



News on sleep apnea for the commercial trucking industry

# Canada launches PPD pilot

### CTA, OSA Canada provides OSA screening, treatment to driving fleet

The Canadian Trucking Alliance, in partnership with OSA Canada Inc., is launching a first-of-its-kind pilot in Canada to deliver a full service sleep apnea program to commercial truck drivers. Wherever you are located in the country, OSA Canada will visit your terminal to screen, test and diagnose drivers as well as equip and train identified drivers with sleep apnea to use their CPAP (Continuous Positive Airway Pressure) treatment machine and mask -- all within 72 hours or less.

OSA Canada Inc. will provide ongoing monitoring of the CPAP equipment to ensure both driver comfort and compliance. Companies will not only know they are providing drivers with a tool to mitigate the negative impacts associated with sleep apnea; they will know that this tool is being properly used. For a monthly fee, the OSA Canada



program will offer companies and drivers all the requirements of the Canadian medical and legal community - creating a turnkey solution for both management and drivers.

"The OSA Canada program will offer a turnkey solution for fleets whose commercial drivers are dealing with the challenges of sleep apnea," said Mark Sylvia, president, OSA. "Carriers will never have to worry about access to sleep beds, CPAP machines breaking down or drivers having difficulty finding the right mask; equipment will be replaced and re-fitted no questions asked."

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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 2-4 times a year.

Precision Pulmonary Diagnostics 8275 El Rio, Suite 110 Houston, TX 77054 Phone: 713-520-5864 Fax: 713-528-0433 e-mail: info@ppdsleep.com

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,

How many of you think in terms of the glass being half full or half empty? Research shows many of us are pre-programmed to think or react to things in certain ways and the way we approach life can significantly impact our emotions. (WebMD)

Cognitive-Behavioral Therapy puts forth the idea our thoughts influence our feelings and behaviors, rather than external things like people or situations. So in essence, we can change our behavior by changing our thoughts. If you listen real carefully to your mind, you will begin to hear the internal dialogue constantly running in the background.

Does your internal dialogue go something like this, "Yes, I can do this because I'm a winner!" Or are you more of a naysayer, "I can't do this. It's just not in the cards for me. Why try, I'm only going to fail!" Two very different approaches to life, right? Who do you think is happier or more successful in life?

When it comes to successful CPAP treatment, there is a large element of positive thinking involved. Of course, CPAP treatment is hard and, yes, it takes a lot of getting used to, but how successful do you think you will be if you tell yourself you can't do it? My suggestion to you naysayers is YES YOU CAN DO THIS, OF COURSE YOU CAN DO THIS, and you keep on telling yourself this over and over and over — 100 times a day each and every day while you are adjusting to all of the components of treatment. Not only does your job depend on it, but your HEALTH depends on it. Your kids, wife, grandchildren, girlfriend, boyfriend are all counting on you to be healthy and take good care of yourself.

Start to apply this positive thinking to other aspects of your life, such as weight loss. Start telling yourself YOU ARE GOING TO LOSE WEIGHT. YOU CAN DO IT. Again, weight loss isn't easy, but if you tell yourself you can't do it -- or it's just too hard to lose weight -- then chances are you won't.

I think you get the point, pretty simple right? Think again. It's not always easy to shift how you've always approached something. It takes a lot of work and it's not always easy, but it can be done.

REMEMBER: YOUR THOUGHTS influence YOUR BEHAVIOR. Listen to your internal dialogue and start to develop your own positive mantra. YES, I CAN DO THIS. OF COURSE I CAN DO THIS!

Unleash the power within you.

Follow PPD

Safe Travels,

### Katia LaManna, LCSW





PPD

## Bariatric surgery no cure for sleep apnea

Bariatric surgery may have little to do with treating OSA, according to a recent study. Researchers in Australia studied the benefits of weight loss for sleep apnea reduction and found whittling your middle may not be the cure-all some believe.

