



# fact sheet

## SLEEP APNEA

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### Sleep apnea

Sleep Apnea (ICSD\* category 780.53) occurs when a person repeatedly stops breathing for short periods during sleep. These episodes can occur as often as 300 times a night, disrupting normal sleep patterns. There are two main types of sleep apnea. "Obstructive sleep apnea" is a cessation of breathing due to mechanical blockage of the airway; "central sleep apnea" appears to be related to a malfunction of the brain's normal signal to breathe. Hypopnea syndrome occurs when breathing continues during sleep, but is decreased to half of its normal capacity for a duration of 10 or more seconds.<sup>1</sup>

Excessive sleepiness (ES) is the typical presenting complaint of persons with sleep apnea. Symptoms of sleep apnea may include restless sleep; loud, heavy snoring (often interrupted by silence and then gasps); falling asleep while driving and/or during the day (at work, watching TV, etc.); morning headaches; loss of energy; trouble concentrating; irritability; forgetfulness; mood or behavior changes; anxiety or depression and obesity. Not all people with sleep apnea experience all of these symptoms and not everyone who has these symptoms has sleep apnea. According to the National Institutes of Health, approximately 12 million Americans suffer from sleep apnea, which is twice as common in men as in women.

### Obstructive sleep apnea / Hypopnea syndrome (OSA/HS)

- In OSAHS, sleep disruption is most commonly caused by airway obstruction – usually the relaxation and collapse of the soft tissue in the back of the throat during sleep.
- OSAHS is associated with snoring, which typically consists of a pattern of loud snores or brief gasps that alternate with episodes of silence that usually last 20 to 30 seconds.
- The snoring is commonly so loud that it disturbs the sleep of bed partners or others sleeping close by.



### Central sleep apnea (CSA)

- CSA is associated with an inability to maintain sleep, however, excessive sleepiness can occur.
- Snoring can occur in CSA, but is not prominent.
- Heart disease and stroke are often contributing factors to CSA.



\*ICSD = International Classification of Sleep Disorders

**Courtesy of Awake In Philly Community Education Group**

**Consequences**

- ES can be incapacitating, resulting in job loss, accidents, self-injury, marital and family problems and poor school performance.
- Retrospective studies show that the rate of traffic accidents among persons with sleep apnea is three to four times the rate among persons without sleep apnea.<sup>2</sup>
- Problems associated with untreated sleep apnea include hypertension, coronary artery disease, myocardial infarction, stroke, psychiatric problems, impotence, cognitive dysfunction, memory loss and death.

**Diagnosis and treatment**

- An estimated 80 percent of individuals with sleep apnea remain undiagnosed.<sup>3</sup>
- Prompt and proper diagnosis of sleep apnea is an important first step to treating the disorder.
- Hundreds of accredited sleep centers around the country evaluate and diagnose sleep problems.
- Misdiagnosis can lead patients to be labeled as lazy or having a primary psychiatric disorder, such as depression.
- Mild sleep apnea frequently can be overcome through weight loss or by preventing the person from sleeping on his or her back.
- Surgery may benefit some patients by eliminating or reducing the narrowing of the airway due to anatomical defects.
- Many serious cases of obstructive sleep apnea can be relieved by a treatment called nasal continuous positive airway pressure (nasal CPAP). Nasal CPAP uses a mask-like device and pump that work together to keep the airway open with air pressure during each inspiration. This device must be worn every night to be effective.
- Despite the use of the nasal CPAP device, many patients continue to experience residual ES.

Sources: American Sleep Disorders Association. *International Classification of Sleep Disorders, Revised: Diagnostic and Coding Manual*. Rochester, Minn: American Sleep Disorders Association; 1997. Kryger MH, Roth T, Dement WC, eds. *Principles and Practice of Sleep Medicine Third Edition*. Philadelphia, PA; WB Saunders Co; 2000. Lee-Chiong TL, Sateia MJ, Carskadon MA., eds. *Sleep Medicine*. Philadelphia, Pa. Hanley & Belfus, Inc.; 2002.

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<sup>1</sup> Veasey, M.D., Sigrid Carlen. University of Pennsylvania Health System, "Sleep Apnea," [http://pennhealth.com/health\\_info/tips/sleep/sleep\\_apnea/what\\_osahs.html](http://pennhealth.com/health_info/tips/sleep/sleep_apnea/what_osahs.html); 4/16/99.

<sup>2</sup> Suratt PM, Findley LJ. Driving with sleep apnea. *N Engl J Med*. 1999;340:881-883.

<sup>3</sup> Young T, Evans L, Finn L, Palta M. Estimation of the clinically diagnosed proportion of sleep apnea syndrome in middle-aged men and women. *Sleep*. 1997;20:705-706.