

TENS

TENS refers to “Transcutaneous Electrical Nerve Stimulation.” This is a medical device that sends small electrical impulses through the skin to stimulate nearby nerves. These impulses create a mild tingling feeling. When the nerves are stimulated, fewer pain signals are able to reach the brain. This reduces pain.

For many people, TENS treatments are done for about 30 minutes, 3 to 4 times a day. There are many types of portable TENS units. One option is the TENS-7000™. It uses a 9-volt battery. Some TENS units can be purchased for as little as about \$25. An example of a TENS unit is shown here.

CAUTION

- Do not use TENS if you are pregnant.
- Do not use TENS if you have an electrical device in your body, such as a pace maker, an automatic implantable cardioverter defibrillation (AICD), the presence of telemetry, or other electronic monitoring systems. If you have any other electrical implants, pumps, or stimulators, consult your care team before using TENS as it may be contraindicated for your device.
- Do not put electrode pads over your chest, ribcage or breast bone, open wounds, infections or surgical hardware.
- If you have cancer, TENS may be used if placed distant to the site of cancer, however, it is important to seek guidance from your Oncologist in this situation as well as prior to using TENS for palliative cancer care.

APPLYING THE ELECTRODES

- 1 Read the instructions included with your TENS unit.
- 2 Identify where your pain is. Use at least two electrode pads. Four pads may be more effective to treat pain.
- 3 Trim any excess body hair in the area where you'll put the pads.
- 4 Wash the area with mild soap and warm water. Dry with a clean, dry cloth before you place the pads.
- 5 Apply the pads to your body.

OPERATING THE TENS UNIT

Refer to the instructions included with your TENS unit to learn what setting the company suggests that you use first.

To operate the unit, typically you will:

- 1 Connect the electrode wires to the TENS unit.
- 2 Turn the unit on at the recommended, comfortable setting.
- 3 Leave the unit on for about 30 minutes.
- 4 Turn the unit off when the treatment is over.
- 5 Remove the electrode pads from your body.
- 6 Repeat your treatment 3 to 4 times a day.



GETTING THE BEST RESULTS

Start with the manufacturer's recommended setting. When you are comfortable using the unit:

- Ask a member of your care team about changing the mode and pulse rate. Also ask about changing the treatment timeframe.
- Test different distances between the TENS electrode pads. The spacing will affect the flow of the electrical current.
- If you travel with your TENS unit, be sure you have a new 9-volt battery with you.

RESOURCE

- **Handout:** [Transcutaneous electrical nerve stimulation \(TENS\)](https://sharedfiles.mayoclinic.org/bedside/ope/GNT-20248283.html)
sharedfiles.mayoclinic.org/bedside/ope/GNT-20248283.html
- **Video:** [Using TENS for Pain Relief](https://mayoclinic.org/pe?mc=MC2058-01)
mayoclinic.org/pe?mc=MC2058-01