleep for you and your family. Circle all that apply.

I have been told that I snore, or snore loudly, every night, in all positions.

I have been told I stop breathing while I sleep

I have jolted awake gasping for breath during the night

After a full night's sleep, I still wake up feeling tired.

I fall asleep at inappropriate times.

I have trouble concentrating.

I have become unusually forgetful.

I often wake up with a headache.

I have high blood pressure.

I am overweight.

If you circled even one of the statements above, contact your company's program coordinator or call PPD to see if you qualify for a sleep screening.

SPOUSE'S CORNER



Quickie sleep comebacks for your spouse

Arm yourself with the facts when your spouse fails to acknowledge the importance of a good night's sleep.

If your spouse says: Getting one hour less sleep per night than needed won't affect me.

Respond with: Getting even slightly less sleep can leave you feeling less energetic, hinder your ability to think properly and respond quickly, affect cardiovascular health, and make it more difficult for your body to fight off infections.

If your spouse says: My body quickly

adjusts to different sleep schedules. **Respond with:** It can take a week or longer to adjust to dramatically altered sleep/wake cycles, such as when traveling across time zones or switching from the day shift to working overnight.

If your spouse says: I can make up for sleep loss by sleeping more on weekends.

Respond with: This pattern will help relieve part of the sleep deficit, but it won't completely make up for it. Sleeping later on weekends can make it more difficult to fall asleep

on Sunday night and get up early on Monday.

If your spouse says: Extra sleep can prevent daytime fatigue.

Respond with: It's not just how much you sleep but how well.

If your spouse says: Snoring is normal.

Respond with: Snoring on a regular basis might make you sleepy during the day and more susceptible to heart disease and type 2 diabetes, or could be a symptom of sleep apnea.

Reggie White Foundation debuts apnea video

Nearly four years following the death of NFL Hall of Famer Reggie White, his widow Sara, is on a mission to wake everyone up to the dangers of sleep apnea.



Sara, the White family and the Sleep Wellness Institute of West Allis co-founded The Reggie White Sleep Disorders Research & Education Foundation shortly after the Packer Hall of Famer death at age 43 from complications caused by sleep apnea.

White was a larger than life figure who passed away unexpectedly in 2004 after suffering a respiratory attack

brought on by the sleep disorder and inflammation of the heart.

The Reggie White Sleep Disorders Research & Education Foundation recently completed an educational DVD about obstructive sleep apnea and is making it available free to anyone interested in sleep disorders.

The DVD, titled "When It's My Time, I Want to Die in My Sleep," was made possible by a grant from the National Football League Retired Players Association and was produced and directed by Davidson Kane of Milwaukee-based

Media Spirits.

The foundation has sent copies to the training staffs of all National Football League teams, since obstructive sleep apnea is common in somewhat overweight people with large necks.

However, since part of the foundation's purpose is to educate, free copies are available to schools and individuals, as well.

To obtain a copy of the DVD, call Stephen Gardner, the foundation's executive director, at (414) 336-3000, ext. 112. The video also can be viewed by visiting www.reggiewhitesleepdisordersfoundation.org.

Apnea linked to eye issues

Patients with obstructive sleep apnea now have one more ailment to add to their list of effects. According to an article in *Medical News Today*, multiple studies have identified OSA as an independent risk factor for the development of several medical conditions, including high blood pressure, which are related to impairments or alterations in a person's vascular system. With their own complex and sensitive vascular system, the eyes can sometimes signal and be affected by systemic vascular problems.

PPD welcomes SWIFT drivers

PPD welcomes Swift drivers to our company. PPD looks forward to working with the SWIFT drivers on their journey to a safe and healthy sleep. We are here to serve you and delighted you are on board.

Study: Short Sleep Dams Arteries

With an increase of heart awareness in America, enthusiasts may be cutting back on fast and processed food and amping up their time in the gym. However, they may be forgetting a necessary component to helping battle heart disease – a good night's sleep.

According to a study in the *Journal of the American Medical Association*, an extra hour of sleep every night could reduce the risk of calcification in the arteries, a precursor to heart disease.

The study included 495 healthy participants aged 35-47 from the Coronary Artery Risk Development in Young Adults (CARDIA) cohort in Chicago. Researchers at the University of Chicago Medical Center performed a computed tomography, or CT, scan on each participant to measure coronary artery calcification. An initial scan was done, with the next five years later.

During the five years, the study revealed 12.3 percent of participants had developed calcium deposits. Out of



those, 27 percent had slept less than five hours a night, 11 percent slept five to seven hours and 6 percent slept more than seven hours a night.

The people who slept longer on average were at reduced risk of acquiring new coronary artery calcifications in a five-year period, Diane Lauderdale, who works at the University of Chicago's Department of Health Studies, told ABC News.

According to her interview, she called the results Lauderdale "surprisingly strong."