

# Dentists Against Drowsy Driving

The American Academy of Dental Sleep Medicine established "Dentists Against Drowsy Driving" to raise awareness among health care communities and the public about the costs and dangers of obstructive sleep apnea when left untreated.

## About Drowsy Driving

Drowsy driving can be as dangerous as drunk driving. Drivers are 15 times more likely to be involved in a deadly motor vehicle accident when they have excessive daytime sleepiness, a common symptom of sleep apnea. Motor vehicle accidents due to drowsy driving account for \$48 billion in medical costs each year.

Current legislation recommends that commercial drivers get screened and treated for sleep apnea. However, many drivers do not know that they have sleep apnea. The American Academy of Sleep Medicine estimates that 18 million Americans have sleep apnea. 80 to 90 percent of cases remain undiagnosed and untreated. The Institute of Medicine reports 50 to 70 million Americans suffer from chronic sleep disorders, including sleep apnea.

Help protect yourself, your loved ones and your fellow travelers. The AADSM requests that you read the following information and contact a sleep specialist if the risk factors or warning signs sound familiar. A sleep specialist can test you for sleep apnea and provide treatment.

## Sleep Related Breathing Disorders

Sleep apnea, like snoring and upper airway resistance syndrome, is a sleep-related breathing disorder. Snoring and upper airway resistance syndrome occur when the airway is partially constricted. The snoring sound is a result of a collapsed airway. The reduced size of the opening causes the tissues to vibrate, producing the sound.

Sleep apnea occurs when the airway collapses partially or completely. These collapses can happen hundreds of times a night. The pauses can be as brief as 10 to 30 seconds, or as long as a minute or longer. When the collapse occurs, the brain causes you to wake to breathe, though you may not know it. This may cause your sleep to be fragmented, leading to daytime sleepiness.

Snoring is a common symptom of sleep apnea but not everyone who snores has sleep apnea. The AASM reports that habitual snoring affects an estimated 24 percent of adult women and 40 percent of adult men. Approximately half of people who snore loudly have sleep apnea. Patients with sleep apnea often make choking or gasping sounds when they wake up to breathe. This noise can help spouses recognize a sleep-related breathing disorder.

Anyone can have a sleep related breathing disorder, but the risk increases with age and weight. Other risk factors include obesity, large neck sizes, alcohol and tobacco smoke use and Down Syndrome. Sleep apnea is more common in men.

## Diagnostic Testing

A sleep physician at a sleep center diagnoses sleep apnea using overnight polysomnography. This test is also known as a sleep study.

A sleep study measures your Apnea-Hypopnea Index using electrodes. An Apnea-Hypopnea Index is the average number of partial and complete pauses in breathing that occur per hour of sleep.

Different AHI results indicate different levels of sleep apnea

- **Mild Sleep Apnea:**AHI of 5-15
- **Moderate Sleep Apnea:**AHI of 15-30
- **Severe Sleep Apnea:**AHI of more than 30

Dentists are not permitted to diagnose sleep apnea, but they can help screen patients for this serious condition. Because dentists see patients on a regular basis, they have the opportunity to provide questionnaires about sleep apnea and

advise at-risk patients to visit a sleep center.

More than 180,000 dentists practice in the United States and given their large numbers, they can help respond to the serious risks of untreated sleep apnea.

## **Oral Appliance Therapy and Other Treatments**

Members of the AADSM have pioneered the scientific research and clinical development of dental sleep medicine. Dental sleep medicine is the focus of dentistry that addresses sleep apnea. Oral appliance therapy and upper-airway surgery are two ways dentists can treat sleep apnea.

Oral appliance therapy includes the selection, fabrication, fitting and long-term follow-up care of custom-designed oral devices. These appliances are worn during sleep to move the lower jaw and tongue forward, opening the person's airway. The devices appear similar to sports mouth guards.

Every sleep apnea patient has specific needs. Dentists are trained to select which oral appliance is right for his or her patient and adjust it for the best results. A dentist will continue to monitor a patient's treatment and may ask the patient to go for a follow-up sleep study to ensure that the therapy is working.

Oral appliance therapy is a first-line treatment for mild to moderate sleep apnea and is a safe and effective alternative to Continuous Positive Airway Pressure (CPAP). While CPAP is the gold standard for sleep apnea treatment, up to half of sleep apnea patients cannot tolerate it.

OAT may be combined with CPAP. It can also be used with behavioral therapy to treat sleep apnea. Behavior therapy may involve sleeping on one's side, quitting smoking, losing weight or avoiding alcohol.

Upper-airway surgery can also be an effective treatment for some, but not all OSA patients. Dentists specializing in Oral and Maxillofacial Surgery perform it.