

# Work Conditioning

*Definition, Indications, Contra-Indications, Benefits and Dilemmas*



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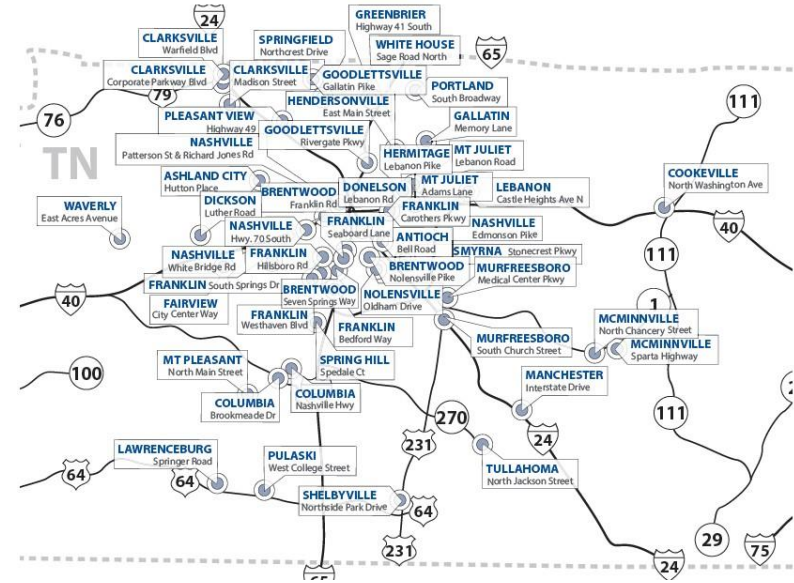
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*Joshua 1:9 "Be Strong and courageous. Do not be afraid or discouraged, for the Lord your God will be with you wherever you go."*

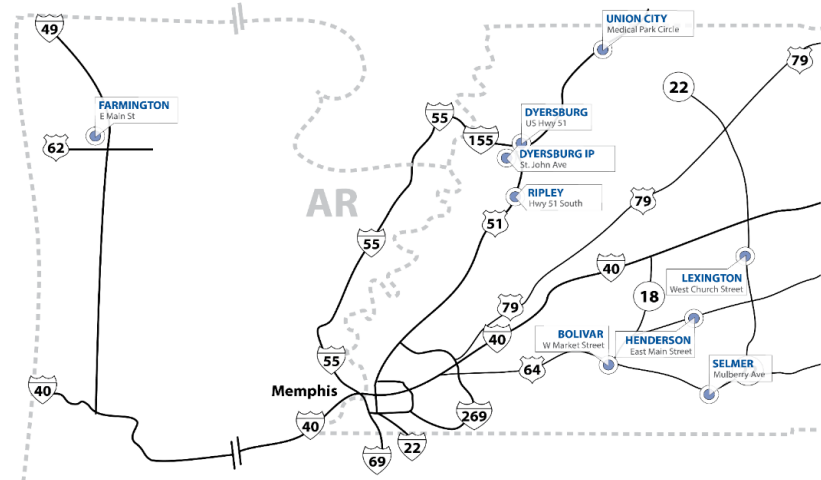
# STAR Physical Therapy Facts

- 70 locations in Middle, East, and West Tennessee, Arkansas, and Alabama
  - Covington, Tennessee
  - East Nashville
  - Lebanon 109
  - Huntsville, Alabama
- Provide the following Outpatient Physical Therapy Services
  - Physical/Occupational Therapy
  - Regenerative Rehab-Integrative Dry Needling and ASTYM
  - Work Conditioning
  - Functional Capacity Evaluations
  - Job Demands and Ergonomic Analysis
  - Post-Offer Employment Testing
  - Manual Therapy
  - Pain Neuroscience Education

## Middle Tennessee, East Tennessee



## West Tennessee, Arkansas



# Central Scheduling Now Available

## STAR Physical Therapy Central Referral

Phone: (615) 435-8759

Fax: (615) 435-8757

EMAIL: [referral@starpt.com](mailto:referral@starpt.com)



