Ankle sprains usually occur as a result of injury in which the ankle ligaments are stressed.* When your weight goes down on a foot that is in a wrong position, OUCH! There goes the ankle.

**What is an Ankle Sprain?**

An ankle sprain is an injury to ligaments, usually on the outer side of the foot. This may or may not be accompanied by a related muscle strain. Severity of a sprain can range from a minor stretch to a total rupture of the ligament, which can cause a serious instability of the whole joint.

Pain may or may not be accompanied by swelling, depending on the severity of the injury. Bruising and discoloration may appear in the foot and lower leg a few hours after injury.

**Rehabilitating an Ankle Sprain**

With a less severe injury, symptoms usually diminish within 3 to 4 days, and you should be able to walk with a minimal limp. With more severe sprains, we recommend that you use crutches or a cane to limit weight bearing on the ankle. The use of crutches with a toe-touchdown gait can help control complications to healing. If you use a single crutch or cane, it should be placed on the opposite side of the injured ankle and used to provide extra support for walking.

As swelling is controlled and pain decreases, indicating that the ligaments have healed enough that they are not in danger from minimal stress, rehabilitation can become more aggressive. This may start at 3 to 5 weeks after the injury, though total healing will not be complete before 6 to 8 weeks, depending on the severity of the injury. You should avoid any high-impact activity during this period.

Follow these guidelines to promote healing and reduce the risk of re-spraining your ankle.

**Treatment: Day 1 to Day 3**

The steps you can take to help the pain, swelling, and inflammation associated with an ankle injury are easy to remember if you can recall the word “RICE.”

- **Rest.** Cut back on your activity and get off your feet if you can. Avoid any activity that causes pain. If it hurts, don’t do it.
- **Ice.** Gently place an ice pack or plastic bag of ice on the injury for 15 to 20 minutes. Place a cloth or paper towel between the ice and your skin to protect the skin area. (Ice will cause numbness and lack of awareness of the cold.) Repeat every two hours until pain and swelling subside.
- **Compression.** Firmly wrap your ankle with an Ace bandage. (If your foot gets cold or blue, remove the wrap and apply it more lightly.) Always start the bandage below the injury site. As you wrap, move toward the knee without leaving gaps.
- **Elevation.** Sit or lie in a position so the injured ankle rests at a level higher than the heart to reduce swelling and pain. Do frequent ankle pumps.

If ice and/or Ace bandages are not readily available, proceed with rest and elevation until you can obtain these supplies. Ice and compression are optimal, but if only one device is practical, choose compression with an Ace wrap. Aspirin or ibuprofen may help reduce pain and inflammation.

**Day 4 to Day 10**

If swelling and tenderness persist, continue the RICE treatment. If not, follow the instructions in the next section and do the exercises.

**Day 10 to Full Recovery**

Continue to use an Ace bandage or ankle support until your ankle is completely healed. Why?... because the injured structures of your ankle (ligaments, muscles):

1. require 6 to 8 weeks to heal completely
2. may have lost some of their supportive capabilities
3. may have lost some of their “positional awareness” capabilities, which can make re-injury more likely.

Ankle supports should never be substituted for a properly supervised rehabilitation/strengthening program. When you can walk normally—without pain or a limp—gradually discontinue use of crutches or cane.

* Ankle strain, which involves musculature, can also occur.
Exercises to restore motion:
Begin these exercises only when you can walk normally and without a limp.

Use these exercises to restore motion in your ankle. Do each one twice a day.

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Calf Stretch</strong></td>
<td>Wrap a scarf, small towel, or rope around the bottom of your foot. Press foot down and hold 20 seconds. Rest. Repeat once.</td>
</tr>
<tr>
<td><strong>2. Ankle Alphabet</strong></td>
<td>Using your ankle and foot only, trace the letters of the alphabet. Perform A-Z.</td>
</tr>
<tr>
<td><strong>3. Isometric Dorsiflexion</strong></td>
<td>With rolled pillow between feet, squeeze feet together. Hold 5 seconds, then relax. Repeat 5 to 10 times.</td>
</tr>
<tr>
<td><strong>4. Isometric Eversion</strong></td>
<td>With rolled pillow against wall, press outer border of foot into pillow. Hold 5 seconds, then relax. Repeat 5 to 10 times.</td>
</tr>
<tr>
<td><strong>5. Isometric Inversion</strong></td>
<td>With rolled pillow between feet, press inner border of feet into pillow. Hold 5 seconds, then relax. Repeat 5 to 10 times.</td>
</tr>
<tr>
<td><strong>6. Isometric Plantarflexion</strong></td>
<td>With rolled pillow against wall, push foot into pillow. Hold 5 seconds, then relax. Repeat 5 to 10 times.</td>
</tr>
<tr>
<td><strong>7. Sitting Heel Rise</strong></td>
<td>From a sitting position, rise up on balls of feet. Repeat 10 times.</td>
</tr>
<tr>
<td><strong>8. Ankle Pump</strong></td>
<td>With leg elevated, gently flex and extend ankle. Repeat 10 times.</td>
</tr>
</tbody>
</table>

Prevent re-injury
Talk with your clinician about ways to prevent further sprains. This may include wearing a special ankle brace or wrap, or wearing high-top tennis shoes, and taping your ankle with a wide adhesive tape. Additionally, you may be advised to follow a regular program of ankle exercises. Such exercises can further strengthen your muscles and help prevent repeat damage to your ligaments.