Lead researcher John Dixon, associate professor at Monash University, and his team studied two groups of obese participants – those who had laparoscopic adjustable gastric banding (LAGB) and those who were provided with tailored

dietary, exercise, and behavioral programs. Over two years, the LAGB group achieved weight loss of about 20 percent of their initial weight. The conventional group lost an average of almost three percent of their body weight, However, in both instances, the differing amounts of weight loss were not reflected in improvement in their OSA.

"Both groups experienced a reduction in OSA severity," Dixon said, "but the difference between the surgical group and the conventional group was surprisingly small, given the

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Part of the strength of OSA Canada Inc. includes the involvement of Precision Pulmonary Diagnostics LLC in helping to deliver and monitor the therapy being provided to drivers under the program. PPD has screened over 40,000 truck drivers for trucking companies, including Schneider National and Swift Transportation (See testimonial appendix below). They have also provided and monitored the therapy program for over 3,000 drivers who have been diagnosed with obstructive sleep apnea.

"We at PPD are very happy to provide our unmatched experience and expertise in the delivery of the OSA Canada program. With our involvement, clients of OSA Canada can be assured from day one they will be dealing with a full service sleep apnea solution team that is driver-focused and on standby to assist 24-7," said Dr. Mark Berger, president PPD and senior medical advisor to OSA Canada. "Our years of experience have helped us to understand the issues and concerns of trucking managers and their drivers.

"Our program is based on a full service model. Competitors may want to sell machines to the industry in Canada, but through OSA Canada they can rest easy knowing they will be provided a solution that fits the needs of individual drivers and companies and is backed by our unparalleled customer support."

In 2012, the US Federal Motor Carrier Safety Administration's Motor Carrier Safety Advisory Committee and Medical Review Board adopted 11 recommendations related to sleep apnea in the trucking industry, which includes requiring all drivers with a body mass index measurement of 35 or higher to be tested for the condition.

Since 2010, CTA has been working with various partners, including its group benefits provider Group Health, to put a Canadian sleep apnea program together in anticipation of a possible regulatory requirement in the Unites States.

"FMCSA took a significant step toward potential regulation of the screening and treatment of drivers at risk for obstructive sleep apnea," said CTA CEO David Bradley. "Although it may still take some time for this regulation to materialize, the Canadian Trucking Alliance has been working on a solution for all Canadian carriers regardless of where they are domiciled -- the creation of OSA Canada has provided that solution."

#### **TESTIMONIALS**

Here is what representatives of Swift Transportation and Schneider National had to say about PPD – comments OSA Canada believes its customers will soon be repeating in Canada:

"PPD's program to detect and treat sleep apnea in our drivers is the industry's most comprehensive program, one that will make the process easier for our drivers, limit downtime, and provide the best coordination of care. We believe it will be a very positive health benefit to our drivers and will positively impact the safety of everyone on the road."

Scott Barker, Director of Safety,
 Swift Transportation Co. Inc.

"I have been using my CPAP machine for weeks now. I feel a lot better during the day... Along with the assistance that I have received, I have observed PPD associates treat drivers' associates with empathy and respect."

-- Roberto M., Driver Business Leader, Schneider National PPD

## Study: OSA may make you deaf

If you suffer from obstructive sleep apnea (OSA), your hearing could be at risk, according to a recent study in Taiwan.

Researchers found that people who experienced sudden deafness were more likely to have OSA than a control group without hearing loss.

Lead researcher Dr. Jau-Jiuan Sheu, of Taipei Medical University Hospital, and his team discovered almost 3,200 patients in the country's national health database who suffered sudden hearing loss. They then randomly matched each patient with the data of five others based on gender and age without hearing loss to serve as a comparison.

Out of those 19,000 people in total, 240 had been diagnosed with sleep apnea before the episode of sudden deafness occurred. Also, the study revealed male patients with sudden hearing loss were more likely to have prior OSA than the control group.

"There is a possible explanation for the association," researchers said. "Obstructive sleep apnea indirectly contributes to the development of sudden sensorineural hearing loss via the effects of cardiovascular disease and cardiovascular risk factors."



Photo credit by marin

# Researchers claim CPAP may protect against hypertension

Wearing a CPAP mask at night may protect OSA patients from hypertension, according to two recent studies published in the Journal of the American Medicine Association.