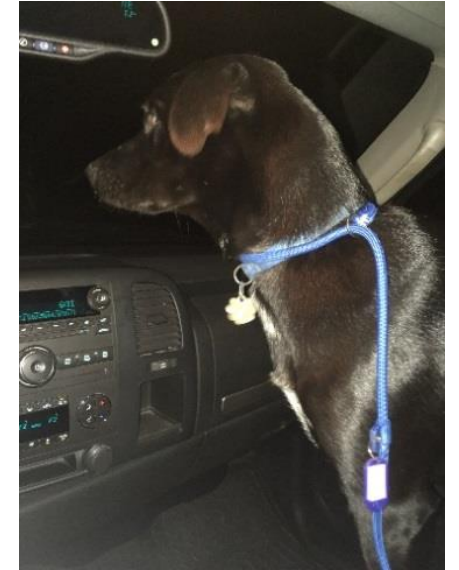
*Quick, Easy access to all locations and services with one, phone call, fax, or email*

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# Dan Headrick PT, CEAS III, CETS, ASTYM, BS



- Physical Therapist since 1992
- Level I, and III Certified Ergonomic Assessment Specialist
- Certified Employment Testing Specialist
- Member of the Medical Advisory Council, State of Tennessee
- Married for 30 years to college sweetheart
- Two fantastic adulting children... and one cute rescue
- Pastor of Young Adults at Portland Nazarene Church, and lay Speaker for the UMC
- Basketball nut-especially UT Vols and WSU Shockers
- Love to fish
- Taught Functional Capacity Evaluation courses at TSU and to CM
- Presenter at BAMA , MSWCA, State Of Tennessee Worker's Comp Physician Conference, Tennessee Health and Safety Conference, and State Of Tennessee State Worker's Comp Conference
- JDAs at over 20 industries



*Joshua 1:9 "Be Strong and courageous. Do not be afraid or discouraged, for the Lord your God will be with you wherever you go."*



# JOSH EZELL, ATC/L, CEAS I, CETS, CFE

- Graduated from Middle Tennessee State University in Sports Medicine/Athletic Training with minors in Science & Coaching.
- Certified Athletic Trainer for 20 years with experience at the secondary and collegiate levels & industrial settings.
- Director of FCE Programming at STAR Physical Therapy
- Earned post-graduate certifications in Functional Capacity Evaluations, Ergonomic Assessment, and Employment Testing and Job Analysis
- Works with Bridgestone, Tacle, Rich Products, Mahle, Schneider, and Peterbilt.
- Married to Kelli, and has a daughter Ava (10) and a son Max (9).
- Enjoys the outdoors- camping, hiking, and hunting/fishing; coaching his kids; and being active with his family.
- Attends World Outreach Church in Murfreesboro and resides in Rockvale.



# In-Service Objectives

- Identify indications and contra-indications for a work conditioning recommendation
- List three benefits of a work conditioning program
- Site the differences between work conditioning and work hardening
- List two dilemmas and their resolution in work conditioning
- Identify effort indicators that therapists document



# The Workers' Compensation System

*“Workers’ Comp has been doomed from the beginning because of its name. When people hear the words ‘workers’ compensation’ they focus on the word ‘compensation’ because it means money, and people expect to be paid a lot of money if they get hurt at work. It should have been called ‘workers’ recovery’ because the emphasis should always be on recovery rather than compensation.”*

Jeff Francis, ***Assistant Administrator, Bureau of Workers’ Compensation***

# Therapist Role in The Workers' Comp System

- Implement the ATP orders
- Do no harm
- Facilitate return to work in a system that rewards disability
- Communicate with all stakeholders, even if one stakeholder is withholding stakeholder contact information
- Make recommendations while not ordering treatment
- Get that patient better no matter the post-surgical protocol that is in place
- Test work ability when medically appropriate
  - Much earlier now than in years past





# Expectations In The *First Few Weeks of Care*

- Expect DC from PT for goals achieved.
  - Not DC (all the time) in two weeks, but assessment of are we on the right track?
  - Will this client meet goals on current course of treatment?
  - Are we spinning our wheels?
- Progress to Work Conditioning to assist with meeting job demands as early as is medically safe and ordered.
- **INVOLVE the Patient**
- RMD if no progress! (strains and sprains, be quick about this)
- FCE recommendation for PDL or Yahoo determination.
  - You can have an indication of this early.



