

## **More Information About Sleep Apnea**

At the practice of Dr. Zachary Hodgins, our team has researched and compiled information from leading organizations on the forefront of sleep conditions, such as snoring and sleep apnea.

This information can help determine if you or someone you know is suffering from these disorders... and how to treat them for improved health and a good night of rest, night after night. We welcome you to contact our team to address learn more about these options.

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### **Sleep Interruption and Your Health**

87 million Americans snore, so you are not alone, but you could be in danger. 40 million Americans are chronic sufferers of sleep disorders, but only 10% have been treated or diagnosed, so there are some walking strokes and heart attacks among you and your friends.

Snoring occurs when the airway or passage through which you breathe becomes partially blocked. This can happen when your tongue falls back as you drift off into deeper sleep. As the diameter of the airway passage shrinks, throat vibrations begin, and snoring ensues.

In many scenarios, this compromise is minor and your body continues to get adequate amounts of oxygen, causing little or no harm, although discord with your bed partner is something different altogether. However, this is a red flag as it could be one of the early signs or a component of “obstructive sleep apnea” (OSA). In fact, 40% of snorers have been shown to have OSA. Most all sleep apnea sufferers snore in between bouts of apnea, or oxygen interruption.

In one well-known study, patients with untreated sleep apnea had a 37% chance of dying within eight years versus 4% for patients who had received treatment for their sleep apnea. That’s scary enough to pay attention to that bed partner who is sawing some serious logs.

OSA sufferers have a rough night and don’t even know what’s happening to them. In a given night, these apneic events (when a patient stops breathing) can occur more than 30 times an hour! Obviously, these individuals awake exhausted each morning, as they’ve been fighting for oxygen all night. Sleep should be a replenishing tool for each of us.

Should you be worried? Well, to answer that, first analyze some signs and symptoms of OSA sufferers. Common side effects of OSA include:

- heart attacks or irregular heart beats
- impotence
- high blood pressure
- stroke
- heartburn
- morning headaches
- dry mouth
- gastroesophageal reflux disease (GERD)
- impaired concentration
- depression and decreased quality of life
- decreased libido
- irritability
- poor job performance

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- family discord

... and the obvious one, chronic sleepiness. A simple test can be taken that will grade this last symptom called the Epworth Sleepiness Scale (you can find a copy on our web site). Not all apneics will score high, but if you do, it is a very good sign of OSA.

OSA can also cause learning or memory disabilities, as well as periods of nodding off while on the phone or at work. Obviously, sleep apnea patients are at a much greater risk of having auto accidents. So, what's the cure? Unfortunately, there is not yet a cure for sleep apnea, but it is treatable. The type of treatment for sleep apnea depends on the severity of the disorder as assessed by a sleep specialist. The goal of treatment is to keep the airway open during sleep leading to improved sleep, better oxygenation and enhanced daytime alertness.

First, the patient should undergo a sleep study to determine the extent of any sleep apnea. Depending on the test results, the recommendations will vary. A CPAP machine is often recommended in moderate to severe cases, while an oral appliance (airway orthotic) is usually suggested if the OSA is slight, or if the snoring is not a part of OSA at all. There are also acceptable surgical options, and patients are encouraged to seek advice from their physician for these.

Whatever your choice, please do not ignore this. It is a very serious health concern, and one that has proven to shorten the life of the sufferer. Make it your New Years Resolution to stop snoring!

### **Sleep Apnea Facts: Impact of Sleep Apnea on the Economy**

A few assumptions.

- **\*25 million American suffer from sleep apnea**
- **\*200,000 each year are involved in MVA (Motor Vehicle Accidents) because of sleep problems**
  - Of these at least 50,000 are estimated to be directly related to sleep apnea
  - Insurance cost per accidents is estimated to be over \$80,000
  - Total estimated insurance cost for MVA related to sleep apnea only \$ 4 Billion
- **\*38,000 die each year from complications of sleep apnea (i.e. heart attack, stroke etc.)**
  - Cost of healthcare in the ER or ICU is in excess of \$ 50,000 per patient
  - The total estimated cost is \$ 1.9 Billion
- **Productivity ratio is at least 10% less in people who suffer from sleep apnea**
  - That is estimated to cost the US economy \$ 75 Billion each year

*(The above statistics are related to sleep apnea and the numbers indicated by (\*) are estimations by the American Sleep Apnea Association).*

The National Sleep Foundation 2003 Poll found adults reported the following occurred at least a few

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nights a week:

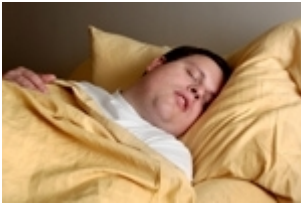
- 67% of adults report experiencing a sleep disorder
- 48% of adults report having symptoms of insomnia
- 32% of adults state they snore
- 7 % of adults reported pauses in their breathing during sleep
- 17% of adults report unpleasant, tingling feelings in their legs

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### **Evidence that Obstructive Sleep Apnea Causes Brain Damage**

Brain damage may explain problems related to sleep apnea such as memory loss and mood changes.

**American Academy of Sleep Medicine**  
AASM | 03/26/2009



Studies show that [obstructive sleep apnea](#) (OSA) affects much more than just your sleep. It can even damage your brain.

A recent brain imaging study from France involved 16 adults. Each of them had just been diagnosed with sleep apnea.

In numerous brain regions the study found a loss of “gray matter”. This is brain tissue that contains fibers and nerve cell bodies. There also was a decrease in brain metabolism.

The authors suggest that these changes may explain some of the impairments that often occur in people with sleep apnea. Examples include attention lapses and memory loss. The study was published in the March 2009 issue of the *Journal of Sleep Research*.

The results are similar to those found by a research team from UCLA. Their study was published in *Neuroscience Letters* in June 2008.

They reported that people with sleep apnea have tissue loss in the “mammillary bodies.” These are brain regions that help store memory.

In July 2008 the UCLA team published another brain imaging study in the journal *Sleep*. It involved 41 people with moderate to severe sleep apnea. It also included 69 control subjects matched by age.

Results show that people with sleep apnea have extensive alterations in “white matter.” This is nerve tissue in the brain. It contains fibers that are insulated with myelin - a white, fatty sheath.

The structural changes appear in brain regions that help control mood and memory. These regions also play a role in adjusting your blood pressure. Damage also was found in fiber pathways that connect these brain regions.

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What causes the brain damage? The authors suggest that oxygen, blood flow and blood pressure may be involved.

Sleep apnea involves breathing pauses that can occur hundreds of times during a night of sleep. These pauses can produce drastic changes in oxygen levels.

These breathing pauses also reduce blood flow in the brain. People with sleep apnea also are at risk for high blood pressure. Both of these conditions create a potential for brain tissue damage.

Dr. Ronald Harper of UCLA said that the studies show how important it is for sleep apnea to be treated.

Process:

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*We encourage you to read additional patient brochures for more information. Online patient brochures such as the Patient FAQ provide detailed information about symptoms, and how the various SomnoMed options provide comfortable alternatives to sleep disorder treatment. ■*