

# CPAP and BIPAP Information

CPAP and BIPAP are methods that use air pressure to keep your airways open and to help you breathe well. CPAP and BIPAP use different amounts of pressure. Your health care provider will tell you whether CPAP or BIPAP would be more helpful for you.

- CPAP stands for "continuous positive airway pressure." With CPAP, the amount of pressure stays the same while you breathe in (*inhale*) and out (*exhale*).
- BIPAP stands for "bi-level positive airway pressure." With BIPAP, the amount of pressure will be higher when you inhale and lower when you exhale. This allows you to take larger breaths.

CPAP or BIPAP may be used in the hospital, or your health care provider may want you to use it at home. You may need to have a sleep study before your health care provider can order a machine for you to use at home.

## What are the advantages?

CPAP or BIPAP can be helpful if you have:

- Sleep apnea.
- Chronic obstructive pulmonary disease (COPD).
- Heart failure.
- Medical conditions that cause muscle weakness, including muscular dystrophy or amyotrophic lateral sclerosis (ALS).
- Other problems that cause breathing to be shallow, weak, abnormal, or difficult.

CPAP and BIPAP are most commonly used for obstructive sleep apnea (OSA) to keep the airways from collapsing when the muscles relax during sleep.

## What are the risks?

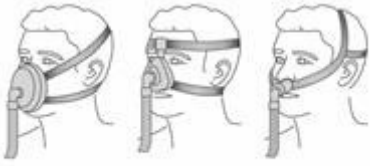
Generally, this is a safe treatment. However, problems may occur, including:

- Irritated skin or skin sores if the mask does not fit properly.
- Dry or stuffy nose or nosebleeds.
- Dry mouth.
- Feeling gassy or bloated.
- Sinus or lung infection if the equipment is not cleaned properly.

## When should CPAP or BIPAP be used?

In most cases, the mask only needs to be worn during sleep. Generally, the mask needs to be worn throughout the night and during any daytime naps. People with certain medical conditions may also need to wear the mask at other times, such as when they are awake. Follow instructions from your health care provider about when to use the machine.

## What happens during CPAP or BIPAP?



Both CPAP and BIPAP are provided by a small machine with a flexible plastic tube that attaches to a plastic mask that you wear. Air is blown through the mask into your nose or mouth. The amount of pressure that is used to blow the air can be adjusted on the machine. Your health care provider will set the pressure setting and help you find the best mask for you.

### Tips for using the mask

- Because the mask needs to be snug, some people feel trapped or closed-in (*claustrophobic*) when first using the mask. If you feel this way, you may need to get used to the mask. One way to do this is to hold the mask loosely over your nose or mouth and then gradually apply the mask more snugly. You can also gradually increase the amount of time that you use the mask.
- Masks are available in various types and sizes. If your mask does not fit well, talk with your health care provider about getting a different one. Some common types of masks include:
  - Full face masks, which fit over the mouth and nose.
  - Nasal masks, which fit over the nose.
  - Nasal pillow or prong masks, which fit into the nostrils.
- If you are using a mask that fits over your nose and you tend to breathe through your mouth, a chin strap may be applied to help keep your mouth closed.
- Use a skin barrier to protect your skin as told by your health care provider.
- Some CPAP and BIPAP machines have alarms that may sound if the mask comes off or develops a leak.
- If you have trouble with the mask, it is very important that you talk with your health care provider about finding a way to make the mask easier to tolerate. **Do not** stop using the mask. There could be a negative impact on your health if you stop using the mask.

### Tips for using the machine

- Place your CPAP or BIPAP machine on a secure table or stand near an electrical outlet.
- Know where the on/off switch is on the machine.
- Follow instructions from your health care provider about how to set the pressure on your machine and when you should use it.
- **Do not** eat or drink while the CPAP or BIPAP machine is on. Food or fluids could get pushed into your lungs by the pressure of the CPAP or BIPAP.
- For home use, CPAP and BIPAP machines can be rented or purchased through home health care companies. Many different brands of machines are available. Renting a machine before purchasing may help you find out which particular machine works well for you. Your health insurance company may also decide which machine you may get.
- Keep the CPAP or BIPAP machine and attachments clean. Ask your health care provider for specific instructions.
- Check the humidifier if you have a dry stuffy nose or nosebleeds. Make sure it is working correctly.

### Follow these instructions at home:

- Take over-the-counter and prescription medicines only as told by your health care provider. Ask if you can

take sinus medicine if your sinuses are blocked.

- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your health care provider.
- Keep all follow-up visits. This is important.

### **Contact a health care provider if:**

- You have redness or pressure sores on your head, face, mouth, or nose from the mask or head gear.
- You have trouble using the CPAP or BIPAP machine.
- You cannot tolerate wearing the CPAP or BIPAP mask.
- Someone tells you that you snore even when wearing your CPAP or BIPAP.

### **Get help right away if:**

- You have trouble breathing.
- You feel confused.

