

# ILIOTIBIAL BAND SYNDROME

## What is iliotibial band syndrome?

Iliotibial band syndrome is inflammation and pain on the outer side of the knee. The iliotibial band is a layer of connective tissue. It begins at a muscle near the outer side of your hip, travels down the outer side of your thigh, crosses the outer side of the knee, and attaches to the outer side of your upper shin bone (tibia).

## How does it occur?

Iliotibial band syndrome occurs when this band repeatedly rubs over the bump of the thigh bone (femur) near the knee, causing the band to be irritated. This most often occurs in running.

This condition can result from:

- having a tight iliotibial band
- having tight muscles in your hip, pelvis, or leg
- your legs not being the same length
- running on sloped surfaces
- running in shoes with a lot of wear on the outside of the heel

## What are the symptoms?

The symptom is pain on the outer side of the knee.

## How is it diagnosed?

Your healthcare provider will examine your knee and find tenderness where the band passes over the bump on the outer side of your knee. Your iliotibial band may be tight.

## How is it treated?

Treatment includes the following:

- Place an ice pack over your iliotibial band for 20 to 30 minutes every 3 or 4 hours for 2 to 3 days or until the pain goes away.
- You can also do ice massage. Massage your knee with ice by freezing water in a Styrofoam cup. Peel the top of the cup away to expose the ice and hold onto the bottom of the cup while you rub ice over your knee for 5 to 10 minutes.
- Take an anti-inflammatory medicine, according to your healthcare provider's prescription (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)

- Do the stretching and strengthening exercises recommended by your healthcare provider or physical therapist.

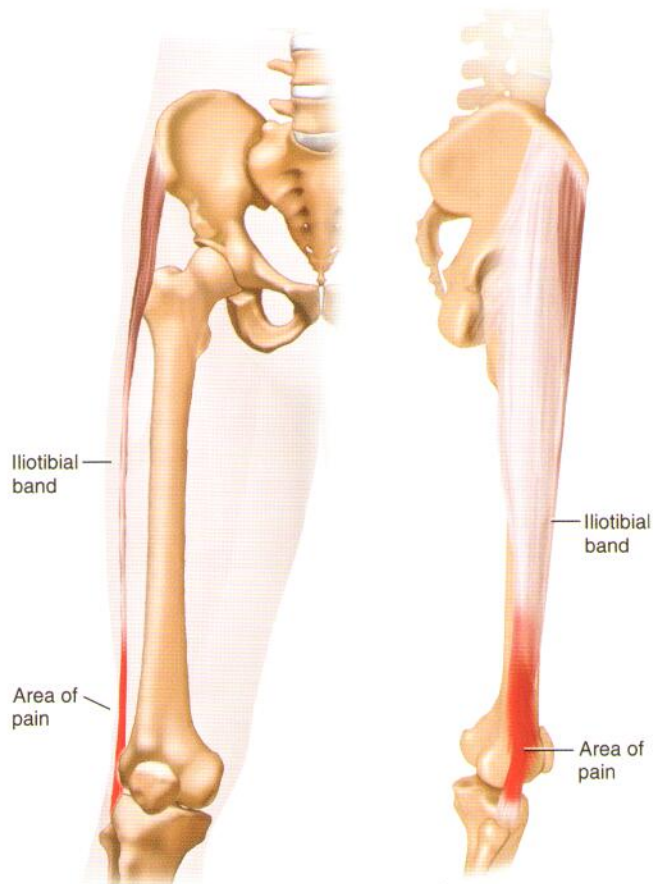
Your provider may give you an injection of a corticosteroid medicine to reduce the inflammation and pain.

While your knee is healing, you will need to change your sport or activity to one that does not make your condition worse. For example, you may need to bicycle instead of run.

## How long will the effects last?

The length of recovery depends on many factors such as your age, health, and if you have had a previous injury. Recovery time also depends on the severity of the injury. A mild injury may recover within a few weeks, whereas a severe injury may take 6 weeks or longer to recover. You need to stop doing the activities that cause pain until your iliotibial band has healed. If you continue doing activities that cause pain, your symptoms will return and it will take longer to recover.

## ILIOTIBIAL BAND SYNDROME



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## When can I return to my normal activities?

Everyone recovers from an injury at a different rate. Return to your activities will be determined by how soon your knee recovers, not by how many days or weeks it has been since your injury has occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better. The goal of rehabilitation is to return you to your normal activities as soon as is safely possible. If you return too soon you may worsen your injury.

You may safely return to your normal activities when, starting from the top of the list and progressing to the end, each of the following is true:

- your injured knee can be fully straightened and bent without pain
- your knee and leg have regained normal strength compared to the uninjured knee and leg
- you are able to walk or jog straight ahead without limping

## How can I prevent iliotibial band syndrome?

Iliotibial band syndrome is best prevented by warming up properly and doing stretching exercises before sports or other physical activity.

# ILIOTIBIAL BAND SYNDROME REHABILITATION EXERCISES

You may do all of these exercises right away.

