



Division of Neurology

What is TMS?

Transcranial Magnetic Stimulation (TMS) is a noninvasive way to identify exactly where in your child's brain the motor function of hands, shoulders and legs are located. It uses magnetic energy to stimulate the brain to be activated with precision and the muscle responses and picked up by stickers on the skin called electrodes.

We typically test 3 muscles on each side of the body which can take 2-3 hours depending on the need for bathroom or snack breaks. If your doctor is also requesting language mapping, this will take an additional hour to perform. Most kids tolerate these studies with no complaints however a small portion of kids may have temporary headache which usually resolves within a few hours.

What to bring

Please feel free to bring your child and snacks or drinks needed for the duration of this study as we will allow for brief snack and bathroom breaks as needed. You are also encouraged to bring any device (iPad, phone, or DVD player) on which your child can watch shows or movies to help them pass time.

Please do not:

- Please do not forget to take medications as normally prescribed.
- Please do not have hair tied up in any ties as we need to be able to place the stimulator flat against various areas of the head.
- No hair products; only clean hair
- Please avoid wearing any earrings, necklaces or other metal objects on or around the head.

What clothing to wear

To allow adequate access to limbs being studied, please have your child wear shorts or loose pants so that we can access from the knees down. Tops should be a t-shirt or tank top to allow access to the shoulders. You can bring a blanket in case your child gets cold easily; however the room tends to be warm.

Disposable ear plugs will be provided to your child as a precaution to ensure safety of their hearing as the machine does make repetitive clicking sounds during the mapping procedure. If you prefer to use your own, you are welcome to bring this.