Obstructive Sleep Apnea (**THE SILENT KILLER**)

Obstructive sleep apnea (OSA) is a potentially serious sleep disorder in which breathing repeatedly stops and starts during sleep. Obstructive sleep apnea (OSA) is a serious and lifelong medical condition that affects between 18 and 30 million adults over 18 in the US¹; with approximately 90% of them undiagnosed. OSA is a chronic, lifelong medical condition that can affect your sleep, health and quality of life.  It has been linked to hypertension, diabetes, heart disease, work and driving related accidents, stroke and Death.

## Causes

Obstructive sleep apnea occurs when the muscles in the back of your throat relax. These muscles support the soft palate, the triangular piece of tissue hanging from the soft palate (uvula), the tonsils, the side walls of the throat and the tongue. When the muscles relax, your soft tissue may vibrate (commonly known as snoring) or it may completely collapse causing you to stop breathing.  This can last for 10 seconds or more and may lower the level of oxygen in your blood. Your brain senses this inability to breathe and briefly rouses you from sleep so that you can reopen your airway. This awakening is usually so brief that you don't remember it. You may make a snorting, choking or gasping sound. This pattern can repeat itself five to 30 times or more each hour, all night long. These disruptions impair your ability to reach the desired deep, restful phases of sleep, and you'll probably feel sleepy during your waking hours. People with obstructive sleep apnea may not be aware that their sleep was interrupted. In fact, some people with this type of sleep apnea think they sleep well all night.

 **Symptoms**

The most common signs and symptoms of obstructive sleep apnea include but are not limited to:

* Loud snoring, which is usually more prominent in obstructive sleep apnea
* Episodes of breathing cessation during sleep witnessed by another person
* Decreased Sex Drive
* Morning headache
* Difficulty staying asleep (insomnia)
* Excessive daytime sleepiness (hypersomnia)

Risk factors

Sleep apnea can affect anyone, even children. But certain factors increase your risk of Obstructive sleep apnea including but not limited to:

* **Excess weight.** People who are obese have four times the risk of sleep apnea that people who are a normal weight people do. Fat deposits around your upper airway may obstruct your breathing. But not everyone who has sleep apnea is overweight.
* **Neck circumference.** People with thicker necks may have narrower airways. For men, the risk increases if neck circumference is 17 inches (43 centimeters) and larger. In women, the risk increases if neck circumference is 15 inches (38 centimeters) or more.
* **A narrowed airway.** You may have inherited a naturally narrow throat. Or, tonsils or adenoids may become enlarged and block the airway.
* **Being male.** Men are twice as likely to have sleep apnea. However, women increase their risk if they're overweight, and their risk also appears to rise after menopause.
* **Being older.** Sleep apnea occurs significantly more often in older adults.
* **Family history.** If you have family members with sleep apnea, you may be at increased risk.
* **Use of alcohol, sedatives or tranquilizers.** These substances relax the muscles in your throat.
* **Smoking.** Smokers are three times more likely to have obstructive sleep apnea than are people who've never smoked. Smoking may increase the amount of inflammation and fluid retention in the upper airway. This risk likely drops after you quit smoking.
* **Nasal congestion.** If you have difficulty breathing through your nose — whether it's from an anatomical problem or allergies — you're more likely to develop obstructive sleep apnea.

**Complications**

Obstructive Sleep apnea is considered a serious medical condition. Complications may include:

* **Daytime fatigue.** The repeated awakenings associated with sleep apnea make normal, restorative sleep impossible. People with sleep apnea often experience severe daytime drowsiness, fatigue and irritability. You may have difficulty concentrating and find yourself falling asleep at work, while watching TV or even when driving. People with sleep apnea have an increased risk of motor vehicle and workplace accidents.
* **High blood pressure or heart problems.** Sudden drops in blood oxygen levels that occur during sleep apnea increase blood pressure and strain the cardiovascular system. If you have obstructive sleep apnea, your risk of high blood pressure (hypertension) is greater than if you don't. Obstructive sleep apnea may increase the risk of recurrent heart attack, and abnormal heartbeats, such as atrial fibrillation. Obstructive sleep apnea also increases the risk of stroke. If there's underlying heart disease, these multiple episodes of low blood oxygen (hypoxia or hypoxemia) can lead to sudden death from an irregular heartbeat.
* **Type 2 diabetes.** People with sleep apnea are more likely to develop insulin resistance and type 2 diabetes compared with people without the sleep disorder.
* **Metabolic syndrome.** This disorder is a collection of other risk factors linked to a higher risk of heart disease. The conditions that make up metabolic syndrome include high blood pressure, abnormal cholesterol, high blood sugar and an increased waist circumference.
* **Complications with medications and surgery.** Obstructive sleep apnea is also a concern with certain medications and general anesthesia. People with sleep apnea may be more likely to experience complications following major surgery because they're prone to breathing problems, especially when sedated and lying on their backs.
* **Liver problems.** People with sleep apnea are more likely to have abnormal results on liver function tests, and their livers are more likely to show signs of scarring. This is a condition known as nonalcoholic fatty liver disease.
* **Sleep-deprived partners.** Loud snoring can keep those around you from getting good rest and eventually disrupt your relationships. It's not uncommon for a partner to go to another room, or even on another floor of the house, to be able to sleep. Many bed partners of people who snore may be sleep-deprived as well.

**Treatment Options**

Although Obstructive Sleep Apnea can disrupt your nightly slumber and put you at risk of several serious diseases, there are ways to control it. There are many options to consider and some of the more common treatments such as continuous positive airway pressure(CPAP) and oral appliances, help keep oxygen flowing into your lungs while you sleep. Losing weight can also improve sleep apnea symptoms while reducing your heart disease risk. Talk to your PCP to discuss the most effective ways to treat your sleep apnea.