

### Children and sleep

The sleep patterns of children are much different than the sleep patterns of adult men and women. As they grow, these patterns will change and evolve, but through it all, the importance of getting the right amount of sleep is constant.

### Children need a lot of sleep

While the recommended hours vary by age, one thing is certain: sleep is critical for a child's growth and development. As babies, children spend most of their time sleeping (about 14-17 hours a day). By the time they are teenagers, they need about 8-10 hours of sleep. The chart below shows the National Sleep Foundation's recommended sleep guidelines for children.

Age Group	Recommended Sleep Time	May be Appropriate
Newborns (0-3 months)	14-17 hours	11-19 hours
Infants (4-11 months)	12-15 hours	10-18 hours
Toddlers (1-2 years)	11-14 hours	9-16 hours
Pre-Schoolers (3-5 years)	10-13 hours	8-14 hours
School-age kids (6-13 yrs)	9-11 hours	7-12 hours
Teenagers (14-17 years)	8-10 hours	7-11 hours

Regardless of their age, it's important that your child is getting all the sleep they need in a comfortable, quiet environment. This is because their circadian rhythms, or internal clocks, are often build around having naps in the middle of the day. One study showed that all it takes is missing one nap to impact a toddler's ability to react to and enjoy their surroundings. During this study, toddlers that skipped their nap showed more negative responses to their surroundings, as well as a decreased ability to respond to puzzles. Skipping these naps can even contribute to sleep deprivation.

### Sleep disorder in children

Sleep disorders are quite common in children, and include:

- Night terrors (partial arousals from sleep accompanied by shouting or emotional outbursts)
- Sleep walking
- Nightmares
- Bedwetting

Adolescent children can also experience something called delayed sleep-phase disorder. The most notable symptom of this disorder is a desire to go to bed very late, resulting in difficulty waking up in the morning. The good news is that most of the time children grow out of these conditions.

### Sleep apnea and children

Children are not immune to sleep apnea, though the causes and symptoms may differ from adults. In children, one of the most common causes of sleep apnea is oversized tonsils or adenoids. In these cases, sleep apnea can often be cured by a tonsillectomy.

We perform sleep studies on children 6 years and older at our sleep center. Our dedicated technologists have experience working with children and administering sleep studies in a caring, comfortable environment. A parent or guardian will stay the night in an adjacent room.

### How do I schedule a sleep study?

To get a sleep study, you must see your physician and they must order the study. We cannot do any studies without a prescription from a doctor. Everything we do is based on that order. It can take 7-10 days after you see your doctor before we contact you to schedule your appointment. Once we receive an order, we check your insurance to check if they need any additional information from us before we conduct the test. We cannot schedule your appointment until we have all the needed information. We will contact you by phone to set up an appointment time that works best with your schedule.

Please check the address of your appointment on your paperwork that was mailed to you. Your appointment time will also be in the mailing. When you arrive at the center, the technologist will explain the process in detail and answer any questions you may have. The study is painless. The technologist will place electrodes on your head, face, torso, and legs using a water-soluble paste that you can wash off in the morning with warm water. The electrodes have wires that attach to the recording equipment and the technologist will bundle the wires into a ponytail to help keep them out of your way. If you need to go to the bathroom during the study, just call out and the technologist will disconnect you. If your physician has ordered a titration study to see if a CPAP (Continuous Positive Airway Pressure) device might help you sleep better, the technologist will wake you briefly in the middle of the night to put the mask on. It is not oxygen – it is just room air at a slightly higher pressure to help keep your airway open and to allow you to breathe without obstruction. We ask that you shower prior to the study and not apply skin lotion, makeup, or hair products. Please arrive with dry hair. Please wear 2-piece sleepwear with a top and bottom, such as a 2-piece pajamas or gym shorts and a t-shirt. Boxer shorts alone are not acceptable.

### When will my sleep study take place?

Most sleep studies start in the evening, first arrival at 6:45 PM. There may be multiple patients scheduled per each technologist at the sleep center. They will spend around 45 minutes or so with each patient completing paperwork, educating, and completing the hook-up where electrodes are placed on your head, face, and body. The recording needs to have six hours of recording time to meet insurance guidelines so start and end times should be discussed with your technologist if you need to get up early for work, appointments, etc.

The electrodes and wires record brain activity, breathing effort, oxygen levels and movement of the legs and eyes. After the study, our technicians score the data, then a physician interprets the data to make a diagnosis and possibly recommend treatment options. We send the signed report to your physician and they, then, discuss the results and any treatment approach with you. It takes 7 to 10 working days to score and interpret the data and send the report to your physician. **Our technologists cannot discuss the results of the study.**

Children under age 16 require a parent, guardian, or authorized adult to stay with them. We also do not allow anyone to stay in the same room with the patient. We may have rooms adjacent available or we also have a family suite fully equipped with TV, full-sized bed, bathroom, and shower. If the child would need help getting in or out of bed, getting from one place to another or going to the bathroom or have special needs, or help dispensing medications (we cannot dispense medications nor do we have any medications or pain relievers of any kind on-site) the parent will be called upon to help with these things. A PCA from the hospital can also be scheduled to be on hand to help.

### What does one wear for a sleep test?

Two-piece pajamas (separate top & bottom). Undergarments do not qualify for pajamas (such as boxers); shorts or sleeping pants must be worn. Even though you may have a favorite night gown, two-piece pajamas are a must for the comfort of the technologist performing your study and the need to attach electrodes and leads in various positions around your waist, legs, etc.

## Can I be early/late for my appointment?

No—it is important that you arrive on time. Typically, you will not be the only person completing a sleep study in the sleep center that night. Even though you will have a private room, the technologist will have another patient that night. Setting up for the sleep study requires attaching multiple electrodes to different places on your body. This requires dedicated time and attention by our staff. If you are early or late, this may disrupt your technologist's schedule for the night and impact your study or the study of another patient. Please stick with the appointment time provided and call us if you are going to arrive late.

## What should I bring with me?

- **Pajamas** (separate top and bottom)
- Toothbrush and toothpaste
- Book/magazine (if these help you get settled to fall asleep)
- Snack/water bottle—feel free to bring a snack bar or piece of fruit. We have water on-site, but you might like your own.
- **Pre-Study Questionnaire.** Please complete the questionnaire (both sides of paper) which will be mailed in your packet after your test is scheduled and bring it with you the night of your test if you choose not to mail it back to us.
- Fan, blankets, pillow from home. Anything else that will make you more comfortable. Rooms do have ceiling fans.

## Will the technologist tell me the results of the study?

No, the technologist cannot give you the results of your sleep study. They cannot provide any diagnosis or final PAP pressure.

## When will I get my test results?

You will receive your results in about two weeks (10 business days). Each sleep study is scored by a registered technologist and then reviewed by a sleep specialist. Please contact your referring physician to discuss your results and next steps.

## Who received the final sleep study report?

The ordering physician receives the final report, interpretation, and recommendation. Also, the interpretation can be viewed on CentraCare's MyChart.

If you are unable to attend your appointment, please call at your earliest convenience as we have a wait list of people that could take your appointment time and we can reschedule you at that time as well.