



Patient & Family Guide

2024

# Using TENS for Pain



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# Using TENS for Pain

## What is TENS?

- TENS stands for Transcutaneous Electrical Nerve Stimulation. Transcutaneous means across the skin.
- TENS can help you manage pain when you use it with other strategies, like:
  - › Pacing (balancing activity and rest, to save energy and manage pain)
  - › Relaxation
  - › Movement
  - › Eating healthy foods
- Your primary health care provider (family doctor or nurse practitioner) will teach you how to use TENS at home.

## What is pain?

- When your body is injured or something else is wrong, your nerves send messages to your brain. Your brain then makes you feel pain. Feeling pain may cause an emotional response (like crying).
- Pain warns you that:
  - › Your body may be in danger.

**OR**

  - › You have been injured.

- Most of the time, pain helps you. For example:
  - › Pain can help you avoid injury by telling you to move your hand away from a hot stove before you get burned.
  - › Pain can also tell you to move less while you are healing from an injury or a condition. As your body heals, you will have less pain. This tells you that you can move more.
- When your nervous system is working well, the amount of pain you feel matches your injury or condition.
- Sometimes, the amount of pain does **not** match your injury or condition. You may have a big injury with no pain, or no injury with a lot of pain, or something in between. How you experience pain depends on many things, like:
  - › What is happening around you
  - › Your emotions
  - › Your thoughts
  - › Your past experiences
- Sometimes pain lasts longer than you think it will (like after an injury has healed). This may happen because your nerves have been injured or your nervous system has become more sensitive.

If you want to learn more about pain, ask your primary health care provider for information.

## How does a TENS unit work?

- TENS creates an electrical current on your skin. The stimulation causes your body to release chemicals that can help lower your pain.
- Everyone responds differently to different sensations (feelings). How your brain responds to TENS may be affected by your:
  - › Health and well-being
  - › Posture
  - › Movements
  - › Thoughts and feelings
  - › Medications
  - › Expectations
- A home TENS unit is small enough to fit in your pocket. You can use it while you are resting or while you are active.
- Most TENS units have 2 sets of leads (wires):
  - › Black lead (often called the negative lead)
  - › Red lead (often called the positive lead)
- The leads have a jack on one end and electrodes on the other end. The electrodes deliver the electrical current to your skin in pulses.

## **TENS unit settings**

### **Pulse rate (number of pulses each second):**

- On most units, this can be adjusted from 2 to 200 pulses each second.

### **Pulse width (amount of time a pulse lasts):**

- Each pulse can be 50 to 300 microseconds long.

### **Pulse height (intensity):**

- You can set the strength of the pulse higher or lower.
- Each unit has many modes (ways to change the pulse width and rate).

Talk with your primary health care provider about what modes may work best for you.

- You may want to change the settings when you have more pain.
- It is also a good idea to change the setting every once in a while. This is because your nervous system can get used to the same sensation over time.

## How do I use a TENS unit?

1. **Read the instructions that came with the TENS unit carefully.**
2. Attach the leads to the TENS unit and to the electrodes. Your TENS unit may have:
  - › **Self-adhesive electrodes:** These have a sticky gel pad that is self-adhesive (sticks to your skin without tape).
  - › **Carbon electrodes:** These are found on some older units. These electrodes may not have self-adhesive gel pads. If they do not have self-adhesive gel pads, you will need to use conducting gel to let the current transmit to your skin, and tape to hold the electrode in place. Use just enough gel to cover the electrode fully and evenly.
3. Place the electrodes on clean, dry skin in the spots your primary health care provider recommended. Place the electrodes at least 2 inches apart. This helps the current reach deeper tissues. If the electrodes are too close together, the current will travel directly between them and will not work as well.
4. Use the settings your primary health care provider recommended. Slowly raise the height (intensity) one level at a time until you feel the current.

5. If you are very sensitive:
  - › Keep the height low, but high enough that you can feel it.
  - › If the sensation fades, it means your body has started releasing chemicals that help your pain.
- If your pain gets worse when using the unit, turn it off. Talk with your primary health care provider about using different settings.

