

148.6440 PHYSICAL AGENT MODALITIES.

Subdivision 1. **General considerations.** (a) Occupational therapists who intend to use superficial physical agent modalities must comply with the requirements in subdivision 3. Occupational therapists who intend to use electrotherapy must comply with the requirements in subdivision 4. Occupational therapists who intend to use ultrasound devices must comply with the requirements in subdivision 5. Occupational therapy assistants who intend to use physical agent modalities must comply with subdivision 6.

(b) Use of superficial physical agent modalities, electrical stimulation devices, and ultrasound devices must be on the order of a physician.

(c) Prior to any use of any physical agent modality, a licensee must obtain approval from the commissioner. The commissioner shall maintain a roster of persons licensed under sections 148.6401 to 148.6450 who are approved to use physical agent modalities.

(d) Licensees are responsible for informing the commissioner of any changes in the information required in this section within 30 days of any change.

Subd. 2. **Written documentation required.** (a) An occupational therapist must provide to the commissioner documentation verifying that the occupational therapist has met the educational and clinical requirements described in subdivisions 3 to 5, depending on the modality or modalities to be used. Both theoretical training and clinical application objectives must be met for each modality used. Documentation must include the name and address of the individual or organization sponsoring the activity; the name and address of the facility at which the activity was presented; and a copy of the course, workshop, or seminar description, including learning objectives and standards for meeting the objectives. In the case of clinical application objectives, teaching methods must be documented, including actual supervised practice. Documentation must include a transcript or certificate showing successful completion of the coursework. Coursework completed more than two years prior to the date of application must be retaken. An occupational therapist who is a certified hand therapist shall document satisfaction of the requirements in subdivisions 3 to 5 by submitting to the commissioner a copy of a certificate issued by the Hand Therapy Certification Commission. Practitioners are prohibited from using physical agent modalities under supervision or independently until granted approval as provided in subdivision 7, except under the provisions in paragraph (b).

(b) If a practitioner has successfully completed a specific course previously reviewed and approved by the commissioner as provided for in subdivision 7, and has submitted the written documentation required in paragraph (a) within 30 calendar days from the course date, the practitioner awaiting written approval from the commissioner may use physical agent modalities under the supervision of a practitioner listed on the roster of persons approved to use physical agent modalities.

Subd. 3. **Requirements for use of superficial physical agent modalities.**

(a) An occupational therapist may use superficial physical agent modalities if the occupational therapist has received theoretical training and clinical application

training in the use of superficial physical agent modalities and been granted approval as provided in subdivision 7.

(b) Theoretical training in the use of superficial physical agent modalities must:

- (1) explain the rationale and clinical indications for use of superficial physical agent modalities;
- (2) explain the physical properties and principles of the superficial physical agent modalities;
- (3) describe the types of heat and cold transference;
- (4) explain the factors affecting tissue response to superficial heat and cold;
- (5) describe the biophysical effects of superficial physical agent modalities in normal and abnormal tissue;
- (6) describe the thermal conductivity of tissue, matter, and air;
- (7) explain the advantages and disadvantages of superficial physical agent modalities; and
- (8) explain the precautions and contraindications of superficial physical agent modalities.

(c) Clinical application training in the use of superficial physical agent modalities must include activities requiring the practitioner to:

- (1) formulate and justify a plan for the use of superficial physical agents for treatment appropriate to its use and simulate the treatment;
- (2) evaluate biophysical effects of the superficial physical agents;
- (3) identify when modifications to the treatment plan for use of superficial physical agents are needed and propose the modification plan;
- (4) safely and appropriately administer superficial physical agents under the supervision of a course instructor or clinical trainer;
- (5) document parameters of treatment, patient response, and recommendations for progression of treatment for the superficial physical agents; and
- (6) demonstrate the ability to work competently with superficial physical agents as determined by a course instructor or clinical trainer.

Subd. 4. **Requirements for use of electrotherapy.** (a) An occupational therapist may use electrotherapy if the occupational therapist has received theoretical training and clinical application training in the use of electrotherapy and been granted approval as provided in subdivision 7.