### **Summary**

- CPAP and BIPAP are methods that use air pressure to keep your airways open and to help you breathe well.
- If you have trouble with the mask, it is very important that you talk with your health care provider about finding a way to make the mask easier to tolerate. **Do not** stop using the mask. There could be a negative impact to your health if you stop using the mask.
- Follow instructions from your health care provider about when to use the machine.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

# Living With Sleep Apnea

Sleep apnea is a condition in which breathing pauses or becomes shallow during sleep. Sleep apnea is most commonly caused by a collapsed or blocked airway. People with sleep apnea usually snore loudly. They may have times when they gasp and stop breathing for 10 seconds or more during sleep. This may happen many times during the night.

The breaks in breathing also interrupt the deep sleep that you need to feel rested. Even if you do not completely wake up from the gaps in breathing, your sleep may not be restful and you feel tired during the day. You may also have a headache in the morning and low energy during the day, and you may feel anxious or depressed.

## How can sleep apnea affect me?

Sleep apnea increases your chances of extreme tiredness during the day (*daytime fatigue*). It can also increase your risk for health conditions, such as:

- Heart attack.
- Stroke.
- Obesity.
- Type 2 diabetes.
- Heart failure.
- Irregular heartbeat.
- High blood pressure.

If you have daytime fatigue as a result of sleep apnea, you may be more likely to:

- Perform poorly at school or work.
- Fall asleep while driving.
- Have difficulty with attention.
- Develop depression or anxiety.
- Have sexual dysfunction.

## What actions can I take to manage sleep apnea?

### Sleep apnea treatment



- If you were given a device to open your airway while you sleep, use it only as told by your health care provider. You may be given:
  - An oral appliance. This is a custom-made mouthpiece that shifts your lower jaw forward.
  - A continuous positive airway pressure (CPAP) device. This device blows air through a mask when you breathe out (*exhale*).
  - A nasal expiratory positive airway pressure (EPAP) device. This device has valves that you put into each nostril.
  - A bi-level positive airway pressure (BIPAP) device. This device blows air through a mask when you breathe in (*inhale*) and breathe out (*exhale*).

- You may need surgery if other treatments do not work for you.

## Sleep habits

- Go to sleep and wake up at the same time every day. This helps set your internal clock (*circadian rhythm*) for sleeping.
  - If you stay up later than usual, such as on weekends, try to get up in the morning within 2 hours of your normal wake time.
- Try to get at least 7–9 hours of sleep each night.
- Stop using a computer, tablet, and mobile phone a few hours before bedtime.
- **Do not** take long naps during the day. If you nap, limit it to 30 minutes.
- Have a relaxing bedtime routine. Reading or listening to music may relax you and help you sleep.
- Use your bedroom only for sleep.
  - Keep your television and computer out of your bedroom.
  - Keep your bedroom cool, dark, and quiet.
  - Use a supportive mattress and pillows.
- Follow your health care provider's instructions for other changes to sleep habits.

## Nutrition

- **Do not** eat heavy meals in the evening.
- **Do not** have caffeine in the later part of the day. The effects of caffeine can last for more than 5 hours.
- Follow your health care provider's or dietitian's instructions for any diet changes.

## Lifestyle



- **Do not** drink alcohol before bedtime. Alcohol can cause you to fall asleep at first, but then it can cause you to wake up in the middle of the night and have trouble getting back to sleep.
- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your health care provider.

## Medicines

- Take over-the-counter and prescription medicines only as told by your health care provider.

- **Do not** use over-the-counter sleep medicine. You can become dependent on this medicine, and it can make sleep apnea worse.
- **Do not** use medicines, such as sedatives and narcotics, unless told by your health care provider.

### **Activity**

- Exercise on most days, but avoid exercising in the evening. Exercising near bedtime can interfere with sleeping.
- If possible, spend time outside every day. Natural light helps regulate your circadian rhythm.

### **General information**

- Lose weight if you need to, and maintain a healthy weight.
- Keep all follow-up visits. This is important.
- If you are having surgery, make sure to tell your health care provider that you have sleep apnea. You may need to bring your device with you.

### **Where to find more information**

Learn more about sleep apnea and daytime fatigue from:

- American Sleep Association: [sleepassociation.org](https://sleepassociation.org)
- National Sleep Foundation: [sleepfoundation.org](https://sleepfoundation.org)
- National Heart, Lung, and Blood Institute: [nhlbi.nih.gov](https://nhlbi.nih.gov)

### **Summary**

- Sleep apnea is a condition in which breathing pauses or becomes shallow during sleep.
- Sleep apnea can cause daytime fatigue and other serious health conditions.
- You may need to wear a device while sleeping to help keep your airway open.
- If you are having surgery, make sure to tell your health care provider that you have sleep apnea. You may need to bring your device with you.
- Making changes to sleep habits, diet, lifestyle, and activity can help you manage sleep apnea.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.