



## Pediatric Sleep Testing

*A Sleep study has been ordered for your child to monitor and measure many aspects of sleep. It is important to have your child evaluated and tested as lack of sleep or interrupted sleep can disturb daytime activities and influence overall health and development. One parent or guardian will need to stay with the child all night and assist in comfort measures. A cot will be provided for you and a separate bed for your child.*

### How to prepare and what to bring:

- ✓ See the attached cannula with instructions and have your child practice wearing it prior to their sleep study. The cannula can be tickly and bothersome to some children but it is a very important signal that is monitored. The more your child is used to the feeling the better the recording.
- ✓ Bring two-piece, loose-fitting pajamas. If there is a possibility of an accident, then bringing two pairs is best. Arrive with your child already in his/her pajamas if the appointment is close to their normal bedtime.
- ✓ Bring from home anything that will make your child more comfortable sleeping away from home: a special blanket, pillow, stuffed animal, game, book, music player, etc.
- ✓ Any special snacks can be brought. Please make sure your child has eaten dinner prior to arriving. There is juice in the morning for your child.
- ✓ Bring all medications that your child will need to take.
- ✓ No lotions should be applied to skin or hair prior to the study and braids should be removed if possible.
- ✓ Bring a toothbrush and toiletries. A shower is available if needed, but no bath is available. Towels and a face cloth are available for clean-up.
- ✓ Bring a change of clothes for the trip home in the morning.

### What to expect the night of the study:

- A trained sleep technologist will greet you and escort you into the bedroom where the study will be taking place. Additional paperwork will need to be completed.
- Sensors will be placed on your child in order to monitor their sleep through the night.
- The set-up of the equipment will take up to 45 minutes to apply. Your child may sit on your lap or in a chair independently. During set-up, your child can watch tv (cable with child-friendly stations is available), play on a phone/tablet (wifi is available), or read. If they just want to help and ask questions that is fine as well. Sometimes a parent's assistance is encouraged to get the equipment on efficiently and effectively.
- We will try to adhere to your child's normal bedtime as much as possible.
- Once the sensors are on, you and your child can relax in the room and carry out "normal" bedtime routine (cuddles, stories, watching TV, etc.) until lights out.
- Your child will be woken at 6AM unless more testing is needed or an earlier wake up time is requested. Please note it can take up to 20 minutes to remove all of the sensors.
- Sensors do occasionally get loose or are taken off throughout the night. The technologist may be in to adjust and reapply sensors.



### The Sensors & How Many:

1. Surface sensors will be pasted onto your child's head (these monitor brain waves (EEG) throughout stages of sleep).
2. One sensor will be taped to each eye (these monitor eye movements).
3. Two sensors will be taped on either side of the chin, and one of the center of the chin (we can see if your child is mouth breathing, grinding their teeth, etc.).
4. One sensor will be placed just below the collar bone, and 1 on the rib cage (these measure heart beat and heart rate).
5. Two sensors will be placed on each shin (these measure leg movements).
6. Two sensors will be placed under the nose (these measure breathing -- one has been sent home to practice with).
7. Two belts will be placed: one around the chest and one around the abdomen (these monitor breathing).
8. One sensor will be placed on a finger or toe (this monitors heart beat and oxygen levels).



photo of completed set-up

### More About Set-Up:

- Wires look like a long, colorful ponytail connected to a box for monitoring and are “tied up” to stay out of their way while sleeping. Each patient is audio and video monitored for safety.
- Everything is applied with a water soluble paste or hypo-allergenic tape. An adhesive remover is used in the morning to remove the tape.
- You will need to let your child soak in a tub or clean up in a warm shower at home to remove the paste from their hair.

### Remember: Nothing Hurts!

*Sometimes the sensors can feel strange at first but normally they are forgotten about once the study starts. A sleep study is not like sleeping at home but we do our best to get the most data for your child's doctor. Don't worry if your child is awake more at the lab than at home. Even a little bit of sleep can provide a lot of data.*

Please contact your child's referring physician for sleep testing results.

