What Are Sprains and Strains?

Fast Facts: An Easy-to-Read Series of Publications for the Public

What Is a Sprain?

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

What Causes a Sprain?

Many things can cause a sprain. Falling, twisting, or getting hit can force a joint out of its normal position. This can cause ligaments around the joint to stretch or tear. Sprains can occur if people:

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

Where Do Sprains Usually Occur?

Sprains happen most often in the ankle. Sometimes when people fall and land on their hand, they sprain their wrist. A sprain to the thumb is common in skiing and other sports.

What Are the Signs and Symptoms of Sprains?

The usual signs and symptoms of a sprain are:

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

Sometimes people feel a pop or tear when the injury happens. A sprain can be mild, moderate, or severe.

What Is a Strain?

A strain is an injury to a muscle or a tendon (tissue that connects muscle to bone). In a strain, a muscle or tendon is stretched or torn.

What Causes Strains?

A strain is caused by twisting or pulling a muscle or tendon. Strains can happen suddenly or develop over days or weeks. A sudden (acute) strain is caused by:

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

Chronic strains are usually caused by moving the muscles and tendons the same way over and over.

Where Do Strains Usually Occur?

Two common sites for a strain are the back and the hamstring muscle in the back of the thigh. Sports such as soccer, football, hockey, boxing, and wrestling put people at risk for strains in the back or legs. People who play some sports use their hands and arms a lot. Examples are gymnastics, tennis, rowing, and golf. People who play these sports sometimes strain their hand or arm. Elbow strains can also happen when playing sports.

What Are the Signs and Symptoms of Strains?

A strain can cause:

- Pain
- Muscle spasms
- Muscle weakness
- Swelling
- Cramping
- Trouble moving the muscle.

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

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, the doctor might tell you to use crutches or a cane.
- Put ice on the injury for 20 minutes at a time. The doctor might say to do this 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.
- The doctor may recommend taking medicines, such as aspirin or ibuprofen.

After treating pain and swelling, doctors usually say to exercise the injured area. This helps to prevent stiffness and increase strength. Some people need physical therapy. You may need to exercise the injured area or go to physical therapy for several weeks. 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.

It is important to see a doctor if you have a painful sprain or strain. This helps you get the right treatments.

Can Sprains and Strains Be Prevented?

To help prevent sprains and strains, you can:

- Avoid exercising or playing sports when tired or in pain.
- Eat a well-balanced diet to keep muscles strong.
- Maintain a healthy weight.
- Try to avoid falling (for example, put sand or salt on icy spots on your front steps or sidewalks).
- Wear shoes that fit well.
- Get new shoes if the heel wears down on one side.
- Exercise every day.
- Be in proper physical condition to play a sport.
- Warm up and stretch before playing a sport.
- Wear protective equipment when playing.
- Run on flat surfaces.

For More Information on Sprains and Strains and Other Related Conditions:

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The information in this publication was summarized in easy-to-read format from information in a more detailed NIAMS publication. To order the Sprains and Strains Q&A full-text version, please contact NIAMS using the contact information above. To view the complete text or to order online, visit http://www.niams.nih.gov.