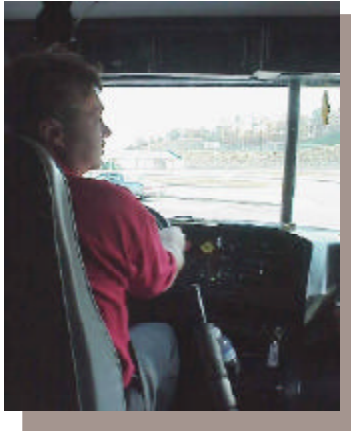


Prevalence of Sleep Apnea Among Commercial Truck Drivers



The Problem

It is as common as adult diabetes and presents symptoms similar to sleep deprivation. Yet the prevalence and effects among commercial truck drivers of the serious medical condition called *sleep apnea* has received little attention.

Sleep apnea causes obstruction to the upper airway, interrupting breathing and resulting in repeated waking or arousing to a lighter stage of sleep. Drivers with untreated sleep apnea can suffer fatigue, difficulty concentrating, and sleepiness – even falling asleep while driving.

A 1995 study of commercial drivers found that 78% had sleep apnea – the highest number from any study of the illness. However, researchers studied only *some* drivers at only *one* company. Clearly, a more representative study of the trucking industry was needed.

What We Studied

Our study, sponsored by the Federal Motor Carrier Safety Administration, had 400 randomly chosen holders of commercial drivers licenses (CDL) within a 50-mile radius of Philadelphia stay in a sleep laboratory. The next day the drivers performed alertness tests, in-

cluding assessment of reaction times, performance lapses and lane tracking ability.

What We Found

- Though far fewer than the 1995 study found, 4.7% of commercial drivers in the study were found to have severe sleep apnea. Another 5.8% had moderate sleep apnea and 17.6% has mild sleep apnea.
- Prevalence of moderate to severe sleep apnea is *twice* as high among CDL holders no longer currently employed as drivers, suggesting that the industry may be losing valuable drivers because of undiagnosed sleep apnea.
- Drivers with severe sleep apnea exhibited impaired performance on alertness tests.
- Shorter average sleep duration makes sleep apnea more likely. In fact, short sleep duration *itself* degrades performance on alertness tests.

Implications for Your Business

ATRI's study identifies serious implications of sleep apnea for your drivers and their safety. However, help is available.

Education. Sleep apnea is often undiagnosed and thus untreated. Most people are unaware that chronic and severe snoring is a common sign of sleep apnea. Simple, easy to understand educational materials are available to benefit your drivers and your company. For more information on these materials, contact ATRI.

Wellness Programs. Consistent with other research, we found that age, gender (male) and obesity are major risk factors for sleep apnea among commercial drivers. Age and

obesity form a "vicious cycle" with the effects of age increasing at higher levels of obesity and effects of obesity being more pronounced with increased age.

A corporate fitness and wellness program is highly recommended. Your program should stress good



sleep habits as well as diet and exercise. Sample programs are available from ATRI.

Treatment. Your drivers must understand that sleep apnea *is* treatable, and that those diagnosed with it need not leave their occupation.

The most common treatment is use of a CPAP (Continuous Positive Airway Pressure) machine. Small and portable, CPAPs are easily taken along by anyone who must spend nights away from home.

The use of this machine can restore restful sleep, hence increasing daytime energy and alertness.

For more information about this and other ATRI studies, visit WWW.ATRI-ONLINE.ORG



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ATRI's primary mission is to conduct or support research in the transportation field, with an emphasis on the trucking industry's essential role in the U.S. and international marketplace.

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This is one in a series of research summaries detailing work on ATRI's Research Agenda. It is designed to provide the trucking industry with practical information on the results of a specific research study.



**2200 Mill Road
Alexandria, VA 22314
(703) 838-1966**

**Visit ATRI Online at: ATRI-ONLINE.ORG
Email: ATRI@trucking.org**