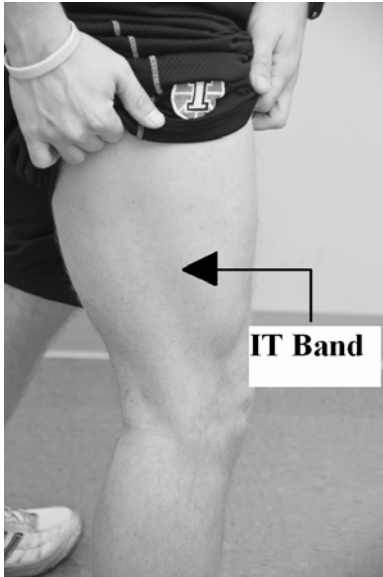




## Iliotibial Band Overuse Injuries

Runners frequently experience pain on the outside of their knee(s), which could simply be caused by overuse or improper running methods. Iliotibial band syndrome (ITBS) is the most common cause of outside knee pain, which results from friction between the IT band and the upper leg bone as the knee is repetitively bent and straightened.



### Symptoms

Sharp or burning pains gradually increase during activity over time, and may seem to improve with rest. Oftentimes, the pain returns once you begin activity again. As pain worsens, sitting for a long period of time, walking, and using stairs may even become bothersome. There are several training factors that could help prevent the onset of ITBS, and if you are experiencing knee pain, it is important to take control of the issue and begin treatment.

### Training recommendations

For prevention of ITBS, you may want to try the following tips:

- Use adequate, **comfortable footwear** with appropriate shock absorption.
- Properly **stretch** leg muscles prior to running, or after warming up.
- **Avoid** running on banked roads (incline/decline running).
- If you choose to run on a track, **change direction** regularly.
- **Gradually increase** the intensity, duration and pace of workouts.
- Incorporate **cross-training** workouts regularly, such as swimming or biking.

It has also been shown that runners with ITBS may lack flexibility and/or may have muscle weakness on the outside of the hip and thigh. These factors put additional strain on the IT band during activity. With proper stretching and strengthening of the hip muscles, an impressive number of patients are able to bounce back from this injury within six weeks.

### Treatment/rehab recommendations

To reduce pain, you may want to try the following tips:

- **Rest or modify** painful activities (incorporate cross-training methods). **Important:** cycling may increase painful symptoms, but you may want to try using the elliptical or swimming.
- **Ice** 2-3 times/day and after activities with ice bag (20 minutes) or ice massage (5 minutes).
- Anti-inflammatories such as **Aspirin or Ibuprofen** to reduce pain and/or inflammation (follow product guidelines).
- **Stretch** in the morning and prior to activity:



### Standing Wall Stretch

Stand with involved side facing the wall, and cross involved leg behind the other. Lean away from wall until a stretch in the involved hip is felt.



### Foam Roller Stretch

Lie on involved side with hip on top of foam roll. Prop yourself up onto elbow and use it to pull yourself as you roll thigh up and down over foam roll.

- **Strengthen** your hip/thigh muscles



### Side-lying Leg Raise

Lie on uninvolved side with bottom knee in a bent position. Slowly raise the involved leg upward while keeping the knee straight. Slowly lower leg and repeat. Perform 3 sets of 10 repetitions.



### Single Leg Balance

With arms at your sides, stand on one leg for 20 seconds. Repeat with other leg.

## References

"Iliotibial Band Syndrome in Runners: Innovations in Treatment," Sports Med; 2005; Vol. 35 (5); p451-459.

"ASB Clinical Biomechanics Award Winner 2006: Prospective Study of the Biomechanical Factors Associated with Iliotibial Band Syndrome," Epub; Nov, 2007; Vol. 22 (9), p951-956.

"Understanding Running Injuries," IDEA Fitness Journal; Feb, 2007; p103.

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>