

Dry Needle FAQ

What is Dry Needling?

The American Physical Therapy Association definition includes; “Dry Needling is a skilled intervention that uses a thin filiform needle to penetrate the skin and stimulate underlying myofascial trigger points, muscular, and connective tissues for the management of neuromusculoskeletal pain and movement impairments. Dry needling is a technique used to treat dysfunctions in skeletal muscle, fascia, and connective tissue, and, diminish persistent peripheral nociceptive input, and reduce or restore impairments of body structure and function leading to improved activity and participation.”^{1(p2)}

How does Dry Needling work?

Dry Needling works in a variety of ways depending on the problem. It is used to treat myofascial trigger points, hyperirritable points where actin and myosin are stuck in a contracted state. It is used to treat tendinopathies to facilitate the inflammatory response and allow the tissue to progress through the stages of healing. Dry Needling is also used in conjunction with electrical stimulation to both facilitate muscle contractions, as well as provide pain relief, when passing the electrical stimulation through the metal needle into the underlying tissue.

Is Dry Needling Acupuncture?

No. Dry Needling is based on Neuroanatomy and Physiology stemming from Western Medicine while Acupuncture is based on Traditional Chinese Medicine, involving Qi, Meridians, and Tongues. The only thing similar is the tool; much as a physical therapist may use a stethoscope or a blood pressure cuff, different professionals frequently use the same tools. “No one profession actually owns a skill or activity in and of itself.”^{2(p9)} Furthermore, “health care education and practice have developed in such a way that most professions today share some procedures, tools, or interventions with other regulated professions. It is unreasonable to expect a profession to have exclusive domain over an intervention, tool, or modality.”^{3(p4)}

What is the history of Dry Needling?

- Janet Travell, MD (JFK’s White House MD) and David Simons, MD pioneered dry needling using hypodermic needles to treat myofascial pain with trigger point therapy in the 1940’s. Used originally as a control vs wet needling.
- 1979 Czech MD, Karel Lewis, emphasized that the needling effect was more important than the substance injected.
 - Since then many studies found the same
- Eventually got away from the beveled tip because of tissue damage and moved towards acupuncture needles, because of round tip.
- Dr. Ma (Neuroscientist and former pain researcher at University of Iowa) found human biomechanical homeostasis is established with Dry Needling, which alleviates pain.
- About 13 different organizations offer Dry Needling training

Do other States have training requirements?

13 states have training requirements. Typically, requirements include 2 years of clinical experience before 20-100 hours of face-face training to finalize the psychomotor skills not typically taught in DPT Curriculum. Other topics required include clean needle techniques and proper management of any possible adverse outcomes.

For example, Nebraska Guidelines⁴:

- A physical therapist who wished to perform tissue penetration for the purpose of dry needling must meet the following requirements:
 1. Complete pre-service or in-service training. The pre-service or in-service training must include:
 - a. Pertinent anatomy and physiology;
 - b. Choice and operation of supplies and equipment;
 - c. Knowledge of technique including indications and contraindications;
 - d. Proper technique of tissue penetration;
 - e. Sterile methods, including understanding of hazards and complications; and
 - f. Post intervention care; and
 - g. Documentation of application of technique in an educational environment.
 2. The training program shall require training to demonstrate cognitive and psychomotor skills. Also, the training program must be attended in person by the physical therapist.
 3. Maintain documentation of successful completion of training.

Is Dry Needling Safe?

Yes. The adjacent state of Iowa, which allows Dry Needling, has never had a physical therapist have an adverse effect.⁵ In a recent prospective study of 7629 treatments, published in the Journal of Manual and Manipulative Therapy, no significant adverse events were seen.⁶

Adverse effects may include:

- Bruising- 4%
- Pneumothorax- Very Rare
- Infection- Very Rare
- Nerve Injury- Very Rare
- Forgot Needles- Very Rare
- Broken Needles- Very Rare
- Soreness- 1-2 days of soreness is not uncommon, 5% of treatments.

Is Dry Needling Effective?

Yes. For example, a recent systematic review included 19 high quality randomized controlled trials found that Dry Needling was effective for improving pain, range of motion and functional outcomes.⁷

Is Dry Needling a standalone treatment?

No. It is just another tool in a PT's tool belt. It is combined with traditional Physical Therapy techniques to decrease pain and increase function.

How many states can PTs Dry Needle in?

Most of them!⁸



Is Dry Needling currently taught in DPT Schools?

It is now being introduced in many Doctor of Physical Therapy Programs.

How much training towards Dry Needling do PTs get in a typical entry-level DPT School?

An independent third party did an in-depth analysis of minimal requirements of entry-level DPT programs, finding that they cover a **minimum of 86%** of the skills required to dry needle. **Only** the psychomotor skill of physically handling the needle not required.⁹ Remember, that these are **Clinical Doctorate Programs that have rigorous curriculum** including: Gross Anatomy, Neuroscience, Physiology, Pathophysiology, as well as significant education and hands on training for manual techniques. Recently, programs are introducing Dry Needling and the psychomotor skills into the curriculum and as an elective. It is rumored to be required in the next 10 years.

Examples of local DPT Programs curriculum includes:

http://catalog.usd.edu/preview_program.php?catoid=23&poid=3580

<https://www.briarcliff.edu/doctor-of-physical-therapy/curriculum/>

Some of the curriculum that prepares Physical Therapist for Dry Needling includes:

Gross Anatomy
Physiology
Neuroscience
Pathophysiology
Tests and Measures
Physical Therapy Examination
Kinesiology

Interventions
Musculoskeletal Physical Therapy
Neurorehabilitation
Integumentary
Dry Needling Electives
Manual Therapy Electives

Where are Physical Therapists trained to Dry Needle?

Any number of organizations are available for training, ~13 currently. Recall, that Physical Therapists already have most of the background knowledge and skills required to Dry Needle. What is required is fine-tuning and training on the proper psychomotor skills, safety and clean needle techniques; other components of Dry Needling are reinforced during these courses as well.

Who are some of the other organizations that support Physical Therapist in pursuit of Dry Needling?

- American Physical Therapy Association (APTA) – Multiple Resource Papers^{1,3}
- Federal State Board of Physical Therapist (FSBPT) – Dry Needling Resource Paper 2013⁴
- American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) –<http://aaompt.org/members/statements.cfm>¹⁰

Who are some of the local Dry Needling experts, who can answer your questions or concerns?

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