We understand that you may have additional questions or concerns about your child's sleep study. Client Service Coordinators are available to assist you from 8am-7pm Monday-Friday, and 2pm-6pm Saturday-Sunday.

617-796-7766



### Nasal Cannula Instructions:

A breathing sensor called a nasal cannula will be placed slightly under and within your child's nose throughout the night of his/her sleep study to monitor breathing. This is an important sensor to be worn during the sleep study and can be tough for some children to tolerate.

- ☐ Yes it does go within their nose.
- ☐ No it doesn't hurt, but may feel foreign, tickly, or annoying.

Please have your child practice with the cannula, as it will make their sleep study that much easier in knowing what to expect. Start with showing it to them and letting them touch it so they get more comfortable with it.

It is best to have them practice wearing it for short periods of time while awake and supervised-relaxing, reading a book together, or watching TV is best.

It helps to call it a tickly nose hose and tell them to "honk" their nose if it feels funny vs pulling it out. To put on the cannula:

1. Hold cannula in front of face
2. Prongs go in the nose
3. Hook tubing around ears and secure tightly under neck



*Nasal cannula appliance shown on stuffed toy*



Beth Israel Deaconess Hospital  
Needham

Sleep Center  
148 Chestnut Street  
Needham, MA 02492  
617-796-7766 Mon-Fri 8am-7pm, Sat-Sun 2pm-6pm

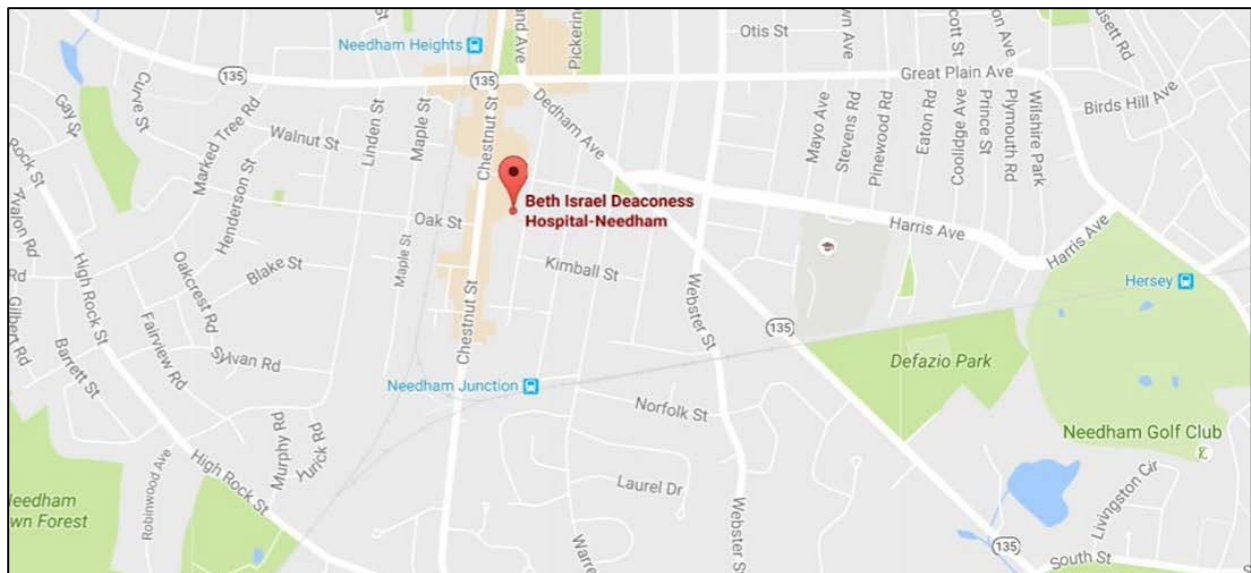
## DIRECTIONS

The Sleep Center at Beth Israel Deaconess Hospital-Needham is located at:  
148 Chestnut Street  
Needham, MA 02492

For detailed directions, please visit Beth Israel Deaconess Hospital– Needham’s website at:  
<http://www.bidneedham.org/about/contact-us/maps-and-directions>

Enter the building through the EMERGENCY WALK-IN ENTRANCE (which faces Chestnut Street) Check in with the Emergency Room Receptionist

A sleep technologist will be contacted to meet you in the lobby and escort you to the center (do NOT go directly to the Sleep Center)





PEDIATRIC SLEEP CENTER PATIENT QUESTIONNAIRE  
PLEASE BRING THIS WITH YOU TO YOUR CHILD'S SLEEP STUDY

This questionnaire has been compiled from multiple sources in order to best help us assess a pediatric patient's sleep. Please fill out all questions to the best of your knowledge. This Information will become part of the patient's medical record and is considered confidential.

