What Are Sports Injuries?

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

"Sports injuries" are injuries that happen when playing sports or exercising. Some are from accidents. Others can result from poor training practices or improper gear. Some people get injured when they are not in proper condition. Not warming up or stretching enough before you play or exercise can also lead to injuries. The most common sports injuries are:

- Sprains and strains.
- Knee injuries.
- Swollen muscles.
- Achilles tendon injuries.
- Pain along the shin bone.
- Fractures.
- Dislocations.

What's the Difference Between an Acute and a Chronic Injury?

There are two kinds of sports injuries: acute and chronic. Acute injuries occur suddenly when playing or exercising. Sprained ankles, strained backs, and fractured hands are acute injuries. Signs of an acute injury include:

- Sudden, severe pain.
- Swelling.
- Not being able to place weight on a leg, knee, ankle, or foot.
- An arm, elbow, wrist, hand, or finger that is very tender.
- Not being able to move a joint as normal.
- Extreme leg or arm weakness.
- A bone or joint that is visibly out of place.

Chronic injuries happen after you play a sport or exercise for a long time. Signs of a chronic injury include:

- Pain when you play.
- Pain when you exercise.
- A dull ache when you rest.
- Swelling.

U.S. Department of Health and Human Services
Public Health Service

National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Institutes of Health
1 AMS Circle
Bethesda, MD 20892–3675

Phone: 301–495–4484
Toll free: 877–22–NIAMS
TTY: 301–565–2966
Fax: 301–718–6366
Email: NIAMSinfo@mail.nih.gov
Website: www.niams.nih.gov

National Institute of Arthritis and Musculoskeletal and Skin Diseases

November 2014

What Should I Do if I Get Injured?

Never try to "work through" the pain of a sports injury. Stop playing or exercising when you feel pain. Playing or exercising more only causes more harm. Some injuries should be seen by a doctor right away. Others you can treat yourself.

Call a doctor when:

- The injury causes severe pain, swelling, or numbness.
- You can't put any weight on the area.
- An old injury hurts or aches.
- An old injury swells.
- The joint doesn't feel normal or feels unstable.

If you don't have any of these signs, it may be safe to treat the injury at home. If the pain or other symptoms get worse, you should call your doctor. Use the RICE (Rest, Ice, Compression, and Elevation) method to relieve pain, reduce swelling, and speed healing. Follow these four steps right after the injury occurs and do so for at least 48 hours:

- Rest. Reduce your regular activities. If you've injured your foot, ankle, or knee, take weight off of it. A crutch can help. If your right foot or ankle is injured, use the crutch on the left side. If your left foot or ankle is injured, use the crutch on the right side.
- Ice. Put an ice pack to the injured area for 20 minutes, four to eight times a day. You can use a cold pack or ice bag. You can also use a plastic bag filled with crushed ice and wrapped in a towel. Take the ice off after 20 minutes to avoid cold injury.
- Compression. Put even pressure (compression) on the injured area to help reduce swelling. You can use an elastic wrap, special boot, air cast, or splint. Ask your doctor which one is best for your injury.
- Elevation. Put the injured area on a pillow, at a level above your heart, to help reduce swelling.

How Are Sports Injuries Treated?

Treatment often begins with the RICE method. Here are some other things your doctor may do to treat your sports injury.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

Your doctor may suggest that you take a nonsteroidal anti-inflammatory drug (NSAID) such as aspirin or ibuprofen. These drugs reduce swelling and pain. You can buy them at a drug store. Another common drug is acetaminophen. It may relieve pain, but it will not reduce swelling.

Immobilization

Immobilization is a common treatment for sports injuries. It keeps the injured area from moving and prevents more damage. Slings, splints, casts, and leg immobilizers are used to immobilize sports injuries.

Surgery

In some cases, surgery is needed to fix sports injuries. Surgery can fix torn tendons and ligaments or put broken bones back in place. Most sports injuries don't need surgery.

Rehabilitation (Exercise)

Rehabilitation is a key part of treatment. It involves exercises that step by step get the injured area back to normal. Moving the injured area helps it to heal. The sooner this is done, the better. Exercises start by gently moving the injured body part through a range of motions. The next step is to stretch. After a while, weights may be used to strengthen the injured area.

