

## Knee pain

### Alternative Names

Pain - knee

### Causes

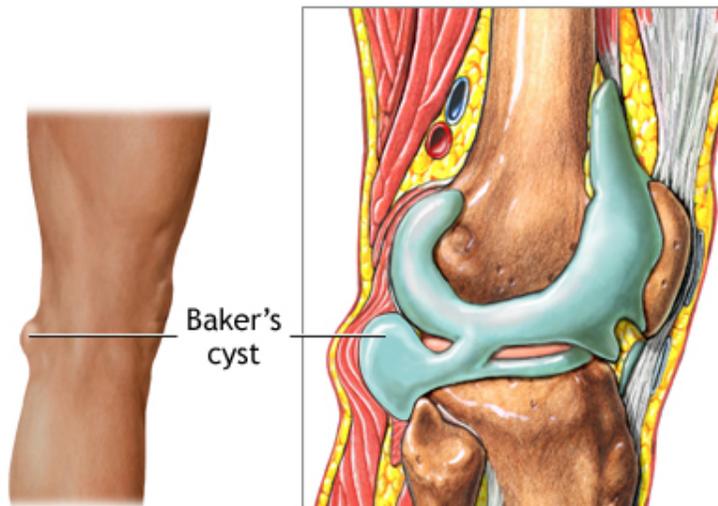
Knee pain usually results from:

- Overuse
- Poor form during physical activity
- Not warming up or cooling down
- Not enough stretching

Simple causes of knee pain often clear up on their own with self care. Being overweight can put you at greater risk for knee problems.

Knee pain can be caused by:

- Anterior knee pain
- Arthritis -- including rheumatoid arthritis, osteoarthritis, and gout
- Baker's cyst -- a fluid-filled swelling behind the knee that may occur with swelling (inflammation) from other causes, like arthritis
- Bursitis -- inflammation from repeated pressure on the knee, such as kneeling for long periods of time, overuse, or injury
- Connective tissue disorders such as lupus
- Dislocation of the kneecap
- Iliotibial band syndrome -- a hip disorder from injury to the thick band that runs from your hip to the outside of your knee
- Infection in the joint
- Knee injuries -- an anterior cruciate ligament injury or medial collateral ligament injury may cause bleeding into your knee, which makes the pain worse
- Osgood-Schlatter disease
- Tendinitis -- a pain in the front of your knee that gets worse when going up and down stairs or inclines
- Torn cartilage (a meniscus tear) -- pain felt on the inside or outside of the knee joint
- Torn ligament (ACL tear) -- leads to pain and instability of the knee
- Strain or sprain -- minor injuries to the ligaments caused by sudden or unnatural twisting



ADAM.

Tendinitis



ADAM.

Less common conditions that can lead to knee pain include bone tumors.

### Home Care

For knee pain that has just started:

- Rest and avoid activities that aggravate your pain, especially weight bearing activities.

- Apply ice. First, apply it every hour for up to 15 minutes. After the first day, apply it at least four times per day.
- Keep your knee raised as much as possible to bring any swelling down.
- Wear an ace bandage or elastic sleeve, which you can buy at most pharmacies. This may reduce swelling and provide support.
- Take acetaminophen for pain or ibuprofen for pain and swelling.
- Sleep with a pillow underneath or between your knees.

For knee pain related to overuse or physical activity:

- Always warm up before exercising and cool down afterward. Stretch your quadriceps and hamstrings.
- Avoid running straight down hills -- walk down instead.
- Bicycle or swim instead of run.
- Reduce the amount of exercise you do.
- Run on a smooth, soft surface, such as a track, instead of on cement.
- Lose weight if you are overweight. Every pound that you are overweight puts about 5 extra pounds of pressure on your kneecap when you go up and down stairs. Ask your health care provider for help losing weight.
- If you have flat feet, try special shoe inserts and arch supports (orthotics).
- Make sure your running shoes are made well, fit well, and have good cushioning.

