

## Normative Data

**Table 1 – Normative Data for Sleep in Adults**

<b>Normal Sleep Latency [1]</b> (Minutes)	Sleep Latency 10-20 Min.	REM Latency > 70 Min.				
<b>Normal Sleep Efficiency [1]</b> (Percentage)	37-54 Yrs. 85.7 ± (8.3)	55-60 Yrs. 83.3 ± (8.9)	61-70 Yrs. 80.6 ± (11.7)	>70 Yrs. 79.2 ± (10.1)		
<b>Sleep Architecture [3]</b> (Percentage TIB)						
	N1	N2	N3	REM		
20-29 Yrs.	3.0	50.5	18.8	22.2		
30-39 Yrs.	2.5	52.8	16.1	23.1		
40-49 Yrs.	4.3	54.6	10.9	20.4		
50-59 Yrs.	4.7	56.7	8.1	20.9		
>60 Yrs.	4.0	57.6	7.7	16.4		
<b>Normal Arousal Index (AHI) [1]</b> (Arousals/Hour)	37-54 Yrs. 16.0 ± (8.2)	55-60 Yrs. 18.4 ± (10.0)	61-70 Yrs. 20.3 ± (10.5)	>70 Yrs. 21.0 ± (10.6)		
<b>Periodic Limb Movement Index [2]</b> PLM/Hour	Mild 5-25	Moderate 26-50	Severe >25			
<b>Respiratory Disturbance Index (RDI)</b> (AHI + RERA/Hour)	Mild 5-≤15	Moderate 15-30	Severe >30			
<b>Normal Oxygen Values [4]</b> Oxygen Saturation Percentage	10-20 Yrs. 96.5	20-30 Yrs. 95.3	30-40 Yrs. 96.3	40-50 Yrs. 96.0	50-60 Yrs. 95.8	>60 Yrs. 95.1

**Table 2 - Normative Data for Sleep in Children**

<b>Normal Sleep Efficiency [5]</b> Percentage	89			
<b>Normal Sleep Latency [5]</b> Minutes	23			
<b>Normal REM Latency [5]</b> Minutes	<10 Yrs. 87-155	>10 Yrs. 136-156		
<b>Normal Arousal Index (AHI) [5]</b> (Arousals/Hour)	9-16			
<b>Sleep Architecture [5]</b> (Percentage TST)	N1 4-5	N2 44-56	N3 29-32 (<10 Yrs.) 20 (> 10 Yrs.)	REM 17-21
<b>Apnea Hypopnea Index (AHI) [5]</b> Apneas and Hypopneas/Hour	≤1.4			
<b>Central Apnea Index [5]</b> Central Apneas/Hour	≤0.4			
<b>SpO2 &gt;90% [5]</b> Percentage	0			
<b>SpO2 Nadir [5]</b> Percentage	≥9			
<b>Periodic Limb Movement Index [5]</b> PLM/Hour	≤4.3			
<b>Partial Pressure of Carbon Dioxide &gt; 50mmHg [5]</b> Percentage	25			

[1] Archives of Internal Medicine 2004; 164: 406-418. Redline S et al.

[2] International classification of sleep disorders, revised; diagnostic and coding manual. Rochester, MN: American Sleep Disorder Association, 1997

[3] Adapted from Hirshkowitz M. Normal human sleep: an overview. *Med Clin North Am.* May 2004;88(3):551-65.

[4] Gries, RE, Brooks, LJ Normal oxyhemoglobin saturation during sleep. *Chest* 1996; 110 1489-1492

[5] *Sleep Med Clin.* 2009 September; 4(3): 393-406. Doi: 10.1016/j.smcl.2009.04.007