



PAIN MANAGEMENT



## Transcutaneous Electrical Nerve Stimulation (TENS) for Pain

*A guide for patients and families*

*We would like to thank the team of MUHC librarians, the medical, the nursing team of the clinic and the patient partner for the development, plain language editing, design, layout, and the creation of all images.*

Your doctor has offered you a Transcutaneous Electrical Nerve Stimulation (TENS) system to help with your pain, improve your quality of life, and help you be more active.

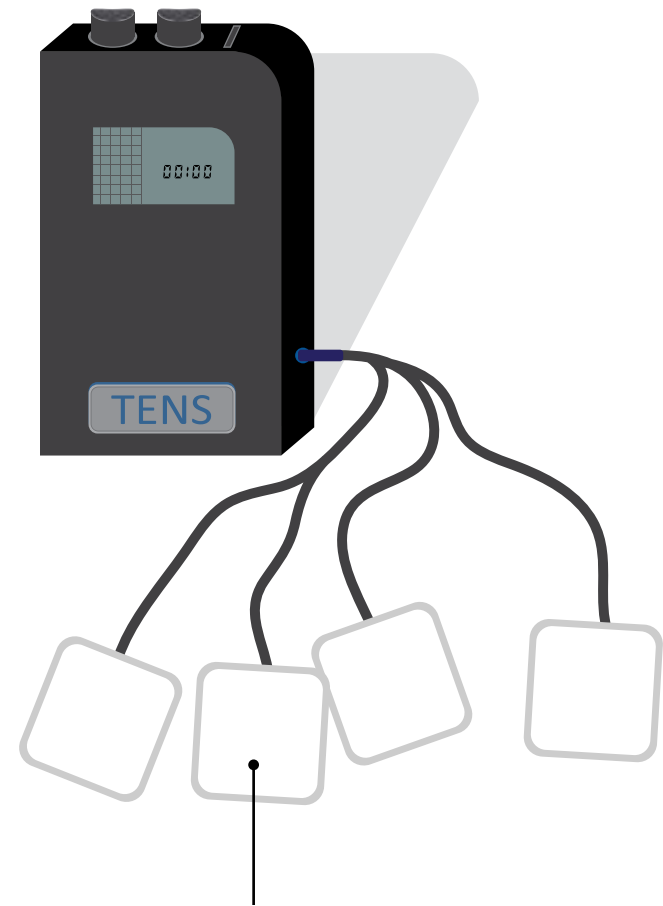
A decorative graphic consisting of several concentric circles in shades of pink and red, located in the bottom right corner of the page.

# Table of contents

|                                                                                            |           |
|--------------------------------------------------------------------------------------------|-----------|
| <b>Transcutaneous Electrical Nerve Stimulation (TENS) system</b>                           | <b>1</b>  |
| <i>How does TENS work?</i>                                                                 | 2         |
| <b>What a TENS machine looks like</b>                                                      | <b>5</b>  |
| <b>Using your TENS device</b>                                                              | <b>7</b>  |
| <i>How to use a TENS machine</i>                                                           | 8         |
| <i>When should you not use a TENS machine</i>                                              | 10        |
| <i>Warnings and things to remember</i>                                                     | 10        |
| <i>Talk to your chronic pain management team if you have any of the following symptoms</i> | 11        |
| <b>Acknowledgements</b>                                                                    | <b>13</b> |
| <b>Resources</b>                                                                           | <b>15</b> |

## Transcutaneous Electrical Nerve Stimulation (TENS) system

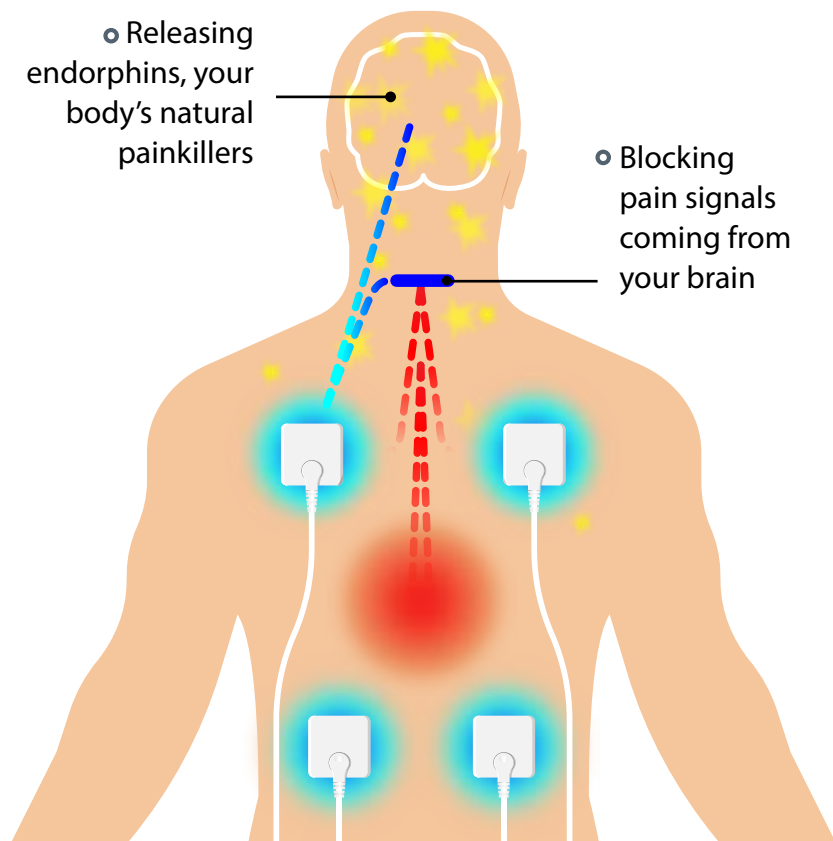
A TENS system is a little machine with wires and sticky pads called electrodes.



