

Sports Medicine: Lateral Collateral Ligament Sprain

The lateral collateral ligament (LCL) is one of the 4 major ligaments of the knee. The LCL helps connect the thigh bone (femur) to the smaller shin bone (fibula) on the outside of the knee. The LCL stops the knee from buckling outward. An injury to the LCL alone is not common and often occurs with knee injuries. Sprains are classified into 3 grades:

- **Grade 1** is when the ligament is stretched but not torn but is painful.
- **Grade 2** is when the ligament is partially torn but still works.
- **Grade 3** is when the ligament is torn and does not work.

Signs and Symptoms

- Pain, tenderness and swelling on the outside of the knee
- A feeling of popping, tearing, or pulling at the time of injury
- Limping or walking with the knee bent
- Feeling like the knee buckles

Increased Risk

- Sports that require pivoting, cutting, or changing direction (soccer, lacrosse)
- Contact sports (football, rugby)
- Poor physical conditioning (strength and flexibility)

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 and **do not** take for the first 3 days after injury.
 - Other minor pain relievers, such as acetaminophen (Tylenol®), may be taken.

- Use of 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 stretching and strengthening activities prescribed by your doctor, health care provider, or athletic trainer. Use a heat pack or warm soak.
- Orthopedic aids
 - An elastic bandage can be used to relieve pain and reduce swelling.
 - Crutches may be used for more severe injuries.
 - A knee brace with a hinge may be prescribed to protect the joint and decrease pain.
- Rehab
 - Rehab with a physical therapist or athletic trainer may be prescribed to improve flexibility, strength, and range of motion.
- Surgery
 - Surgery may be needed for severe injuries or when more knee ligaments are damaged.

How to Prevent

- Do correct warm-up and stretch before practice or competition.
- Wear proper protective equipment (correct length of cleats for surface).
- Maintain proper conditioning, knee and thigh flexibility, muscle strength and endurance, and cardiovascular fitness.

When to Call the Doctor

Call your doctor, health care provider, or the Sports Medicine team at (614) 355-6000 if:

- Symptoms get worse or do not improve in 4 to 6 weeks, despite treatment.
- New, unexplained symptoms develop.

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

