

# Repetitive Transcranial Magnetic Stimulation (rTMS)

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## What is rTMS?

- Repetitive Transcranial Magnetic Stimulation (rTMS) is a type of brain stimulation therapy used to treat depression symptoms.
- rTMS is often used when people have not had good results with medication.

## How does rTMS work?

- rTMS therapy sends short pulses of magnetic energy to your brain. The energy goes to the parts of your brain that control mood.
- Only a small part of your brain is affected.

## What are the possible side effects of rTMS?

- Most people do not have a serious risk of side effects.
- There is a small risk of seizures (electrical brain activity that may cause you to shake, faint, or change how you act or feel). This risk is higher for people who:
  - › Have epilepsy or a family history of epilepsy
  - › Have any neurological (brain) conditions
  - › Take medication to lower your seizure risk (like bupropion, a stimulant, a tricyclic antidepressant [also called **TCA**], an antipsychotic, or theophylline)
  - › Have recently and suddenly stopped drinking alcohol, taking benzodiazepines, or anticonvulsants
  - › Are very sleep deprived

## **Other possible side effects include:**

- › Eye blinking
- › Contraction (squeezing) of the face muscles that you cannot control during the therapy. These do not hurt and stop when the therapy ends.
- › Mild headache or shoulder stiffness. These usually go away within 24 hours (1 day). You can take acetaminophen (like Tylenol®) and/or ibuprofen (like Advil) if needed.
- › Tiredness. This usually goes away within 24 hours.
- Sometimes, depression symptoms get worse in the first few weeks of treatment. This will get better as your treatment goes on.

## **Where do I go for my treatments?**

Neuromodulation Clinic  
Mount Hope Building, basement floor  
Nova Scotia Hospital  
300 Pleasant Street  
Dartmouth, NS

- Take the elevator to the basement and follow the signs to the clinic waiting room. Clinic staff will take you to the rTMS treatment area when it is time for your appointment.

## **Parking**

- There is free parking in front of and beside the Mount Hope Building.
- There is also parking in front of and behind the Hugh Bell Building (next to Mount Hope), if needed.

## **When are rTMS treatments done?**

- › Between 7:30 a.m. and 1:30 p.m.  
(Monday to Friday, except holidays)

## What will happen before I start rTMS treatment?

- If your health care team decides that rTMS therapy may help you, they will book an appointment for you at the Neuromodulation Clinic. Clinic staff will call you with your appointment date and time, and any instructions.
- At your first appointment, you will meet with an rTMS psychiatrist and a nurse. Together, you will decide if rTMS is right for you.
- If you decide to have rTMS therapy, the psychiatrist will ask you to sign a consent form.
- The rTMS team will decide the stimulation placement and strength for your treatments.
- You may have to adjust (change) or stop some medications, like:
  - › Benzodiazepines (like lorazepam)
  - › Neuropathic agents (like gabapentin or pregabalin)

These medications can lower how well rTMS therapy works. The psychiatrist will work with your primary health care provider (family doctor or nurse practitioner) and will tell you if you need to change your medications.

- The nurse will ask you to fill out forms. Your answers will help your health care team monitor your depression symptoms. You must fill out these forms once a week during your treatment.

**If you need to book or cancel an appointment, please call the clinic as soon as possible:**

› Phone: 902-464-3124

## **What will happen during the treatment?**

- During the treatment, you will sit comfortably in a chair. You will be awake during the treatment.
- The nurse will place the rTMS device against your head. **You must keep your head still during the treatment so the device stays in place.**
- When the treatment starts, you will feel short bursts of stimulation on your scalp followed by short pauses. Many people say it feels like static electricity. The feeling is usually strongest during the first few treatments. It will get weaker over time as the nerves in the area get used to it.

- You are welcome to bring a support person with you to your first few appointments to help you get used to the treatments.
- You **do not** need to take any medications during the treatment.
- Your appointment may last for up to 15 minutes, depending on your treatment.
- You will have 20 to 30 treatments over 4 to 6 weeks. How many treatments you need may change. Your health care team will talk with you about this.

**It is very important to:**

- › Attend your appointments regularly
- › Not miss any appointments, if possible

This will help you have better treatment results.

**If you miss any appointments, your rTMS treatment may not work as well.**

## **Activity after rTMS treatment**

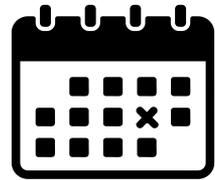
- You can do all of your usual activities right away after each treatment.

## **Can I drive after rTMS treatment?**

- It is OK to drive right away after rTMS treatment.

## **Follow-up care**

- The Neuromodulation Clinic does not offer long-term psychiatric care, therapy, or medication management.
- **You will need to keep seeing your psychiatrist for follow-up care.**



**Call the Mental Health Mobile Crisis Team at 902-429-8167 or (toll-free) 1-888-429-8167, or go to the nearest Emergency Department right away if you have any of these symptoms:**

- › Thoughts of ending your life
- › Harming yourself or thoughts of harming yourself
- › Anxiety that affects your daily activities
- › Psychotic or distorted thinking (believing thoughts that are not real or not based in reality)
- › Worsening depression
- › More alcohol or drug use than usual
- › Any other mental health changes

**Do not call the clinic. We may not be able to respond right away.**

## **Contact**

**If you need to contact the Neuromodulation Clinic for any reason, please call:**

- › Phone: 902-464-3124

If there is no answer, please leave a message.

# Notes:

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This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here:  
[www.nshealth.ca/patient-education-resources](http://www.nshealth.ca/patient-education-resources)

Connect with a registered nurse in Nova Scotia any time:  
Call 811 or visit: <https://811.novascotia.ca>

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