



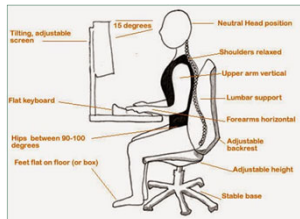
Why is Ergonomics Important to MTs?



<https://consumer.healthday.com/encyclopedia/pain-management-30/pain-health-news-520/repetitive-stress-injury-rsi-646236.html>



General Definition of Ergonomics

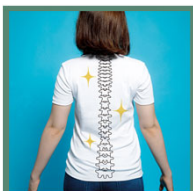


Scientific study of human work, design job to fit worker

- Optimization
- Health and safety
- Ease of use





MTF Ergonomics Project Purpose



- **Identify work tasks** and risk factors for MTs in order to determine potential safety issues (preventable and non-preventable).
- **Suggest workplace modifications** for injury prevention and symptom improvement.
- **Publish suggested guidelines** for massage therapy practice to be utilized by therapists, employers, and educators.



MTF Ergonomics Project Team


<https://www.briotix.com/>

MTF Ergonomics Workgroup — Experts

- Robin B. Anderson, MEd, LMT, BCTMB, CEAS (MTF President, Workgroup Chair)
- Brad Decker, BS, LMT, NCTMB, CSMT, NCMMT
- Sandy Fritz, MS, LMT, BCTMB
- Sabrina Lopez, LMT, BCTMB
- Dana Madigan, DC, MPH, PhD
- Edward G. Mohr, CPE, CSP, BCTMB
- Portia B. Resnick, PhD, ATC, BCTMB (MTF Trustee)

Professional ergonomists specializing in job analysis and evaluation

- Stefan Schultz, MS, PT
- Kelson Wann, MS, ATC, FMS




Investigation Phases


Phase 1 – Identifying basic risks

- Observation of MTs at work
- Evaluate typical work environments for MTs
- Determine items contributing to risk
- Provide guidelines that can contribute to general approach to educational methods to reach all practitioners



Phase 2 – Specifying risk and developing the ergonomic model

- Definition of a full-time work cycle and best approaches
- Use of body mechanics, micro breaks, and supplemental tools as diminishing risk factors
- Requirements for safe work environments and scheduling





Data Collection Process – Phase 1





A Tale of Two Cities– Baltimore and Portland

- Survey data – over 700 MTs responded
- Volunteer recruitment
- Site visits of massage practice environment samplings



Data Collection Tools

- Video recordings
- Force matching
- REBA – Rapid Entire Body Assessment
- QEC – Quick Exposure Checklist
- DUET – Distal Upper Extremity Tool
- Physical measurements of table heights/widths, room sizes, etc.




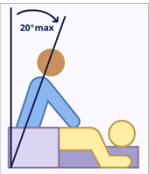
Phase 1 Discovery Themes

- Moderate risk job for developing RSIs if no self-care or intervention is used regularly
- **MTs have long duty cycles**—time spent doing work is very long in relation to other professions, more opportunity for risk
- The massage work environment can be prepared effectively to improve health and safety for MTs
- **Establishment of recommendations** to be incorporated into entry – level and continuing education training
- **8 Specific guidelines noted**




Guidelines for Career Longevity

1. **Physical conditioning is important for career preparation**
2. **Table height adjustments**
 - a) Higher table for lighter pressure strokes
 - b) Lower table for moderate to firm strokes
 - c) Generally suggested table heights and therapist positioning
3. **Trunk positioning**
 - a) Should be aligned with stroke direction to improve force application and minimize risk
 - b) Trunk flexion should be **NO MORE than 20 degrees** at any time
4. **Use the stride stance frequently**



Guidelines for Career Longevity


5. **Side of table positioning is ideal whenever possible, avoid end of table unless performing work in that area**
6. **Limit stroke excursion**
 - a) Avoid longer strokes when possible and stand as close to the target area as possible
 - b) Avoid reaching across the midline, except with direct contralateral strokes
7. **Avoid single digit force exposures, support digits at all times**
8. **Avoid trunk and neck lateral flexion and rotation**




Phase 2 Goals

- Measure cumulative risk of cumulative workday
- Community-based study across entire United States
- Generate recommendations to minimize fatigue and workplace injuries
- Avoid simulations
- Minimize disruption to daily activities and work
- Compare objective and subjective data

Wearable Technology—2 Vendors

GoX LABS  **Preventure**



Participation


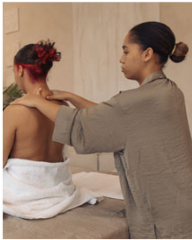


- Brief virtual training
- Wear 3 small devices for 1 week during work hours
 - Wrist or upper non-dominant arm
 - Upper dominant arm
 - Upper back
- Short survey after each massage
- Mail device to next participant




Goals: Business As Usual

- No changes to operation
- Just a normal day of work
- Measuring actual movements
- Good and bad of traditional day
- True representation of work conditions will provide the most impactful data




Sensors and Their Data




Fatigue
Heart Rate Measurement to Estimate VO2 Max
Non-Dominant Wrist or Upper Arm

Posture
High-risk movement based on Speed, Position and Control
Upper Back and Dominant Upper Arm



Benefits of Your Involvement

- Innovative research assessing the role fatigue and posture have within massage therapy
- Recommendations to extend the careers of current and future therapists
- Promote sustainable workplace guidelines
- Better understand your own movements
- Exposure to cutting-edge wearable technology
- Be a part of the future




Overview of Your Involvement

Conference Next Steps


1. Meet at MTF booth to see sensors and review protocols
2. Sign up for additional information

Study Schedule

1. Short virtual training
2. 1:1 Meeting with study coordinator
3. A few days of sensor testing to increase familiarity
4. 7 Days of sensor utilization + post-massage surveys
5. Ship device to next location



MTF Resources Plan



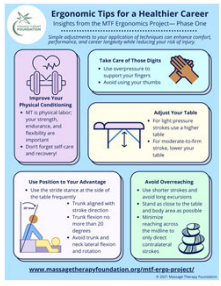
- White paper with the full report data and discovery of Phase 1
- Research Perch podcasts
- Ergo Tips Infographics
- E-book with guidance on integration into curriculum
- Workshops at conferences highlighting the guidelines (2023)
- Full research article after Phase 2 is completed (2023 - 2024)

International Journal of Therapeutic Massage & Bodywork

MASSAGE THERAPY FOUNDATION

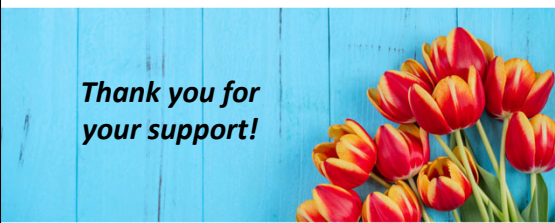
MTF Ergonomics Project Webpage

<https://massagefoundation.org/mtf-ergo-project/>



- Central hub with links to all project-related materials
- Learn more about the Phase 1 journey
- Access Ergonomic resources
- Stay informed on the latest Phase 2 Updates

MASSAGE THERAPY FOUNDATION



Thank you for your support!

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