

Sprains and Strains 101

EXPERT ADVICE

Prevention

Regular stretching and strengthening exercises for your sport, fitness or work activity, as part of an overall physical conditioning program, can help to minimize your risk of sprains and strains. Try to be in shape to play your sport; don't play your sport to get in shape. If you have a physically demanding occupation, regular conditioning can help prevent injuries. You can protect your joints in the long term by working to strengthen and condition the muscles around the joint that has been injured. The best brace you can give yourself is your own "muscle brace." Ask your doctor about appropriate conditioning and stability exercises. Also, use footwear that offers support and protection.

Source: Mayo Clinic

While many athletes suffer from broken bones and dislocated joints every year, a good majority of sports injuries are due to minor trauma to muscles, ligaments, and tendons. Here's a quick overview of sprains and strains, the most common sports injuries of all.

Sprains 101 A sprain is a stretched or torn ligament, which is a band of tissue that connects the end of one bone to another. There are three degrees of sprains, ranging from the more mild first degree sprain, which is a smaller tear accompanied by pain and swelling, to the more severe third degree sprain, in which the

ligament completely ruptures causing severe pain and joint instability.

A good deal of the time, sprains occur within sports that involve running, jumping, and sudden changes of direction. Some of the most common are the ankle sprain, caused by the foot twisting, rolling, or turning beyond its normal range of motion, the knee sprain, caused by twisting or an outside impact to the knee, and the wrist sprain, caused by the forceful bending of the wrist in a certain direction, often by a fall.

Symptoms: pain, swelling, bruising, not being able to move or use a joint, a "pop" or tear feel at time of injury

Strains 101 A strain is an injury to a **muscle or tendon** (a tendon is a tissue that attaches muscle to bone). Like sprains, strains are classified by their severity. A first degree strain involves a small tissue tear and mild tenderness, whereas a third degree strain is a total tear causing limited or no movement and severe pain.

Strains are caused by overstretching the muscle, either over time (chronic strains) or by a sudden movement like lifting a heavy object the wrong way (acute strains). They occur frequently in the back, hamstring, quad, calf, groin, and rotator cuff. Strains in the back or legs commonly occur in soccer, football, boxing, and wrestling, whereas strains in the upper body, hands, and arms may occur in sports like gymnastics, tennis, rowing, and golf.

Symptoms: pain, muscle spasms, muscle weakness, swelling, cramping, trouble moving the muscle, hard to move (if muscle or tendon is torn completely)

First Aid While severe sprains and strains may require surgery, most will just require a doctor or trainer to establish and monitor a rehabilitation program. Generally, the best treatment for these injuries begins with P.R.I.C.E.

P. stands for "protection."

Protect small injuries by applying bandages, elastic wraps, or simple splints.

R. stands for "rest."

I. stands for "ice."

C. stands for "compression."

In most cases, a simple elastic bandage will suffice.

E. stands for "elevation." Elevating an injured leg or arm drains fluid away from injured tissue and reduces swelling and pain.

Physical therapy and off-season training can help strengthen your joints, preventing the recurrence of sprains and strains. As always, wearing proper sports gear—like braces and/or pads—can protect you from injury as well. +



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