



[Request an Appointment](#)
[Find a Doctor](#)
[Find a Job](#)
[Give Now](#)

[Log in to Patient Account](#)

 [English](#) 

[Patient Care & Health Information](#) > [Diseases & Conditions](#)

Knee pain



[Request an Appointment](#)

[Overview](#)

[Symptoms & causes](#)

[Diagnosis & treatment](#)

[Self-management](#)

[More about](#)

Symptoms and causes

By Mayo Clinic Staff

 [Print](#)

Advertisement

Symptoms

The location and severity of knee pain may vary, depending on the cause of the problem. Signs and symptoms that sometimes accompany knee pain include:

- Swelling and stiffness
- Redness and warmth to the touch
- Weakness or instability
- Popping or crunching noises
- Inability to fully straighten the knee

When to see a doctor

Call your doctor if you:

- Can't bear weight on your knee
- Have marked knee swelling
- Are unable to fully extend or flex your knee
- See an obvious deformity in your leg or knee

- Have a fever, in addition to redness, pain and swelling in your knee
- Feel as if your knee is unstable or your knee "gives out"

Causes

Knee pain can be caused by injuries, mechanical problems, types of arthritis and other problems.

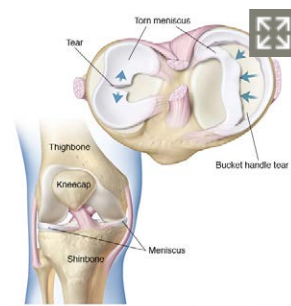
Injuries

A knee injury can affect any of the ligaments, tendons or fluid-filled sacs (bursae) that surround your knee joint as well as the bones, cartilage and ligaments that form the joint itself. Some of the more common knee injuries include:

- **ACL injury.** An ACL injury is the tearing of the anterior cruciate ligament (ACL) — one of four ligaments that connect your shinbone to your thighbone. An ACL injury is particularly common in people who play basketball, soccer or other sports that require sudden changes in direction.
- **Fractures.** The bones of the knee, including the kneecap (patella), can be broken during motor vehicle collisions or falls. People whose bones have been weakened by osteoporosis can sometimes sustain a knee fracture simply by stepping wrong.
- **Torn meniscus.** The meniscus is formed of tough, rubbery cartilage and acts as a shock absorber between your shinbone and thighbone. It can be torn if you suddenly twist your knee while bearing weight on it.
- **Knee bursitis.** Some knee injuries cause inflammation in the bursae, the small sacs of fluid that cushion the outside of your knee joint so that tendons and ligaments glide smoothly over the joint.



ACL injury



Torn meniscus

Mayo Clinic does not endorse companies or products. Advertising revenue supports our not-for-profit mission.

Advertising & Sponsorship

[Policy](#) | [Opportunities](#) | [Ad Choices](#)

Mayo Clinic Store

Check out these best-sellers and special offers on books and newsletters from Mayo Clinic.

[NEW! – The Mayo Clinic Diet, Second Edition](#)

[Healthy Heart for Life!](#)

[Mayo Clinic on Better Hearing and Balance](#)

[Treatment Strategies for Arthritis](#)

[The Mayo Clinic Diet Online](#)

Advertisement

Adult Asthma Symptoms?

Get Info On An Asthma Control Treatment For Adults Here.

www.Asthma-Control-Treatment.com



- **Patellar tendinitis.** Tendinitis is irritation and inflammation of one or more tendons — the thick, fibrous tissues that attach muscles to bones. Runners, skiers, cyclists, and those involved in jumping sports and activities are prone to develop inflammation in the patellar tendon, which connects the quadriceps muscle on the front of the thigh to the shinbone.

Mechanical problems

Some examples of mechanical problems that can cause knee pain include:

- **Loose body.** Sometimes injury or degeneration of bone or cartilage can cause a piece of bone or cartilage to break off and float in the joint space. This may not create any problems unless the loose body interferes with knee joint movement, in which case the effect is something like a pencil caught in a door hinge.
- **Iliotibial band syndrome.** This occurs when the tough band of tissue that extends from the outside of your hip to the outside of your knee (iliotibial band) becomes so tight that it rubs against the outer portion of your femur. Distance runners are especially susceptible to iliotibial band syndrome.
- **Dislocated kneecap.** This occurs when the triangular bone (patella) that covers the front of your knee slips out of place, usually to the outside of your knee. In some cases, the kneecap may stay displaced and you'll be able to see the dislocation.
- **Hip or foot pain.** If you have hip or foot pain, you may change the way you walk to spare these painful joints. But this altered gait can place more stress on your knee joint. In some cases, problems in the hip or foot can refer pain to the knee.

Types of arthritis

More than 100 different types of arthritis exist. The varieties most likely to affect the knee include:

- **Osteoarthritis.** Sometimes called degenerative arthritis, osteoarthritis is the most common type of arthritis. It's a

Diagnosis & treatment



Request an appointment



Diagnosis



Treatment



Clinical trials



Preparing for your appointment

wear-and-tear condition that occurs when the cartilage in your knee deteriorates with use and age.

