

## Knee Injuries

### Common Causes of Knee Pain

**Joint Effusion:** A collection of fluid within the knee joint often occurring after an injury to the knee. It is also sometimes necessary to have the knee drained by a medical provider.

**Patellofemoral pain syndrome:** is a common cause of pain seen by primary care physicians and orthopedic physicians. It involves the area under the knee cap where it slides up and down on the thigh bone. This often results in an aching pain and a rubbing/grinding sound in the front of the knee. It is usually worse with increased knee bending such as squatting and going up and down steps.

**Bursitis:** inflammation of a bursa. The bursa (fluid-filled sacs) are lubricating or protective sacs in the joints. Prepatellar bursas are frequently affected in the knee.

**Ligament injuries:** Multiple ligaments within the knee are susceptible to injuries. Anterior and posterior cruciate ligament (inside the knee joint) injuries typically involve noncontact decelerations, cutting movements or hyperextension and are often accompanied by a “pop”. The collateral ligaments (on the outside of the joint) are usually associated with twisting injuries.

**Meniscus Tears:** The meniscus is a crescent-shaped cartilage cushioning the area at the end of the thigh bone where it meets the lower leg. Twisting the knee with the foot planted is often the cause for injuries to the meniscus.

**Tendonitis:** Inflammation of a tendon may occur in the knee. The iliotibial band runs along the outside of the knee and thigh and the Patellar tendon is just below the knee cap. These are common tendons affected by inflammation, especially in runners.

### Treatment

**Rest:** Avoid kneeling and squatting.

**Ice:** Apply ice twenty minutes at a time, 3 to 4 times a day while symptoms persist. Lay a towel on knee and place ice over painful or swollen area.

**Elevate:** To reduce swelling. Sit or lie down and raise leg above the level of your heart while icing.

**Medication:** Take ibuprofen (generic Advil or Motrin) or naproxen (generic Aleve) as directed on the label to reduce inflammation and pain. Your clinician may prescribe an alternative anti-inflammatory medication.

**Stretching:** After your muscles are warmed-up, hold each stretch as directed. Don't cause pain. Don't bounce.

- **Single Quadriceps Stretch:** Standing with your back straight, pull your foot back until your thigh muscle stretches moderately. Push down and back with your knee. Hold for 30 seconds and relax. Do 3 to 5 repetitions several times daily.
- **Hamstring stretch:** Standing up, prop up injured leg, knee straight. Bend standing leg slightly. Place hands on lower thigh just above the knee. With back straight, bend forward from the hip until you feel a stretch under your thigh. Hold for 20 to 30 seconds. Do 3 to 5 repetitions, several times daily.
- **Iliotibial band stretch:** Lie on your back on the floor. Bend the knee and hip of your injured leg to 90 degrees. Using the opposite hand, gently pull the leg across your body until you feel the stretch. Hold for 20 to 30 seconds. Do 3 to 5 repetitions, several times daily.

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### Additional Tips

- Sports that are easy on the knees include swimming, slow jogging, walking, skating, and cross-country skiing.
- Wear well-cushioned shoes.
- Do not wrap your knee with an elastic bandage unless specifically instructed by your clinician.
- Certain conditions are made worse by pushing the kneecap against the femur. Your clinician may recommend a neoprene brace with a hole cut out for the kneecap.

### When to see a Healthcare Provider

- Unable to put weight on knee or knee “gives out”
- Knee is very swollen or painful
- You have fever with knee pain, swelling and redness
- Your knee pain doesn’t get better or gets worse after you treat it on your own for a few days.

**In an emergency go to Mount Nittany Medical Center or call 911 for an ambulance.**

### Test Results and Advice Nurse

Send secure message to advice nurse via the UHS website or call 814- 863-4463.

### Appointments

Appointments can be made online via the UHS website, by phone 814-863-0774, or in person. If you are unable to keep your appointment, please call or go online to cancel. Otherwise you will be charged for the visit.

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