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CPAP, BiPAP, and APAP Therapy Explained

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Downloadable PAP guide for those that want to know more about the most common modalities: CPAP, BiPAP, and APAP Therapy

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CPAP Therapy Tips

CPAP Machine: How it Works, Reasons, and Uses

If you've been diagnosed with obstructive sleep apnea (OSA) and a physician or sleep specialist has told you that you need to start CPAP therapy, you probably have a lot of questions. You've come to the right place. As an authority on all things CPAP-related, answering peoples' questions about CPAP therapy and CPAP devices is what we do. We want you to feel comfortable with the life-changing therapy you're about to begin.

The most important thing to know is that CPAP is going to improve your sleep, and therefore your health, almost immediately. Once you start treating your sleep apnea, you'll stop snoring and you'll see a noticeable reduction in daytime sleepiness, along with an improvement in your focus and attention.

Other benefits of using CPAP to treat your OSA are less visible, but just as important: managing your apnea can prevent or reverse serious, long-term health conditions like chronic high blood pressure, cardiovascular disease, and risk of stroke.

What Is Sleep Apnea (OSA)?

The first question you may have if you're going to use CPAP is, "What exactly is sleep apnea? How do I know if I have it?"

If you snore, or if you've been told that you making gasping or choking sounds in your sleep, then it's likely you have obstructive sleep apnea. You're not alone. Sleep apnea is an extremely common condition affecting millions of people.

If you have obstructive sleep apnea, something is actually blocking your ability to take in the air you need to breathe. This happens when your airway relaxes during sleep. The muscles of the mouth or throat collapse, blocking the airway and preventing oxygen from getting into your lungs.

These temporary blockages or obstructions are events called "apneas," and they can interrupt your breathing, which in turn raises your blood pressure and causes snoring.

Apneas can also wake you up with a characteristic gasp or choking noise, or even a cough, though you may not even realize this; it's not uncommon for people with apnea to wake up dozens or even hundreds of times per hour without awareness, which leads to fragmented, poor-quality sleep (both for the individual with apnea and their bed partner).

If you have these apnea symptoms—along with symptoms like waking up with a headache or experiencing all-day drowsiness—you'll need confirmation by a doctor before you can begin CPAP therapy.

What Is CPAP Therapy and How Does it Work?

Your next questions, if you have apnea, are probably related to the therapy itself. You may be asking, "What is CPAP and why do I need it?" or "What does a CPAP machine do?"

"CPAP" is the term for a machine used to treat mild, moderate, or severe sleep apnea. A CPAP machine (sometimes referred to as a "sleep apnea machine") is a medical device that can be prescribed by a board-certified sleep specialist.

“CPAP” is an acronym describing exactly what the machine does: the four letters stand for continuous positive airway pressure. Your CPAP provides a constant, gentle flow of pressurized air that keeps your airway from collapsing while you sleep. This helps you breathe and maintain good blood oxygen levels throughout the night.

“CPAP therapy” is the term for the treatment approach itself. To get the best results, people diagnosed with sleep apnea are expected to use their CPAP machines consistently, all night every night.

CPAP Machines: Are They Hard to Use?

CPAP machines are not difficult to use. They’re simple devices, and the technology is improving all the time. The three main components are:

1. **Motor.** The CPAP box or machine that sits on your bedside table is the CPAP motor. It’s a small, quiet compressor that takes in room temperature air and pressurizes it. The motor then delivers the gently pressurized and filtered air to your airway via a hose and mask (see below). Some people opt to use the humidifier that comes with the motor to keep their nose, mouth, and throat from getting dry.
2. **Hose.** The CPAP hose, about 6 feet long, connects the motor to the mask. Hoses are specially designed to convey humidified air.
3. **Mask.** Depending on your particular breathing issues and fit requirements, your CPAP mask may go over your nose or over your entire face (nose and mouth together). Another style is the nasal pillows CPAP mask, which inserts into the nostrils from below. Though the masks are easy to use and effective, comfort can be an issue; sometimes trial and error is required before you find the perfect CPAP mask fit that helps you comply with your therapy.

CPAP machines and their components do need to be tested, serviced, and replaced periodically, but this regular CPAP maintenance and upkeep is part of your prescription, and is typically covered by insurance.

Reasons for Using CPAP

You may be asking yourself, “Why do I need a CPAP machine?” CPAP can help treat the following conditions and issues:

- **Obstructive Sleep Apnea (described above).**
- **Upper Airway Resistance Syndrome (UARS).** A form of sleep-disordered breathing, UARS is the stage between mild snoring and full apnea. When your airway reduces in diameter due to loose tissue, this constriction creates resistance. Air still moves into your lungs, but not as easily. You may not experience apnea events where you stop breathing, but your sleep breathing will be heavy and labored. As you work harder and harder to breathe, your brain may compensate by waking you up. Left untreated, UARS almost always develops into OSA. CPAP is not necessarily the first line of treatment for UARS, but as the condition progresses, it's often recommended to help keep the airway open.
- **Snoring.** We all know what snoring sounds like, but what does it look like? As the tissue in your throat loosens, it vibrates when you inhale and exhale. Snoring may begin as a harmless, irritating form of noise pollution, but it can be a sign of things to come. Snoring often progresses to UARS and ultimately to OSA.

Getting Prescribed to Use CPAP

How do you get started with CPAP therapy? The first step is getting a diagnosis. To confirm you have sleep apnea, you'll probably need to have a sleep study (polysomnogram) conducted at a sleep clinic. (Some patients may qualify for a Home Sleep Study instead.) This overnight test allows sleep technologists to collect comprehensive data about your sleep, such as brain activity, blood oxygen levels, heart rate, and respiration.

If you do have apnea, sleep lab technologists will be able to track how often you stop breathing per each hour of sleep. After the study, they share these numbers with your sleep specialist, who will make a diagnosis as to your condition and its severity.

If the sleep specialist advises you use a CPAP machine, you may need a follow-up sleep titration study. This is a second overnight visit to the sleep center, to help determine which CPAP machine and mask are right for you. During this visit, you will sleep while trying a few different CPAP masks and machines. The technologist will test different air pressure calibrations to determine a level that will clear your airway obstruction without disturbing your sleep.