While OSA reduces the flow of oxygen to the body and brain in short episodes, for the past 15-20 years, specialists thought these instances increase blood pressure and put patients at risk of heart attack and stroke.

In the first study, researchers in Spain studied the effects of CPAP treatment on hypertension and risk of heart attack and stroke among 723 apnea sufferers who didn't have daytime sleepiness. The patients were divided into two groups based on if they wore CPAP masks at night.

In more than two years, lead researcher Dr. Ferran Barbe and his colleagues found patients who used their masks at least 4 hours a night did better.

In a related study, Dr. Jose M. Marin, a respiratory specialist also in Spain, and his team followed 1,889 patients without

hypertension who underwent evaluations for abnormal nighttime breathing at a sleep center.

In a span of 12 years, Marin's study suggested OSA patients who used their CPAP machine didn't develop hypertension as much as patients with untreated OSA, those who refused treatment or those who don't wear a CPAP as prescribed.

The greater the adherence to prescribed nightly CPAP use, the more protective the treatment, the study concluded.

"Treatment may not only reduce blood pressure (although modestly on average), but if confirmed by future studies, also may prevent hypertension in at-risk patients," Drs. Vishesh Kapur and Edward Weaver, both of the University of Washington in Seattle, wrote in an accompanying editorial.

"Thus, OSA deserves attention in patients with or at risk of developing hypertension as a potentially treatable cause of hypertension as well as other clinically important outcomes."

PPD

# Use your CPAP on battery power

Your CPAP machine doesn't have to bind you to your bedside. By using a DC capable CPAP, you too can adhere to your therapy in the great outdoors. How?

### Step 1: Check compatibility

Check your machine's manual to make sure you have a unit capable of running from a DC battery. Usually all models from 2002 and on have some kind of built-in DC power capability. When in doubt, contact the place you bought the machine or call the manufacturer.

### Step 2: Get the hook up

Decide how you want to hook up the machine. Most have an optional DC cable available, which is the most simple and allows for the most flexibility. You will also need a 12v accessory plug to connect your CPAP to the battery.

Another possibility is a battery cable which connects to your CPAP on one end and has eyelets to connect right to the battery on the other end.

Yet another option is to connect your CPAP with the supplied AC power cord to a DC inverter. However, this possibility tends to drain the battery faster.

In all cases, you will need a pure sine wave DC inverter if you want to use a heated humidifer on a DC connection.

#### Step 3: Decide on battery.

Choose the right battery option. Consider the following questions:

- How many nights do you need the machine to run?
- Will you be using a heated humidifier?
- Will you be moving the battery and is there a place to recharge the battery?

Most manufacturers suggest a 12v



Photo credit by stoonn

deep cycle marine battery, which give you power for an extended period of time and are best for non-mobile use because of their weight – 40-70 lbs.

Gel cell batteries are good alternative because they are much lighter. However, they need to be recharged more often or multiple batteries must be used. Some major CPAP manufacturers offer smaller sealed lead acid battery solutions. While they are packaged well and are flexible, they also need to be recharged more often than deep cycle batteries.

Another option is a high capacity Li-ion battery which delivers a lot of power for up to 40 hours in a compact and lightweight package, usually 3-4 lbs.

### Step 4: Calculate sleep time Figure out how long your CPAP will

Figure out how long your CPAP will run on your battery of choice. A CPAP

machine draws a certain amount of power during continuous use, called Amp Hours (Ah), which is what batteries are rated on. So, if a CPAP machine draws 1Ah and you use a 70Ah battery, you would get about 70 hours of use (divide 70 by 1 = 70 hours of use).

Going overseas? You must take into account voltage and frequency of the place you'll be visiting.

The North American standard is 110-120 volts at 60 Hz, using plugs A and B, and the European standard of 220-240 volts at 50 Hz, using plugs C through M. Most CPAP,machines will automatically detect and adjust to the differing voltages. So all you need is a non-powered plug adapter to convert the US plug to the style of plug used in country in which you are using the machine. Happy travels!