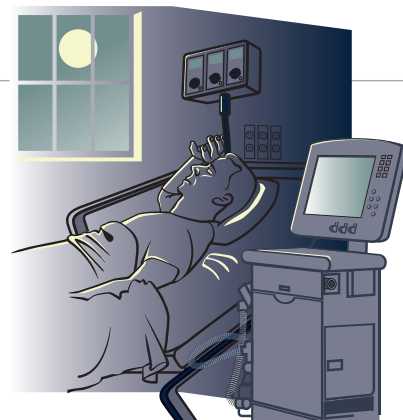


## PATIENT EDUCATION | INFORMATION SERIES

# Hospitalization and Sleep

Sleep plays a vital role in good health. It is an essential part of having a happy and healthy life. This fact sheet reviews factors that negatively affect sleep when a person is ill and in the hospital. It also gives helpful suggestions for ways to try to reduce sleep problems while you recover from your illness. For more information on healthy sleep, see the ATS Patient Information Series fact sheets at [www.thoracic.org/patients](http://www.thoracic.org/patients).



## Why is sleep important when you are in the hospital?

Sleep can be disrupted by illness and being in an unfamiliar setting, such as the hospital. Getting enough quality sleep recharges your energy and mood. There is also evidence that good sleep can help lessen pain and anxiety, control high blood pressure and blood sugar levels, and possibly help your body fight infections. Good sleep also helps your attention and memory so that you can work well, make good decisions and stay safe.

## How is sleeping in the hospital different from sleeping at home?

People commonly have poor sleep when they are ill. In addition, the hospital is a very busy and stimulating place. The older and sicker you are, the more likely you will get poor quality sleep when in the hospital. This lack of sleep can affect how well you recover and can even lead to other health issues.

## What factors bother your sleep when you are in the hospital?

When you are in the hospital, there are many factors that can interfere with your sleep. They can be broadly divided into two groups: environmental and non-environmental factors.

### Environmental Factors:

- **Noise:** Noise from hospital equipment, overhead announcements, and entertainment devices can disrupt sleep. If you share a room, your roommate may also make noises that can wake you up. People talking outside the room can also disturb your sleep.
- **Care Interactions:** While trying to sleep you may be awakened by healthcare staff to do things such as check your blood pressure, do a physical exam, or give treatments that are medically necessary.

- **Light exposure:** While in the hospital, especially in an intensive care unit, you may be exposed to relatively high levels of light during the night and low levels of light during the daytime. This can disturb your normal biological sleep-wake cycle. Exposure to blue light from portable electronics like cell phones as well as televisions can also have the same effect.

### Non-Environmental Factors:

- **Serious Illness:** Symptoms from an illness such as fever, anxiety, pain, cough, changes in urination, or diarrhea can affect your sleep.
- **Other medical problems:** Diseases such as congestive heart failure, acid reflux, asthma or chronic obstructive pulmonary disease tend to worsen in the night and can cause poor sleep.
- **Medications:** Various medications you take can alter sleep patterns, either by making you sleepy or causing you to stay awake. These medications may include sedatives and hypnotics, glucocorticoids, steroids, beta blockers, and certain antibiotics. Your healthcare provider can tell you if any of your medicines may have sleep related side-effects.
- **Mechanical Interventions:** Feeding tubes, urinary catheters, or even hardware used after bone fractures may cause discomfort and reduce the amount and quality of the sleep that you get.

## What problems can I have from poor sleep while in the hospital?

A number of problems can occur due to poor sleep, though not everyone has all of these.

Poor quality or reduced sleep can:

- Cause blood sugar to be higher than usual, whether or not you have diabetes.

- Make anxiety and pain difficult to control.
- Interfere with your brain function, such as having a slower working memory, reduced speed of thought, depressed mood, and problems with attention.
- Worsen obstructive sleep apnea (for people who have it).
- A slower drive to breathe during sleep when acutely ill.
- Weaken your immune system, making it harder for you to fight infections.

### How can you improve your sleep during a hospital stay?

- **Review medications:** Go over your medications with your healthcare provider to see if any might have sleep-related side effects. If a medicine is causing sleep problems, see if either the type or the timing of the medicine can be changed or given at a different time to lessen the problem.
- **Recover from acute illness:** Treating the acute illness that caused your admission can itself improve the duration and quality of your sleep.
- **Find and treat unrecognized sleep disorders:** You may have an undiagnosed sleep disorder such as obstructive sleep apnea or chronic insomnia. If you think you may have symptoms of a sleep disorder, talk to your healthcare provider.
- **Take actions to improve your sleep environment:** Ways you can do this include:
  - Noise reduction: Reduce nighttime noise by using ear muffs/plugs or noise-cancelling headphones, or try sound masking by using white noise.
  - Light therapy: Use eye masks during sleep. Ensure light exposure in the daytime to early evening by opening the blinds and turning on room lights to keep your sleep-wake cycle adjusted. This is especially true if you are very sick and are in the intensive care unit.
  - Relaxation techniques: Music, massage, or aromatherapy may help improve the duration or the quality of your sleep. Talk to your healthcare provider to see if these may be something you can try and how you can access them in the hospital.
  - Comfortable environment: You may want to bring items from home—a comfortable pillow or blanket—to create a more familiar sleep space. You may also ask that the temperature in the room be set to a good level for you.
  - Talk to your healthcare team about ways to reduce the number of interruptions to your sleep. This may include putting a sign on the door to indicate a nap or sleep time and adjusting schedules for tests and procedures to reduce how often you are awakened.

- Using sleep aid medications: If these measures do not work, medications called sleep aids may be tried after talking with your healthcare provider.

### What if you use a Continuous Positive Airway Pressure (CPAP) or a Bilevel Positive Airway Pressure (BPAP) machine at home?

If you use a CPAP or BPAP machine at home, then mention it to your healthcare provider. You may be asked to bring in your own machine and mask to use during your hospital stay. Depending on the reason for the admission, and how sick you are, the machine may either be continued on your usual home settings or ordered with certain changes.

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## Rx Action Steps

- ✓ Review your medications with your healthcare provider to see if any might have sleep related side effects.
- ✓ Partner with your healthcare provider to manage the acute illness to improve the duration and quality of your sleep.
- ✓ Consider other ways to help you sleep better such as noise reduction, light therapy, and relaxation techniques.

**Healthcare Provider's Contact Number:**

## Resources

### American Thoracic Society

- <http://www.thoracic.org/patients>

– Healthy Sleep in Adults

### American Academy of Sleep Medicine

- [www.sleepeducation.com](http://www.sleepeducation.com)

### American Sleep Association

- <https://www.sleepassociation.org/>

### National Sleep Foundation

- <https://sleepfoundation.org/>

### American Academy of Sleep Medicine

- <http://www.aasmnet.org/>

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