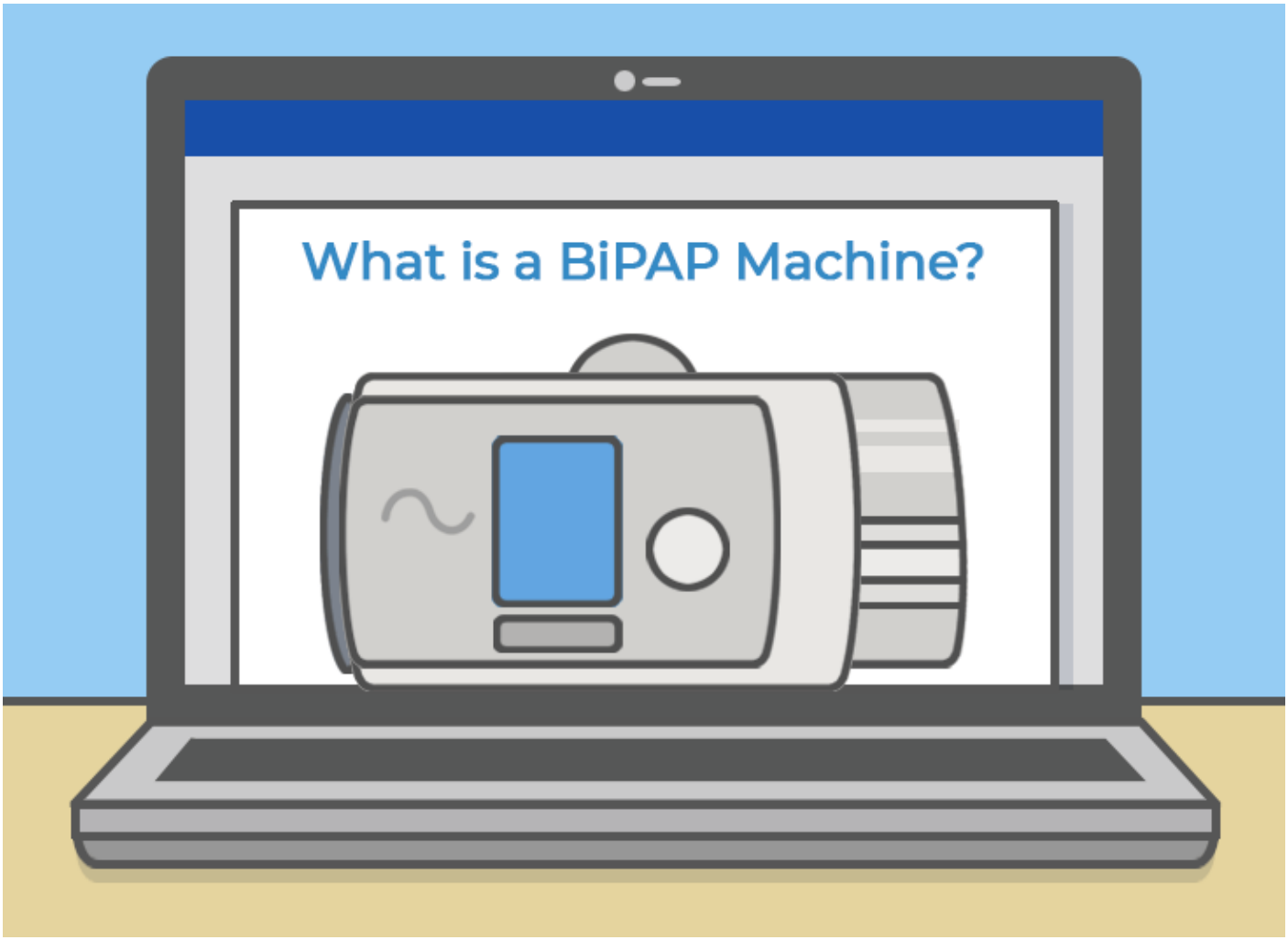
CPAP Therapy Is a Treatment, Not a Cure

CPAP therapy is remarkably effective, but only if you use it regularly. CPAP is a treatment, not a cure for apnea. You need to comply with the therapy by using CPAP daily or your apnea will continue as it did before you began treatment.

Why might people fail to comply with their CPAP therapy? A few reasons. Common barriers to good adherence include:

- A poorly fitting CPAP mask
- A problem with tolerating the air pressure
- Aerophagia—swallowing air, which can lead to gas, flatulence, bloating, burping, or discomfort
- Humidification issues (or lack thereof) irritating your throat and mouth

Fortunately, most of these CPAP intolerance issues can be addressed by having your equipment and settings adjusted or swapped out. Be sure to contact your sleep physician if you have problems. Remember, treating your apnea is a long-term commitment. You may need to make adjustments and modifications from time to time to keep your therapy working for you—but the boost in your sleep and health is well worth the effort.



Therapy Equipment

What Is a BiPAP Machine? (Benefits, Uses, Indications)

If you have severe obstructive sleep apnea, central sleep apnea, COPD, Overlap Syndrome, obesity hypoventilation, or another health condition with an obstructive or restrictive component that affects your breathing during sleep, then your doctor may recommend you use a BiPAP machine instead of a CPAP machine.

BiPAP vs. CPAP is not a question of "which therapy is better for sleep apnea?" Both machines are superior for treating apnea. They have the same purpose and function: both BiPAP and CPAP use filtered, pressurized air to keep your airway open so it doesn't collapse during sleep.

The difference between BiPAP and CPAP is that a CPAP machine uses a continuous, steady pressure, regardless of whether you are inhaling or exhaling. (The "C" in CPAP stands for "continuous.") BiPAP machines offer a dual pressure setting, so your inspiratory setting (IPAP) can be set at a higher pressure than your expiratory setting (EPAP). (The "Bi" in "BiPAP" stands for "bilevel," or two levels.) This difference in pressures is sometimes called a "pressure gradient."

Which apnea machine you use is not a question of "what works better?"—it's a question of individual fit, based on your specific needs. CPAP is the go-to for treating obstructive sleep apnea, but there are certain health conditions that compromise breathing and lead to an imbalance in blood gas levels. You may have too little oxygen in your bloodstream or too much carbon dioxide.

For people with these types of pulmonary conditions, BiPAP can be a more effective apnea treatment because it addresses the other breathing-related issues, as well.

Also, for some individuals with a proven inability to tolerate CPAP—for example, if exhaling against the pressurized air is too labored and uncomfortable and prevents you from getting good quality sleep—BiPAP may be easier to use.

What Is a BiPAP Machine?

The term "BiPAP" is a trademarked brand name for a particular manufacturer's (Respironics) product. (Think how we commonly say "Kleenex" when we should be asking for a "tissue.") The official, generic term for this modality is "bilevel positive airway pressure" therapy. You may sometimes see the term "BPAP" used interchangeably with "BiPAP." They are the same. Both BPAP and BiPAP refer to machines designed to treat sleep disordered breathing.

As mentioned earlier, BiPAP is very similar in function and design to CPAP. It differs by the addition of a second air pressure setting.

How Does a BiPAP Machine Work?

The experience of sleeping with a BiPAP is almost identical to using a CPAP. The machine on your nightstand contains a motor and air compressor (and, optionally, a humidifier to moisten the air). The BiPAP brings room air into this machine, where the air is then filtered and pressurized. The pressurized air is delivered to your airway via tubing and a mask which you wear to sleep. This air works like a splint to keep your collapsing airway open during sleep.

However, whereas CPAP has a single air pressure setting, a BiPAP allows for a differential in inspiratory and expiratory pressures. This means your doctor may prescribe one air pressure for inhaling—often, a pressure higher than a typical CPAP will allow—and a second, lower air pressure for exhaling.

This pressure gradient is helpful for people who may need additional assistance with their nighttime breathing. For example, if you have very low blood oxygen, your doctor may recommend a higher inspiratory pressure in order to get more air into your lungs. However, exhaling against that higher-than-average air pressure can be difficult. The bilevel pressure setting allows for a lower pressure when you exhale.

And if you have too much carbon dioxide in your bloodstream, the lower expiratory pressure means you don't have to work as hard to exhale and eliminate the excess CO2. The bilevel air pressure settings enhance your body's ability to take in and remove gases.

Benefits of BiPAP

What are some of the benefits and advantages to using BiPAP for apnea?

- BiPAP is a better treatment for those with breathing restrictions. People with breathing restrictions may have trouble getting enough oxygen and expelling enough CO2. BiPAP can improve your gas exchange, which helps the body function more efficiently. Clearing the body of CO2 can also prevent a dangerous and sometimes deadly condition called hypoxia.

- BiPAP makes exhaling easier—which is good for those with a need for a higher inspiratory pressure. If your doctor recommends a higher-than-average air pressure to help keep your airway from collapsing, then you may find exhaling against that pressure to be challenging and uncomfortable. Working to exhale is no fun, and it may actually lead to a higher blood CO2 level. Many people with a need for higher pressure end up switching from CPAP to BiPAP.

- BiPAP includes an optional breath timing feature. This setting can measure your sleep respiration rate and set an "ideal rate" for how often you should inhale and exhale over a set period of time. When you're asleep, if you go too long without inhaling, the BiPAP will increase air pressure temporarily. This forces you to take a breath. Once you resume breathing at your normal rate, the automatic setting returns to the previous air pressure level.

Uses and Indications for BiPAP Therapy

How do you know if you need BiPAP therapy? Your doctor will tell you which to use, based on the results of your sleep study, your titration study, and your general health history.

Common reasons to use BiPAP include:

- **CPAP intolerance.** If you cannot tolerate CPAP, BiPAP can be approved as an alternative. However, BiPAP is traditionally more expensive than CPAP. Because of this, for your insurance to cover the change, your inability to use CPAP will need to be documented during your sleep study.

- **A need for increased ventilation.** If you have a pulmonary disease or other condition that requires assistance with both inhaling and exhaling, BiPAP may be a better choice for you than CPAP; for example, if you have an obstructive and restrictive component like central sleep apnea, obesity hypoventilation, COPD, or Overlap Syndrome.

Downsides of BiPAP

BiPAP has many pros, but also a few cons:

- **Expense.** BiPAP machines are more expensive than CPAP machines. On average, they can cost anywhere from two to four times as much. If you can get your BiPAP covered by insurance, this helps, but you may have trouble getting insurance coverage unless you can prove you need BiPAP for medical reasons.

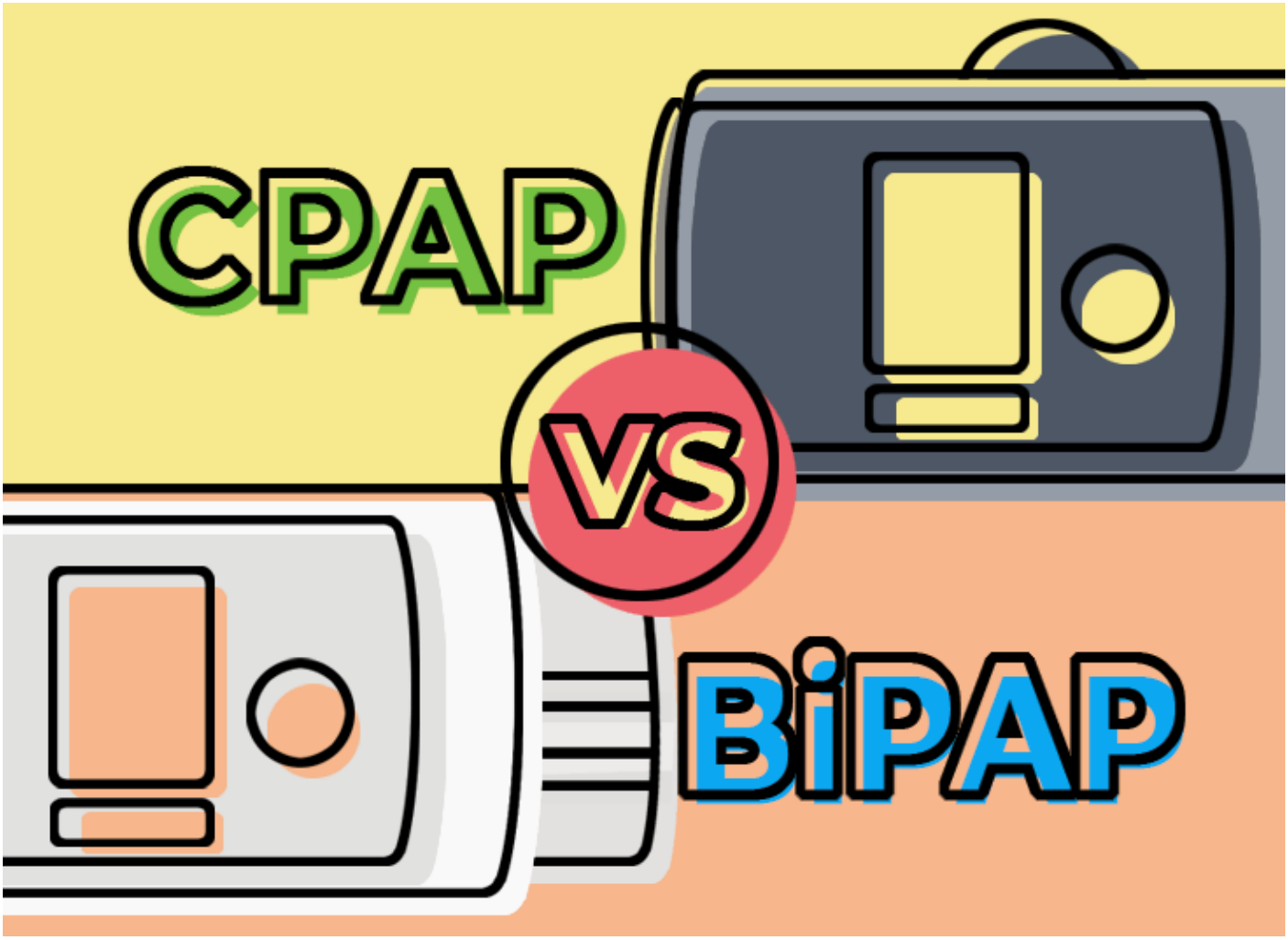
- **Adjustment period.** Getting used to using a BiPAP machine may take some time. Although the mask and tubing will feel the same as using a CPAP, the need for higher pressure variations can be challenging at first for some patients.

Summary

A BiPAP machine for the treatment of sleep apnea and sleep disordered breathing is very similar to a CPAP machine. Both BiPAP and CPAP use pressurized air to keep your airway open.

The main difference between BiPAP and CPAP is that BiPAP offers bi-level air pressure. This means you can have two different air pressure settings, one for inhaling (inspiratory setting, or IPAP), and one for exhaling (expiratory pressure, or EPAP). This differential is also known as a "pressure gradient."

The pressure gradient can be helpful for apnea patients who have additional breathing-related issues, such as COPD or obesity hypoventilation syndrome. The dual pressure feature enables these patients to improve their gas exchange by bringing in more oxygen and eliminating more CO2. BiPAP is also an effective alternative treatment for apnea patients who cannot comply with or tolerate CPAP machine therapy at higher air pressures.



Therapy Equipment

CPAP vs BiPAP Machine: Which Is Best?

If you've been diagnosed with obstructive sleep apnea (OSA), which sleep apnea machine is best for your particular needs—CPAP or BiPAP?

For most people, the answer is CPAP. CPAP therapy is the first-line therapy of choice for most cases of mild to severe sleep apnea, snoring, and upper airway resistance syndrome. Most people with apnea and sleep-disordered breathing respond well to CPAP, as long as they give themselves time to get used to the therapy.

However, there are special cases where a BiPAP Machine may be a better choice.

You may not have heard much about BiPAP. Some people casually lump it under the broader category of "CPAP machine" because the devices are similar and have the same end goal of treating apnea. However, there is a difference between these two forms of sleep apnea therapy.

Both CPAP and BiPAP treat sleep apnea by delivering pressurized air to keep your airway from collapsing when you sleep. However, the two apnea machines have different settings and slightly different functions. CPAP and BiPAP essentially do the same job, but they aren't interchangeable devices; which one is best for you depends on a few factors.

What Is the Difference between CPAP and BiPAP?

What Is CPAP?

A CPAP machine provides "continuous positive airway pressure"—a steady, gentle flow of pressurized air, at an air pressure level prescribed by your doctor. This pressurized air, delivered via tubing and a mask, keeps your airway open while you sleep.

CPAP therapy is prescribed after a sleep study (polysomnogram) to confirm the presence of obstructive sleep apnea and its severity. Often, a follow-up CPAP titration sleep study is necessary to help determine which CPAP machine and mask are right for you. The technologist will test different air pressure calibrations to figure out an air pressure level that will clear your airway obstruction without disturbing your sleep.

What Is BiPAP?

BiPAP stands for "bilevel positive airway pressure." Bilevel means there are two levels of air pressure, instead of the single air pressure level used in CPAP machines. With BiPAP, you can have individual pressure settings: one for your inhalation (ipap), and another for your exhalation (epap).

The basic principle of BiPAP is the same as CPAP: a BiPAP machine delivers pressurized air to keep your airway open. You wear a mask to sleep with BiPAP therapy, just as you would with CPAP. How it differs from CPAP is that a BiPAP machine has those two pressure settings instead of the single setting.

Why Would Someone with Apnea Need Two Pressure Settings (BiPAP)?

Some people do better with a heavier inhalation pressure and a lighter exhalation pressure. The higher pressure upon inhalation (ipap) may help them to clear the airway and take in enough oxygen, while the lower pressure setting for exhalation (epap) helps them to clear their lungs of carbon dioxide.

Also, the lower setting for exhalation can be more comfortable for people who feel that they're working too hard to breathe out.

For some people with apnea, another advantage to BiPAP therapy is the breath timing feature. This setting can measure your optimal sleep respiration rate. If you go too long without inhaling, the BiPAP will make you inhale by increasing the air pressure temporarily. Once you start breathing at a normal rate again, this setting automatically reverts to the previous air pressure level.

When Is BiPAP a Better Apnea Treatment Option Than CPAP?

Although most people with apnea use CPAP on the recommendation of their sleep specialist, there are certain conditions where BiPAP might be a better option:

If you require higher CPAP pressures. If you have low oxygen levels and your sleep specialist has determined that you require higher CPAP air pressure to treat your apnea effectively, you may benefit from BiPAP. Many people who need higher air pressure prefer the comfort of BiPAP, with its lower expiratory pressure. Exhaling against a high air pressure can feel like a struggle and may make it harder for you to fall asleep or stay asleep.

If you have obesity hypoventilation syndrome (OHS). This form of sleep-disordered breathing tends to affect people with a high BMI. You may breathe too shallowly or slowly during sleep, which can lead to respiratory depression (hypoventilation) and a high level of carbon dioxide (CO_2) in your bloodstream.

A dangerous condition called hypoxia can develop, sometimes resulting in heart failure or respiratory failure. However, for people with OHS, BiPAP, with its restrictive component, can be better than CPAP because of its ventilatory effect. The higher inspiratory pressure and the lower expiratory pressure can help you to get sufficient oxygen while expelling CO_2.

If you have COPD/Overlap Syndrome. If you have both sleep apnea and chronic obstructive pulmonary disease (COPD), you may have what's termed "overlap syndrome." This means you experience double the impact of having either a pulmonary issue alone. You don't have a correct gas exchange of CO2 and oxygen in your bloodstream when you're awake, thanks to the COPD; but your body never gets a chance to correct this imbalance when you're asleep, either.

Your breathing problems last around the clock, leading to a number of potentially serious health complications. However, by using BiPAP, you may be able to improve the work of breathing when you're asleep. With its higher inspiratory pressure and lower expiratory pressure, BiPAP can help rebalance the blood oxygen and CO2 levels when you sleep.

Whether you'd benefit more from BiPAP or CPAP is a decision your doctor makes, based on your sleep test results and medical condition. If you have questions about BiPAP and CPAP, ask your sleep medicine physician. It's important that you understand the specific benefits of the sleep apnea therapy that your doctor recommends for you.

CPAP Is Still the Gold Standard for Sleep Apnea

Although BiPAP has its place in the treatment of sleep apnea, in most cases it's an alternative to CPAP or a specialized choice based on your specific health profile. CPAP is still the gold standard for treating OSA, snoring, and Upper Airway Resistance Syndrome (UARS). It remains the most effective treatment for apnea and has been shown in studies to help lower blood pressure, dramatically reducing the risk of death from cardiovascular disease or stroke.

"But What if CPAP Doesn't Work for Me?"

CPAP may be the gold standard, but that doesn't mean it's the right choice for every person with apnea. Your specific needs are unique. If you have COPD, Overlap Syndrome, or Obesity Hypoventilation Syndrome, you may actually benefit more from the dual air pressure of a BiPAP. Likewise, if you require high CPAP air pressure to treat your apnea, exhaling may be uncomfortable unless you switch to a BiPAP machine.

After your CPAP titration study, your doctor will have a better understanding of how much air pressure you need to treat your apnea to the level required to keep you healthy. After viewing these study results, your doctor may recommend you use a BiPAP machine instead.

Don’t be alarmed if this is the case. Remember, which machine you use, BiPAP vs. CPAP matters less than how often you use it. Complying with your therapy is the most important part of getting and staying healthy.

If you’ve been prescribed a CPAP but you can’t wear your apnea mask and find yourself tearing it off in the night, the treatment isn’t helping you at all. Be honest with your doctor and your sleep technologists (and most of all, yourself). If exhaling with CPAP is difficult, maybe you need an adjustment in air pressure or a new CPAP mask. Or maybe BiPAP is a better choice for you.

Remember: the most effective treatment for your sleep apnea is the one you use faithfully.

Therapy Equipment

What Is an Automatic Positive Airway Pressure (APAP) Machine? (Uses and Benefits)

If you've been diagnosed recently with Obstructive Sleep Apnea—or if you think you have Sleep Apnea, but are not yet diagnosed—you may be feeling confused about the differences between the various Sleep Apnea machines (sometimes referred to as PAP machines, or Positive Airway Pressure machines).

Most people with apnea use a CPAP (Continuous Positive Airway Pressure) machine, but CPAP isn't the ideal choice for every user. Individual treatment needs can vary. Some apnea patients will see better results by using a BiPAP/BPAP (Bilevel Positive Airway Pressure) machine and others will benefit more from using an APAP (Automatic Positive Airway Pressure) machine.

In this article, we'll take a look at what an APAP machine is, why you'd use it to treat your apnea or sleep-disordered breathing, and what the benefits are from this therapy.

What Is an APAP Machine?

The acronym APAP is short for Automatic Positive Airway Pressure. APAP therapy is similar to CPAP therapy: it's a non-invasive (non-surgical) option for treating your Sleep Apnea on an ongoing basis.

The general principle behind CPAP, BiPAP, and APAP is the same in all three cases: pressurized, filtered air keeps your airway from collapsing during sleep, allowing you to breathe without interruption.

By using an apnea machine like APAP, you'll be able to breathe without apnea events—those cessations of breathing that lead to multiple nighttime awakenings per hour throughout the night. Apnea machines can also help to treat upper airway resistance syndrome (UARS), a precursor to Sleep Apnea that narrows, rather than blocks, your airway.

All PAP machines consist of three main components:

1. a motor that pressurizes, filters, and humidifies (if you want it to) room air
2. tubing through which this pressurized air travels until it gets to…
3. an apnea mask that you wear while sleeping

The difference between the three types of machines is in the pressure settings.

Depending on the severity of your apnea and any underlying health issues you may have that affect your breathing, you may benefit from one style of air pressure setting more than another.

How Does an APAP Machine Work?

Sleep Apnea experts frequently hear this question: "APAP vs. CPAP: what's the difference between these apnea machines? If they all do the same thing, why choose APAP for my apnea instead of CPAP?" The difference is in the air pressure settings.