# When does protection enable disability?

*Is it realistic to work without discomfort and intermittent pain if hurt does not always equal harm and sore is safe?*

## MD Focus

- “That is the worst \_\_\_\_\_ I have ever seen.”
- Restrictions-cannot do, but where is the can do?
- “If it hurts, do not do it.”
- Protection and thus disability is emphasized.

## Patient Response

- Fear
- Work will cause more pain and pain equals re-injury.
- Work is the cause of my pain.
- “My restrictions are ‘no lifting of over 10lbs.’ Therefore, I cannot lift anything.”
  - What about 0-9lbs?

# Work Conditioning



## WORK CONDITIONING

Addresses physical and functional needs; may be provided by one discipline (single discipline model)

Requires Work Conditioning examination and evaluation

Utilizes physical conditioning and functional activities related to work

Provided in multi-hour sessions up to:

- 4 hours/day
- 5 days/week
- 8 weeks

# Indications/Contra-Indications for Work Conditioning

## Indications

- Patient is largely being coached in traditional therapy sessions.
- Job PDL is Medium (36-50lbs) or higher
- Client has a high FABQ score
- Long Period of no activity between the treatment cessation and RTW.
- Weakness and poor technique
- Compliant – attendance and program
- Consistent Illness Behavior

## Contra-Indications

- **Currently working an 8 hour shift**
- Yahoos
- Clients who do not attend tx
- Flowering magnifiers
- Medically Unsafe
  - Unstable surgical fixation, or general medical status



# “Requesting” Work Conditioning

- Talk to the CM and MD first
- Acquire orders and get authorization
- Educate the patient on services and benefits at last regular treatment session **following** securement of approval from MD or CM and authorization.

Doing well, but...





# Components of Work Conditioning

- **Frequency / Duration:**  
**Daily (5x per week)**

- Pain Neuroscience Education.
- Work is 5 days per week 40 hours / week
- Work Conditioning at best is 20 hours / week.
- 2 hours, 3 hours, then 4 hours
- PN every 6<sup>th</sup> Visit

- **Written Job Description:**  
**JDA vs JD**

- JD-Basic, most common, nearly worthless
- JDA-Functional, preferred, rare occurrence
- Verbal – Can be informative when keeping the client focused



# Work Conditioning Program Components

- **Evaluation**

- Resting Blood Pressure and HR
  - ACSM: 200/120 Contraindicates Exercise
  - APTA and AMA: 200/110
  - STAR: Monitor 150/90, Terminate 180/110
- Baselines-grip, pinch, and dexterity can be included
- Non-Material Handling (NMH) requirements of job and testing
- Material Handling (MH) requirements of job and testing
- Subjective complaints versus objective findings
- **Work restrictions-are they for work conditioning?**
- **Injury Specific Assessment-AROM/MMT/Sensation**
- **Screen Whole Person**
  - *Work is total body!!!*



# Work Conditioning Program Components

- **Assessment**

- Job PDL versus Patient PDL
- Medical risk factors that impact recovery
- Musculoskeletal factors that impact meeting job demands
- The role of FEAR
- Presence or absence of inappropriate illness behavior
- Goal setting



# Work Conditioning Program Components

- **Treatment-total body because work is total body**
  - Pain Neuroscience Education
  - Patient Education
  - Aerobic Exercise-warm-up
  - Dynamic Stretching-total body
  - Upper and Lower Core Activities
  - Work Specific Exercise-if the client can lift a 20lb kettle bells floor to waist, but cannot lift a box of the same weight, why?
  - Work Circuits-light resistance and long durations, uses light weight to establish heavier weight PDL safely. Focus on NMH and MH.
    - Can be used to set PDL



