

# RUNNING INJURY PREVENTION

## *Some Facts About Running Injuries*

- i. ~ 80% of running injuries are due to **how** you are training
  - Meaning, you can significantly decrease your risk by changing your habits
- ii. Your **cadence**, **foot-strike pattern**, and **form** can all decrease your risk of injury
- iii. The **shoe** you wear may be putting you at risk

**For 10km, ½ marathon, and full-marathon running programs, in addition to interval-training programs visit the link below:**  
<http://www.therunningclinic.ca/en/runners-information/tools-for-runners.php>

### **How can I safely progress my distance?**

- Week-to-week, don't increase your total distance by more than ~10%
- On the longest run of your week, do not exceed the longest run of the previous week by over 10-15min.
- After 3 weeks of rest, your tissues (muscles, bone, fascia) will have weakened and won't be as strong as they once were, so:
  - o Start at 50% of your previous weekly routine and build up from there
  - o To help maintain the strength of your tissues when taking a break, try to perform at least two days per week of some form of jumping activity
    - E.g. ABC's\*\*, or skipping rope, or step-class

### **How frequently should I be running?**

- o Try to run at least 3 days per week, and start with combining minutes of walking with running to reduce the impact and incidence of injury.
- o When you have a high-volume week, add volume by doing physiological cross training to lessen the mechanical load.
- o If you're taking a break from running you must maintain ¼ of your running volume per week to keep your tissues strong.

### **Cadence:**

- Run with a cadence of 165-180 steps per minute (just count your steps!)
  - o Decreases your risk of injury and improves your running efficiency

### **Foot-Strike Pattern:**

- Land with a mid-foot or fore-foot strike
  - o Heel-strikers have an overall 2.7x greater frequency of moderate & severe injuries than for forefoot-strikers

### **Form Essentials**

- o Keep your body upright
- o Land with your foot closer to your body so as not to 'brake' yourself
- o Land with a slight knee bend
- o Minimize how high your body travels up & down (vertical displacement)

## ***The Skinny on Running Shoes***

### ***Changing Shoes***

- When changing your shoe, do it over a period of 3-4 weeks by alternating between your old shoes and your new shoes.
- When transitioning from a cushioned shoe to a minimalist shoe, don't exceed 10% of your total volume per week in the minimalist shoe to allow your body time to accommodate.

### ***Type of Support***

- Shoes are classified by support into 'neutral', 'stability', and 'motion-control'
- Neutral vs. stability shoes
  - o Regardless of what foot-type you have, studies have shown that there is ***no difference*** in the injury rate between these two types of support.

### ***What is a good fit?***

- To minimize injury risk, it is best to choose a shoe that is similar to the one you previously ran in, as this is the style that your body is most familiar with.
- Choose a shoe that fits your foot well
  - o Select a shoe that is wide enough to allow your foot to splay
  - o Leave 1-2cm in length from your longest toe
  - o Select a shoe that does not push your big-toe inwards (hallux valgus)

For an expert retailer of running shoes nearby, visit ***Fit First*** at Fortius Sport and Health!



***For any further questions, concerns, or resources just call us at Royal City Physio!***

