



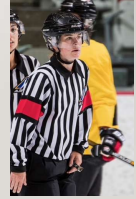
## INJURY PREVENTION

ERICA HOLMES, PHYSIOTHERAPIST

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## LITTLE ABOUT ME

- Athletic background – Fastball, Hockey, Basketball, Hockey Official, Track, Triathlon, etc.
- 5 years CIS hockey with University of Manitoba Bisons
- Started officiating hockey as a flexible part time job, but have travelled across Canada & Internationally
- Physiotherapist with a special interest in active populations and a personal training background
- Spent the last 10 months rehabbing from hip surgery
- Passionate about top quality, patient centered and preventative care



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## WHAT TO EXPECT

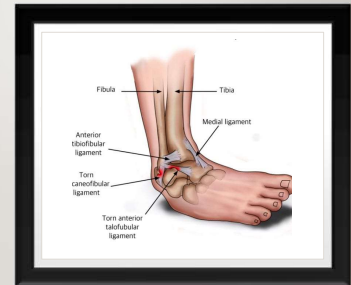
- Why and how injuries occur
- Healing process
- How to manage an injury should it occur
- Prevention
  - Warm-up structure
  - Exercise recommendations
- How to advocate for yourself



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## WHY DO INJURIES OCCUR

- Insufficient strength/stability (muscles, tendons, ligaments)
  - Poor mechanics
- Insufficient endurance – compensation
- Structural abnormalities – leg length differential
- Overuse – repeated microscopic injuries to a part of the body – insufficient recovery
- Improper equipment/footwear
- Trauma
- Unsafe exercising environments



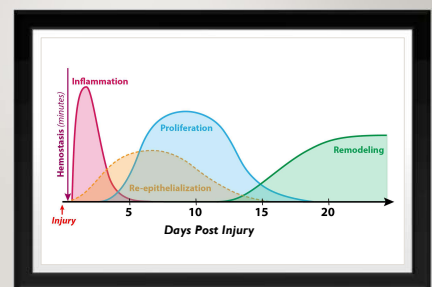
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## INJURIES HAPPEN

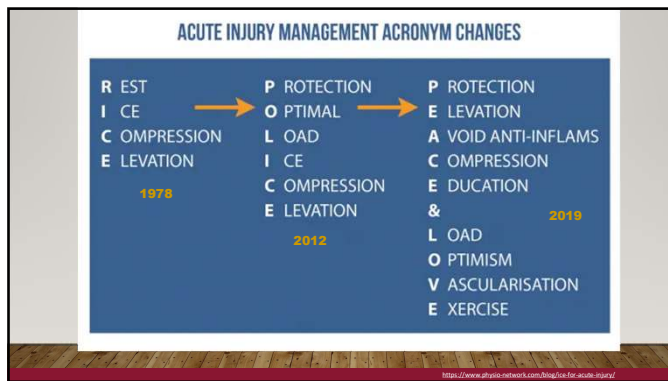
WHEN YOU ARE ACTIVE IT IS HIGHLY LIKELY THAT YOU WILL EXPERIENCE AN INJURY AT SOME POINT IN YOUR CAREER

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## HEALING PROCESS



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### MOLEHILLS TO MOUNTAINS

- Addressing an injury by "nipping it in the bud" vs. pushing through and letting it become chronic
- Not only missing a weekend or two, but could be a season sidelining injury
- Moral – Listen to your body & take care of those "nags" & "snags"

Achilles tendinopathy vs. Tear	2-4 weeks	14-18 weeks
Knee tendinopathy Vs. Meniscus tear	2-3 weeks	6-9 months +
Ankle Sprain vs. Stress #	2 weeks	12-16 weeks

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# PREVENTION

PROACTIVE VS. REACTIVE

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### COMPONENTS OF PHYSICAL CONDITIONING

- STRENGTH**
  - Must have sufficient strength to move and stabilize joints
  - Muscle's ability to accel, decel, produce power and force
- BALANCE**
  - You have balance receptors (proprioceptors) in your joints
  - Any injury – acute or chronic – affects these receptors their ability to react and interpret the information from the environment which affects your movement
- FLEXIBILITY**
  - Are your muscles "tight" or shortened?
  - If so they will pull on your joints and can change the angle at which you perform movement
- ENDURANCE**
  - Do your muscles have the endurance to last the length of your activity
  - When they fatigue they start to compensate

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### WARM-UP

- Why?
- Components of a good warmup
  - Increase HR
  - Lengthen tissues – dynamic vs. static
  - Fast feet/overspeed
  - Power/explosive/reactionary
- Examples

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### FUNCTIONAL EXERCISE #1

@DAVIDGREYREHAB  
<https://www.youtube.com/watch?v=Q-QiF6XON4>

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## GENERAL ADVICE

- As a health professional my goal is to return your movement safely as soon as it is practical and to educate
- One off Gems
- Don't Dr. Google
- Advocate for yourself – factory physio vs. quality care, imaging
- Ask for a second opinion
- Get a Sports Med Referral
  - Major cities usually have a self referral service to see sports med sooner vs. later

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## KEY TAKE AWAYS

- Be proactive vs. reactive
- Listen to your body
- Take care of your nags and snags
- Functional exercise is the best bang for your buck
- If you take umpiring seriously make sure to train for it as you are an athlete

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## PICTURE REFERENCES

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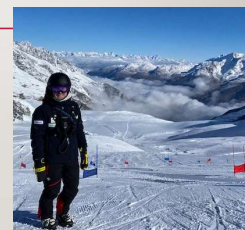
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