As injury heals, scar tissue forms. After a while, the scar tissue shrinks. This shrinking brings the injured tissues back together. When this happens, the injured area becomes tight or stiff. This is when you are at greatest risk of injuring the area again. You should stretch the muscles every day. You should always stretch as a warmup before you play or exercise.

Don't play your sport until you are sure you can stretch the injured area without pain, swelling, or stiffness. When you start playing again, start slowly. Build up step by step to full speed.

Rest

Although it is good to start moving the injured area as soon as possible, you must also take time to rest after an injury. All injuries need time to heal; proper rest helps the process. Your doctor can guide you on the proper balance between rest and rehabilitation.

Other Therapies

Other therapies include mild electrical currents (electrostimulation), cold packs (cryotherapy), heat packs (thermotherapy), sound waves (ultrasound), and massage.

What Can People Do to Prevent Sports Injuries?

These tips can help you avoid sports injuries.

- Don't bend your knees more than half way when doing knee bends.
- Don't twist your knees when you stretch. Keep your feet as flat as you can.
- When jumping, land with your knees bent.
- Do warmup exercises before you play any sport.
- Always stretch before you play or exercise.
- Don't overdo it.

- Cool down after hard sports or workouts.
- Wear shoes that fit properly, are stable, and absorb shock.
- Use the softest exercise surface you can find; don't run on asphalt or concrete.
- Run on flat surfaces.

For adults:

- Don't be a "weekend warrior." Don't try to do a week's worth of activity in a day or two.
- Learn to do your sport right. Use proper form to reduce your risk of "overuse" injuries.
- Use safety gear.
- Know your body's limits.
- Build up your exercise level gradually.
- Strive for a total body workout of cardiovascular, strength-training, and flexibility exercises.

For parents and coaches:

- Group children by their skill level and body size, not by their age, especially for contact sports.
- Match the child to the sport. Don't push the child too hard to play a sport that she or he may not like or be able to do.
- Try to find sports programs that have certified athletic trainers.
- See that all children get a physical exam before playing.
- Don't play a child who is injured.
- Get the child to a doctor, if needed.
- Provide a safe environment for sports.

For children:

- Be in proper condition to play the sport.
- Get a physical exam before you start playing sports.
- Follow the rules of the game.
- Wear gear that protects, fits well, and is right for the sport.
- Know how to use athletic gear.
- Don't play when you are very tired or in pain.
- Always warm up before you play.
- Always cool down after you play.

What Research Is Being Done on Treating Sports Injuries?

Today, treating a sports injury is much better than in the past. Most people who get sports injuries play sports and exercise again. Doctors have many new ways to treat sports injuries. Some of these new ways include:

- Arthroscopy (fiber optic scopes put through small cuts in the skin to see inside joints).
- Tissue engineering (using a person's own tissues or cells to help heal injuries).
- Targeted pain relief (pain-reducing drug patches put directly on the injured area).
- Advanced imaging techniques (like x rays) that will lead to better diagnosis and treatment.

For More Information About Sports Injuries and Other Related Conditions:

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) Information Clearinghouse
National Institutes of Health
1 AMS Circle
Bethesda, MD 20892–3675
Phone: 301–495–4484
Toll free: 877–22–NIAMS (226–4267)
TTY: 301–565–2966
Fax: 301–718–6366
Email: NIAMSinfo@mail.nih.gov
Website: www.niams.nih.gov

The information in this fact sheet was summarized in easy-to-read format from information in a more detailed NIAMS publication. To order the Sports Injuries Handout on Health full-text version, please contact the NIAMS using the contact information above. To view the complete text or to order online, visit www.niams.nih.gov.

For Your Information

This publication may contain information about medications used to treat the health condition discussed here. When this publication was printed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration (FDA) toll free at 888–INFO–FDA (888–463–6332) or visit its website at www.fda.gov. For additional information on specific medications, visit Drugs@FDA at www.accessdata.fda.gov/scripts/cder/drugsatfda.Drugs@FDA is a searchable catalog of FDA-approved drug products.