



**Northumbria Healthcare**  
NHS Foundation Trust

# **TENS – Transcutaneous Electrical Nerve Stimulation**

Issued by the Palliative Care Physiotherapy Team

This leaflet is to provide information on the use of TENS in the management of your symptoms.

## What is TENS?

TENS is short for “Transcutaneous Electrical Nerve Stimulation.” TENS machines are battery powered and use electrodes placed on the skin to stimulate specific nerve fibres involved in modulating pain. TENS is classed as a “nerve stimulation treatment.”

## How does TENS work?

TENS uses electrical stimulation of specific nerve fibres to stimulate the release of naturally occurring pain relieving neurotransmitters within the body. TENS is a pain management device and as such provides temporary relief of pain rather than a cure.

## How long should I use it for?

TENS can be used throughout the day in the following way:

- Use for 2-hours at a time followed by a 30-minute break as your body can adapt to the stimulation
- DO NOT use it overnight

## Are there any risks to using TENS?

TENS electrodes should only be applied to skin that is intact.

- Monitor your skin - if it becomes red or itchy, remove the electrodes and call for advice on the number given to you by your therapist
- Headache (can occur if machine is used excessively)
- Temporary aggravation of pain.

If any of the above occur, stop using the machine immediately and contact your physiotherapist on the number given.

## What are the physiotherapy alternatives?

- Acupuncture and acupressure (other advice leaflets are available on this)
- Exercise therapy
- Heat packs

## How long does the pain relief last?

Most people find that their symptoms ease only when the machine is turned on. Others find that the symptoms can improve for several hours or even days after use.

## What should I feel during the treatment?

The sensation of TENS depends on the settings used. The feeling is often described as tingling, buzzing and pulsing. To gain maximum benefit the sensation should be 'strong but comfortable'.

## What settings should I use?

Settings	Pulse width	Mode	Pulse rate

Your therapist will help to set up your TENS initially. Use the settings above to start your treatment but some people find it better to use a combination of settings per treatment.

Try each setting until you find the one that suits you best: the one that gives you the most pain relief.

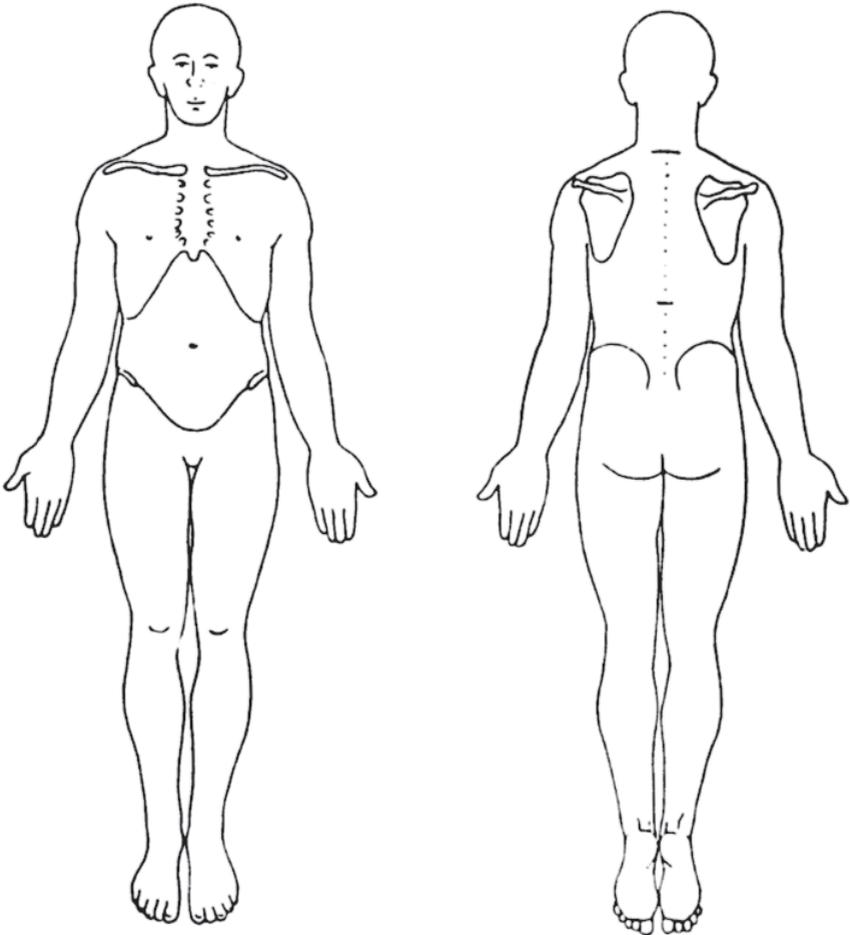
The intensity of the stimulation may need to be increased during the course of treatment as your body adapts to the stimulation. However it must remain 'strong but not painful'.

## Where do I place the electrodes?

Your therapist will help you to select the positioning of the electrodes. This will be according to your particular pain.

Your therapist will indicate on the body chart below the best position to place your electrodes.

Please note the pads must be placed at least 2.5cm (1 inch) apart.



## Do not use TENS (unless instructed by a doctor/consultant/specialist physiotherapist) if you:–

- Have a pacemaker
- Suffer from epilepsy
- Are pregnant

**The TENS machine is only for the use of the person to whom it has been issued.**

## What precautions should I take when using TENS?

- Do not apply pads over an area of reduced skin sensation or hypersensitive skin
- Do not place the pads over broken or damaged skin
- Do not use TENS when driving or using machinery
- Do not use TENS when sleeping
- Do not get the TENS machine or leads wet
- Never apply pads to the throat or over the eyes

Further advice is available from your therapist.

Name:

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Telephone:

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Days of Work:

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Alternative Contact:

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## Alternative Formats

If you would like a copy of this information in large print, another language, audio tape or other format please call the Contact Centre on 03 44 811 8118.

## Other sources of information

### NHS 111

### NHS Choices

[www.nhs.uk/pages/homepage.aspx](http://www.nhs.uk/pages/homepage.aspx)

### NICE (National Institute for Health and Clinical Excellence)

[www.nice.org.uk](http://www.nice.org.uk)

### Patient Advice and Liaison Service (PALS)

Freephone: 0800 032 0202

Text: 07815 500015

Email: [northoftynepals@nhct.nhs.uk](mailto:northoftynepals@nhct.nhs.uk)

### Northumbria Healthcare NHS Foundation Trust

General Enquiries 03 44 811 8111

[www.northumbria.nhs.uk](http://www.northumbria.nhs.uk)



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