

Neuromuscular Electrical Stimulation (Estim) - wrist and finger extension

Patient information

What is Neuromuscular Electrical Stimulation (Estim)?

After a stroke, or other neurological event, it is common for muscles to become weak, painful or swell. These problems affect you using your hand in everyday tasks.

Estim can be used to contract some of these muscles which have been paralysed. Estim sends electrical pulses, through pads on the skin, to the nerves to cause muscle contractions.

Estim on its own is not a cure. It works best when combined with functional and repetitive tasks. Try to work with the machine e.g. to try hit a target or to release an object.

Estim may help improve muscle strength and feeling. However, it may not result in you being able to move your hand yourself

Are there any risks or side effects to using Estim?

Most people report no problems with using Estim. At first it may feel slightly uncomfortable but this normally settles quickly. It should not be painful. Sometimes skin irritation can occur.

How to use it for your wrist/finger extension:

Your therapist will have shown you how to use the machine and may have taken some photos on your phone for you. Here are some more reminders:

Placement of electrodes



Settings:

Select program number:

Intensity level:

Suggested session duration: mins x daily

Goal of treatment:

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Place electrodes in position on the skin that is clean and dry

Turn on the device



Select channel by pressing CH

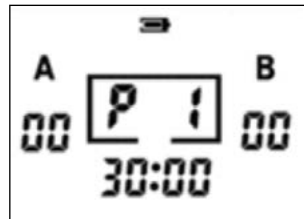


While channel (A or B) is flashing select program by pressing P

1 Upper extremity - short contraction

2 Upper extremity - long contraction

Chose program number -



While the channel button is still flashing adjust the intensity level until you get the contraction you want. If it has stopped flashing before you are ready, press CH again.

Choose intensity level



To pause the machine press T



Trigger mode - you can manually trigger the machine to contract e.g. to practice picking things up.

Press CH to make the channel flash then press and hold T (trigger button) for 3 seconds until this symbol appears next to the channel.

Hold the T button for as long as you want the muscle to contract. Release the button when you want it to relax



Looking after your electrodes:

Remember to return them to the plastic sheet and place on the 'ON' side
If the electrodes lose their stickiness rub a slightly wet finger over the gel area

Signs of skin irritation:

If your skin turns red for longer than 30 minutes, or your skin is blistered, stop using the Estim and tell your therapist.

Safety:

Switch off the Estim when going up and down stairs or using a walking aid.
Keep the electrodes and machine away from water. Remove electrodes before having a wash/shower. Remove when sleeping at night.

Property Rights:

The device remains the property of University Hospitals Dorset. It is on loan to you by your therapist. You must return it when requested. There are devices online that you can buy.

Therapist:

Signature:

Date:

Designation:

This leaflet has been written in collaboration with:


University Hospitals Dorset NHS Foundation Trust
Dorset HealthCare University NHS Foundation Trust

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The Royal Bournemouth Hospital, Castle Lane East, Bournemouth, Dorset, BH7 7DW
Poole Hospital, Longfleet Road, Poole, Dorset, BH15 2JB
Christchurch Hospital, Fairmile Road, Christchurch, Dorset, BH23 2JX

Author: Tracey.legg Date: January 2025 Version: One Review date: January 2028 Ref: 184/24

w: www.uhd.nhs.uk : @uhdnhs.bsky.social : @UHDTrust : @uhd_nhs

Dorset HealthCare University NHS Foundation Trust
Sentinel House, Nuffield Industrial Estate, Nuffield Road, Poole, BH17 0RB

w: www.dorsethealthcare.nhs.uk : @DorsetHealth : dorsethealthcare
: Dorset HealthCare University NHS Foundation Trust