

# Oral Appliances for Snoring and Obstructive Sleep Apnea Fact Sheet

You may have noticed many recent news publications outlining the dangers of obstructive sleep apnea (OSA) and the importance of treatment for snoring and sleep apnea.

Are you aware that a custom oral appliance for obstructive sleep apnea can eliminate snoring, improve the quality of, and even save lives? The great news is that many medical insurance companies do provide benefits for snoring and sleep apnea treatment including oral appliances.

Our office has special training and expertise in preparing and delivering custom made oral appliances, commonly known as oral appliance therapy (OAT) for snoring and sleep apnea.

We hope you find this Fact Sheet helpful to understand OSA better and the health consequences of not treating this serious condition. If you have any questions, please feel free to contact our office.

## Snoring and Obstructive Sleep Apnea Facts

Obstructive Sleep Apnea (OSA) is a sleep breathing disorder in which a person stops breathing while they sleep. The tissues in the throat collapse, cutting off the airway despite efforts to breathe. This can occur dozens and sometimes even hundreds of times an hour.

Typically, someone with sleep apnea snores heavily, and then stops breathing while still sleeping. A sleeping partner would observe that the person is struggling to breathe but there is no snoring sound. These periods of stopped breathing are followed by a gasping or choking sound. The person with sleep apnea will partially awaken in order to breathe, leading to fragmented, non-refreshing sleep which can be the cause of excessive daytime sleepiness.

The even greater concern is that when the airway collapses and oxygen is cut off, the body goes into a fight-or-flight response, putting a strain on the heart and increasing blood pressure. Over time, this can wear out the heart and lead to heart disease or a stroke.

## Sleep Apnea Statistics

- Doctors estimate that 9.1% of men and 4% of women have sleep apnea. That translates to 18-25 million Americans (1 in every 15) are living with sleep apnea.
- Possibly as few as 5% of sleep apnea patients have been diagnosed or have taken a sleep study.
- A person afflicted with untreated obstructive sleep apnea is up to 4 times more likely to have a stroke, as well as 3 times more likely to have heart disease.
- Approximately 50% of all patients who have hypertension, or high blood pressure, are also afflicted with obstructive sleep apnea.
- People suffering from OSA are as much as 6 times more likely to be involved in a car crash than those without sleep disorders. This is due to the fact that they are drowsy from lack of sleep.

## Who is at Risk for Sleep Apnea?

Even though sleep apnea can affect anyone regardless of age, weight, and gender, these factors indicate a higher likelihood of having sleep apnea:

- Mouth breathing: Sleeping with the mouth open is a sign that the nasal airway is obstructed. Nasal obstruction causes the jaw to drop, reducing the diameter of the pharyngeal airway and increasing the likelihood of obstructive sleep apnea. If you know a sleeping mouth breather, they may be suffering from obstructive sleep apnea.
- Body Mass Index: Fat deposits around the neck and chin may obstruct your breathing. Keep in mind though, not everyone who has sleep apnea is overweight. Thin people may have OSA as well.
- Neck size (circumference): People with large neck circumferences tend to have narrowed airways as a result. Men with a 17-inch neck size and women with a 16-inch neck size are at higher risk. Another risk factor is extra skin from the chin to the neck.
- Family history: If you have family members who suffer from OSA or snoring, you may be at increased risk. There is a hereditary link associated with sleep apnea.
- Use of alcohol or other sedatives before bed: These substances cause the muscles in your throat to relax exacerbating sleep breathing issues such as OSA.

- **Smoking:** Smokers are three times more likely to suffer from OSA than their non-smoking counterparts. Smoking tends to cause inflammation and fluid retention in the airway, resulting in less space for air to pass through the airway.
- **Gender:** Men are projected to be twice as likely to have sleep apnea. This gap narrows as age increases. Once women reach menopause, the ratio becomes almost equal.
- **Age:** OSA occurs significantly more often in adults that are older than 40.
- **A narrowed airway:** You may have a naturally narrowed airway. This is more common in women than in men and could be a strong indicator of sleep apnea in women.
- **Enlarged tonsils and/or adenoids:** Your tonsils and/or adenoids may become enlarged, which lessens the amount of room for air to pass through your airway. In children, this is the most common cause of sleep apnea, in which removal is the most effective solution.
- **Small Jaw structure:** A lower jaw that is undersized compared to the upper jaw (retrognathia).

### Symptoms of Sleep Apnea

Often the person with sleep apnea is totally unaware of the problem and will often deny snoring, but the bed partner may actually observe the following symptoms:

- Snoring
- Excessive daytime sleepiness
- Gasping and choking during sleep
- Complaints of morning headaches

### Risks of Untreated Sleep Apnea

#### Excessive Daytime Sleepiness Due to Lack of Sleep Can Cause:

- Car accidents
- Loss of productivity
- Poor job/school performance
- Personal relationships suffering

#### Health Consequences:

- Heart disease
- Stroke
- Irregular heartbeat
- Insomnia
- Hypertension (high blood pressure)
- Cancer
- Increased risk of sudden cardiac death
- Tendency to gain weight
- Loss of libido or erectile dysfunction
- Cognitive or memory problems
- Diabetes

### Treatments

Initially diagnosis for obstructive sleep apnea is through a sleep study (either at an overnight sleep laboratory or with a home sleep study). The sleep study helps to determine which treatment option is best suited for each individual.

- **Oral Appliance Therapy (OAT)** - Custom made oral appliances are placed in the mouth and are worn much like an orthodontic appliance or a sports mouth protector. Worn during sleep to prevent the collapse of the tongue and soft tissues in the back of the throat, oral appliances promote adequate air intake and help to provide normal sleep in people who snore and have sleep apnea. Oral appliances can be used as the first-line therapy for patients who have been diagnosed with mild-to-moderate obstructive sleep apnea, or severe obstructive sleep apnea that cannot tolerate their prescribed CPAP. They can also be used in conjunction with other therapies such as continuous positive air pressure (CPAP). Determination of proper therapy can only be made by joint consultation of your sleep physician and a qualified sleep medicine dentist.
- **Continuous Positive Airway Pressure (CPAP)** - is a most common treatment of obstructive sleep apnea (OSA). The CPAP machine consists of a face or nasal mask that is connected to a pump, providing a positive flow of air into the nasal passages in order to keep the airway open. This pressure ensures that the airway doesn't collapse during sleep. CPAP is recommended as the first line of treatment for patients with severe obstructive sleep apnea. Patients with mild-to-moderate sleep apnea can usually choose which therapy they would prefer.
- **Surgery** - While not considered as the first line of treatment for snoring or sleep apnea, surgery may be an effective option for patients who cannot tolerate CPAP or oral appliance therapy. With many surgical options available, it is up to the surgeon to find where the obstruction is in the patient's upper airway or nasal passage and determine what the best solution is. Surgery is typically more effective in the treatment of snoring than for sleep apnea.