Obstructive Sleep Apnea (OSA)

What is obstructive sleep apnea (OSA)?

Sleep apnea occurs when a person stops breathing for a short time while sleeping. The muscles around the tongue and throat hold them in place to keep the airway open so a person can breathe during sleep. If you have obstructive sleep apnea, these muscles relax during sleep causing the tongue or throat tissues to block or limit the flow of air to your lungs.

If air cannot pass to your lungs for 10 seconds or more, it is called obstructive apnea.
When your throat is partly closed to limit your air flow for at least 10 seconds, it is called **obstructive hypopnea**. This causes a drop in the oxygen level in your blood.

During a sleep study, the times when you stop breathing or when your oxygen level drops are measured. This is called an apnea hypopnea index (AHI). If you have more than 5 times in an hour, it can have major effects on your health. It is also very hard to get rested when you sleep.

**Who is at risk for OSA?**

Sleep apnea can occur in people as they get older, but men are more at risk. Other things that can increase your risk for OSA are:

- Being overweight
- Snoring
- Daytime sleepiness
- Taking sedating medicines
- Alcohol use
- Smoking

Certain health problems can also put you at risk for sleep apnea. These include high blood pressure, stroke, heart failure and diabetes.

**How does OSA affect me?**

OSA does more than affect the quality of sleep. If not treated, it can cause:

- High blood pressure, also called hypertension
- Poor control of diabetes
• Daytime sleepiness and fatigue
• Irritability
• Problems concentrating or remembering facts
• Trouble losing weight
• Swelling in the legs
• Waking often at night to have to go to the bathroom
• Higher risk for stroke
• Higher risk of an irregular heart beat
• Increased risk for heart and blood vessel disease
• Less sexual drive
• Morning headaches
• Greater risk for accidents, especially when driving

**How is OSA treated?**

The most effective treatment is continuous positive airway pressure (CPAP). A mask or large tube called a cannula is worn over or inside your nose while you sleep. Warm, humidified air is pushed through the tube to keep your airway open when you sleep. It can take some time to adjust to wearing the mask but most people feel more rested and alert with the start of this treatment. CPAP needs to be used every time you sleep to stop the apnea. If it is not used or not used correctly, apnea will return. You should take your CPAP when you travel or if you are admitted to the hospital.

Treatment may also include weight loss. Even a 10% weight loss can lessen the sleep apnea, but it can be hard to lose weight if you are not getting rested.
Sleeping on your side can help lessen sleep apnea. This could be done using a wedge behind your back or sewing a pouch to hold tennis balls into the back of your pajamas.

Dental devices that hold the lower jaw or tongue forward during sleep may be used. These devices often do not work as well as CPAP.

Surgery can be used as a treatment in some cases. It is often hard to predict though, how well surgery will reduce sleep apnea.

**For more information**

Here are some websites that may be helpful to you to find out more about OSA.

- OSU Sleep Disorders Center, [www.medicalcenter.osu.edu/go/sleepmedicine](http://www.medicalcenter.osu.edu/go/sleepmedicine)
- American Academy of Sleep Medicine, [www.aasmnet.org](http://www.aasmnet.org)
- National Sleep Foundation, [www.sleepfoundation.org](http://www.sleepfoundation.org)
- American Sleep Apnea Association, [www.sleepapnea.org](http://www.sleepapnea.org)
- National Heart, Lung, and Blood Institute, [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

![Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.](http://www.quiltsquareinv.com)