



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.™*

## **Helping Hand™**

*Health Education for Patients and Families*

# **Sports Medicine: Anterior Cruciate Ligament (ACL) Tear**

An anterior cruciate ligament (ACL) tear is a sprain of one of the four major ligaments of the knee. The ACL is a rope-like structure that helps maintain the normal position of the femur (thigh bone) and the tibia (leg bone). This ligament is most important in sports that require pivoting, changing direction (cutting) or jumping and landing. When torn, this ligament does not heal, although it may attach by scar tissue to other structures of the knee.

### **Signs and symptoms**

- pop or tear heard or felt at the time of injury
- large knee swelling within a few hours of injury
- unable to fully bend or straighten knee
- unable to continue playing after injury
- knee giving way or buckling, mostly when trying to pivot, cut (have a quick change of direction) or jump

### **Increased risk**

- sports that require pivoting, jumping, cutting or changing direction quickly (basketball, soccer, volleyball) or contact sports (football, rugby)
- poor physical conditioning (strength and flexibility)
- females
- improper equipment

### **Treatment**

- Medicine

- Anti-inflammatory medicines, such as ibuprofen (Motrin® or Advil®) or naproxen (Aleve®) may be recommended. Take these as directed by your health care provider.
- Other minor pain relievers, such as acetaminophen (Tylenol®), may be used.
- Use cold and heat
  - Cold should be applied for 10 to 15 minutes every 2 to 3 hours and after any activity that makes symptoms worse. Use ice packs or an ice massage.
  - Heat should not be used on a new injury but may be used before performing stretching and strengthening activities prescribed by your health care provider athletic trainer. Use a heat pack or a warm soak.
- Orthopedic aids
  - Crutches should be used until you can walk without a limp to protect the knee from further damage.
  - Sometimes your health care provider may recommend a knee brace, especially if there is an injury to additional ligaments other than the ACL.
- Surgery
  - Surgery is usually required for those who want to return to sports that require pivoting, cutting and jumping.

## How to prevent

- Do correct warm-up and stretching before practice or competition.
- Maintain suitable thigh, leg and knee strength, flexibility, endurance and cardiovascular fitness.
- Use proper technique
- Use proper equipment (for example, correct length of cleats for a surface).

## When to call the health care provider

Call your health care provider or the **Sports Medicine team** at **614-355-6000** if:

- symptoms get worse after 6 weeks of treatment
- new, unexplained symptoms develop

**To schedule an appointment with  
Sports Medicine, visit  
[NationwideChildrens.org/SportsMe  
dicineScheduling](https://www.nationwidechildrens.org/SportsMedicineScheduling) or scan this code**

