Description:
“Tactical Athletes” experience a high frequency of injuries resulting from intensive occupational demands, which are uniquely different from the demands of traditional athletes. Rehabilitation professionals working with Firefighters, Law Enforcement, or Military personnel must recognize the physical demands Tactical Athletes encounter on a daily basis and appreciate the similarities and differences in treatment and training approaches. Emphasis will be placed on understanding the need to prepare these athletes to excel at physically demanding tasks in challenging environments. This symposium will examine the incidence and prevalence of common injuries in tactical athletes; the clinical presentation and differential diagnosis of these conditions; and the occupation/sport specific rehabilitation concerns.

Symposium Objectives:
1. Describe the incidence and prevalence of injuries in tactical athlete populations.
2. Understand the physical demands of tactical athletes.
3. Discuss common injuries in tactical athletes.
4. Understand the variables involved with constructing evidence-based, occupation & sport-specific rehabilitation programs for tactical athletes.
5. Understand the importance of facilitating relationships between therapists and strength & conditioning professionals.

***The opinions or assertions contained in this presentation are the private opinions of the speaker(s) and are not to be construed as official or as reflecting the views of the the Department of Defense, United States Army, or United States Army Medical Command.

Who is the Tactical Athlete?
MAJ Richard Westrick, PT, DPT, DSc, OCS, SCS
Deputy Chief, Military Performance Division
U.S. Army Research Institute of Environmental Medicine
Natick, MA

I. Traditional athletes vs. “Tactical Athletes”
  • Definitions
  • Overview of Military Tactical Athletes
    o Special Operations, Army, Navy, Air Force, Marines, Coast Guard
I. Objectives
1. Describe the impact of musculoskeletal injuries on military tactical athletes.
2. Review common upper and lower extremity injuries in military tactical athletes.
3. Introduce the unique physical demands required of military tactical athletes.
4. Understand sport-specific rehabilitation concerns for military tactical athletes.

II. Background
- Who is the Military Tactical Athlete?
  - Special Operations, Army, Navy, Air Force, Marines, Coast Guard
  - Active duty, Reserve, National Guard
- Musculoskeletal injury incidence
- Financial burden & lost duty time
  - Impact on public safety & military readiness
- Causes
  - unit training (running, lifting)
  - sports, & recreational activities
  - occupational demands

III. Injury Details

i. Occupations
- Demand specific analysis
  - Special Operations
  - Army, Navy, Air Force, Marines, Coast Guard

ii. Injury Types
- Overuse
- Sprains
• Strains
• Bone trauma

iii. When & Why injuries occur

• Training
  o Initial Training (“basic training”)
  o Specialty Training (Ranger, SF, SEAL, Airborne, etc)
  o Military Training (regular unit training / physical training)

• Occupation demands
  o Variations by occupational specialty
  o Physical training
  o Running

• Deployment vs. home/garrison
• Sports & recreation
• Injury reporting challenges

IV. Treatment & Prevention for Military Tactical Athletes

• Injury Risk
  o Screening, Assessing, Testing
  o Movement Patterns / Faulty movement patterns
    ▪ Mobility, strength, stability
  o Insufficient skill

• Occupation/“Sport-specific” rehabilitation focus
  o Infantry, Armor, Support, etc

• “Finishing Rehab”
  o Restoring function and returning to pre-injury level of capability is likely not enough for prevention of subsequent injury (Wilk JOSPT 14)

• Determining “Return to Duty”
  o Understanding physical demands
  o Running
    o Combatives, hand-to-hand/MMA

• Sports & Recreation
• Strength & conditioning

Physical Therapists Working with Firefighter & Rescue Tactical Athletes
Jacob Morrow, PT, DPT, OCS
Firefighter (& Army Reserve Physical Therapist)
Beverly Hills Fire Department
Beverly Hills, CA

I. Objectives
1. Describe the impact of musculoskeletal injuries on the effectiveness of firefighter tactical athletes.
2. Review common upper and lower extremity injuries in firefighter tactical athletes.
3. Introduce the unique physical demands required of firefighter tactical athletes.
4. Understand sport-specific rehabilitation concerns for firefighter tactical athletes.