CPAP: Single Pressure Setting

CPAP therapy, the gold standard for treating most cases of obstructive apnea, provides a continuous, steady flow of air at a single pressure. This pressure setting is the exact level of air pressure required to clear the airway of obstructions. A CPAP machine user will have their own individual pressure setting, determined by their doctor during their CPAP titration study (an overnight study where you wear your apnea mask to sleep, and technologists observe you and adjust your air pressure until it's precisely what you need).

This set air pressure level can be adjusted in the future if needed—for example, if your Sleep Apnea worsens and you need greater air pressure to clear your airway—but these changes are prescribed and need to be changed by your doctor or technicians in the sleep clinic.

APAP: Automatic Range of Pressures

APAP machines are automated and can deliver one of two air pressures, fluctuating throughout your sleep as needed. Your doctor will set a low air pressure setting range and a high air pressure setting range. After that, sophisticated algorithms automatically determine which level of air pressure you need at any given moment during the night, and the APAP machine makes the necessary adjustments.

No titration study is required. This type of apnea therapy is helpful for people with varying breathing patterns. If for some reason you don't respond well to APAP therapy, your doctor can reset the machine to function like a CPAP, delivering continuous pressure instead.

Which apnea machine is best for you depends primarily on your comfort level.

Uses of APAP (Reasons and Indications)

What is APAP used for? You might choose APAP therapy if you have one of the following situations or indications:

Your apnea events increase in REM sleep.

During REM sleep, your throat muscles relax and may become flaccid or paralyzed, leading to an airway obstruction. If you use CPAP, your machine is adjusted to provide you sufficient air pressure to overcome this obstruction—but that air pressure stays with you all night long, even during the other sleep stages.

Some users find this constant high air pressure to be uncomfortable. APAP can adjust by delivering higher pressure during REM sleep and lower pressure during other sleep stages.

You switch sleep positions during the night.

Are you a side sleeper or a back sleeper—or do you switch between each position? Moving around in the night can lead to changing pressure requirements. Some people with apnea need a higher pressure setting when sleeping on their backs vs. their sides. (Gravity pulls the loose tissue toward the back of your throat, creating a blockage.) An APAP can adjust automatically by reducing the air pressure setting when you roll onto your side.

You've been diagnosed via a Home Sleep Test (HST).

If you live far away from a sleep center or your health insurance does not cover the cost of a full polysomnogram and overnight sleep study at a sleep center, perhaps you've opted for a home sleep test as an alternative. If your HST diagnoses with you apnea, you may be able to start out treatment quickly with an auto-adjusting APAP. This also allows you to begin treatment without going to a sleep center for a CPAP titration study.

Benefits of Using APAP to Treat Apnea

Perhaps the chief benefit of using an APAP is that you do not need to stay on the fixed higher pressure of CPAP over the course of a single night. Using APAP means your overall pressure can be significantly less. For some people who are sensitive to higher air pressures (for example, if you feel claustrophobic), this variable pressure setting may mean more comfort and a better night's sleep.

APAP is also helpful if you experience night-to night-variability in your air pressure needs. For example, if you have seasonal or situational allergies or a cold, sometimes you'll want more or less air pressure depending on your level of congestion.

If you've been drinking alcohol, you may need more air pressure that night to compensate for the resulting flaccidity of your muscle tissue (because alcohol is a depressant).

The APAP machine can adjust on its own for these conditions, whereas CPAP and BiPAP cannot.

Costs: Is an APAP Machine More Expensive than a CPAP Machine?

APAP devices themselves do cost more than CPAP devices, but the long-term cost benefits can more than make up for the cost differences at the start.

For one, you can use an APAP with no need for a CPAP titration study. This can save you co-pay and time (since a titration study is an overnight commitment).

Also, the increased comfort when you choose APAP may improve your compliance, which can mean fewer follow-up appointments and better insurance coverage for your therapy.

Summary

APAP machines have the same therapeutic goal as CPAP and BiPAP, but with a difference: they can automatically adjust air pressure to suit your changing needs as you sleep. APAP machines also do not require a CPAP titration study, meaning you can begin therapy faster and may save on costs and time. Some users choose APAP because they feel the variable air pressures make the treatment more comfortable and therefore easier to use.

Common Problems

CPAP Machine Problems and Solutions to Get Better Sleep

If you're reading this article, you may be having trouble with your new CPAP machine. You may be asking yourself, "Why is my CPAP so hard to use?" or "Will I ever get used to CPAP?"

Perhaps your Sleep Apnea mask is leaking air, or the fit is too tight for your head and gives you a headache. Perhaps the straps are digging into your scalp or the mask is leaving marks on your skin. Either of these issues may be making it tough for you to keep your CPAP mask on all night.

Some people feel claustrophobic sleeping with a CPAP mask. Wearing something on your face can feel awkward, or breathing pressurized air makes you feel trapped.

On the other hand, maybe you sleep fine but you wake up feeling less than terrific in some way: you're still tired, or you're bloated, or you have a dry nose or throat.

Adjusting to a New CPAP Machine Takes Time

If you're struggling with your new CPAP machine, you're not alone. Lots of people with apnea have an adjustment period as they get used to treatment. If you've spent your entire life sleeping without the help of a medical device, adjusting to wearing a "Darth Vader" mask to bed isn't something that you can do overnight (no pun intended).

And there certainly is a noticeable difference between breathing room air on your own and breathing forced, pressurized air that's delivered to your nasal passages from a machine. Some people also need time to get accustomed to the light whirring sound coming from the CPAP motor.

For all of these reasons and more, very few users get totally used to CPAP or BiPAP therapy right away.

However, CPAP is the most effective therapy for managing obstructive Sleep Apnea, so it's worth hanging in there and making the necessary modifications while you get to know the machine. Some of these modifications are tweaks and fine-tuning of your equipment, done by technologists or your doctor at a sleep center. Others are lifestyle or mindset modifications: mainly, adjusting your expectations.

Not All People See Benefits from CPAP Right Away

When you've been chronically exhausted and sleepy for months or years on end, it's only natural to hope for noticeably better sleep on day one. But with Sleep Apnea, that's not always the case.

Not all people feel the amazing benefits of refreshing sleep on night one with a CPAP machine, or even in week one. Typically, there is a relationship between the severity of your Sleep Apnea and how quickly you'll begin to feel better.

