

# Reconditioning to Sport: Focusing on the athlete not the injury

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# Thank you.....

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# Why Reconditioning?

- We are frequently enamored by....
  - Injury
  - Weakness
  - MOI
  - body part
  - Joint
  - rehab program
  - Exercises



- Ultimately seeing/treating the individual as their injury/impairment

# Why Reconditioning?

- We forget everything else
  - The body
  - Sport/demand
  - Detraining effects
  - Psycho-social effects



# Objectives

- Distinguish between Reconditioning vs. Rehabilitation.
- Categorize what the focus is, the individual or injury.
- Explain when to starting reconditioning activities.
- Construct a robust reconditioning program.

# Rehabilitation vs Reconditioning

- **Rehabilitation** is the process to regain full function following **injury** and involves restoring strength, flexibility, endurance, and power. It is achieved through various exercises and drills.
- **Reconditioning** is a performance-based model for training and preparing athletes following injury. It recognizes that biological healing alone of the injured area does not determine whether the athlete is competition ready.

# Current vs Proposed

- Current practice –
  - Focus on the injury now, recondition later
- Proposed practice –
  - Address it all
    - Limit the amount of deconditioning
    - Requires great communication between PT, ATC, Strength Coach, Sport Coach on plan/approach

# The Part vs. The Whole

- Where should the focus be?
- Why is it important?
- When to implement?



# Early-stage

- Rehabilitation focus
  - Tissue healing
  - Inflammatory response mitigation
  - ROM restoration
  - Neuromuscular re-education
- Reconditioning focus
  - Core/Trunk Stability
  - Un-affected body part strength training
  - General conditioning
    - Constant velocity/low intensity

# Mid-stage

- Rehabilitation focus
  - ROM Restoration
  - Functional patterns
  - Tissue loading
- Reconditioning focus
  - Introduction of whole body movements (multi-joint, multi-planar)
  - Introduction of athletic movements (run, jump, hop, skip, slide, bound, role, fall)
  - Introduction of whole body strength movements
  - Sport specialized conditioning (introduction)
    - Deliberate, specific, moderate intensity
    - Rehab session warm-up?

# Late-stage

- Rehabilitation focus
  - Higher intensity exercises
  - Functional movements/exercises
  - Sport specific patterns
- Reconditioning
  - Advanced plyometrics
  - Advanced Strength Training program
  - Advanced sport specialized conditioning

# Conditioning Options

- Low Intensity
  - Bike (Constant Velocity)
  - Treadmill Walk
  - Walk
  - Stairclimber/Stairs
  - Elliptical
- Moderate Intensity
  - Bike Intervals
  - Treadmill Walk Incline/Run
  - Jog/Run
  - Rower
  - Elliptical
- High Intensity
  - Bike Intervals
  - Treadmill Run/Intervals
  - Run
  - Sprint
  - Rower
  - “Circuit Training”

**\*Consideration is work/rest ratio**



# Treadmill Incline Example

<u>Time</u>	<u>Speed</u>	<u>Incline/Grade</u>
1	3.0 - 3.5	0
1	3.0 - 3.5	1
1	3.0 - 3.5	2
1	3.0 - 3.5	3
1	3.0 - 3.5	4
1	3.0 - 3.5	5
1	3.0 - 3.5	6
1	3.0 - 3.5	7
1	3.0 - 3.5	8
1	3.0 - 3.5	9
1	3.0 - 3.5	10
1	3.0 - 3.5	11
1	3.0 - 3.5	12
1	3.0 - 3.5	13
1	3.0 - 3.5	14
1	3.0 - 3.5	15
1	3.0 - 3.5	14
1	3.0 - 3.5	13
1	3.0 - 3.5	12
1	3.0 - 3.5	11
1	3.0 - 3.5	10
1	3.0 - 3.5	9
1	3.0 - 3.5	8
1	3.0 - 3.5	7
1	3.0 - 3.5	6
1	3.0 - 3.5	5
1	3.0 - 3.5	4
1	3.0 - 3.5	3
1	3.0 - 3.5	2
1	3.0 - 3.5	1
1	3.0 - 3.5	0



# Running/Sprinting Examples

- 20's/40's/60's
  - Sprint/Walk
  - Sprint/Jog/Walk
  - Sprint/Walk/Jog
- Baseball Poles (≈200 yds)
  - <:35 sec sprint / 1 min rest
- 300 yd Shuttles (3 reps max)
  - <:70 sec / 2 min rest

# Strength Examples

- Lower Body Circuits

<u>Exercise</u>	<u>Reps</u>
BW Squat	20
Forward Lunge	10 each
Step-up	10 each
Wall-Sit	1 min

<u>Exercise</u>	<u>Reps</u>
Single Leg Squat-to-bench	10 each
Lateral Lunge	10 each
Split Squat	10 each
Lunge Hold	:20-40 sec

- Upper Body Circuit

<u>Exercise</u>	<u>Reps</u>
Push-up	10
	10
Alternating V-up	each
Bird	10
dog/Quadruped	each
Inverted Rows	10



# Be Prepared

- Don't wait to begin reconditioning
- Communicate with your staff
- Create a catalog of conditioning/strength protocols/programs
- Implement appropriate exercises for the phase
- Be creative

# Questions?