

Sleep

Why is sleep important?

Your body needs rest and sleep just like it needs food and air. We spend about 1/3 of our lives sleeping. Sleep is a very organized sequence of events that follows a regular, cyclic pattern each night.

What happens during sleep is still a mystery to researchers. We do know that it is important for normal motor, cognitive and emotional function. We all feel the need to sleep. After sleeping well, we feel rested and more alert.

It is easy to take sleep for granted. Sleep deprivation is common in our society. Lack of sleep can contribute to daytime sleepiness, lack of energy, reduced alertness, impaired judgement, anxiety, reduced exercise tolerance and deterioration in lung function.

What about sleep and lung disease?

Many people with lung disease have problems sleeping. Some complaints include:

- trouble falling asleep
- waking up often
- trouble falling back to sleep
- not feeling rested

A lack of sleep is often caused by coughing, shortness of breath, chest pain, inactivity, medications, alcohol and age-related changes.

Some people with lung disease may also suffer from sleep disorders called:

- obstructive sleep apnea
- nocturnal hypoventilation.

Obstructive Sleep Apnea

This is often called the 'snoring disease'. Sleep apnea can be a life-threatening problem because breathing is interrupted or stops during sleep.

Each time breathing stops, the blood oxygen goes down and the carbon dioxide level goes up. This causes you to wake up. When this happens often, you sleep poorly. This can lead to what is called chronic sleep deprivation.

Chronic sleep deprivation causes a sleepy feeling during the day, morning headaches and high blood pressure. When this goes on for a while, your body gets sick as it does not have time to build up strength and energy during sleep.

What is the treatment for Obstructive Sleep Apnea?

There are many things members of your health care team will assess with you to see what helps:

- Losing and controlling your weight
- Changing sleep positions
- Avoiding alcohol, caffeine and sleeping pills
- Using Continuous Positive Airway Pressure (CPAP)
- Using a dental appliance that changes the position of the lower jaw and tongue
- Having surgery to increase the size of the airway

Nocturnal Hypoventilation

When you have nocturnal hypoventilation you forget to breathe when you sleep. You may not take a breath for a very long time then take a breath in very fast.

When this happens, the oxygen in your blood goes down and the carbon dioxide levels go up. You then wake up with a startle and begin to breathe again.

What is the treatment for Nocturnal Hypoventilation?

Members of the health care team will assess with you to see what helps:

- Medications
- BiLevel Positive Airway Pressure (BIPAP)

How do I know what type of sleep problem I have?

There are some tests you can have to decide what type of problem you have.

Overnight Oximetry:

For this test, a probe is placed on your finger to measure your oxygen levels while you sleep. This test may be done in the comfort of your home bedroom. The results are available the next day.

Sleep Study or Polysomnography:

This is a more specialized test used to determine if you have sleep apnea, nocturnal hypoventilation or another sleep disorder.

For this test, you sleep in a special Sleep Lab overnight. Wires and leads are attached to your head, face, chest and legs. These monitor your heart, lungs and brain as well as the movement of some of your muscles. A technician monitors the equipment all night while you sleep. The machine collects the data all night and does not disturb you.

During this test, you will find that:

- None of the leads hurt.
- You can sleep in any position.
- You can get up to go to the bathroom.

Your doctor looks at the results within a few weeks. You will have a meeting booked to talk about the results in 2 to 4 weeks.

What happens after I am tested?

Members of your health care team will help you learn how to help yourself sleep, after you know what type of problem you have.

Please turn over for Good Sleep Habits →

Good Sleep Habits

Here are some helpful hints to promote sleep:

- Follow a sleep schedule as much as you can with a set bedtime and a set time to wake up.
- Do calm and relaxing activities in the late evening. Avoid stressful things such as watching a violent or scary movie.



- Use your bedroom for sleep and intimacy only.
- Never go to bed early to watch television. This habit often causes sleep problems.



- Avoid caffeine in the evening.
- Avoid alcohol to promote sleep.
- Avoid sleep medication - it is not recommended for people with respiratory disease.



- If you are taking a long time to fall asleep get back to sleep, try a relaxation exercise.
- If you are still awake after relaxing, get out of bed and do a quiet activity such as reading.



- Limit naps in the day to 15 to 30 minutes. Try to avoid napping in the day.
- If you use oxygen or CPAP, you need to use this during naps as well as at bedtime.

- Follow your exercise program everyday to help you sleep better at night.