**Rating Job and Patient Physical Demand Level**

- 1) Job-Ascertain highest lifting weight and/or highest frequency of lift. Then use table to rate the job.
  - a. 50lbs, 40 reps/day=Heavy PDL
  - b. 75lbs, 20 reps/day=Medium/Heavy PDL
  - c. Job Description States Medium PDL means 50lbs is lifted  $\leq 33\%$  of the work day or  $\leq 32$  reps/day
- 2) Patient-based on the results of the lifting exam, **rated by the injury**.
  - a. Unable To Perform Due To Medical Safety=Did not qualify for a PDL rating due to not completing the lifting exam
  - b. 10lb lifting restriction=Sedentary PDL
  - c. Shoulder Injury who shows a 50lb Floor to Waist Ability, and 10lb Waist to Shoulder Ability=Sedentary PDL

**Physical Demand Level (PDL): based on 8 hour work day**

|            | Sedentary | Light | Light/Medium | Medium | Med./Heavy | Heavy  |
|------------|-----------|-------|--------------|--------|------------|--------|
| Occasional | 10lbs     | 20lbs | 35lbs        | 50lbs  | 75lbs      | 100lbs |
| Frequent   | Neg.      | 10lbs | 15lbs        | 20lbs  | 35lbs      | 50lbs  |
| Constant   | Neg.      | 5lbs  | 7lbs         | 10lbs  | 15lbs      | 20lbs  |

**Material Handling Frequencies**

|   |  |   |
|---|--|---|
| <b>Occasional</b> = 1-33% of day, 1-32 reps | <b>Frequent</b> = 34-66% of day, 33-200 reps | <b>Constant</b> = 67-100% of day, >200 reps |
|---|--|---|

**Non-Material Handling Frequencies**

|  |   |   |
|--|---|---|
| <b>Occasional</b> = 1-33% of day, 1-100 reps | <b>Frequent</b> = 34-66% of day, 101-800 reps | <b>Constant</b> = 67-100% of day, >800 reps |
|--|---|---|



# Outcome of Work Conditioning

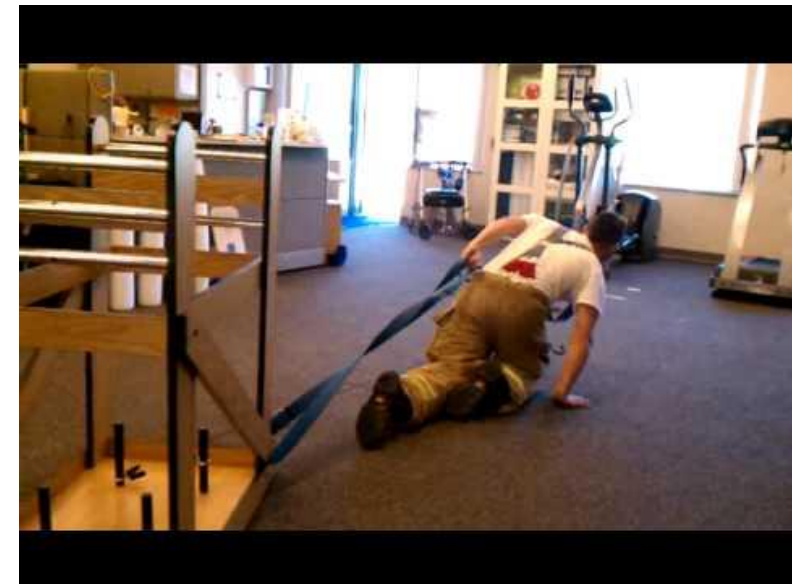
## Consistent Clients

- Patient PDL ability that is not extrapolated but is tested at multiple levels.
- Decreased FEAR-practice and coaching lessen FEAR
- Can replace FCE and is a better tool to determine work ability