Today's Date: \_\_\_\_\_ Facility: \_\_\_\_\_

Demographic Information

Child's Last Name: \_\_\_\_\_ Child's First Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_\_ Child's Age: \_\_\_\_\_ Gender: ☐ Male ☐ Female

Height: \_\_\_\_\_ Weight: \_\_\_\_\_ School Grade: \_\_\_\_\_

Your relationship to child: \_\_\_\_\_

Physician Information

Referring Physician:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone: \_\_\_\_\_

Primary Care Physician: ☐ Same as Referring

Name: \_\_\_\_\_

Address: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone: \_\_\_\_\_



### Sleep Problems

What are your major concerns about your child's sleep?

What have you previously tried to help with this problem?

### Sleep Times

Total estimated amount of sleep on a weekday (including naps): \_\_\_\_\_

Usual bedtime on weekday nights: \_\_\_\_\_

Usual wake up time on weekday mornings: \_\_\_\_\_

Total estimated amount of sleep on a weekend day (including naps): \_\_\_\_\_

Usual bedtime on weekend nights: \_\_\_\_\_

Usual wake up time on weekend mornings: \_\_\_\_\_

### Nap Schedule

Number of days each week that child takes a nap: \_\_\_\_\_

Nap times (from when to when): \_\_\_\_\_ to \_\_\_\_\_



### General Sleep Information

Please circle your response.

Is there a regular bedtime routine?	Yes	No
Does your child have his/her own bedroom?	Yes	No
Does your child have his/her own bed?	Yes	No
Is there a parent present when your child falls asleep?	Yes	No
Does your child resist going to bed?	Yes	No
Does your child have difficulty falling asleep?	Yes	No
Does your child awaken during the night?	Yes	No
Do you consider these nocturnal awakenings a problem?	Yes	No
Does your child have difficulty returning to sleep after awakening?	Yes	No
Is your child difficult to awaken in the morning?	Yes	No
Is your child a poor sleeper?	Yes	No
Does your child use a pacifier or thumb-suck to sleep?	Yes	No
Is your child a mouth-breather at night when sleeping?	Yes	No

### Current Daytime Symptoms

Please circle your response.

Trouble getting up in the morning?	Never	Occasionally	Frequently
Falls asleep at school?	Never	Occasionally	Frequently
Naps after school?	Never	Occasionally	Frequently
Daytime sleepiness?	Never	Occasionally	Frequently
Reports dreams during naps?	Never	Occasionally	Frequently
Unusual behaviors during the day?	Never	Occasionally	Frequently
Feels weak or loses control of his/her muscles with strong emotions?	Never	Occasionally	Frequently
Reports being unable to move when falling asleep?	Never	Occasionally	Frequently
Reports frightening visual images before falling asleep?	Never	Occasionally	Frequently



### Current Sleep Symptoms

Please circle your response.

Difficulty breathing when asleep?	Never	Occasionally	Frequently
Stops breathing during sleep?	Never	Occasionally	Frequently
Snoring?	Never	Occasionally	Frequently
Restless sleep?	Never	Occasionally	Frequently
Sweating when sleeping?	Never	Occasionally	Frequently
Daytime sleepiness?	Never	Occasionally	Frequently
Poor appetite?	Never	Occasionally	Frequently
Sleeps in unusual positions? (i.e. sitting, etc.)	Never	Occasionally	Frequently
Nightmares?	Never	Occasionally	Frequently
Sleepwalking?	Never	Occasionally	Frequently
Sleep talking?	Never	Occasionally	Frequently
Screaming during sleep?	Never	Occasionally	Frequently
Leg kicking during sleep?	Never	Occasionally	Frequently
Walking up at night?	Never	Occasionally	Frequently
Getting out of bed at night?	Never	Occasionally	Frequently
Trouble staying in bed?	Never	Occasionally	Frequently
Resistance going to bed?	Never	Occasionally	Frequently
Teeth grinding?	Never	Occasionally	Frequently
Uncomfortable "creepy-crawly" feeling in his/her legs?	Never	Occasionally	Frequently
Bed wetting?	Never	Occasionally	Frequently