Tips to relieve knee bursitis pain:

- Use ice three to four times a day for the first 2 or 3 days. Cover your knee with a towel and place ice on it for 15 minutes. Do not fall asleep while using ice. You can leave it on too long and get frostbite.
- Try not to stand for long periods of time. If you must stand, do so on a soft, cushioned surface. Stand with an equal amount of weight on each leg.
- When you sleep, do not lie on the side that has bursitis. Place a pillow between your knees when you lie on your side to help decrease your pain.
- Wear flat shoes that are cushioned and comfortable.
- If you are overweight, losing weight may help.

## When to Contact a Medical Professional

Call your doctor if:

- You cannot bear weight on your knee
- You have severe pain, even when not bearing weight
- Your knee buckles, clicks, or locks
- Your knee is deformed or misshapen
- You have a fever, redness or warmth around the knee, or significant swelling
- You have pain, swelling, numbness, tingling, or bluish discoloration in the calf below the sore knee
- You still have pain after 3 days of home treatment

## What to Expect at Your Office Visit

Your health care provider will perform a physical examination, with careful attention to your knees, hips, legs, and other joints.

To help diagnose the cause of the problem, your health care provider will ask medical history questions, such as:

- When did your knee first begin to hurt?
- Have you had knee pain before? What was the cause?
- How long has this episode of knee pain lasted?
- Do you feel the pain all the time, or off and on?
- Are both knees affected?
- Is the pain in your entire knee or one location, like the kneecap, outer or inner edge, or below the knee?
- Is the pain severe?
- Can you stand or walk?
- Have you had an injury or accident involving the knee?
- Have you overused the leg? Describe your usual activities and exercise routine.
- What home treatments have you tried? Have they helped?
- Do you have other symptoms, such as pain in your hip, pain down your leg or calf, knee swelling, swelling in your calf or leg, or fever?

The following tests may be done:

- Joint fluid culture (fluid taken from the knee and examined under a microscope)
- MRI of the knee if a ligament or meniscus tear is suspected
- X-ray of the knee

Your health care provider may prescribe nonsteroidal anti-inflammatory drugs (NSAIDs) that are stronger than those available over-the-counter. If those don't help, your doctor may inject a steroid into the knee to reduce pain and inflammation.

You may need referrals to a physical therapist (to learn stretching and strengthening exercises) and podiatrist (to be fitted for orthotics).

In some cases, surgery is needed. For example, if arthritis is severe, a joint replacement may be recommended. A minor ligament strain will heal with home care and torn ligaments may recover with use of a knee brace. However, for big tears or ruptures, as well as a torn meniscus, arthroscopic knee surgery is often needed.

Recovery from ligament and meniscus problems is slow. You may need crutches and long-term physical therapy.

## Prevention

- Increase your activity level slowly over time. For example, when you begin exercising again, walk rather than run.
- Always warm up before exercising and cool down afterward. Stretch your quadriceps and hamstrings.
- Replace your sports shoes often. Get good advice about proper footwear for your foot shape and mechanics. For example, if you land on the outside of your heel and turn your foot inward when you walk (pronate), consider anti-pronation footwear.

## References

Frontera WR, Silver JK, eds. *Essentials of Physical Medicine and Rehabilitation*. 2nd ed. Philadelphia, Pa: Saunders Elsevier; 2008:section 7.

Honkamp NJ, Shen W, Okeke N, Ferretti M, Fu FH. Knee: Anterior cruciate ligament injuries in the adult. In: DeLee JC, Drez D Jr, Miller MD, eds. *DeLee and Drez's Orthopaedic Sports Medicine*. 3rd ed. Philadelphia, Pa: Saunders Elsevier; 2009:chap 23, section D.

Huddleston JI, Goodman SB. Hip and knee pain. In: Firestein GS, Budd RC, Harris ED Jr, et al, eds. *Kelley's Textbook of Rheumatology*. 8th ed. Philadelphia, Pa: Saunders Elsevier; 2008:chap 42.

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