These electrodes stick to your skin and send tiny electrical pulses through the skin. These pulses travel to the nerves in the area where you feel pain.

## How does TENS work?

The electrical signals help your body by:



This can help you feel less pain.

A TENS machine is one way to help you get better pain relief. If you use one, you might be able to take less medicine for your pain, while being able to enjoy the activities you value in life.



TENS has been found to offer short-term pain relief for chronic pain conditions such as fibromyalgia, arthritis, back pain, neuropathic pain, and muscle pain.

## Appointment at the Alan Edwards Pain Management Unit

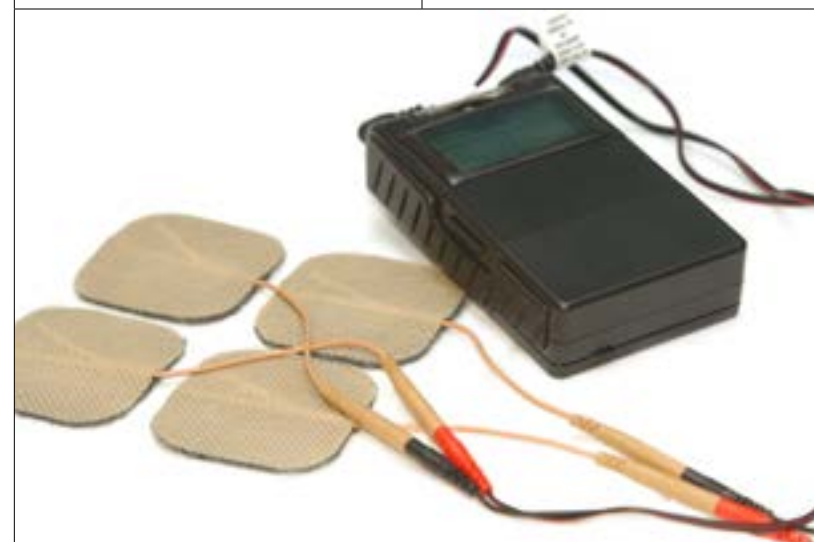
You will have an appointment with a nurse at the Alan Edwards Pain Management Unit (AEPMU).

The nurse will explain how to use the machine and test it out to see if it helps with your pain.

The appointment will be tailored to your needs, and last about 1 hour.

**A TENS kit should have:**

- |                                                                                                     |                                                                                         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• TENS machine with or without a belt clip</li> </ul>        | <ul style="list-style-type: none"> <li>• 2 wires with connectors at each end</li> </ul> |
| <ul style="list-style-type: none"> <li>• 4 electrodes (small pads to stick to your skin)</li> </ul> | <ul style="list-style-type: none"> <li>• User guide</li> </ul>                          |
|                                                                                                     | <ul style="list-style-type: none"> <li>• Batteries</li> </ul>                           |



*Note: Depending on what brand of TENS you use, the contents of the kit might be different.*

- This machine can be used at home, at work, or while doing your daily activities.
- It is most helpful when used for at least 30 minutes while being active (like walking, doing chores, or exercising).

- A TENS machine has different modes.

Each mode has a unique frequency, which can be high or low (*see Table 1 below*) and intensity. You will learn to adjust the modes to reduce your pain.

Table 1

*TENS machine: Low and high frequency*

|                                 | <i>Low frequency</i>                                        | <i>High frequency</i>                                            |
|---------------------------------|-------------------------------------------------------------|------------------------------------------------------------------|
| <b><i>When to use?</i></b>      | At rest                                                     | During everyday activities or at rest but works best when active |
| <b><i>Time of treatment</i></b> | Approximately 20 minutes 3 times a day                      | 30-60 minutes, once per day                                      |
| <b><i>Desired effects</i></b>   | Relieves pain slowly, but lasts for a longer amount of time | Relieves pain quickly, but lasts for a shorter amount of time    |

- We recommend referring to your user guide to help you understand the different modes available on your TENS machine.
- Your nurse will also help guide you during your visit at the clinic to choose the best mode for you.

