

## Glossary of Sleep Disorder Terms

Term: Abdominal Effort

Definition: Abdominal movement involved in inhalation and exhalation effort

Term: American Academy of Sleep Medicine (AASM)

Definition: The accreditation and regulatory body for sleep medicine

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Term: American Sleep Apnea Association (ASAA) (A.W.A.K.E.)

Description: A patient-oriented national voluntary health agency serving individuals who have sleep apnea, and their families

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Term: Bi-level Positive Airway Pressure; [bi' -pap] (BLPAP); (Bi-PAP)

Description: Two different pressure levels, for inhalation and exhalation, introduced through the nasal cavity to produce a pneumatic splint to prevent the upper airway from obstructing, but allowing for unefforted exhalation.

Term: Bruxism; [brux'ism]

Definition: The forcible grinding or gnashing of the teeth, produced by rhythmic contractions of the masseter and other muscles, occurring usually without the patient's awareness during sleep.

Description: Consists of violent, repetitive grinding of the teeth. Occurs in episodes consisting of grinding, approximately once per second for perhaps 5 seconds--sometimes much longer, repeated any number of times during the night. Produces a loud and unpleasant sound, which frequently awakes bed partner or even a roommate 10 to 20 feet away.

Term: Cataplexy; [cat-uh'plex-ee]

Definition: A sudden spell of weakness due to a decrease in muscle tone triggered by external or internal stimuli, i.e., emotion such as laughter, anger, surprise, joy, fright, intense concentration, and athletic activities.

Description: The patient may stagger briefly and then fall to the ground, unable to move yet fully alert. Episode may last a minute or more and the patient may enter REM sleep.

Term: Continuous Positive Airway Pressure, CPAP; [see'-pap]

Definition: Pressure introduced through the nasal cavity to provide a pneumatic splint to prevent upper airway from obstructing.

Term: Delta Stage  
Definition: Stages 3, 4, and REM  
Description: The stages in which muscle tension is relaxed and body rest occurs.

Term: Electrocardiogram; [electro-car'dio-gram] ECG, EKG  
Definition: The graphic record of the heart's action currents obtained with the electrocardiograph.

Term: Electroencephalogram; [electro-en'seflo-gram]; EEG  
Definition: The record, obtained by means of the electroencephalograph, of the brain potentials derived from scalp electrodes  
Description: Brain waves

Term: Electromyogram; [electro-my'oh-gram]; EMG  
Definition: A graphic representation of the somatic electric currents associated with muscular actions.  
Description: Electrodes are usually placed on the chin or jaw and the tibialis anterior muscle. The chin or jaw EMG helps identify muscle activity associated with tongue movement opening the upper airway. The tibialis EMG identifies leg movement associated with myoclonus, periodic leg movement (PLMs) and restless leg syndrome (RLS)

Term: Electrooculogram; [electro-oc'ulo-gram]; EOG  
Definition: A record on paper or film of electric currents using electrodes placed on the skin adjacent to the eyes to detect movement of the eyeball.  
Description: Helps in determining rapid eye movement (REM) stage of sleep.

Term: Eupnea; [uoop-nee'uh]  
Definition: Easy, free respiration; the type observed in the normal subject under resting conditions.

Term: Excessive Daytime Somnolence (Sleepiness); EDS  
Definition: Excessive drowsiness during the daytime which causes one to use extraordinary means to prevent sleep onset

Term: Flow  
Definition: The flow of air caused by inhalation and exhalation effort.  
Description: Air flowing in and out of the lungs.

Term: Hyper  
Definition: A prefix denoting excessive, above the normal

Term: Hyperpnea; [hi-purp-ne'ah]  
Definition: A condition in which the respiration is deeper and more rapid than normal.  
Description: Extreme deep, rapid breathing -- huffing and puffing -- generally associated with strenuous exercise.