## Inconsistent Clients

- Reason for FCE and case closure



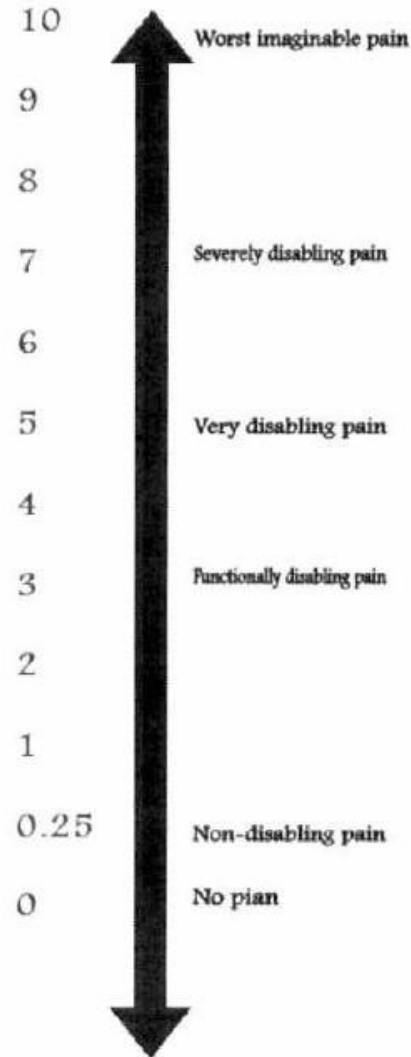
# Symptom Behavior Matching Pathology

How we assess, document, and report weird illness behavior!

# Pain Level

(Functional Expectations)

- 9-10/10-ER level-speaking is impossible; writhing in pain
- 6-8/10-severe compensation patterns, tears likely; positional changes constantly
- 4-5/10-moderate to severe compensation patterns; positional changes frequent
- 1-3/10-positional changes occasional; grimacing with positional changes possible
- 0/10-no pain



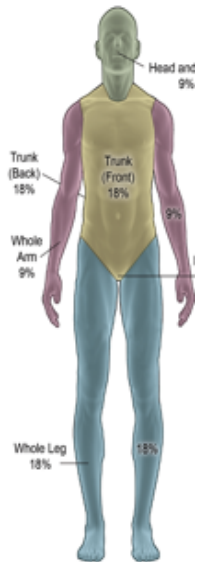
|              |   |
|--------------|---|
| 10           | <b>Worst imaginable pain.</b> Causes you to be completely incapacitated and barely able to talk. Requires immediate emergency hospitalization.  |
| 8-9          | Pain that causes disability between levels 7-10. Nearing need for hospitalization.  |
| 7            | <b>Severely disabling pain.</b> You cannot use or move the painful area. You have difficulty talking and concentrating on anything but the pain. Needing to lie down and/or <b>pain-related</b> tearfulness are common at this level of pain.                       |
| 6            | Pain that causes disability between levels 5 and 7.   |
| 5            | <b>Very disabling pain.</b> Causes great difficulty moving or applying any strength through the painful area. You are unable to complete the current activity.  |
| 4            | Pain that causes disability between levels 3 and 5.   |
| 3            | <b>Functionally disabling pain.</b> Pain that is starting to affect your ability to perform the current activity. (i.e., decreased movement, decreased speed, and/or the need to briefly rest and/or stretch in order to continue completing the current activity). |
| 0.25 to 2.75 | <b>Non-disabling pain.</b> The pain is present, but not yet at a level which limits you from performing the current activity.   |
| 0            | <b>No pain or discomfort.</b>   |

# Index Scoring Inappropriate Illness Behavior Somatic Amplification Rating Scale (SARS)

## Non-Organic Signs: Somatic Amplification Rating Scale (SARS)

- Rule of 9s
- Scored following evaluation or PN assessment
  - Palpation-depth, reaction, involved and uninvolved areas, discrete anatomical structures
  - MMT-weakness coachable or giving way, cogwheeling, related to injury
  - Sensation-appropriate for condition
  - Distracted Testing-SLR sitting and supine

