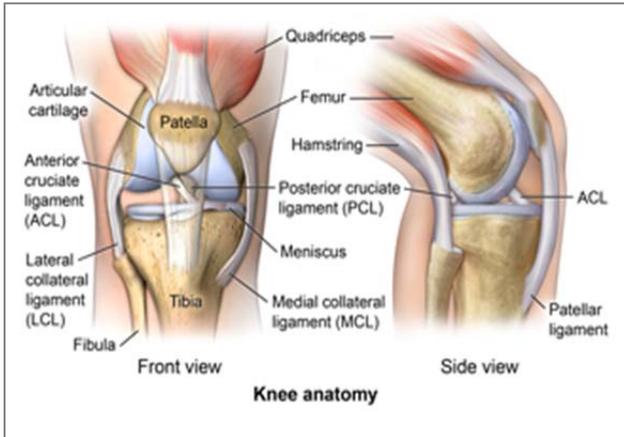


ACL Injury Prevention Guide

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For more information, visit AustinRegionalClinic.com.



What is the ACL?

The **ACL** (**A**nterior **C**ruciate **L**igament) is a strong ligament in the center of the knee that connects the femur and tibia. It keeps the knee stable by preventing excess translation (sliding) and rotation (twisting) between the femur and tibia.

ACL Injuries are Common

ACL rupture is the **most common knee ligament injury requiring surgery**.

- An estimated 100,000 to 250,000 ACL tears occur annually.
- Tears result in pain, swelling, and a sense of instability in the knee.

ACL Injuries in Athletes

ACL injuries occur most often as the result of a non-contact sudden change in direction during sports—with cutting, pivoting, deceleration, or landing from a jump.

Who is at risk?

- **Female athletes playing “at-risk” sports:** soccer, football, basketball, volleyball.
- Tears result in pain, swelling, and a sense of instability in the knee.
- **Female Athletes** are up to 8 times more likely to injure the ACL than their male counterparts.
- **Young Athletes** with ACL tears are most often treated with surgical reconstruction, which requires a **minimum recovery of 6 months before returning to sports**.
- **Best Treatment** is injury prevention!

ACL Injury Prevention

Athletes playing “at-risk” sports should consider a team ACL Prevention Training Program. Injury prevention programs should begin during the off-season or pre-season, and can be incorporated into the warm-up session before sport-specific training. An abbreviated “maintenance” program can be used during in-season practices.

Good ACL injury prevention programs include the following:

- **Warm-up**
- **Strength training** for hamstrings and quadriceps
- **Pylometric training** (jump training) for proper landing mechanics
- **Agility training** for cutting, pivoting, accelerating, and decelerating
- **Stretching** for quadriceps, hamstrings, and hip muscles

The PEP Program (Prevent Injury and Enhance Performance)

- Participation in this program has been found to significantly reduce the risk of ACL injury in young female athletes.
- The **15-20 minute program outline** can be found at: smsmf.org/files/PEP_Program_04122011.pdf
- The guidance of a trained professional is recommended, particularly during initial implementation of the program.