

# Using Electrophysical Agents: Don't get burned

Many patients benefit from the use of electrophysical agents (EPAs) in their physiotherapy treatment. A hot pack placed on the low back to ease muscle tension, a TENS machine applied to the neck muscles for pain relief, and ultrasound to an injured area to speed up the healing process are all examples of typical interventions involving EPAs. But what happens when these common treatments lead to uncommon results? While minimal, there is risk associated with the use of EPAs. As professionals who use these treatments, physiotherapists must be able to protect patients by ensuring EPAs are used safely in practice, and without harm.

Allegations of injury related to improper use of an EPA is one of the more common injury claims made against physiotherapists participating in the Canadian Physiotherapy Association (CPA) Insurance Program. In many of these claims, the patient has alleged experiencing a burn from the use of either a hot pack or TENS machine, and that the physiotherapist failed to properly monitor them during treatment.

## Commonly Used EPAs:

Hot pack	TENS
Wax	NMES
Hydrotherapy	IFC
Ice baths	HVPC
Ice	Laser
Ice packs	Short-wave
Ultrasound	

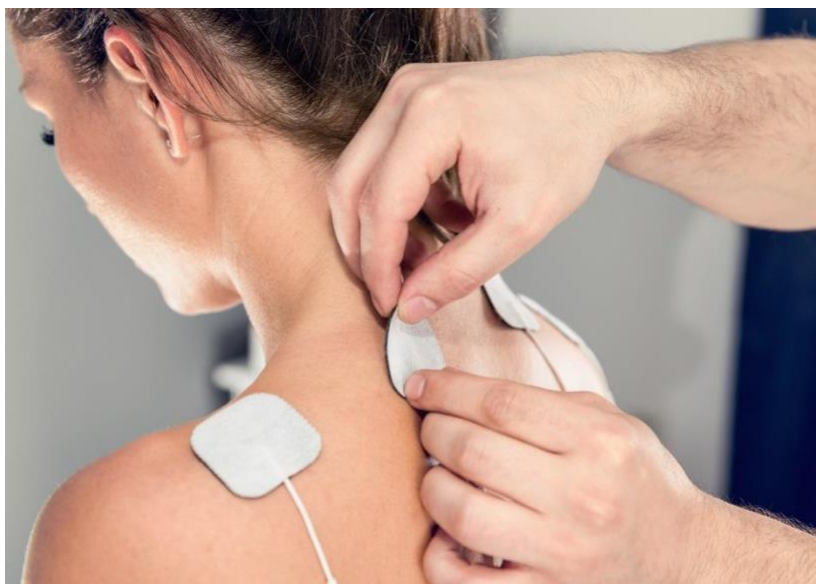
In order to protect patients from injury and minimize liability when using EPAs in treatment, a physiotherapist should practise the following risk management strategies.

Following these risk management strategies is not only good practice for safe patient care, but thorough documentation of these actions is invaluable to successfully defending a claim

### 1 Select the most appropriate EPA

Use clinically appropriate treatment and application techniques.

Do not use EPA if there are contraindications.



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### Obtain and document informed patient consent

Provide your patient with an opportunity to ask questions prior to treatment, and include an explanation of benefits and risks, as well as treatment alternatives.

Examine and document skin integrity and test sensation to assess your patient's risk for burns.

Perform evaluation prior to course of treatment and periodically thereafter.

**3****Be aware of the high risk of burns from certain commonly used treatments and interventions**

Exercise caution when combining EPAs (such as TENS or IFC and hot packs or ice packs). This may cause the underlying tissues to become insensitive to the heat, the cold or the TENS/IFC stimulation, which may result in increased risk of injury.

**4****Evaluate and document patient's ability to understand instructions and communicate appropriately**

Ensure your patient has the appropriate cognition to give accurate and timely feedback.

Confirm your patient is able to recognize and communicate unwanted effects of treatment.

**5****Closely monitor patient's response during and after treatment**

Check your patient's skin integrity and comfort level every five minutes during treatment; examine the skin following treatment and document patient reactions.

Provide a reliable means for your patient to communicate with staff in the event the physiotherapist leaves the treatment area while EPAs are in use.

Stop treatment and immediately re-evaluate your patient in the case of concerns or unanticipated reactions to treatment.

**6****Maintain equipment in accordance with organizational policies and College requirements**

Routinely test, monitor, and log temperatures of hot pack warmers and other equipment.

Perform and document preventative maintenance for all equipment as per manufacturer's guidelines.

Discontinue use of faulty or unsafe equipment immediately.

**7****Closely supervise physiotherapist assistants (PTAs) who assist in patient care****For more information**

For further information on safe practice when using electrophysical agents CPA members may be interested in the Physiotherapy Canada special supplement on EPA's, November 2017 (Vol. 69, No. 5).

[www.physiotherapy.ca](http://www.physiotherapy.ca) for further Clinical, Practice and Risk resources and an overview of CPA member benefits, including the CPA Liability Insurance Program.

[www.cpa.bmsgroup.com](http://www.cpa.bmsgroup.com), 1-855-318-6136, or [cpa.insurance@bmsgroup.com](mailto:cpa.insurance@bmsgroup.com) for information on professional liability and practice risk insurance for physiotherapists and physiotherapist assistants.



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