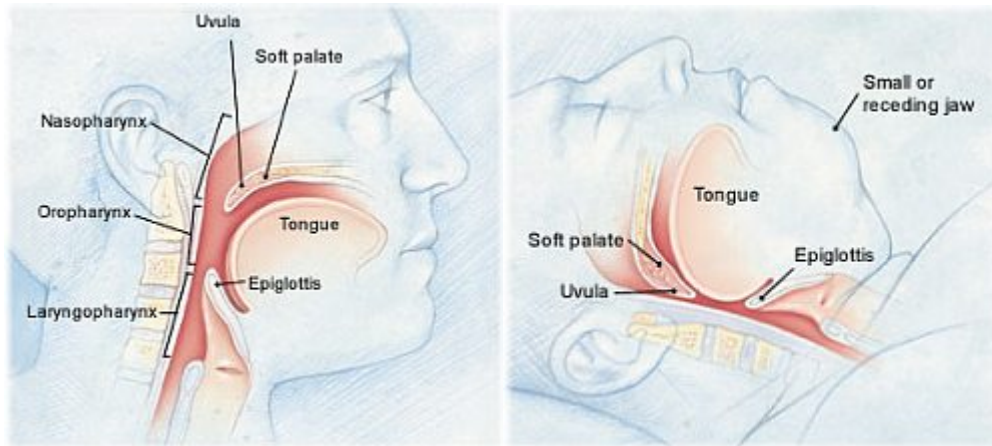


Sleep Apnea

What is sleep apnea?

Obstructive sleep apnea is a disorder that results from a blockage of airway caused when the area of tissue in the back of the throat closes while sleeping. Apnea is a Greek word for “without breath”. People with sleep apnea stop breathing 10 to 30 seconds while sleeping. People with this condition generally do not get enough rest and have a higher incidence of health problems.



Picture 1: Normal airway. The Uvula and soft palate are normal. The tongue is appropriate size and length.

Picture 2: Several areas of obstruction. The long soft palate and large uvula close the airway. A retruding jaw moves the tongue backward and decreases the airway size.

How common is sleep apnea?

Extremely common. It affects more than 12 million Americans. In fact, it is as common as diabetes in the adult population. Men have an increased risk, as well as people over the age of 40, although it can strike at any age.

How do I know if I have sleep apnea?

Several symptoms of sleep apnea include heavy snoring, pauses in breathing while sleeping, or feeling tired the next day after a full night of rest. Individuals with sleep apnea sometimes fall asleep at work or while driving/talking. They sometimes feel grumpy, forget things more often, or have headaches.

Is sleep apnea dangerous?

If you have sleep apnea it is very important to get treatment because untreated conditions can cause high blood pressure, problems with memory, weight gain, headaches, and increased incidence of heart disease/strokes. This is especially important for drivers because untreated sleep apnea leads to an increase in car accidents and over the road fatalities.

What is the treatment for sleep apnea?

Some patients with very mild sleep apnea can be treated with good sleep hygiene. Sometimes correcting chronic sinus trouble, nasal polyps, or surgery for septal deviation



Picture 3: This demonstrates a CPAP mask and correct usage for treatment of sleep apnea.

can be used to treat sleep apnea. Losing weight can reduce symptoms as well as raising the head of the bed during sleep (elevating head on pillows). If these measures do not work, or if sleep apnea is greater than mild, subjects may be placed on a machine called CPAP (continuous positive airway pressure). This machine contains air that is pushed under pressure into the nostrils to help keep the airway open. This is not a cure for sleep apnea, so it needs to be used nightly to control symptoms. This has been proven to improve mood, sleep, functional status of patients, and decreases incidence of motor vehicle accidents.

What does DOT state in regard to sleep apnea?

Sleep apnea may be a significant problem among drivers and is a public health risk. Drivers with this condition have a sevenfold increased risk of accidents. Approximately 1-3% of crashes are due to driver sleepiness. The DOT guide suggests if there is suspicion of sleep apnea, the driver needs to be referred to a specialist for evaluation. This condition needs to be properly controlled before a certification can be issued. Reports state that it may take 6 weeks of treatment for daytime drowsiness to subside. Therefore, the regulations recommend a 1-month waiting period before qualification to drive a commercial vehicle. Regulations also recommend sleep testing before and after treatment. If you are a commercial driver who is under treatment for sleep apnea, it would benefit you to bring records from your treating physician in regard to the condition as well as a follow up note after treatment suggesting that symptoms are under control and you may drive a commercial vehicle safely.

New guidelines suggest that providers conducting DOT exams should inquire about high blood pressure that is difficult to control, a height-weight ratio, exam of the upper airway (throat), neck circumference, and questions regarding over the road drowsiness. The driver should have an evaluation for a sleep disorder with a history of snoring/drowsiness/or witnessed absent episodes of breathing while sleeping. Two or more of the following also may warrant a sleep study with upcoming guidelines:

Medically Qualified if Driver Meets the Following:

- 1). No positive findings or any of the numbered in-service evaluation factors.*
- 2). Diagnosis of OSA with CPAP compliance documented.*

Evaluation Recommended If Driver Falls Into Any One of the Following Five Categories (Maximum 3 Month Certification):

- 1). Sleep history suggestive of OSA (snoring, daytime drowsiness, witnessed apnea).*

- 2). *Two or more of the following:*
 - a). *Body Mass Index ≥ 35 .*
 - b). *Neck circumference greater than 17 inches in men, 16 inches in women.*
 - c). *Hypertension (new, uncontrolled, or unable to control with less than 2 medications).*
- 3). *Epworth Sleepiness Scale (ESS) >10.*
- 4). *Previously diagnosed sleep disorder; compliance claimed, but no recent medical f/u (must be reviewed within 3 month period); if found not to be compliant, should be removed from service (includes surgical treatment).*
- 5). *Apnea-Hypopnea Index (AHI) >5 but <30 in a prior sleep study or polysomnogram and no excessive daytime somnolence (ESS<11), no motor vehicle accidents, no hypertension requiring 2 or more agents to control.*

Out-Of-Service Immediate Evaluation Recommended if Driver Meets Any Factor:

- 1). *Observed unexplained excessive daytime sleepiness (sleeping in exam/waiting room) or confessed excessive sleepiness.*
- 2). *Motor vehicle accident (run off road, at-fault, rear-end collision) likely related to sleep disturbance, unless evaluated for sleep disorder in the interim.*
- 3). *ESS ≥ 16 or FOSQ (sleep questionnaire) <18*
- 4). *Previously diagnosed sleep disorder:*
 - a). *Noncompliant (CPAP treatment not tolerated);*
 - b). *No recent follow up (within recommended time frame);*
 - c). *Any surgical approach with no objective follow up.*
- 5). *AHI >30.*

Medical examiners and DOT are becoming increasingly stringent when making judgments regarding driving with sleep apnea and certifying drivers who may potentially have sleep apnea. It is important to be compliant with recommended medical recommendations when prescribed and/or follow up with your health care provider if this condition is suspected.



Picture 4: Driving a commercial vehicle can be a potentially dangerous job. It is crucial to undergo appropriate evaluation and treatment if the condition is suspected.