## **Taking care of your skin**

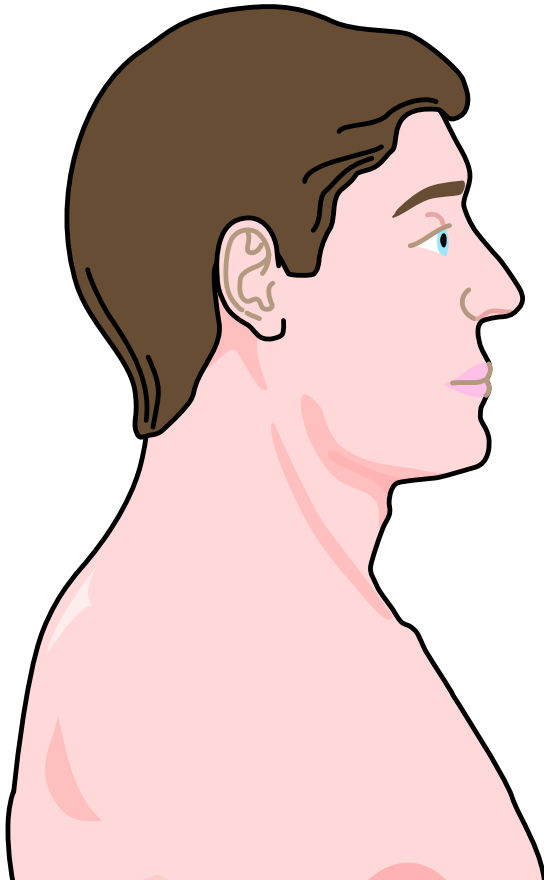
- **Check your skin each time you remove the electrodes.** If it looks red or feels itchy, you can:
  - › put the electrodes in a different spot.
  - › use a different type of electrode.
  - › shorten the treatment time.
  - › stop using the unit until you talk with your primary health care provider.

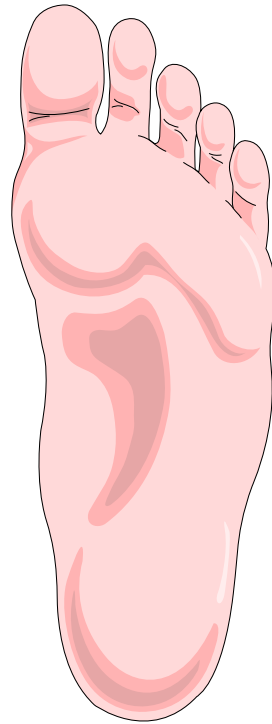
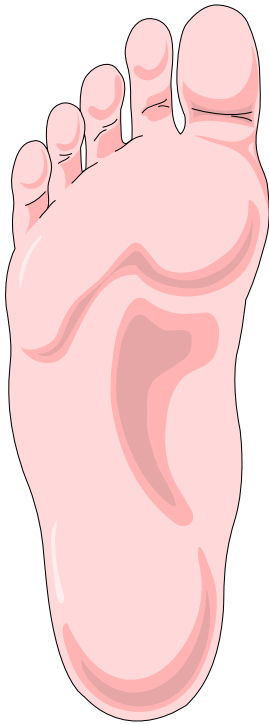
## Taking care of the TENS unit

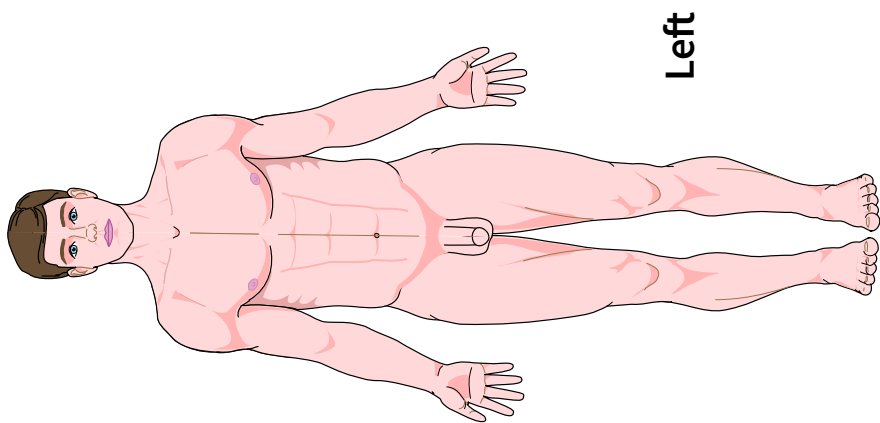
- **Do not** get the unit wet.
- **Do not** twist or pull on the leads.
- Turn the unit off and remove the electrodes from your skin **after each use**.
- When you are not using the self-adhesive electrodes:
  - › Put the electrodes in their plastic liner or inside a plastic bag.
  - › **Keep the electrodes in the fridge between uses.** This helps the self-adhesive electrodes to last longer.
- If the self-adhesive electrodes lose some of their stickiness:
  - › Gently wet the surface of the electrode with water by brushing it with a wet finger or putting it under slow running water.
  - › Let the electrodes air dry until they feel sticky again. Replace the electrodes when they are no longer sticky, or when the electrical stimulation changes and feels prickly or stings.



