



Sleep-Disordered Breathing Can Up Your Death Risk

Is sleep-disordered breathing keeping you from getting a good night's sleep? Frequent, short disruptions in your breathing can upset the oxygen-carbon dioxide balance in your blood. Your brain restarts the breathing process, triggering a waking episode perhaps hundreds of times nightly—leaving you choking or gasping for air each time.

The problem is, 90% of us don't even know we're doing it and wonder why we're exhausted during the day.

Sleep-disordered breathing (SDB)—also known as obstructive sleep apnea (OSA)—can affect people of any age, but is most common among the middle-aged, elderly, overweight and smokers. In fact, for some, the aging process may come into play, reducing the brain signals' ability to keep throat muscles "stiff" while you sleep, which narrows the airway or causes it to collapse.

According to the National Heart Lung and Blood Institute, over 12 million American adults have obstructive sleep apnea and 50% of those are overweight. It is more commonly seen in males than females. Women tend to develop the condition after menopause.

SDB symptoms often include . . .

- Loud snoring (due to airway blockage)
- Silences during sleep (breaks in breathing)
- Choking for air during sleep
- Sudden awakening to get air or waking up in a sweat
- Excessive daytime sleepiness

And it's a major health concern.

SDB has been linked to cardiovascular disease, hypertension, stroke, insulin-resistance, endothelial dysfunction, poor concentration, memory loss, accidents and even death.

Now a new study reveals the risk of SDB may be greater than previously realized. According to the research, severe SDB can **double the risk of death for men aged 40-70** as compared to men of similar age who don't have SDB.

Study details. The Sleep Heart Health Study—published in the August 18, 2009 online issue of *PloS Medicine* by lead author Dr. Naresh Punjabi, associate professor of medicine at the Johns Hopkins University School of Medicine—was a prospective cohort study of 6,294 men and women, aged 40 years and older, who were not being treated for SDB. Researchers performed health evaluations, including in-home polysomnograms to test for SDB.

Among the participants, 57.1% of the men and 35.3% of the women were found to have SDB. Of the men, 33.2% had mild, 15.7% had moderate and 8.2% had severe SDB. In the women, 24.5% were found to have mild, 7.9% moderate and 3.0% severe SDB.

The study followed participants for an average of 8.2 years. In that time, 1,047 participants died—587 men and 460 women. After adjusting for age, sex, race, body mass index, smoking status and prevalent medical conditions, researchers found that participants with moderate SDB were 117% more likely to die of any cause than those without SDB. Participants with severe SDB were 146% more likely to die. Those with mild SDB showed no increase in risk.

Risk greater for men under 70.

However, when the results were stratified for age and sex, researchers found the risk much greater for men than for women—and the risk was greatest for men aged 70 years and younger.

Who Might Develop Sleep Apnea?

- Middle-aged men
- Women after menopause
- People with small airways in the nose, throat or mouth
- Those with enlarged tonsillar tissue or soft palates
- You, if someone in your family has sleep apnea

Per the National Heart Lung and Blood Institute

For men aged 40-70, even mild SDB increased their risk of death by 124% as compared to men of the same age who had no SDB. Those with moderate SDB upped their risk by nearly 1.5 times (145%), and those with severe SDB were more than twice as likely to die (209%) of any cause.

For men, coronary artery disease (CAD) the main culprit.

The study found that men with moderate and severe SDB were 169% more likely to die of CAD-related causes than men with no or mild SDB. No link between SDB and CAD-related deaths was found for women.

Lack of oxygen blamed for deaths.

In addition, researchers were able to pinpoint which symptom of SDB was most associated with mortality: They found that the decrease in oxygen levels was the main factor, not the sleep arousals or number of central sleep apneas.

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The study showed that the percentage of time sleepers was under 90% oxygen saturation (TST₉₀) and a significant predictor of mortality in the men under 70. Specifically, the quartile of men under 70 with TST₉₀ percentages of 2.70% and higher was 183% more likely to die than the three quartiles of men under 70 with TST₉₀ percentages under 2.70%.

Women and elderly may still be at risk. Researchers caution that despite the lack of statistical significance in mortality rates among women and those over age 70, these groups may still be at risk for SDB.

According to Punjabi: “Because of the limited number of deaths in younger women with moderate to severe disease in our study, we cannot exclude an independent association between sleep-disordered breathing and mortality in women . . . Furthermore, the negative finding in older adults (age >70y) should not obviate the clinical concern for identifying and treating sleep-disordered breathing in this subgroup. With increasing age, the likelihood of death from other causes rises so that quantifying the potential association between sleep-disordered breathing and mortality becomes more difficult.”

Your bottom line. Estimates suggest as little as 10% of those with SDB are currently being treated for the disease. If you have any suspicions that you may suffer from sleep apnea, get a sleep disorder evaluation to see if you have a problem.

If you have SDB, consider these lifestyle changes . . .

- Lose weight. Just 10% can better your sleep quality. But note, 50% of those with sleep apnea are not obese
- Quit smoking and avoid alcohol and sedatives that relax the throat muscles
- Try sleeping on your side to keep your throat open—and raise the head of your bed by four to six inches
- Keep on a regular sleep schedule
- Try breathe-right strips or a nasal dilator to help nasal passages stay open
- Use a CPAP mask device—Continuous Positive Airway Pressure—if your doctor/sleep specialist prescribes it, your life may depend on it

People who make an effort to get their SDB under control significantly reduce their risk of premature death—and ultimately enjoy better health, improved mental acuity and increased vitality.

What you can do now. Start getting involved in your health. As the recognized global leader in age management medicine, Cenegenics has long realized that a proactive approach is critical for optimized health.

Going far beyond routine annual checkups, Cenegenics guides you through highly comprehensive health evaluations to determine your physiologic, metabolic and hormonal baselines.

From there, we take corrective actions to help your body function at the highest-possible level, integrating a synergistic, four-pronged program to ensure you’re at the best weight and best physical condition—preventing or delaying the onset of age-related diseases and conditions described in this article.

It’s about a lifestyle shift with more daily activities and exercise, which ultimately help change your body composition for optimal health. Using results from highly comprehensive diagnostics, our expert age-management team works with you to design customized programs to help you meet short- and long-term health goals: low-glycemic nutrition, appropriate exercise, nutraceutical supplementation and hormone optimization (if clinically indicated).

Mounting research continues to support our proactive approach, and our established protocols continue to garner global media attention. The science behind our medical specialty, age management medicine, allows us to improve your health span by identifying and meeting criteria that places you in the lowest possible risk category for disease, including heart disease, diabetes, metabolic syndrome, stroke and Alzheimer’s.

What is Sleep-Disordered Breathing?

- Sleep-disordered breathing (SDB) is a chronic condition characterized by brief disruptions in breathing (apneas) or shallow breaths (hypopneas) while you sleep.
- An apnea is a cessation of breath lasting at least ten seconds. A hypopnea is shallow or slower breathing that measurably limits airflow.
- Repeated apneas and hypopneas throughout the sleep cycle lead to sleep disruptions (micro-awakenings) and decreased blood oxygen saturation (hypoxemia).
- The severity of sleep-disordered breathing is measured by the apnea-hypopnea index (AHI) – the number of episodes of apnea-hypopneas with at least a 4% decrease in oxygen saturation, per hour of sleep.
- In the Sleep Heart Health Study, less than 5 episodes per hour was considered normal, 5.0-14.9 was considered mild, 15.0-29.9 moderate and 30.0 or more severe.

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Discussions are always confidential and without obligation.