### Family History

Mother: \_\_\_\_\_

Age: \_\_\_\_\_ Occupation: \_\_\_\_\_

Father: \_\_\_\_\_

Age: \_\_\_\_\_ Occupation: \_\_\_\_\_

Other person(s) living in the home:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Are there pets in the home: \_\_\_\_\_Yes \_\_\_\_\_No

If yes, what kind of pets? \_\_\_\_\_

If there is a pet, does the pet sleep in the child's bed? \_\_\_\_\_Yes \_\_\_\_\_No

Does anyone in the family have a sleep disorder? \_\_\_\_\_Yes \_\_\_\_\_No

If yes, who and what disorder? \_\_\_\_\_

### Past Medical History

#### Pregnancy/Delivery

Pregnancy: ☐ Normal ☐ Difficult Delivery Term: ☐ Pre-term ☐ Post-Term

Child's birth weight: \_\_\_\_\_lbs \_\_\_\_\_oz

Is this an only child? \_\_\_\_\_Yes \_\_\_\_\_No

If no, what number child is this one? \_\_\_\_\_



### Child's Medical History

Frequent nasal congestion?	Yes	No
Trouble breathing through his/her	Yes	No
Sinus problems?	Yes	No
Chronic bronchitis or cough?	Yes	No
Environmental allergies?	Yes	No
Asthma?	Yes	No
Frequent colds or flus?	Yes	No
Frequent ear infections?	Yes	No
Frequent strep throat infections?	Yes	No
Difficulty swallowing?	Yes	No
Acid reflux (gastroesophageal reflux)?	Yes	No
Poor or delayed growth?	Yes	No
Excessive weight?	Yes	No
Hearing problems?	Yes	No
Speech problems?	Yes	No
Vision problems?	Yes	No
Seizures / Epilepsy?	Yes	No
Morning headaches?	Yes	No
Cerebral palsy?	Yes	No
Heart disease?	Yes	No
High blood pressure?	Yes	No
Sickle cell disease?	Yes	No
Genetic disease?	Yes	No
Chromosome problem (e.g. Down's)?	Yes	No
Skeleton problem (e.g. dwarfism)?	Yes	No
Craniofacial disorder?	Yes	No
Thyroid problems?	Yes	No
Eczema (itchy skin)?	Yes	No
Pain?	Yes	No



If your child has long-term medical problems, list the three that you think are the most important

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

### Psychiatric History

Please circle your response.

Autism?	Yes	No
Development delays?	Yes	No
Hyperactivity / ADHD?	Yes	No
Anxiety / Panic attacks?	Yes	No
Obsessive Compulsive Disorder?	Yes	No
Depression?	Yes	No
Learning Disabilities?	Yes	No
Drug use / abuse?	Yes	No
Behavioral disorder?	Yes	No
Psychiatric admission?	Yes	No

### Dental/Surgical History

Please circle your response.

Has your child had his/her tonsils removed?	No	Yes	If yes, at what age?
Has your child had his/her adenoids removed?	No	Yes	If yes, at what age?
Does your child have ear tubes?	No	Yes	If yes, at what age?
Has your child worn braces or had orthodontic work?	No	Yes	If yes, at what age?

Has your child had any other surgeries? \_\_\_\_\_Yes \_\_\_\_\_No

If yes, at what age was surgery performed? \_\_\_\_\_

Please describe: \_\_\_\_\_



### Medications

Please list any medications your child is currently taking:

Medication Name	Dose	How often?

Non-prescription medication:

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Medication Allergies:

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Environmental Allergies:

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