

Running injuries and the role of the Coach

Why injuries occur

- Running generates loading on body characterised by impact and rapid stretch
- This causes
 - bone break down
 - reaction in connective tissue
 - fatigue in muscle
- Body responds with
 - bone growth to a stronger capacity
 - connective tissue improves in elastic quality
 - muscle fibres become more efficient, optimise (depending on stimulus)
- Injury occurs when the body's rate of tissue recovery is unable to keep up with the rate of tissue damage or irritation, due to
 - inadequate recovery time
 - inadequate recovery materials
 - inadequate body response to load
 - significant amounts of damage or irritation

Risk factors

- Body type - low muscle %
- No history of running sports
- Poor quality nutrition
- Transition phase of development



Early warning signs

- Running technique changes over course of run
- Performance reduction
- Asymmetrical arm swing or stride length
- One sided fatigue or tightness
- Consistent overload of one muscle group
- Sharp pain
- Lingerin pain > next morning

Injury risk mitigation

- Post-run question: individually ask "where are you feeling that run?"
 - Looking for one sided feeling, one muscle group or joint focused symptoms
 - Don't ask "are you sore?": pride may affect response, particularly in group setting
- Observe running technique throughout run
- Warm up drills to monitor movement patterns
- Post-run drills to monitor soreness
- Recovery advice regarding nutrition, hydration
- Pre-run questioning "Any injuries or niggles to report?"
 - Adjust training: eg. Use stair reps for injuries that are symptomatic on stretch
 - Don't omit from training: this will affect decision to report injury (eg. don't want to miss out or easy way out)



Warm up drills & sequence

Purpose

- blood flow redirects to active muscle
- connective tissue function improves with more bounce and ability to store energy

Example

1. Easy jog and chat
2. Walking lunge - smooth, brisk pace for connective tissue
3. Toe touches - hip range, leg stabilisers
4. Bunny hops - ankle and knee tendons
5. Faster jog
6. Start session within 3 minutes (if greater than 5 minutes, add another fast jog before starting)