Term: Hypnagogic; [hip-nuh-goj'ick]

Definition: 1. Denoting a transitional state, related to the hypnoidal, preceding the onset of sleep; applied also to various hallucinations that may manifest themselves at that time.  
2. Inducing sleep; hypnotic.

Term: Hypnagogic/Hypnopompic Hallucinations

Definition: Auditory, tactile, or visual hallucinations occurring at the interface between waking and sleep. They can occur in anyone with disturbed sleep or a disrupted sleep schedule.

Description: Hallucinations are "dreamlike," but differ from dreams by the lack of full participation of the subjects and by the absence of a theme or story. They may involve revisualization of scenes from the previous few hours or minutes, often with feelings of weightlessness and loss of balance or support. These episodes last seconds to minutes and often terminate suddenly with a hypnic jerk.

Term: Hypnapagogic; [hip-nap-uh-goj'ick]

Definition: 1. Denoting a state similar to the hypnagogic, through which the mind passes in coming out of sleep; denoting also delusions experienced at such time.  
2. Causing wakefulness; preventing sleep.

Term: Hypnic; [hip-nick]

Definition: 1. Relating to sleep  
2. Causing sleep; somnifacient; somniferous

Term: Hypno; [hip-no]

Definition: Combining form relating to sleep or hypnosis

Term: Hypnopompic; [hypno-pom'pic]

Definition: Denoting the occurrence of visions or dreams during the drowsy state preceding or following sleep.

Term: Hypo; [hi-po]

Definition: A prefix, equivalent to sub-, denoting (1) a location beneath something else; (2) a diminution or deficiency; (3) the lowest, or least rich in oxygen, of a series of chemical compounds

Term: Hypopnea; [hy-pop'ne-uh]

Definition: Decreased in amount of air breathed per minute. Depth of breathing, rather than rate, usually is decreased

Description: Shallow airflow due to the lack of thoracic and abdominal effort; generally accepted as 50% loss of airflow for 10 or more seconds

Term: Insomnia; [in-sawm'ne-uh]

Definition: Insufficient or inadequate sleep

Description: Classified into three main types; (1) delayed sleep onset (can't go to sleep); (2) impaired sleep continuity (can't stay asleep); (3) early morning awakenings (can't go back to sleep)

Term: Laser Uvulopalatoplasty; [oov-uh-lo'pal-uh-to'plas-tee]; (LVUP)

Definition: A surgical procedure, using a cold CO2 laser, removing the uvula and part of the soft palate in an effort to increase the caliber of the upper airway.

Description: Procedure is usually done with local anesthetic in four to five visits.

Term: Myoclonus; [myo-klonus]

Definition: Clonic spasm or twitching of a muscle or group of muscles. Nocturnal Myoclonus--frequently repeated muscular jerks occurring at the moment of dropping off to sleep. Similar jerks that awaken a sleeper occur occasionally in all normal persons. Palatal myoclonus--rhythmic contractions of the soft palate, the facial muscles and the diaphragm, related to lesions of the olivocerebellar pathways.

Term: Obstructive Sleep Apnea Syndrome; [app'-knee-uh]; (OSAS); (OSA), Apnea

Definition: From the Greek term meaning "the want of breath." The intermittent cessation of breathing.

Description: The intermittent cessation of breathing for a period of 10 seconds to more than one (1) minute, wherein the chest and abdomen expand in unsuccessful effort to fill the lungs with air.

Term: Oximeter; [ox-im'eh-ter]

Definition: An instrument for determining photoelectrically the oxygenation of a sample of blood in a translucent part, such as the lobe (pinna) of the ear or the tip of the finger; it consists of an infrared bulb and photoelectric cell placed, respectively on the front and back ear lobe or finger tip. Red light rays are transmitted by oxyhemoglobin, but only slightly by reduced hemoglobin.

Description: Small portable instrument primarily used by respiratory care practitioners for measuring noninvasively, oxyhemoglobin.

Term: Oxyhemoglobin Saturation (SaO<sub>2</sub>)

Definition: Percent of oxygen present in the hemoglobin present in arterial blood.