(b) Theoretical training in the use of electrotherapy must:

- (1) explain the rationale and clinical indications of electrotherapy, including pain control, muscle dysfunction, and tissue healing;
- (2) demonstrate comprehension and understanding of electrotherapeutic terminology and biophysical principles, including current, voltage, amplitude, and resistance;
- (3) describe the types of current used for electrical stimulation, including the description, modulations, and clinical relevance;
- (4) describe the time-dependent parameters of pulsed and alternating currents, including pulse and phase durations and intervals;
- (5) describe the amplitude-dependent characteristics of pulsed and alternating currents;
- (6) describe neurophysiology and the properties of excitable tissue;

- (7) describe nerve and muscle response from externally applied electrical stimulation, including tissue healing;
 - (8) describe the electrotherapeutic effects and the response of nerve, denervated and innervated muscle, and other soft tissue; and
 - (9) explain the precautions and contraindications of electrotherapy, including considerations regarding pathology of nerve and muscle tissue.
- (c) Clinical application training in the use of electrotherapy must include activities requiring the practitioner to:
- (1) formulate and justify a plan for the use of electrical stimulation devices for treatment appropriate to its use and simulate the treatment;
 - (2) evaluate biophysical treatment effects of the electrical stimulation;
 - (3) identify when modifications to the treatment plan using electrical stimulation are needed and propose the modification plan;
 - (4) safely and appropriately administer electrical stimulation under supervision of a course instructor or clinical trainer;
 - (5) document the parameters of treatment, case example (patient) response, and recommendations for progression of treatment for electrical stimulation; and
 - (6) demonstrate the ability to work competently with electrical stimulation as determined by a course instructor or clinical trainer.

Subd. 5. Requirements for use of ultrasound. (a) An occupational therapist may use an ultrasound device if the occupational therapist has received theoretical training and clinical application training in the use of ultrasound and been granted approval as provided in subdivision 7.

- (b) The theoretical training in the use of ultrasound must:
- (1) explain the rationale and clinical indications for the use of ultrasound, including anticipated physiological responses of the treated area;
 - (2) describe the biophysical thermal and nonthermal effects of ultrasound on normal and abnormal tissue;
 - (3) explain the physical principles of ultrasound, including wavelength, frequency, attenuation, velocity, and intensity;
 - (4) explain the mechanism and generation of ultrasound and energy transmission through physical matter; and
 - (5) explain the precautions and contraindications regarding use of ultrasound devices.
- (c) The clinical application training in the use of ultrasound must include activities requiring the practitioner to:
- (1) formulate and justify a plan for the use of ultrasound for treatment appropriate to its use and stimulate the treatment;
 - (2) evaluate biophysical effects of ultrasound;
 - (3) identify when modifications to the treatment plan for use of ultrasound are needed and propose the modification plan;
 - (4) safely and appropriately administer ultrasound under supervision of a course instructor or clinical trainer;
 - (5) document parameters of treatment, patient response, and recommendations for progression of treatment for ultrasound; and
 - (6) demonstrate the ability to work competently with ultrasound as determined by a course instructor or clinical trainer.

Subd. 6. Occupational therapy assistant use of physical agent modalities.

An occupational therapy assistant may set up and implement treatment using physical agent modalities if the assistant meets the requirements of this section, has demonstrated service competency for the particular modality used, and works under the direct supervision of an occupational therapist who has been granted approval as provided in subdivision 7. An occupational therapy assistant who uses superficial physical agent modalities must meet the requirements of subdivision 3. An occupational therapy assistant who uses electrotherapy must meet the requirements of subdivision 4. An occupational therapy assistant who uses ultrasound must meet the requirements of subdivision 5. An occupational therapist may not delegate evaluation, reevaluation, treatment planning, and treatment goals for physical agent modalities to an occupational therapy assistant.

Subd. 7. Approval. (a) The advisory council shall appoint a committee to review documentation under subdivisions 2 to 6 to determine if established educational and clinical requirements are met. If, after review of course documentation, the committee verifies that a specific course meets the theoretical and clinical requirements in subdivisions 2 to 6, the commissioner may approve practitioner applications that include the required course documentation evidencing completion of the same course.

(b) Occupational therapists shall be advised of the status of their request for approval within 30 days. Occupational therapists must provide any additional information requested by the committee that is necessary to make a determination regarding approval or denial.

(c) A determination regarding a request for approval of training under this subdivision shall be made in writing to the occupational therapist. If denied, the reason for denial shall be provided.

(d) A licensee who was approved by the commissioner as a level two provider prior to July 1, 1999, shall remain on the roster maintained by the commissioner in accordance with subdivision 1, paragraph (c).

(e) To remain on the roster maintained by the commissioner, a licensee who was approved by the commissioner as a level one provider prior to July 1, 1999, must submit to the commissioner documentation of training and experience gained using physical agent modalities since the licensee's approval as a level one provider. The committee appointed under paragraph (a) shall review the documentation and make a recommendation to the commissioner regarding approval.

(f) An occupational therapist who received training in the use of physical agent modalities prior to July 1, 1999, but who has not been placed on the roster of approved providers may submit to the commissioner documentation of training and experience gained using physical agent modalities. The committee appointed under paragraph (a) shall review documentation and make a recommendation to the commissioner regarding approval.