### 1. ILIOTIBIAL BAND STRETCH: STANDING:

Cross one leg in front of the other leg and bend down and touch your toes. You can move your hands across the floor toward the front leg and you will feel more stretch on the outside of your thigh on the other side. Hold this position for 15 to 30 seconds. Return to the starting position. Repeat 3 times. Reverse the positions of your legs and repeat.



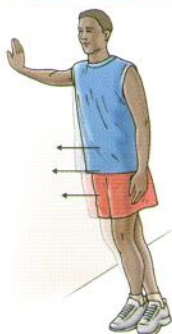
ILIOTIBIAL BAND STRETCH: STANDING

**3. STANDING CALF STRETCH:** Facing a wall, put your hands against the wall at about eye level. Keep one leg back with the heel on the floor, and the other leg forward. Turn your back foot slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 15 to 30 seconds. Repeat 3 times and then switch the position of your legs and repeat the exercise 3 times. Do this exercise several times each day.



STANDING CALF STRETCH

**2. ILIOTIBIAL BAND STRETCH: SIDE-LEANING:** Stand sideways near a wall. Place one hand on the wall for support. Cross the leg farthest from the wall over the other leg, keeping the foot closest to the wall flat on the floor. Lean your hips into the wall. Hold the stretch for 15 seconds, repeat 3 times, and then switch legs and repeat the exercise another 3 times.



ILIOTIBIAL BAND STRETCH: SIDE-LEANING

**4. HAMSTRING STRETCH ON WALL:** Lie on your back with your buttocks close to a doorway, and extend your legs straight out in front of you along the floor. Raise one leg and rest it against the wall next to the door frame. Your other leg should extend through the doorway. You should feel a stretch in the back of your thigh. Hold this position for 15 to 30 seconds. Repeat 3 times and then switch legs and do the exercise again.



HAMSTRING STRETCH ON WALL



QUADRICEPS STRETCH

**5. QUADRICEPS STRETCH:** Stand an arm's length away from the wall with your injured leg farthest from the wall. Facing straight ahead, brace yourself by keeping one hand against the wall. With your other hand, grasp the ankle of your injured leg and pull your heel toward your buttocks. Don't arch or twist your back. Keep your knees together. Hold this stretch for 15 to 30 seconds.

**6. WALL SQUAT WITH A BALL:** Stand with your back, shoulders, and head against a wall and look straight ahead. Keep your shoulders relaxed and your feet 2 feet away from the wall and a shoulder's width apart. Place a soccer or basketball-sized ball behind your back. Keeping your back upright, slowly squat down to a 45-degree angle. Your thighs will not yet be parallel to the floor. Hold this position for 10 seconds and then slowly slide back up the wall. Repeat 10 times. Build up to 3 sets of 10.



WALL SQUAT WITH A BALL

**7. SIDE-LYING LEG LIFT:** Lying on your uninjured side, tighten the front thigh muscles on your top leg and lift that leg 8 to 10 inches away from the other leg. Keep the leg straight and lower slowly. Do 3 sets of 10.



SIDE-LYING LEG LIFT

**8. KNEE STABILIZATION:** Wrap a piece of elastic tubing around the ankle of the uninjured leg. Tie a knot in the other end of the tubing and close it in a door.

A. Stand facing the door on the leg without tubing and bend your knee slightly, keeping your thigh muscles tight. While maintaining this position, move the leg with the tubing straight back behind you. Do 3 sets of 10.



KNEE STABILIZATION



B. Turn 90° so the leg without tubing is closest to the door. Move the leg with tubing away from your body. Do 3 sets of 10.

C. Turn 90° again so your back is to the door. Move the leg with tubing straight out in front of you. Do 3 sets of 10.



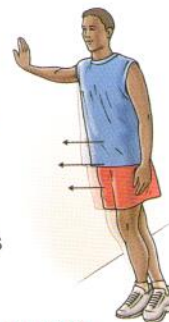
KNEE STABILIZATION



D. Turn your body 90° again so the leg with tubing is closest to the door. Move the leg with tubing across your body. Do 3 sets of 10.

Hold onto a chair if you need help balancing. This exercise can be made even more challenging by standing on a pillow while you move the leg with tubing.

**9. ILIOTIBIAL BAND STRETCH: SIDE-BENDING:** Cross one leg in front of the other leg and lean in the opposite direction from the front leg. Reach the arm on the side of the back leg over your head while you do this. Hold this position for 15 to 30 seconds. Return to the starting position. Repeat 3 times and then switch legs and repeat the exercise.



ILIOTIBIAL BAND STRETCH: SIDE-BENDING

**10. CLAM EXERCISE:** Lie on your uninjured side with your hips and knees bent and feet together. Slowly raise your top leg toward the ceiling while keeping your heels touching each other. Hold for 2 seconds and lower slowly. Do 3 sets of 10 repetitions.



CLAM EXERCISE

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