Description: Generally measured using an oximeter.

Term: Parasomnias; [pair-uh-sawm'nee-uhs]

Definition: Movements and behaviors occurring during sleep.

Description: Includes movements and behaviors such as hypnic jerks, brief myoclonic jerks, sleepwalking, sleeptalking, sleep terror, confusional arousals, PLMs, headbanging, and bruxism.

Term: Periodic Leg Movement (PLM)

Definition: Involuntary leg movements causing arousals during sleep.

Description: Varies from slight twitches to violent movement of the legs. Best described as rhythmic extensions of the big toe and dorsiflexions of the ankle with occasional flexion of the knee and hip, each movement lasting approximately 0.5 to 5 seconds with a frequency of about one every 20 to 40 seconds.

Term: Poly

Definition: From the Greek word polys, meaning much, many. Prefix, in words formed from Greek

roots, denoting multiplicity; corresponding to the Latin prefix multi-.

- Term: Polysomnogram; [poly-sawm'na-gram]; (PSG)  
Definition: Multi-channel graph recorded during sleep.  
Description: Generally includes electro-encephalogram (EEG), electro-cardiogram (ECG or EKG), electro-myogram (EMG), electro-oculogram (EOG), flow, thoracic effort, abdominal effort, oxyhemoglobin saturation (SaO<sub>2</sub>).
- Term: Rapid Eye Movement REM  
Description: The rapid and erratic movement of the eyeball sometimes occurring during delta stage sleep.
- Term: Restless Leg Syndrome (RLS)  
Description: Irresistible leg movements that are often accompanied by creeping sensations deep in the limbs; occasionally, the upper limbs can also be affected.
- Term: Snoring  
Definition: Produced by the vibration of the soft tissues of the upper airway.  
Description: Intensity and quality is dependent on time of night, stage of sleep, position of the body, rate of airflow through the airway, tone of airway muscles, and the anatomic structure of the nose and throat. Snoring of apneic persons can exceed 80 dB, is often mixed with snorts, gasps, choking noises, body jerks, and flailing limb movements.
- Term: Somnipathy; [somni'pathy]  
Definition: Any disorder of sleep.
- Term: Somnogram; [sawm'na-gram]  
Definition: Graph created while sleeping
- Term: Somnolence, somnolency; [sawm'nolence]; [sawm'nolency];  
Definition: 1. Drowsiness; sleepiness  
2. A condition of semiconsciousness approaching coma.
- Term: Thoracic Effort  
Definition: Chest movement involved in inhalation and exhalation effort.
- Term: Titration; [ty-tray'shun]  
Definition: Volumetric analysis by means of the addition of definite amounts of a test solution of the substance being assayed.  
Description: The systematic noninvasive process of inducing finite pneumatic pressure through the nasal passage to develop and maintain a pneumatic splint in the upper airway, resulting in near normal breathing while sleeping.
- Term: Uvulopalatopharyngoplasty; [uvulo-palato-pharyngo-plasty]; (UPPP)  
Definition: A surgical procedure removing the uvula, part of the soft palate, and part of the pharyngeal tissue in the upper airway to increase the caliber of the upper airway.  
Description: A surgical procedure intended to eliminate snoring, reduce airway obstructions, and

improve nocturnal air flow.

Term: Advanced Sleep-phase Syndrome (ASPS):

Definition: . . . nocturnal sleep period occurring earlier than the desired bedtime

Description: Individuals tend to become very sleepy typically between 6:00 p.m. and 9:00 p.m. and awaken between 1:00 a.m. and 3:00 a.m.

Term: Delayed Sleep-phase Syndrome (DSPS):

Definition: . . . nocturnal sleep period occurring later than the desired bedtime

Description: Individuals tend to not become sleepy until between 1:00 a.m. and 3:00 a.m. with awakenings usually after 9:00 a.m. Individuals commonly referred to as "night people".