## How to use a TENS machine

|   |                                                                                                                                                                                                                                                                       |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | When starting your TENS treatment, make sure the machine is turned off and that the batteries are inside.                                                                                                                                                             |
| 2 | Connect the wires with the 4 connectors to the TENS machine.                                                                                                                                                                                                          |
| 3 | Make sure your skin is intact (no cuts or scratches). Clean your skin with regular soap and water, and dry the skin well with a clean towel. Place the electrodes on clean and dry skin.                                                                              |
| 4 | If the electrodes have sticky pads, peel off the protective cover before placing them. If the electrodes do not have sticky pads, use medical lubricating gel (water soluble and hypoallergenic) and tape (hypoallergenic) to stick them onto your skin.              |
| 5 | Follow the nurses' instructions on how to place the electrodes in the areas where you feel pain. The electrodes should not touch each other or any metal object or device.<br>Ask the nurse about different ways to apply the electrodes to get the most pain relief. |
| 6 | Turn the TENS machine on.                                                                                                                                                                                                                                             |
| 7 | Always start the machine on the lowest intensity and increase slowly. You should feel a tingling or gentle buzzing sensation on your skin. It should be strong but comfortable, not painful.                                                                          |
| 8 | When your treatment is done, turn off the machine.                                                                                                                                                                                                                    |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓ | <p>If you are using electrodes that have sticky pads:</p> <ul style="list-style-type: none"> <li>Take the electrodes off your skin or leave them on until your next use if you are going to use the TENS machine again in the next few hours. If you decide to take off the electrodes: <ul style="list-style-type: none"> <li>Remove the electrodes from your skin</li> <li>Detach the lead wires from the electrodes</li> <li>Place the protective covers back on the electrodes</li> </ul> </li> <li>Store them according to instructions in your TENS kit</li> <li>These patches can be re-used as long as they are still sticky</li> <li>It is time to replace your electrodes when: <ul style="list-style-type: none"> <li>They are not sticky anymore</li> <li>They start to have rips or tears</li> </ul> </li> </ul> |
|   | <p>If you are using electrodes that are not sticky:</p> <ul style="list-style-type: none"> <li>Do not leave them on your skin until your next use because the medical lubricating gel might dry and not work as well.</li> <li>Detach the lead wires from the electrodes. Then wash the electrodes with soap and water and pat dry before putting them back in their plastic bag</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ✓ | Remember to check the batteries in your TENS machine and replace them according to the instructions in the kit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ✓ | Keep track of when and for how long you use the TENS machine and how it makes you feel. Your user guide may have a TENS tracking log. If not, speak to your nursing team at the pain clinic. This can help you and your treating team know if TENS is helping with your pain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## → When should you not use a TENS machine

Even though TENS machines are safe for many people, there are some cases when you should not use them.

Please talk with your doctor or nurse first if:

- You have a cardiac pacemaker or any other implanted device
- You have heart problems
- You are pregnant
- You have epilepsy, cancer, or diabetes
- You have cognitive impairment (for example, trouble concentrating, memory loss, difficulty following instructions, dementia, etc.)
- Open wounds or rashes
- Swollen, red, infected, or inflamed skin
- Known allergy to nickel or adhesives

## → Warnings and things to remember

- Keep the TENS machine in a safe place where children cannot reach it when you are not using it.
- It is important to turn off your TENS machine before removing the electrodes from your skin.
- Do not share your electrodes (pads) with others.
- If traveling with your TENS machine, keep the user guide with it in case any questions arises from the airport personnel.

|  Do not use TENS while: |                                                                                     |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                         |  |
| • Taking a bath or shower                                                                                  | • Sleeping                                                                          |
|                         |  |
| • Using machinery                                                                                          | • Driving                                                                           |

## → Talk to your chronic pain management team if you have any of the following symptoms

- Skin rash, redness, or itching
- Dizziness
- Headache
- Nausea

Remember, using a TENS machine can help you feel better and manage your pain. As your pain gets better over time, talk with your doctor about adjusting your medication.



*If you have questions about your medication, please contact your local pharmacist*



You may also speak with your physician or nurse at the Alan Edwards Pain Management Unit:  
**514-934-1934 ext. 48222**  
Monday to Friday  
from 8 a.m. to 4 p.m.



- Quebec Chronic Pain Association  
[douleurquebec.ca/en](http://douleurquebec.ca/en)



- Canadian Pain Society  
[canadianpainsociety.ca](http://canadianpainsociety.ca)



- My pain management  
[gerermadouleur.ca/en](http://gerermadouleur.ca/en)



- Power Over Pain  
[poweroverpain.ca](http://poweroverpain.ca)



- International Association for the Study of Pain  
[iasp-pain.org](http://iasp-pain.org)



Transcutaneous Electrical Nerve Stimulation (TENS) for Pain: 15  
A guide for patients and families



**Important:** Information provided by this booklet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute for medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.

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