

Understanding AHI: Apnea-Hypopnea Index Scores

The apnea-hypopnea index (AHI) is the number of breathing pauses and shallow-breathing events per hour of sleep; in adults, under 5 is normal, 5–14 mild, 15–29 moderate and 30 or more severe sleep apnea.

Updated October 28, 2026

The **apnea-hypopnea index (AHI)** is the headline number on any sleep apnea report. It counts breathing events per hour of sleep.

- An **apnea** is a near-complete stop in airflow lasting at least 10 seconds.
- A **hypopnea** is a partial reduction in airflow lasting at least 10 seconds, accompanied by an oxygen drop or an arousal.

Adult severity scale

| AHI | Severity | |---|---| | Under 5 | Normal | | 5–14 | Mild | | 15–29 | Moderate | | 30 or more | Severe |

The 3% vs 4% rule

The American Academy of Sleep Medicine recommends scoring a hypopnea with a 3% oxygen drop *or* an arousal. Medicare requires the 4% rule for coverage decisions. The same night scored both ways can produce noticeably different AHIs, so check which rule your report used.

Related numbers on your report

- **RDI:** AHI plus respiratory effort–related arousals.
- **REI:** events per hour of *recording* time, used for home tests that don't measure sleep.
- **ODI:** oxygen desaturations per hour.
- **Oxygen nadir:** the lowest saturation reached.
- **Central apnea index:** events with no breathing effort.

Why AHI isn't the whole story

Two people with the same AHI can feel very different. Treatment decisions also weigh daytime sleepiness, oxygen levels, heart disease, blood pressure and how much events cluster in REM sleep or on your back. For insurance, an AHI of 15 or more qualifies alone, while 5–14 usually requires documented symptoms or conditions such as hypertension.

Frequently asked questions

What AHI is normal on CPAP?

Most clinicians aim for a residual AHI under 5 on the machine's nightly report. Persistently higher numbers are worth discussing with your sleep physician.

Why is my AHI different on two tests?

Night-to-night variation, sleep position, alcohol, REM sleep time, the type of test and the hypopnea scoring rule (3% versus 4% oxygen drop) all change the result.

Is AHI the same for children?

No. In children, an obstructive AHI of 1 or more is generally considered abnormal, and pediatric severity thresholds are much lower than adult ones.