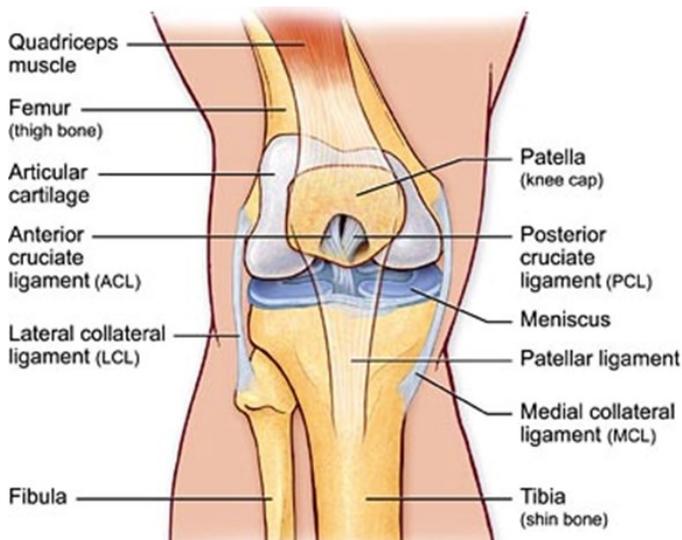


## Knee Injury

Your knee is a complex joint and is the largest joint in the body, making it vulnerable to a variety of injuries. Three bones meet to form your knee joint: femur (thigh), tibia (shinbone) and patella (kneecap.) The ends of these bones are covered with cartilage which is slippery to help your knee bones glide smoothly across each other as you bend or straighten your leg. There are also two wedge-shaped pieces of cartilage (meniscus) that act as "shock absorbers" to help cushion and stabilize the knee. Four main ligaments connect the bones to each other: medial and collateral ligaments on the sides, which control sideways movement and brace knee against unusual movement, and the cruciate ligaments inside your knee joint which control the back and forth motion. Attached to the patella are tendons connecting the thigh muscles and muscles from the skin to the patella.



### TREATING KNEE PAIN

Knee injuries can be acute or chronic in nature. A direct blow or twisting of the knee accounts for most acute injuries.

Chronic Problems arise from overuse of the joint and often involve the surrounding ligaments or tendons.

These problems are likely when pain develops gradually or discomfort is recurrent over a period of time.

Chronic problems are often triggered by prior injuries especially if original injury was not allowed to heal completely. Certain activities, such as contact sports or any repetitive movements involving the knee can increase risk for injury.

### TREATING KNEE PAIN

If you suspect injury, **STOP ACTIVITY**. Apply the **RICE** System:

**R=Rest.** Initially, rest the joint by avoiding activities that use or place weight on the joint.

**I=Ice.** Wrap a sealed ice bag in a towel and apply to the injury as soon as possible. Keep on injury for 20 minutes and repeat ever 2–3 hours for the first 48–72 hours. This will help reduce swelling and pain.

**C=Compression.** Use elastic bandage over the injured joint to reduce swelling. The bandage should provide a snug compressions, but not restrict movement of blood flow. Remove compression bandages at night while sleeping

**E=Elevation.** Elevate injured knee to help reduce swelling by placing leg on a chair, bed, or desk.

Gradually resume normal activities as pain and swelling improve, but only if the movement doesn't cause significant discomfort. Overuse or sprains take time to heal, so be patient about returning to your sport or usual exercise to avoid re-injury.

Make an appointment with a medical provider if you:

- Hear a popping noise and feel your knee "give out" at the time of injury
- Have severe pain and/or are unable to bear weight
- Cannot move the knee
- No improvement after following the initial recommendations under RICE

For further information:

American Association of Orthopaedic Surgeons  
[www.aaos.org](http://www.aaos.org)—Look under "Patient education" top right