|                                    |   |  |                  |
|------------------------------------|---|--|------------------|
| Sensory Examination                | A. No deficit or deficit well localized to dermatome<br>Deficits related to dermatome(s) with some inconsistency<br><del>Nondermatomal</del> or very inconsistent deficit<br>Blatantly impossible (split down middle of body with positive tuning fork test)  |  | 0<br>1<br>2<br>3 |
|                                    | B. Amount of Body Involved<br>(% of surface area for entire leg is 18%)   | <15%<br>15-35%<br>36-60%<br>>60%           | 0<br>1<br>2<br>3 |
| Motor Examination                  | A. No deficit well localized to myotome(s)<br>Deficit related to myotome(s) but some inconsistency<br><del>Nonmyotomal</del> or very inconsistent weakness, exhibits cogwheeling or giving way, weakness is coachable<br>Blatantly impossible, significant weakness which improves when distracted  |  | 0<br>1<br>2<br>3 |
|                                    | B. Amount of Body Involved (entire leg is 18%)  | <15%<br>15-35%<br>36-60%<br>>60%           | 0<br>1<br>2<br>3 |
| Tenderness                         | A. No tenderness or clearly localized to discrete anatomical structures<br>Tenderness not well localized with some inconsistency<br>Diffuse or very inconsistent tenderness, multiple anatomic structures involved<br>Blatantly impossible, significant tenderness of multiple anatomic structures (skin, muscle, bone, ect) which disappears when distracted |  | 0<br>1<br>2<br>3 |
|                                    | B. Amount of Body Involved (entire leg is 18%)  | <15%<br>15-35%<br>36-60%<br>>60%           | 0<br>1<br>2<br>3 |
| Distracted SLR-Backs               | Difference between SLR sitting and supine <ul style="list-style-type: none"> <li>• Difference</li> <li>• Difference</li> <li>• Difference</li> <li>• No pain seated, strongly positive SLR at</li> </ul>  | <20 deg<br>20-45 deg<br>>45 deg<br><45 deg | 0<br>1<br>2<br>3 |
| Total SARS Score<br>(Positive ≥ 5) | Backs<br>Non-Backs  | <u>    </u> /21<br><u>    </u> /18         |                  |



# SARS Wording

- Sample Wording
- Information is good for objective section, and have test scanned into chart.
- **Wording** - use the wording within the test to describe
- **Example** - “The pt. was scored using the Somatic Amplification Rating Scale (SARS) in an attempt to identify the presence of non-organic motor, sensory or tenderness findings. A positive score of 5 or greater indicates non-organic findings. This pt. scored a 5/18 (or 21) for the following: non-myotomal and very inconsistent weakness, exhibits cogwheeling or giving way, and weakness is coachable, with 18% of the body involved; blatantly impossible and significant tenderness in multiple anatomic structures (skin, muscle, and bone) which disappears when distracted.”



# Belief Gives Way to Suspicion- Skilled Observations Carry Weight

- No guarding of injured part with distraction
- Velocity of motion changes with distraction
- Movement of injured part changes when doing the same task in a different way
- Watch clients getting in and out car in the parking lot and compare it to the clinic



# Illness Behavior is Off and Effort is Marginal- Now What?

- Treatment- Focus on Functional Exercise and Work-Simulation Tasks
- Communication-let CM and MD know your concerns and document those conversations
- Document-use SARS, Pain Level Expectations, and Observations in DN, IE, PN. Cue support staff to document these as well.
- Outside Opinion-ask your teammates to watch a bit and give you their thoughts. (or assess the client)
- Work Conditioning-two edged sword for the iffy effort client.
- Progress Plateauing-state that in documentation, as well as phrasing that current treatment is not producing progress. Use that information as a goal for your patient possibly.
- FCE-good recommendation if there is no further pathology.

# Interesting Case Examples

- My client has been ordered for work conditioning, and they have had no regular PT. What do I do?
- My client is working full time on restricted duty, and has work conditioning orders. What do I do?
- My client is not a work related case, and work conditioning has been ordered. Is that covered by health insurance, and what do I do?
- What can an ATC, PTA, EP do with work conditioning clients?
- The client states they cannot do Work Conditioning that day, what do I do?
- What about smoke breaks and pain pill breaks?
- What about MD restrictions? Do they apply to Work Conditioning?

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