

<p><u>Cold Therapy</u> For the <u>acute</u> stage of an injury. Typically the first 0 – 6 weeks.</p>	<p><u>Heat Therapy</u> For <u>subacute</u> (weeks 7 – 12) and <u>chronic</u> (greater than 12 weeks) injuries.</p> <p>[A 'flare up' of a subacute/chronic injury would indicate the <u>acute</u> therapy protocol].</p>
<p><u>Application</u> Commercial cold pack Treatment time – 15-20 minutes Application: Dampen a towel and wrap over a cold pack. Place over injured or painful area. Reapply as needed. (Eg. 20 minutes ice on, 20 minutes ice off, repeat as often as possible). Ice massage 1. Freeze water in a small paper or Styrofoam cup (Fill cup about ¾). Freeze several at once to save time. 2. After water is frozen, peel off the bottom 1/4 of the cup. Gently and carefully rub the edges of the ice to eliminate sharp edges. 3. Apply ice to area to be treated, quickly moving ice in circular or back-and-forth motions. 4. Continue ice massage 5-7 minutes. 5. The feeling will be initially cold, then burning, and then achy, then numb, at which point it is time to stop. 6. It is normal for the area to appear red after the treatment. Keep Ice moving QUICKLY to avoid frostbite injury.</p>	<p><u>Application</u> If you choose to use a heating pad or paraffin bath at home please follow the product instructions carefully. Using a warm whirlpool or bath is excellent because it allows full or partial immersion of the region being treated.</p> <p>Treatment time – 15-20 minutes (varies according to the heating application used). If you use heat over an area too long, a phenomenon known as rebound vasoconstriction occurs, lessening or even reversing the effects of the treatment. Less heat, applied more often, is better.</p> <p>If mottling (a blotchy discoloration of the skin) occurs, stop the treatment immediately. This is a warning that the temperatures being used are too high and burns could result.</p>
<p><u>Contraindications</u> Cold therapy is contraindicated for certain conditions including but not limited to: patients allergic to cold, Raynaud's disease, rheumatoid conditions, and conditions in which there is a loss of sensation/numbness in the area to be treated. It is recommended that before you apply cold therapy at home, you do the Wrap Test. The Wrap Test consists of wrapping the treatment area with a towel that has been dipped in ice water. Leave on for one minute, and then check skin color. The area should not be mottled and no hives should appear. Be certain NOT to apply ice more than 20 minutes. Prolonged use of ice may trigger reactions in the tissues further aggravating the injury.</p>	<p><u>Contraindications</u></p> <ul style="list-style-type: none"> • Acute injuries • Over Arterial Insufficiency or dilated veins • Over impaired sensation • Bony prominences • Bleeding tendency/Hemorrhage • High fevers/T.B. • Pregnancy • Acute dermatologic conditions • After ointments or lotions have been applied
<p><u>Local effects</u> Vasoconstriction Reduction in inflammation Decreased pain Decreased muscle spasm</p>	<p><u>Local effects</u> Decrease pain Decrease muscle spasm Increased elasticity of tissues Removal of metabolic wastes</p>

1. Lockenour, John D. (2009). Superficial Heat Therapies [PowerPoint slides]. Retrieved from file.
2. Starkey, Chad. Therapeutic Modalities. 3rd Edition. F A Davis Co. March 30, 2004.
3. Christensen, K.D. Physiotherapy and Rehabilitation Guidelines for the Chiropractic Profession. www.chiro.org. Retrieved October 11, 2010 from <http://www.chiro.org/LINKS/GUIDELINES/REHABILITATION.shtml>