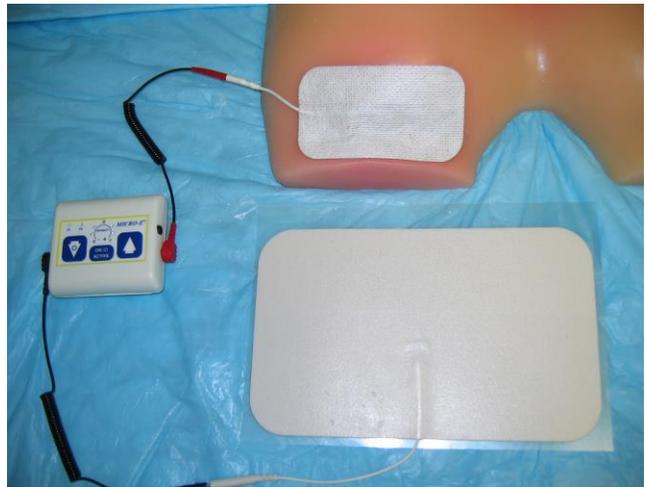


What is Electrical Stimulation Therapy (E-Stim)?

Electrical stimulation therapy (**E-Stim**), involves the delivery of electrical current to the wound at levels that would normally produce pins needles sensation.

E-Stim is most often applied directly to the wound bed using specialized equipment, sterile electrodes, and wound dressings. Treatments should be administered for at least 45-60 minutes at the time of each dressing change no fewer than three times per week. Better healing outcomes are likely when treatments are provided more frequently (5-7 times per week).



E-Stim devices that deliver electrical current to the wound area are specifically designed to produce the kind of current needed to stimulate wound healing. These devices are made by different companies and come in all shapes and sizes. Most are small battery operated and very portable. **E-Stim** is connected to the patient via at least two electrodes. The type and size of these electrodes are selected to best fit the individual's needs.

E-Stim needs to be applied by a qualified person (eg. nurse, physical therapist) who has obtained the necessary training. They need to understand the risks, precautions, and contraindications to using **E-Stim** for wound healing so that they can select individuals who are likely to benefit from this advanced treatment. It is also important for clinicians using **E-Stim** to know how to properly set up the equipment and supplies so that **E-Stim** is delivered in a safe and effective manner. All members of the care team (especially the patient) need to understand what is and isn't expected and have strategies in place to respond appropriately.

There is strong clinical research evidence that **E-Stim** can accelerate closure of many types of open skin wounds that have failed to respond to wound care best practices. In particular, best practice guidelines strongly recommend the use of **E-Stim** for the treatment of pressure ulcers, especially when they occur in people who have a spinal cord injury. **E-Stim** works by replacing the electrical current that naturally speeds healing, it promotes local circulation and delivery of oxygen and nutrients to the area, it keeps the wound clean and free of bacteria, and facilitates the growth of new tissue including skin that will close the wound. An additional benefit of **E-Stim**, is that it can help reduce pain associated with the wound.

E-Stim is provided through South West CCAC and contract agencies. Training and support on how to use **E-Stim** is available from a research team working on the [*E-Stim Collaboration Project*](#).

If you wish assistance or have any questions about **E-Stim**, please contact us at:

Pamela Houghton or Lyndsay Orr. Western University, London, Ontario.

Phone: 1-519-661-2111 x82287; Email: phoughto@uwo.ca