

THE CENTER FOR SLEEP MEDICINE

UNDERSTANDING A SLEEP STUDY

1. **APNEA\ HYPOPNEA INDEX:** THE NUMBER OF RESPIRATORY EVENTS THAT OCCUR PER HOUR OF SLEEP (AVERAGED OUT OVER AN ENTIRE NIGHT OF SLEEP)
2. **RESPIRATORY EVENT:** ONE OF FOUR BREATHING DISTURBANCES THAT MAY OCCUR DURING SLEEP INCLUD ING CENTRAL APNEA, OBSTRUCTIVE APNEA, MIXED APNEA, AND HYPOPNEA
3. **CENTRAL APNEA:** A PERIOD OF 10 SECONDS OR MORE, WHEN THERE IS NO AIRFLOW MEASURED AT THE NOSE AND MOUTH, AND THERE ARE NO ATTEMPTS TO BREATHE DETECTED (A FEW OF THESE OCCURING WHEN FIRST FALLING ASLEEP CAN BE NORMAL).
4. **OBSTRUCTIVE APNEA:** A PERIOD OF 10 SECONDS OR MORE, WHEN THERE IS NO AIRFLOW MEASURED AT THE NOSE AND MOUTH, BUT ATTEMPTS TO BREATHE CONTINUE (BREATHING ATTEMPTS ARE DETECTED BY THE BELTS AROUND THE CHEST AND STOMACH).
5. **MIXED APNEA:** A COMBINATION (OR MIX), OF A CENTRAL APNEA THAT TURNS INTO AN OBSTRUCTIVE APNEA.
6. **HYPOPNEA:** A PERIOD OF 10 SECONDS OR MORE WHEN REDUCED AIRFLOW IS MEASURED AT THE NOSE AND MOUTH, WHILE ATTEMPTS TO BREATHE CONTINUE.
7. **SaO₂:** THIS ABBREVIATION STANDS FOR BLOOD OXYGEN SATURATION AND IS EXPRESSED IN PERCENT. NORMAL SaO₂ = 90% OR HIGHER.
8. **PERIODIC LIMB MOVEMENT INDEX:** THE NUMBER OF LEG MOVEMENTS THAT OCCUR PER HOUR OF SLEEP (AVERAGED OUT OVER AN ENTIRE NIGHT OF SLEEP).
9. **PERIODIC LIMB MOVEMENT INDEX WITH AROUSAL:** THE NUMBER OF LEG MOVEMENTS THAT OCCUR PER HOUR OF SLEEP WHICH, CAUSE DISRUPTION TO THE SLEEP (AVERAGED OUT OVER AN ENTIRE NIGHT OF SLEEP).
10. **HEART RATE:** THE NUMBER OF TIMES THE HEART BEATS PER MINUTE (NORMAL RANGE=60-100).
11. **AROUSAL:** AN INTERRUPTION OF SLEEP WHICH MAY OCCUR FOR A VARIETY OF REASONS (RESPIRATORY EVENT, LIMB MOVEMENT, SNORING, LOUD NOISE, NO APPARENT REASON, ETC).
12. **STAGE 1 SLEEP:** THE LIGHTEST SLEEP, WHICH NORMALLY OCCURS FOR A FEW MINUTES WHEN FIRST FALLING ASLEEP. STAGE 1 IS OFTEN SEEN AFTER AN AROUSAL OCCURS. NORMAL AMOUNT IS APPROXIMATELY 6% BUT VARIES WITH AGE.
13. **STAGE 2 SLEEP:** A DEEPER SLEEP THAN STAGE 1. NORMAL AMOUNT IS APPROXIMATELY 40-60% BUT VARIES WITH AGE.
14. **STAGE 3-4 SLEEP:** THE HEAVIEST OR DEEPEST SLEEP. NORMAL AMOUNTS OF THIS SLEEP CAN INCLUDE FROM 0-26% BUT VARY WITH AGE.
15. **REM SLEEP:** STANDS FOR RAPID EYE MOVEMENT SLEEP (DREAMING). NORMAL AMOUNT IS APPROXIMATELY 20% BUT VARIES WITH AGE.
16. **SLEEP EFFICIENCY:** THE AMOUNT OF TIME DURING A SLEEP STUDY THAT IS ACTUALLY SPENT ASLEEP (EXPRESSED AS A PERCENTAGE OF TOTAL TIME IN BED).
17. **REM LATENCY:** THE AMOUNT OF TIME IT TAKES TO START DREAMING FROM THE TIME ONE FALLS ASLEEP. NORMAL REM LATENCY IS ABOUT 90 MINUTES BUT VARIES WITH AGE.
18. **SLEEP LATENCY:** THE AMOUNT OF TIME IT TAKES TO FALL ASLEEP. NORMAL IS UP TO 30 MINUTES.