



AOTA Approved Provider #4023



**Course Title:** Therapeutic Modalities 112

**Course Subtitle:** Cold Therapy

**Course Description:**

Therapeutic Modalities 112, Cold Therapy, is a 2-hour course designed for the clinician using cold or cryotherapy as a modality for treatment or therapeutic purposes. This course reviews the effects of cooling the surface of the skin along with an overview of various therapeutic uses of cold. Methods of application including immersion, cold packs, ice towels, ice massage and evaporation sprays as well as indications for use, contraindications and precaution. A detailed course outline is presented below. At the end of this lesson, the learner will have a greater understanding of how to apply cooling agents and safely integrate the use of cold into practice.

Upon the completion of the course and successfully answering 10 interactive multiple-choice questions, the learner will complete a satisfaction survey and receive a completion certificate for .2 AOTA eligible CEU's.

**Course Length:** 2 hrs

**Course Authors:** Val Roberston, PhD, Alex Ward, PhD, John Low, BA, DipTP and Ann Reed, BA, DipTP

**Course Instructor:** Joanne Brown, MS, OTR/L, CHT

**Course Objectives:**

Upon course completion, the learner will be able to

- Describe physiological changes that occur as a result of cooling
- List and describe 5 therapeutic effects of cooling
- Outline methods and techniques of applying cold therapy
- Differentiate between the selection process of heat vs. cold
- List 5 contraindications and precautions for the user of cold therapy

**Outline of Content:**

**Hour 1:**

## Effects of Cooling the Skin

### Physiological Changes

- The local effects
  - On cutaneous blood vessels
  - On deeper tissue blood flow
  - On tissue metabolism
  - On the peripheral nervous system
  - On the motor system
- General effects of cooling

### Therapeutic Uses of Cooling

- Recent injuries
- Pain
- Postoperative uses
- Muscle spasm
- Spasticity
- Muscle strengthening
- Chronic inflammatory conditions
- Chronic edema and joint effusions

## **Hour 2:**

### Methods of Applying Cold Therapy

- Technique of application of cold therapy
- Stages
  - Cold packs
  - Ice packs
  - Commercial cold packs
  - Cryotherapy flow units
  - Local immersion
  - Ice towels
  - Ice massage
  - Evaporating
  - Ice wrap

### Choosing between heat and cold

#### Dangers and contraindications

- Excessive local cold on normal tissue
- Certain pathological conditions
- Reduced peripheral vascular supply
- Cold insensitivity
- Cardiac disease
- Arterial blood pressure
- Sensory deficiency
- Emotional and psychological features

