## What is Sleep Apnea?

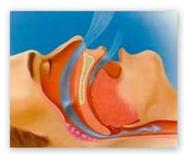


Obstructive Sleep Apnea (OSA) is the most common sleep disorder affecting over 18 million people in the United States. Sleep Apnea is characterized by loud or heavy snoring interrupted by the stopping of breathing for more than 10 seconds.

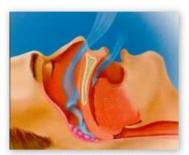
Under diagnosed and frequently dismissed simply as harmless yet annoying snoring, "obstructive sleep apnea" (OSA) is a very dangerous condition. If you or a loved one snore loudly at night, please have a sleep study done to rule out this potentially fatal condition.

The word "apnea" literally means "without breath."

## **How Does Sleep Apnea Occur?**



DURING SNORING
AIRFLOW PARTIALLY BLOCKED



DURING SLEEP APNEA
AIRFLOW COMPLETELY BLOCKED

Snoring occurs when the airway or passage

through which we breathe becomes partially blocked or occluded. An example would be a tongue that falls back as we drift off into deeper sleep. As the diameter or size of the airway passage is shrinking, the net result is a muffled sound secondary to vibrations in the throat, or snoring.

These incidences can happen many times per hour and hundreds of times in a night's sleep. When breathing stops, the snoring stops until individual chokes and gasps for air. They will awaken briefly, sometimes violently, interrupting their sleep patterns and in the morning will have no memories of these incidences.</P< p>

There are three types of apnea. In all three, people with untreated sleep apnea stop breathing repeatedly during their sleep, sometimes hundreds of times during the night and often for a minute or longer.

- Obstructive sleep apnea (OSA), the most common is usually caused when the soft tissue in the rear of the throat collapses and closes closes completely during sleep.
- Central sleep apnea, is not caused by a blocked airway but rather the brain's failure to signal the muscles to breathe.
- Mixed apnea, is a combination of the two.

With each apnea event, the brain briefly arouses people with sleep apnea in order for them to resume breathing, but consequently sleep is extremely fragmented and of poor quality.

**Risk factors include** being male, overweight, and over the age of forty, but sleep apnea can strike anyone at any age, even children. Yet still because of the lack of awareness by the public and healthcare professionals, the vast majority remain undiagnosed and therefore untreated, despite the fact that this serious disorder can have significant consequences.

**Untreated, sleep apnea can cause** high blood pressure and other cardiovascular disease, memory problems, weight gain, impotency, and headaches. Moreover, untreated sleep apnea may be responsible for job impairment and motor vehicle crashes. Fortunately, sleep apnea can be diagnosed and treated. Several treatment options exist, and research into additional options continues.

## **Treatment Options**



**CPAP (Continuous Positive Airway Pressure)** is pressurized air from a bedside machine. The air is delivered through a tube that connects to a mask, covering the nose. The pressure of the air forces and maintains the airway open while you sleep. This is a very successful treatment option, however it is only a great treatment if it is used! Many people find the masks very uncomfortable and cumbersome to wear. The noise created by the machines can also cause difficulty sleeping for the patient and partner. Also, people find that the machines are difficult to travel with.

## TIRED OF CPAP? We have an alternative!

Oral Appliance Therapy is completely non-invasive and painless. It is a mouthpiece, for patients with primary snoring or mild to moderate Sleep Apnea. They are small devices that you wear while you sleep. They are similar in size to an Orthodontic Retainer or Sports Mouthguard. They are very comfortable, easy to wear, and easy to travel with. These appliances can be used alone or in conjunction with other treatments. Oral Appliances work by attempting to prevent the collapse of the tongue and soft tissues in the back of your throat, keeping your airway open to allow adequate air intake. They work to reposition the lower jaw, tongue, soft palate, and uvula. Oral Appliance Therapy involves selecting an appropriate design , and then custom fitting it to your teeth.

Sleep Apnea is a life threatening disorder and should not go un-treated because you can't wear your CPAP! We can make a custom-fit plastic mouthpiece for treating sleep apnea. The mouthpiece will adjust your lower jaw and your tongue to help keep your airways open while you sleep.