What are sprains and strains?

A **sprain** is an injury to a ligament (tissue that connects two or more bones at a joint). When a sprain happens, one or more ligaments is stretched or torn.

A **strain** is an injury to a muscle or tendon (fibrous cords of tissue that connect muscle to bone). In a strain, a muscle or tendon is stretched or torn.

Who gets sprains and strains?

Anyone can get a sprain or strain.

**Sprains** happen most often in the ankle. However, if you fall and land on their hand, you can sprain your wrist. Skiing and other sports can make it more likely for you to sprain your thumb.

**Strains** are most common in your back and the hamstring muscle in the back of your thigh.
Certain sports can make it more likely for you to have a strain in the back or legs. For example:

- Soccer.
- Football.
- Hockey.
- Boxing.
- Wrestling.

If you play sports that use your hands and arms a lot, you may be more likely to have a strain in your arm or hand. For example:

- Gymnastics.
- Tennis.
- Rowing.
- Golf.

**What are the symptoms of sprains and strains?**

**Sprains**

The symptoms of a sprain include:

- Pain.
- Swelling.
- Bruising.
- Not being able to use the joint.

**Strains**

In addition to pain, the symptoms of a strain include:

- Muscle spasms.
- Swelling.
- Cramping.
- Trouble moving.

If you tear a muscle or tendon completely, it is very painful and hard to move.

**What causes sprains and strains?**

**Sprain**

Many things can cause a sprain. Falling, twisting, or getting hit can force your joint out of its
normal position. This can ligaments around your joint to stretch or tear. Sprains usually happen when you:

- Fall and land on an arm.
- Fall on the side of their foot.
- Twist a knee.

**Strain**

A strain happens when you twist or pull a muscle or tendon. Strains can happen suddenly or develop over days or weeks. A sudden or acute strain is caused by:

- A recent injury.
- Lifting heavy objects the wrong way.
- Overstressing the muscles.

Chronic strains usually happen when you move the muscles and tendons the same way over and over.

**Is there a test for sprains and strains?**

Your doctor checks for a sprain or strain by:

- Asking about the injury.
- Examining the area of the injury.
- Ordering an x-ray to make sure you don’t have a broken bone.

Your doctor may order an MRI to look closely at the area of the injury or pain. An MRI is a test that uses magnetic energy to look inside the body.

**How are sprains and strains treated?**

Treatments for sprains and strains are the same. To reduce swelling and pain in the first day or two, doctors usually say to:

- Rest the injured area. If the ankle or knee is hurt, your doctor may tell you to use crutches or a cane.
- Put ice on the injury for 20 minutes 4 to 8 times a day.
- Compress (squeeze) the injury using special bandages, casts, boots, or splints. Your doctor will tell you which one is best for you and how tight it should be.
- Put the injured ankle, knee, elbow, or wrist up on a pillow.
- Take medicines, such as aspirin or ibuprofen.
After treating pain and swelling, your doctor may tell you to exercise the injured area. This helps to prevent stiffness and increase strength. In addition, you may need physical therapy. Your doctor or physical therapist will tell you when you can start to do normal activities, including sports. If you begin too soon, you can injure the area again.

Living with sprains and strains

The goal is to get you back to your normal everyday activities, including sports if possible. You should work closely with your doctor or physical therapist to make sure you are ready. It is important that you have the following before returning to normal activity or sports:

- Normal motion.
- Flexibility.
- Strength.

The amount of time you need to fully heal after a sprain or strain depends on the person and the type of injury.

Can I prevent them?

Can I prevent sprains and strains?

You can help prevent sprains and strains by:

- Avoiding exercise or playing sports when tired or in pain.
- Eating a well-balanced diet to keep muscles strong.
- Maintaining a healthy weight.
- Trying to avoid falling (for example, put sand or salt on icy spots on your front steps or sidewalks).
- Wearing shoes that fit well.
- Getting new shoes if the heel wears down on one side.
- Exercising every day.
- Staying in proper physical condition to play a sport.
- Warming up and stretching before playing a sport.
- Wearing protective equipment when playing.
- Running on flat surfaces.

For more info
Drugs@FDA at https://www.accessdata.fda.gov/scripts/cder/daf. Drugs@FDA is a searchable catalog of FDA-approved drug products.

Centers for Disease Control and Prevention, National Center for Health Statistics
Website: https://www.cdc.gov/nchs

American Academy of Orthopaedic Surgeons
Website: https://www.aaos.org

American Physical Therapy Association
Website: https://www.apta.org

American College of Sports Medicine
Website: https://www.acsm.org

American Medical Society for Sports Medicine
Website: https://www.amssm.org

American Orthopaedic Society for Sports Medicine
Website: https://www.sportsmed.org

National Athletic Trainers Association
Website: https://www.nata.org

If you need more information about available resources in your language or other languages, please visit our webpages below or contact the NIAMS Information Clearinghouse at NIAMSInfo@mail.nih.gov.

- Asian Language Health Information
- Spanish Language Health Information