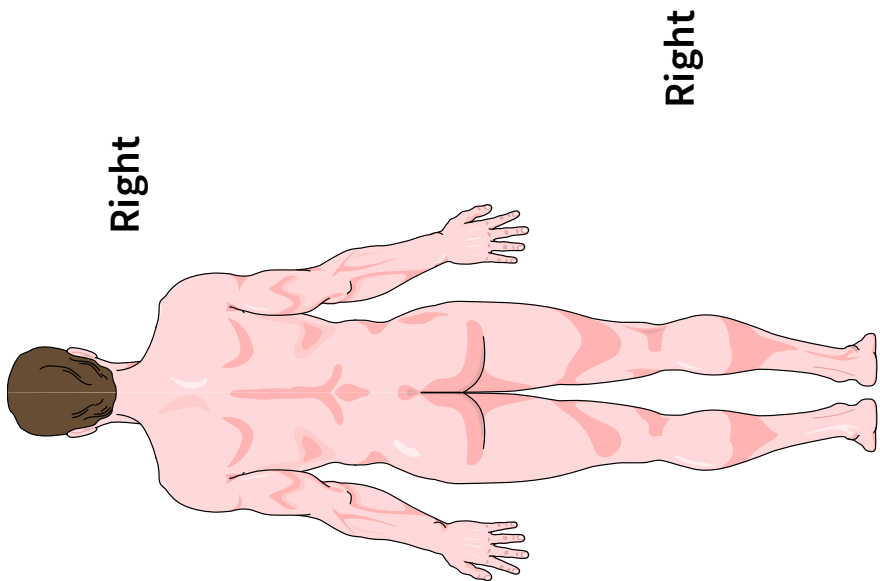
# Electrode placement







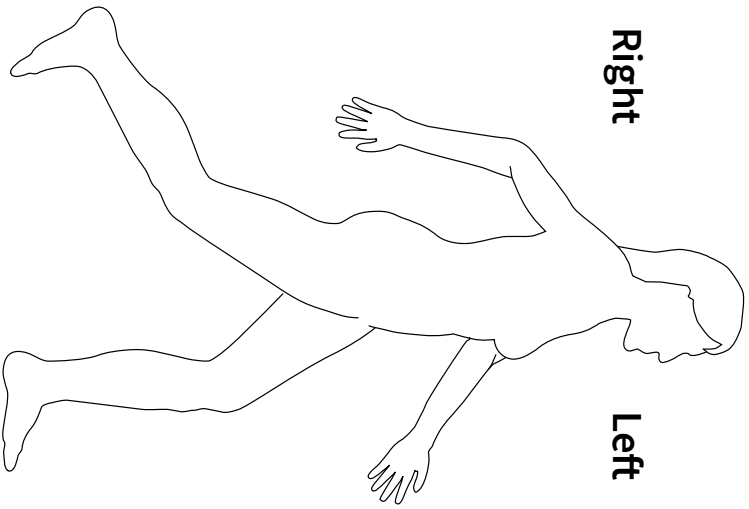
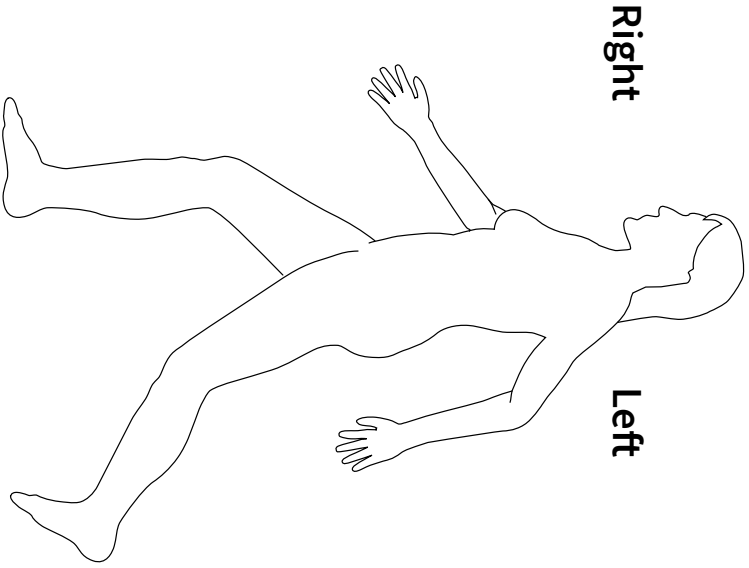
**Left**



**Right**

**Right**

**Left**



## Safety guidelines

- **Do not:**
  - › shower or bathe with the unit or electrodes attached.
  - › drop or bang the unit.
  - › recharge regular batteries.
  - › sleep with the unit attached.
  - › use the unit while driving or operating heavy equipment.
  - › use the unit on other parts of your body without first talking with your primary health care provider.
  - › lend the unit to others.
  - › use TENS to overdo any activity.

**If you have a pacemaker, defibrillator dorsal column stimulator, or any other similar implanted device, talk with your primary health care provider before using TENS. TENS may affect your device and harm you.**

## Starting settings

Option	1	2	3
Mode (M)			
Treatment time			
Pulse rate (R)			
Pulse width (W)			
Intensity (I):			

### **If you have problems with your TENS unit:**

See the instructions that came with the TENS unit.

**What are your questions?**

**Please ask a member of your health care team. We are here to help you.**

# 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.

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