II. Background

- Who is the Firefighter Tactical Athlete?
  - Fire
  - Rescue
- Musculoskeletal injury incidence
- Financial burden & lost duty time
  - Impact on public safety
- Causes
  - Physical training (running, lifting)
  - Sports & recreational activities
  - Occupational demands

III. Injury Details

i. Occupations

- Demand specific analysis
  - Fire
  - Rescue

ii. Injury Types

- Overuse
- Sprains
- Strains
- Bone trauma

iii. When & Why injuries occur

- Training
  - Initial Training (“fire academy”)
  - Specialty Training
  - Regular / proficiency training
- Occupation demands
  - Variations by occupational specialty
  - Physical training
  - Running
- Sports & Recreation
- Movement Patterns / Faulty movement patterns
  - Mobility, strength, stability
  - Insufficient skill
IV. Treatment & Prevention for Firefighter & Rescue Tactical Athletes

- Injury risk?
  - Screening, Assessing, Testing
- Occupation/“Sport-specific” rehabilitation focus
- “Finishing Rehab”
- “Return to Duty”
  - Understanding physical demands
- Sports & Recreation
- Strength & conditioning

**Law Enforcement Tactical Athletes**
Kyle Sela, PT, DPT, OCS, SCS, CSCS
Sports Medicine Program Coordinator
St. Luke’s Health System
Boise, ID

I. Objectives
1. Describe the impact of musculoskeletal injuries on the effectiveness of incidence and prevalence of injuries in law enforcement tactical athletes.
2. Review common upper and lower extremity injuries in law enforcement tactical athletes.
3. Introduce the unique physical demands required of law enforcement tactical athletes.
4. Understand sport-specific rehabilitation concerns for law enforcement tactical athletes.

II. Background
- Who is the Law Enforcement Tactical Athlete?
  - SWAT, police, local/state/federal agencies
- Musculoskeletal injury incidence
- Financial burden & lost duty time
  - Impact on public safety
- Causes
  - Physical training (running, lifting)
  - Sports, & recreational activities
  - Occupational demands

III. Injury Details

  i. Occupations
    - Demand specific analysis
      - Police, SWAT, local/state/federal agencies
ii. Injury Types
- Overuse
- Sprains
- Strains
- Bone trauma

iii. When & Why injuries occur
- Initial Training (“police academy”)
- Specialty Training
- Regular / proficiency training
- Occupation demands
  - Variations by occupational specialty
  - Physical training
  - Running
- Sports & Recreation
- Movement Patterns / Faulty movement patterns
  - Mobility, strength, stability
  - Insufficient skill

IV. Treatment & Prevention for Law Enforcement Tactical Athletes
- Injury risk?
  - Screening, Assessing, Testing
- Occupation/“Sport-specific” rehabilitation focus
- “Finishing Rehab”
- “Return to Duty”
  - Understanding physical demands
- Sports & Recreation
- Strength & conditioning

Collaborating with Strength & Conditioning Coaches for Tactical Athletes
Tyler Christiansen, CSCS*D, USAW, RSCC
Director, Tactical Strength & Conditioning Program (TSAC)
National Strengthening & Conditioning Association
Colorado Springs, CO

I. Objectives
1. Describe the role of strength coaches for tactical athletes.
2. Review tactical athlete programs for military, law enforcement, and firefighter tactical athletes.
3. Introduce the unique physical demands required of law enforcement tactical athletes.

II. Background
- The role of strength coaches working with tactical athletes
PTs working with Firefighters, Law Enforcement, and Military

- Military
- Firefighter
- SWAT, police, local/state/federal agencies
- Tactical athlete strength & conditioning programs / examples

III. Training Techniques
- Training reflecting physical demands
  - Implications for Training
  - Current training challenges
- Training differences
  - Military
  - Law enforcement
  - Firefighters

IV. The Strength Coach & Physical Therapist relationship
- Strength and conditioning <> rehabilitation <> strength and conditioning
  - Military
  - Firefighter
  - SWAT, police, local/state/federal agencies
- Facilitating the relationship at your location

References:
