

Obstructive Sleep Apnea (OSA)

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WELCOME!



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SLEEP APNEA TERMINOLOGY

- Apnea = Breathing stops for 10 seconds or longer
- Hyponea = Breathing does not actually stop
- AHI (Apnea-Hyponea Index) =
- $\text{Apneas} + \text{Hyponeas} / \text{Hours of Sleep} = \text{Severity of Sleep Apnea}$
- $5 - 15 = \text{Mild}$, $15 - 30 = \text{Moderate}$, $>30 = \text{Severe}$



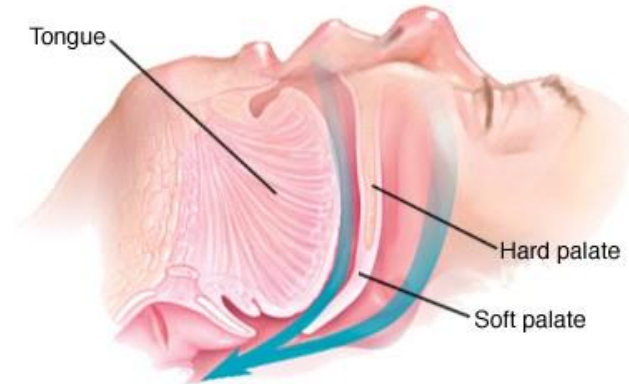
SLEEP APNEA TYPES

- Obstructive
- Central
- Mixed
- The most noticeable sign of obstructive sleep apnea is snoring.

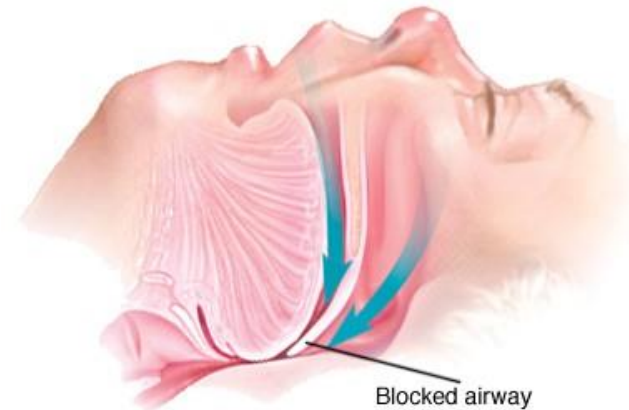


WHAT IS OBSTRUCTIVE SLEEP APNEA (OSA)?

- Soft tissues of the throat temporarily relax
- Breathing becomes momentarily cut off.
- Air intake is often blocked for a minute or longer

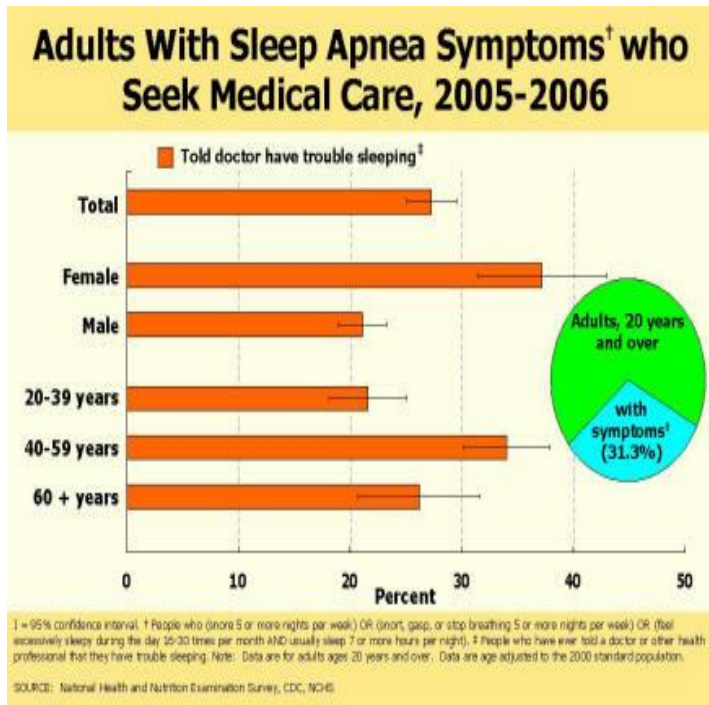


Normal breathing during sleep



HOW MANY ARE AFFECTED?

- An estimated 15 million Americans experience OSA.
- Estimated 15% - 40% of commercial drivers experience this disorder to some degree.
- Many drivers never speak with a doctor.



OSA SYMPTOMS

- Excessive daytime sleepiness
- Loud snoring
- Observed episodes of breathing cessation during sleep
- Abrupt awakenings accompanied by shortness of breath
- Awakening with a dry mouth or sore throat
- Morning headache
- Increased irritability or depression
- Difficult-to-control high blood pressure



RISK FACTORS FOR OSA

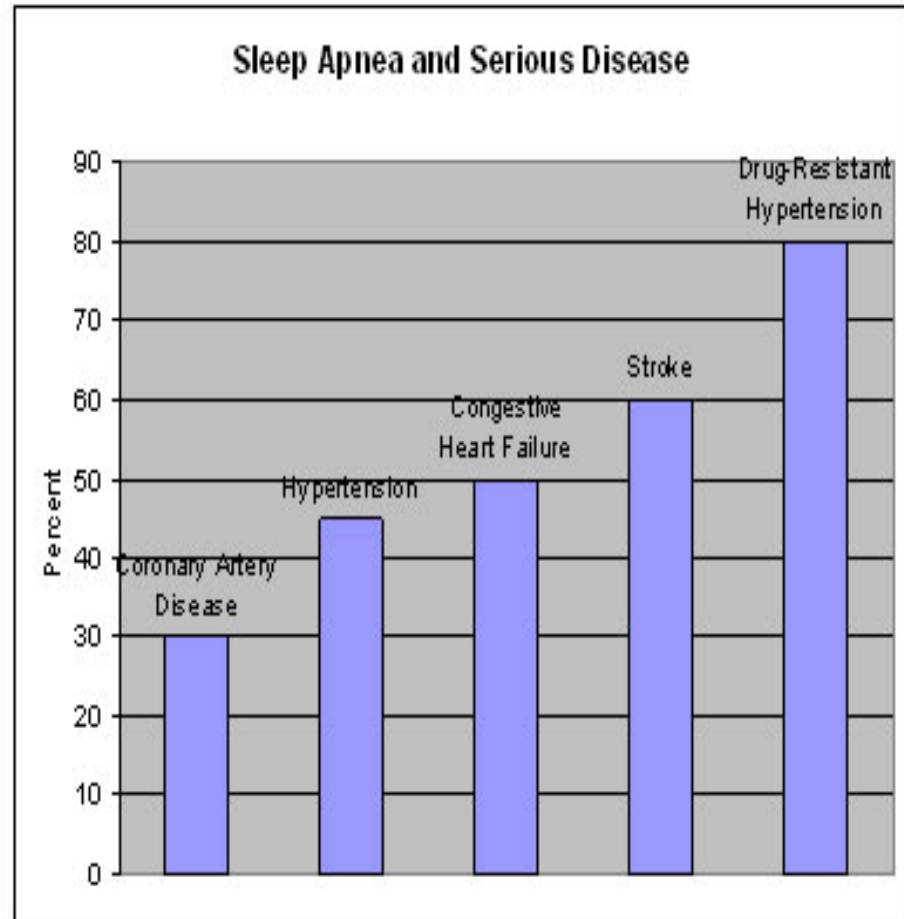
- Being overweight
- Having a large neck
- Having high blood pressure (hypertension)
- Having chronic nasal congestion
- Having diabetes
- Being male
- Being black, Hispanic or Pacific Islander
- Being older
- Being postmenopausal
- Having a family history of sleep apnea
- Smoking

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- ✓ **OBESITY**
 - ✓ **INCREASING AGE**
 - ✓ **MALE GENDER**
 - ✓ **FAMILY HISTORY**
 - ✓ **ALCOHOL OR SEDATIVE USE**
 - ✓ **SMOKING**
 - ✓ **ASSOCIATED CONDITIONS**
 - ✓ **ANATOMIC ABNORMALITIES OF UPPER AIRWAY**



OSA RELATED MEDICAL ISSUES

- Coronary artery disease
- Hypertension
- Congestive heart failure
- Stroke
- Drug-resistant hypertension



FMCSA INVOLVEMENT

- AHI $\geq$ 15
- Drivers with apnea not automatically unfit
- Drivers/specialists have options on testing
- Drivers have wide latitude on treatment options



DIAGNOSING SLEEP APNEA

- Web-based risk factor screening tool
- Sleep study – typically one or two nights. Determines if a driver has OSA and to what degree.
- Home (or truck) based testing option
<http://sleepsafedrivers.com/>
<http://www.precisionpulmonary.com/>
<https://federalsleepinstitute.com/>



SCREENING EXAMS

- Evaluate subjective criteria
 - Snoring
 - Body mass index
 - Hypertension
 - Diabetes



TENANTS OF SUCCESSFUL SLEEP APNEA PROGRAM

- Awareness/Education
- Assessment
- Adjustment
- Adherence



Questions?