



An anterior cruciate ligament (ACL) injury is a tear in the ACL ligament. The ACL is located in the middle of the knee

joint. It connects the lower leg bone to the thigh bone. It stabilizes the knee and prevents the lower leg bone from sliding too far forward at the knee.





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### Causes

ACL injury occurs when your knee gets twisted or during a hard landing from a jump. It can also happen with:

- Sudden stops or changes in direction
- Sidestepping or pivoting
- Direct contact

# Risk Factors

ACL injuries are more common in women. Other factors that increase your chance of ACL injury include:

- Weak knee structure
- Muscle strength imbalance between the quadriceps and hamstrings
- Playing sports that require sudden changes of direction and deceleration
- Use of incorrect technique for cutting, planting, pivoting, or jumping
- Previous injury or reconstructive ACL surgery

## Symptoms

Symptoms may include:

- A popping sound at the time of the injury
- Pain and swelling in the knee
- Loss of full range of motion
- Weakness or instability in the knee
- Difficulty walking



# Knee Conditions: ACL TEAR

## Diagnosis

You will be asked about your symptoms and how you injured the knee. A physical exam will be done. Your knee will need to be viewed. This can be done with:

- X-ray
- MRI scan
- Arthroscopy

Ligament sprains are graded according to their severity:

- Grade 1-Mild ligament damage
- Grade 2-Partial tearing of the ligament
- Grade 3-Complete tearing of the ligament

## Treatment

Talk with your doctor about the best treatment plan for you. Recovery time ranges depending on the grade of the injury. Physical Therapy treatment may include:

- Exercises to help promote recovery. Specifically, therapists will design a program to strengthen the whole leg as well improve its range of motion.
- Balance exercises to allow you to return to your daily activities (including work and sports) while decreasing your risk of falling and reinjuring yourself
- · Hands-on treatment to keep your knee joint from becoming stiff
- Ice and vasopneumatic pressure to reduce any swelling and pain

### Prevention

To reduce your chance of injuring the ACL, take these steps:

- Plyometrics, a form of jumping exercises, can be used to train and strengthen the leg muscles for jumping and landing.
- When jumping and landing or turning and pivoting, your hips and knees should be bent, not straight.
- Strengthen both the quadriceps and the hamstrings.
- Maintain proper technique when exercising or playing sports.

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