This relationship is not what you might think. The worse your Sleep Apnea is, the quicker your response will be. If your Sleep Apnea is mild to moderate, you definitely will benefit from nightly CPAP therapy, but the changes in your sleep that you perceive when you're awake may be more subtle. (Even if the "behind the scenes" health benefits, like reduced risk of heart disease, are already taking place.)

Also, how fragmented your sleep was before CPAP makes a difference in your perception of improvement. If you have upper airway resistance syndrome (UARS)—"breathing through a straw" rather than choking from an obstruction—your number of respiratory events may not look like severe Sleep Apnea at first glance. But your arousals from sleep could be almost as frequent as someone with severe OSA. So for patients with UARS, CPAP may dramatically improve the quality of your sleep pretty rapidly.

Even if you do feel a difference in your sleep and an improvement in your daytime sleepiness right away, you may still struggle with some common issues for which there are solutions. Keep reading to find out what those are.

Common CPAP Machine Problems and Solutions

When people call their CPAP supplier or visit their sleep center to say "I have a CPAP problem," they're usually dealing with one of the following issues. Don't be afraid to share your problems with your sleep experts; they're familiar with all these issues and know how to help you improve your experience with a few basic changes to your apnea machine or your routine.

Swallowing air (Aerophagia)

Aerophagia occurs when a patient swallows excess air during the night and feels bloated in the morning or during the night when they awaken.

Causes. You may be experiencing aerophagia for a few different reasons: your air pressure setting may be too high; your full face mask may be causing you to gulp extra air through your mouth, or the positioning of your head while sleeping may be the reason.

Solutions. A nasal CPAP with humidification restricts air delivery to your nose only, leaving your mouth free to exhale without being covered by a mask. Or you could change to BiPAP if the CPAP pressure is too high on exhalation, where the air swallowing occurs (switching to BiPAP often eliminates this problem).

Consider an APAP machine if you only need the higher pressures during REM sleep. Or you can add a body positioning device to keep you off of your back, a sleeping posture which needs higher pressures to splint the airway open.

Mask Leaks

Almost half of all CPAP mask users say leakage was their reason for abandoning therapy. A mask leak occurs when you don't have a firm seal keeping the air in. For example, if you wear a full face mask, maybe the edges of the mask are not fitted properly to your cheeks. If your CPAP mask is leaking pressurized air, unfortunately, you're not getting the full benefit from the treatment.

Causes. A poorly fitting apnea mask with a weak seal is the most common cause of leaks. Your mask may be worn out, or it could need cleaning.

Solutions. The importance of a good fitting mask is paramount to success. If you have a leak in your apnea machine mask, this needs to be addressed by a different mask so you can comply with your therapy. Don't assume that what you're using is all that's available; depending on your apnea severity, you may have your choice of nasal pillows, nasal masks, and full face masks. And within each of these three basic styles, enough variety exists that you can find something to fit you better. Ask your supplier or home medical equipment provider what your options are.

Also, CPAP mouth leaks can be addressed in a few ways, and in the following order: first, by adding or increasing the humidification level in the circuit (by reducing the inflammation of the nasal passages); second, by wearing a chin strap; and as a last resort, by changing to a full face mask.

Lastly, remember the importance of regular CPAP mask replacements, as the masks are delicate and need to be replaced at least every 3-6 months.

Claustrophobia

Claustrophobia is the fear of being trapped in a small space. People with this anxiety disorder can have panic attacks—rapid heart rate, sweating, hyperventilation, and a feeling of doom—brought on by this fear. If you are claustrophobic, you may have a dread of being unable to breathe (suffocation). This fear can sometimes affect people with apnea when they first attempt to use a CPAP machine.

Causes. A preexisting anxiety disorder can make you more susceptible to claustrophobic reactions when wearing your CPAP mask. You may perceive difficulty breathing against the air pressure.

Solutions. CPAP mask desensitization is the main approach to overcoming claustrophobia. Rather than slapping the mask on at bedtime, try using it in a recliner while watching TV first. Hold it on at first with your hands; then, work your way up to putting the headgear on fully while watching TV in the living room. This approach can gradually acclimate you to the feel of wearing something over your mouth and/or nose.

Tearing the CPAP mask off in the middle of the night and not remembering it

This is a very common complaint from apnea patients. They start out the evening wearing the mask and complying with their therapy, but they wake up in the middle of the night or the morning realizing they've removed it while asleep.

Causes. Usually, you'll take off your apnea mask because of a mouth leak or mask leak during the night.

Solutions. Make sure you have adequate humidification for comfort; wear a chin strap if needed; and, as a last resort, try a full face mask to prevent mouth leaks.

Nasal dryness

Nasal dryness from non-humidified air can lead to a stinging sensation inside the nose, nosebleeds, nasal sores, or nasal infections.

Causes. Lack of appropriate humidification.

Solutions. Increase the humidification setting on your CPAP machine. In addition to this, or in place of it, use a nasal saline spray to moisturize your nasal passages. However, do not use the nasal spray Afrin, as it can have side effects for people with high blood pressure and diabetes (two conditions which often result from sleep apnea).

Dry mouth

A lack of sufficient saliva in the mouth can leave your tongue and mouth feeling sticky or sandpapery. Dry mouth can also extend to "dry throat," leading to a sore throat, sores, cough, or infections. Chronic dry mouth can also lead to dental problems like cavities and gum disease.

Causes. You may develop dry mouth from a mouth leak or as a side effect of wearing a full face mask.

Solutions. Increase your humidification setting and add a chin strap to eliminate mouth leaks.

CPAP pressure is too high

If your CPAP pressure is too high, you may feel like you're laboring hard to exhale against the air pressure. This may lead to a feeling of claustrophobia. In some extreme cases, high pressure can lead to trouble eliminating CO2 from your system, which can cause other health problems.

Causes. If your doctor and sleep technologists determine that you require a higher inspiratory air pressure to keep your airway open, you may find it uncomfortable to exhale against this pressure.

Solutions. CPAP desensitization may help you get used to the air pressure. If you can't adjust or your blood gas levels are not in balance, you may benefit from changing the mode to BiPAP or APAP.

