

CPAP Handout

CPAP is a treatment for obstructive sleep apnea and stands for Continuous Positive Airway Pressure. It is one of the most popular treatment options for the sleep disorder and uses air to keep the airway open during sleep.

The CPAP machine varies in size. Most are about the size of a lunch box. They work by blowing air through a hose that is attached to a mask that attaches to the face by Velcro straps.

Continuous Positive Airway Pressure is effective at treating obstructive sleep apnea by pushing air into the back of the throat where throat tissues collapse during sleep. It acts by 'splinting' the airway open allowing for inhaling and exhaling of air.

Generally, C-PAP is considered a safe treatment as the primary interface uses air to treat the obstruction.

CPAP machine can be adjusted allowing for different pressures. The ideal pressure is often determined during a sleep study. Newer sleep apnea machines use algorithms and pressure sensors to determine the best pressure.

CPAP SUPPLIES



CPAP mask

CPAP Supplies: There are many different additional parts for PAP. Some PAP supplies are necessary, some are optional and added for comfort. Below is a description of PAP supplies used for the treatment of obstructive sleep apnea:

Air Filter- the Continuous Positive Airway Pressure filter is important in purifying the air that comes from outside the machine entering into your nose. There are several types of air filters. Some are reusable and some are disposable. They vary in the size of the particulate that they filter out.

CPAP Hose - The hose connects the PAP machine to the mask. Hoses come in different lengths. Some hoses are heated or insulated in order to reduce condensation build up in the hose.

Humidifier - the humidifier is an optional add-on that increases the moisture of the air that is delivered through the mask. Many PAP users complain of dry mouth and dry nose while using PAP. The humidifier reduces this problem - especially in cold, dry areas with low moisture. Many humidifiers are adjustable by increasing the heat of the water tank.

CPAP mask - There are many types of C-PAP masks. There are masks that just cover the nose (nasal cpap mask), and masks that cover just the mouth (oral masks), and of course, nasal-oral masks. There are also masks that are attached to oral appliance mouth devices.

C-PAP pressure modifications - Some PAP machines feature special computerized algorithms that adjust and modify the pressure. Some features like C-Flex adjust the pressure during the breathing cycle in order to improve comfort and compliance.

BiPAP or Bilevel pressure - Instead of 'continuous positive air pressure', Bilevel uses two different pressures and inspiratory and expiratory pressure or inhale and exhale pressure..

Adaptive Servo Ventilation - ASV is newer type of treatment that is often used in the treatment of central sleep apnea.

Chin straps - are used to keep the mouth closed and are helpful for mouth breathers.



CPAP machine



CPAP



CPAP



CPAP mask

There are several manufacturers of PAP machines, masks and other equipment. Top names include: Phillips Respironics (Respironics), ResMed, DeVilbiss, Fisher & Paykel, Viasys, Puritan Bennett, Apex Medical, and CareFusion.

CPAP Machines/ Masks / Supplies



CPAP Machines with CPAP supplies



Frequently Asked Questions (FAQ's)

How is CPAP pressure titrated?

The PAP pressure is measured in cm/H₂O, or centimeters of water pressure. The ideal pressure is usually determined by a technologist or by a computerized PAP machine. In the sleep center, the pressure is manually increased by a sleep technologist who is monitoring the patients sleep breathing. If there are hypopneas, apneas, or snoring, the pressure is increased.

There are some auto-titrating PAP machines (APAP) that use an computerized algorithm and pressure transducer sensors to eliminate obstructive events while at home.

How much does CPAP, BiPAP cost?

Average price for CPAP machine ranges from about \$200 - \$3000, with an estimated average price around \$850. Many insurance companies cover the cost of PAP and BiLevel devices. This usually includes the mask, hose, filters, and tubing.

Is CPAP dangerous?

Generally, PAP is very safe. There are few medical treatments that are safer than room air. Although it is safe, a doctor's prescription is often required in order to obtain PAP.

What are the complaints and side effects of CPAP?

There are few side effects with CPAP. The most common issues with PAP relate to the contact points where the mask touches the face. Occasionally, the skin will become irritated as a result of the constant contact and pressure of the mask. This can be alleviated by mask adjustment and/or mask replacement. Another common side effect and complaint of using PAP is dryness of the mucosal membranes of the

nose, mouth, and throat. The continuous flow of air can dry out the airway. This problem can often be solved by using a heated humidifier inline with the PAP machine. The humidifier adds moisture to the air.

How do you get a CPAP?

You can get Continuous Positive Airway Pressure from many DME companies. Several DME, or Durable Medical Equipment providers specialize in sleep disordered breathing. You can ask your doctor, or search online, for a reputable DME that specializes in sleep apnea.

There are several online retailers of PAP. Many do not participate with insurance companies and require you to submit your bill to the insurance company to request reimbursement.

Although Continuous Positive Airway Pressure is effective at eliminating snoring, there are several alternatives to PAP for the treatment of snoring.

There are frequent improvements in CPAP, BiPAP and supplies, technology. This leads to discount options for sleep apnea treatment. With the increasing demand for sleep apnea treatment, PAP manufacturers are eager to fill the demand of sleep apnea patients. Keep up to date here for discounts and changes in CPAP and supplies online.

Summary: What is CPAP, CPAP Machine, sleep apnea machine treatment alternatives, side effects and complaints, CPAP supplies, and other pap device information.

References:

- What is CPAP? National Heart, Lung, and Blood Institute. <http://www.nhlbi.nih.gov/health/health-topics/topics/cpap/>.
- CPAP. https://en.wikipedia.org/wiki/Continuous_positive_airway_pressure

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