

# Are you 1 in 5 people who has Obstructive Sleep Apnea (OSA)?



Obstructive sleep apnea (OSA) is a chronic condition that affects as many as 22 million Americans\*. Many people are unaware that they may suffer from OSA, which is responsible for most cases of sleep apnea. Eighty percent of the cases of moderate or severe OSA remain undiagnosed.

One of the reasons that OSA is under-diagnosed is that it only happens when you are asleep and therefore, you don't know it is happening. OSA causes breathing pauses (apneas) or very shallow breathing during sleep. The apneas occur when the upper airway tissues block, or obstruct, the airway. When sleeping, the tissues in the back of the throat or the tongue relax too much, and obstruct the airway, making it difficult for air to reach your lungs. When air tries to move past the obstruction, the tissues vibrate, causing a snoring sound. These apneas can last 10 seconds or longer and can occur many times every hour. During apneas, your oxygen levels can fall to dangerously low levels, potentially leading to serious health conditions.

Males and females of any age can be diagnosed with OSA. Men over 40 or with a large neck circumference, post-menopausal women, and those who are overweight are at higher risk. OSA affects your sleep quality even after sleeping a full night. You may still feel sleepy in the morning, making it difficult to feel alert, concentrate, and perform daily tasks. Poor sleep quality, combined with unhealthy oxygen levels, can negatively affect your body.

Taking the time to learn about OSA, your risk factors, and how it can affect you are the first steps towards better health. If you think you may have OSA, you should make an appointment with your doctor. For more information, call Breathe Pennsylvania at 724-772-1750.



# Q+A

**Q:** If I don't know that I stop breathing at night, what other symptoms may indicate I have OSA?

**A:** Your partner may complain that you snore loudly or wake up suddenly by gasping or choking. You may wake up to use the bathroom several times a night. In the morning, you may have headaches or a very dry mouth. During the day, you may feel unrefreshed, extremely tired or unable to concentrate.

**Q:** Why is it important to follow-up with my doctor if I think I have OSA?

**A:** OSA has been linked to many other serious health conditions including high blood pressure, an increased risk of a heart attack or stroke, or worsening heart failure. People with OSA are more likely to suffer from diabetes or be overweight than those who don't have OSA. Those who have OSA may struggle with memory issues, depression and a greater chance of being involved in a work-related or motor vehicle accident.

**Q:** How will I be tested for OSA?

**A:** Sleep apnea can be diagnosed at home or in a sleep center. If you are ordered a test that requires you to go to a sleep center, the test is called a polysomnography. You will sleep overnight in a controlled environment where a specially trained technologist will record your breathing, heart rate, oxygen levels, body movements, brain activity and eye movements while you sleep.

If you are ordered a home sleep test (HST), you will be provided equipment and directions to set up and use the equipment at home. This test typically records your breathing, heart rate and oxygen levels. A technologist will not be in your home during this study.

The type of test ordered depends on your physician, your overall health condition and your insurance.

**Q:** What happens after my sleep study?

**A:** Your sleep study will be reviewed and interpreted by a sleep specialist. After this is done, your results will be sent to the physician who ordered your study. You should follow-up with your physician to discuss your test results and any treatments.

**Q:** What if I am diagnosed with OSA?

**A:** There are three classifications of OSA: mild, moderate and severe. Your treatment options will depend on the results of your sleep study. In addition to other treatments, your doctor may discuss lifestyle changes with you such as diet changes, weight loss, and exercise. You may also be encouraged to change your sleeping position.

**Q:** If I have OSA, will I have to wear a machine when I sleep?

**A:** Continuous positive airway therapy (CPAP) has been found to be the most effective treatment for most people with obstructive sleep apnea. A CPAP machine is typically very small and portable. It gently blows pressurized air into your airway while you sleep. This pressurized air keeps the tissues in the back of your throat from collapsing so that air and oxygen can easily reach your lungs.

**Q:** What should I do if I think I have OSA?

**A:** Please consider completing the questionnaire in this brochure and following up with your doctor. Need more information? Call Breathe Pennsylvania at 724-772-1750.

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**Learn more at:**

[www.breathepa.org](http://www.breathepa.org)

[www.sleepapnea.org](http://www.sleepapnea.org)

[www.sleepassociation.org](http://www.sleepassociation.org)

[www.sleepfoundation.org](http://www.sleepfoundation.org)

# Consequences of OSA

**HIGHER RISK  
OF STROKE**



**IMPAIRED  
COGNITION**  
due to poor sleep



**MEDICAL  
COSTS**

Untreated sleep  
apnea costs  
Americans an extra  
4.3 billion per year.



**WEIGHT GAIN**



**STRESS ON THE HEART**

- Coronary Artery Disease
- Cardiac Arrhythmias
- Congestive Heart Failure
- Heart Disease
- Sudden Death
- Hypertension



**HIGHER  
RISK  
OF DEPRESSION  
AND ANXIETY**



**HIGHER RISK  
OF DIABETES**



**INCREASED  
SEXUAL PROBLEMS**

- Loss of libido
- Impotence
- Relationship discord  
due to loud snoring



# STOP-BANG Questionnaire\*

## STOP

|                    |  |        |
|--------------------|--|--------|
| S (snore)          | Do you snore loudly (louder than talking or loud enough to be heard through closed doors)? | Yes/No |
| T (tired)          | Do you often feel tired, fatigued, or sleepy during daytime?                               | Yes/No |
| O (observed)       | Has anyone observed you stop breathing during sleep?                                       | Yes/No |
| P (blood pressure) | Do you have or are you being treated for high blood pressure?                              | Yes/No |

## BANG

|                           |                              |        |
|---------------------------|------------------------------|--------|
| B (body mass index [BMI]) | BMI > 35 kg/m <sup>2</sup> ? | Yes/No |
| A (age)                   | Age > 50 years?              | Yes/No |
| N (neck)                  | Neck circumference > 40 cm?  | Yes/No |
| G (gender)                | Gender male?                 | Yes/No |

**Yes to ≥ 3 questions = high risk of obstructive sleep apnea**

**Yes to < 3 questions = low risk of obstructive sleep apnea**

\*Adapted from Chung et al.

The STOP-BANG questionnaire is commonly used by healthcare providers as a screening tool for obstructive sleep apnea. It is included here as only a tool to help you begin a conversation with your doctor about your risk of OSA.

