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## Current Practices in Acute Musculoskeletal Injury Care: A National Survey of Athletic Trainers

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## ***Current Practices in Acute Musculoskeletal Injury Care: A National Survey of Athletic Trainers***

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### ***OBJECTIVE***

Caring for acute musculoskeletal injuries is an important part of the practice of athletic training. Despite the importance, there is no consensus on the current standard of care or description of most common practices in clinical use. The purpose of this study is to begin to document when and how athletic trainers are using modalities in the treatment of acute musculoskeletal injuries.

### ***DESIGN AND SETTING***

Observational, cross sectional, online questionnaire.

### ***PARTICIPANTS***

The questionnaire was distributed using snowball sampling via social media. To be eligible for inclusion, participants had to self-report that they were certified by the Board of Certification for the Athletic Trainer and that their current practice included acute care of musculoskeletal injuries. We collected 187 valid responses from athletic trainers in 40 states across all 10 NATA districts who have been certified for between <1 and 47 years (mean = 11.9±11.4 y). Respondents represent most major practice settings with 48% practicing in the college setting and 36% practicing in the high school setting.

### ***INTERVENTION***

We developed an online questionnaire to ascertain which modalities athletic trainers are using to treat musculoskeletal injuries over the course of the disease and the rationale behind the decisions to use or not use them. The questionnaire was reviewed by 5 external content experts over 2 rounds of reviews for face and content validity.

### ***MAIN OUTCOME MEASUREMENT***

Counts and percentages of athletic trainers using a specified modality during each phase of recovery.

### ***RESULTS***

In the immediate care of injuries, 97% of ATs are using compression, 83% use elevation, 79% are using some form of cryotherapy, 49% use electrical stimulation, and 28% use some form of manual therapy. Before therapeutic exercise, 73% of ATs are using manual therapy, 57% use electrical stimulation, 51% use ultrasound, and 49% specifically use Instrument Assisted Soft Tissue Mobilization (IASTM). After therapeutic exercise, 67% of ATs use an ice bag, 65% use some form of manual therapy, 58% use a cold and compression device, 53% use ice massage, and 44% use elevation. During the maturation/remodeling phase, 73% of ATs are treating their patients with some form of manual therapy, 61% use IASTM specifically, and 44% use some form of electrical stimulation. The most common forms of cryotherapy are, in order, ice bags, ice massage, cold and compression devices, cold whirlpool, and ice bucket. The most common forms of manual therapy, in order, are instrument assisted soft tissue mobilization, massage, active release therapy, muscle energy technique, proprioceptive neuromuscular facilitation, and joint mobilization.

### ***CONCLUSION***

To our knowledge, this is the first study to document patterns of modality use across the treatment continuum by ATs. The findings have meaningful implications about current practice and are helpful in forming additional

questions we are now exploring in an additional project. Our most surprising finding is that although acute cryotherapy is taught almost universally, roughly 1 in 5 ATs are not using it even though they use

compression and elevation. This suggests that the recent “no ice” movement may be gaining traction among ATs.

***KEY WORDS:*** *Modalities, Acute, Injury, Practice*