Therapy Equipment

Everything You Need to Know About CPAP Machine Cost

Is your snoring so loud that it can be heard in another room? You may not realize it, but loud snoring is a symptom of Obstructive Sleep Apnea. If you have OSA (Obstructive Sleep Apnea or related sleep disorders), the most common form of treatment is CPAP therapy.

"CPAP" stands for "Continuous Positive Airway Pressure," and treats Sleep Apnea by using air pressure to open your airway during sleep. With your airway open, you can breathe without gasping or choking, and your blood oxygen levels return to normal while you sleep.

Considering that CPAP machines are among the most common treatments used to combat OSA, we will walk you through everything you need to know about the costs of CPAP therapy.

How Much Does a CPAP Machine Cost?

Here's a rule-of-thumb when it comes to CPAP machine costs:

- The average price for CPAP costs around $500
- APAP machines tend to be more expensive, costing around $800
- BiPAP machines are the most expensive of all, starting out at $1,300

These average CPAP machine costs do not include CPAP masks and other necessary accessories, such as a hose or filters. You'll want to make sure when you buy your first CPAP machine, that you make sure you have the CPAP machine, hose, CPAP mask, and filters. The overall cost of your CPAP equipment will also depend on different factors, such as whether or not you use humidification, or add other accessories like a heated hose. The cost will also vary based on machine type and features. Just like with other electronics, machines with advanced features generally cost more.

There are three different styles of CPAP machine:

- CPAP, which delivers therapy air at one set pressure
- APAP, which automatically adjusts pressure based on what you need
- BiPAP, which delivers therapy air at two set pressures: one for inhale and one for exhale

Before you can order a CPAP machine, you'll need to get a prescription from a doctor. You'll need a prescription if you're buying a CPAP machine, CPAP mask, or Oxygen Concentrator. You'll need to do a sleep study in a medical sleep lab, or you can do one at home, using a home sleep test. A home sleep test generally checks for Sleep Apnea only, but a sleep lab can check for other disorders and is generally more comprehensive.

How Much Do CPAP Accessories Cost?

In addition to the CPAP machine itself, you may have to consider the cost of accessories and add-ons, such as humidifiers, various parts, and cleaning supplies:

Humidifiers

CPAP Masks

CPAP Hoses

Parts

Cleaning Supplies

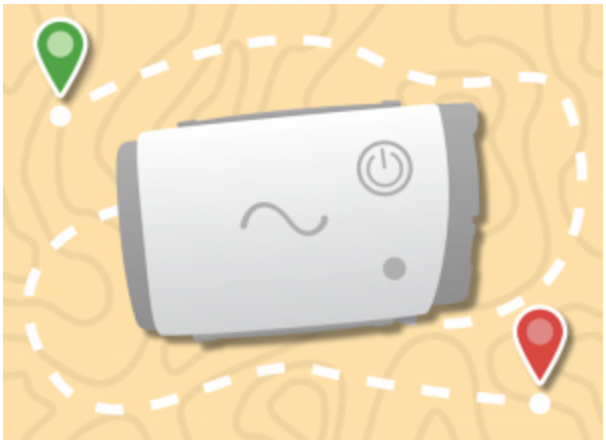
Lumin CPAP Cleaner

Should You Buy Your CPAP Machine Online?

There are generally two ways to get a CPAP machine. You can work with your doctor (who works with a CPAP supplier called a "Durable Medical Equipment Provider" or a DME). Or, you can buy a CPAP machine online. Keep in mind that it may be cheaper to buy your CPAP machine online. When you buy online, you have a larger selection. This increases the likelihood of finding the right machine for you.

Going to your doctor and using a DME provider doesn't give you a lot of choice or options for your first machine. A DME gets reimbursed at the same rate whether they give you a great machine or an average one. So there's no incentive for them to provide you with the best CPAP equipment. Buying online allows you to pick out the best CPAP machine for you, at perhaps a lower price than what you'd pay if you filed your claim with your insurance company. The often lower CPAP machine cost when buying online, is precisely why so many people get a machine online. It's a better value for a better machine.

Hear a firsthand account of why CPAP user David Repasky felt like going through his insurance company to get his first CPAP machine was a mistake. Hopefully his experience can help you as you plan to get your first machine.



How Much Does a Travel CPAP Machine Cost?

A travel CPAP machine costs anywhere from $250 to $2,000. These smaller, portable CPAP devices are perfect for travel. Customers seem to enjoy the portability and enjoy features like being able to use it in-flight. In fact, the most popular machines sold on CPAP.com are travel machines.

You Can Still File a Claim When You Buy With CPAP.com

Just because you buy your machine through us, doesn't mean you can't also bill your insurance company for reimbursement for your CPAP therapy equipment. CPAP.com is considered an "out-of-network" DME or CPAP supplier, so be sure to check with your insurance company to see their coverage for out-of-network providers BEFORE you order.

When you purchase from CPAP.com, if you have coverage, we can help you get reimbursed by your insurance company. We'll provide an insurance guide, an insurance-compliant invoice, and a brochure showing you what paperwork you need and the common reimbursement challenges. It's important to remember that just because you receive an insurance compliant invoice, it's not a guarantee that you will get reimbursed. It's important to check with your insurance plan if you're planning on reimbursement. Insurance plans differ in coverage for out-of-network DMEs, and CPAP.com is considered an out-of-network DME by most insurance companies. If you're planning on getting paid back, check first before you order!

There's always a lot to get used to when you start with CPAP therapy. There's equipment to buy and a new bedtime routine which will be an adjustment for most people. But one thing is for sure: once you find the correct CPAP machine for you, you can't put a dollar amount on a good night's sleep.

For more information on this and other topics, please see the following comprehensive resource on: CPAP machines. There you'll find more information about CPAP machines and how they're used to treat Sleep Apnea, providing additional information to help you on your journey.

If you have questions or want to know more, contact one of our CPAP experts at 1-800-356-5221.

cpap.com

Need Assistance?

Need assistance? Our CPAP Experts are here to help with orders, product questions, sleep disorder, and anything else related to Sleep Apnea.

Contact Us Now!