- **Rheumatoid arthritis.** The most debilitating form of arthritis, rheumatoid arthritis is an autoimmune condition that can affect almost any joint in your body, including your knees. Although rheumatoid arthritis is a chronic disease, it tends to vary in severity and may even come and go.
- **Gout.** This type of arthritis occurs when uric acid crystals build up in the joint. While gout most commonly affects the big toe, it can also occur in the knee.
- **Pseudogout.** Often mistaken for gout, pseudogout is caused by calcium-containing crystals that develop in the joint fluid. Knees are the most common joint affected by pseudogout.
- **Septic arthritis.** Sometimes your knee joint can become infected, leading to swelling, pain and redness. There's usually no trauma before the onset of pain. Septic arthritis often occurs with a fever.

Other problems

Patellofemoral pain syndrome is a general term that refers to pain arising between your patella and the underlying thighbone (femur). It's common in athletes; in young adults, especially those who have a slight maltracking of the kneecap; and in older adults, who usually develop the condition as a result of arthritis of the kneecap.

Risk factors

A number of factors can increase your risk of having knee problems, including:

- **Excess weight.** Being overweight or obese increases stress on your knee joints, even during ordinary activities such as walking or going up and down stairs. It also puts you at increased risk of osteoarthritis by accelerating the breakdown of joint cartilage.
- **Lack of muscle flexibility or strength.** A lack of strength and flexibility are among the leading causes of knee injuries. Tight or weak muscles offer less support

for your knee because they don't absorb enough of the stress exerted on the joint.

- **Certain sports.** Some sports put greater stress on your knees than do others. Alpine skiing with its rigid ski boots and potential for falls, basketball's jumps and pivots, and the repeated pounding your knees take when you run or jog all increase your risk of knee injury.
- **Previous injury.** Having a previous knee injury makes it more likely that you'll injure your knee again.

Complications

Not all knee pain is serious. But some knee injuries and medical conditions, such as osteoarthritis, can lead to increasing pain, joint damage and disability if left untreated. And having a knee injury — even a minor one — makes it more likely that you'll have similar injuries in the future.



[Request an Appointment at Mayo Clinic](#)



[References](#) ▾

[Print](#) Jan. 12, 2017

Share on: [Facebook](#) [Twitter](#)

Related

[Hyperextended knee: Cause of serious injury?](#)

[Metabolism and weight loss](#)

[Prednisone risks, benefits](#)

[Glucosamine: Does it protect cartilage in osteoarthritis?](#)

[Symptom Checker](#)

[Strength training: How-to video collection](#)

Knee pain

Overview

Symptoms & causes

Diagnosis & treatment

Diagnosis

Treatment

Clinical trials

Preparing for your appointment

Request an appointment

Self-management

More about

In-Depth

Expert Answers

Multimedia

Resources

News from Mayo Clinic

Patient Care & Health Information > Diseases & Conditions > Knee pain

CON-20155277



[Request Appointment](#) | [Contact Us](#)

[About Mayo Clinic](#) | [Employees](#) | [Find a Job](#)

[Site Map](#) | [About This Site](#)



Mayo Clinic is a not-for-profit organization. Make a donation.

PATIENT CARE & HEALTH INFO

[Healthy Lifestyle](#)

[Symptoms A-Z](#)

[Diseases & Conditions A-Z](#)

DEPARTMENTS & CENTERS

[Doctors & Medical Staff](#)

[Medical Departments & Centers](#)

[Research Centers &](#)

RESEARCH

[Explore Research Labs](#)

[Find Clinical Trials](#)

[Research Faculty](#)

[Postdoctoral Fellowships](#)

EDUCATION

[Mayo Clinic College of Medicine and Science](#)

[Mayo Clinic Graduate School of Biomedical Sciences](#)

FOR MEDICAL PROFESSIONALS & PRODUCTS & SERVICES

[Provider Relations](#)

[Online Services for Referring Physicians](#)

[Video Center](#)

[Healthy Living Program](#)

[Sports Medicine](#)

[Books and more ...](#)

[Mayo Clinic Health](#)

Tests & Procedures A-Z	Programs	Discovery's Edge Magazine	Mayo Clinic School of Medicine	Publications	Letter
Drugs & Supplements A-Z	About Mayo Clinic	Search Publications	Mayo Clinic School of Continuous Professional Development	Continuing Medical Education	Medical Products
Appointments	Contact Us	Training Grant Positions	Mayo Clinic School of Graduate Medical Education	Mayo Medical Laboratories	Population Health and Wellness Programs
Patient & Visitor Guide			Mayo Clinic School of Health Sciences		Health Plan Administration
Billing & Insurance			Alumni Center		Medical Laboratory Services
Patient Online Services					Continuing Education for Medical Professionals

Any use of this site constitutes your agreement to the Terms and Conditions and Privacy Policy linked below.

- [Terms and Conditions](#)
- [Privacy Policy](#)
- [Notice of Privacy Practices](#)
- [Reprint Permissions](#)

A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.org," "Mayo Clinic Healthy Living," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research.



We comply with the HONcode standard for trustworthy health information: verify here.