Ankle Injury

TYPES OF ANKLE INJURIES:

Ankle injuries can be acute or chronic in nature. Inverting (turning in) of the ankle, accounts for most acute injuries. Damage occurs when ankle is twisted or moved beyond its normal range. Overuse of the ankle can cause tearing of the ligaments or strain tendon fibers. Sometimes, a severe injury or repeated sprain can cause chronic (recurrent) ankle pain.

Chronic problems are likely when pain develops gradually or discomfort is recurrent over a period of time. Chronic problems are often triggered by prior injuries, especially if original injury was not allowed to heal completely. Certain activities, such as jumping, sharp turns, running, or other repetitive movements can lead to injury.

TREATING AN ANKLE INJURY:

The events preceding pain development or injury will help determine appropriate treatment and rehabilitation.

✔ When pain develops suddenly or related to direct trauma, stop all strenuous use of the affected ankle to prevent aggravation of injury that may increase damage, and delay healing.
✔ If walking is difficult or if ankle or foot pain severe, evaluation by health care provider is suggested.
✔ Swelling and bruising is expected following an ankle injury. Applying the RICE system can reduce discomfort and accelerate your recovery
✔ Severity of injury will determine if crutches, ankle brace or other stabilization device will be required. Extent of injury will dictate length of recovery and need for walking aids
✔ Depending upon severity of injury an X-ray or other imaging study may be needed.

RICE SYSTEM

R = Rest. Initially, rest joint by avoiding activities that use or place weight on the joint.
I = Ice. Wrap sealed ice bag in towel and apply to injury as soon as possible. Keep on injury for 20 minutes and repeat every 2-3 hours for the first 48 to 72 hours. This will help reduce swelling and pain.
C = Compression. Use elastic bandage over the injured joint to reduce swelling. The bandage should provide a snug compression, but not restrict blood flow. Please remove compression bandages at night while sleeping.
E = Elevation. Elevate injured part above level of heart for best results. As swelling reduces it may be necessary to adjust compression bandage. Consistent elevation will accelerate healing process.

QUICK TREATMENT: ANKLE PAIN

✔ If you suspect injury, stop activity or reduce use.
✔ Apply RICE system.
✔ Rest the injury as much as possible, especially the first 2-3 days.
✔ If pain is severe at time of injury or you can’t move your ankle, visit a health care provider as soon as possible.

As pain and swelling improve allowing more comfortable use of joint gradually resume normal activities; only if it doesn’t cause significant discomfort. During this phase of recovery exercise caution by avoiding activities that risk re-injury.

Allowing the ankle time to heal COMPLETELY will allow normal return to daily routine and perhaps prevent long term complications.
Rehabilitation Exercises

Recovery Takes Time.
- Rehabilitation may take weeks or even months depending on severity of injury. The severity of the injury will dictate recovery time. Slow, gradual rehabilitation will reduce healing time and prevent re-injury.
- As affected area begins to heal gradually resume normal activity, but only if it doesn't cause significant discomfort.
- Rehabilitation exercises are critical for recovery process. Here are some general exercises that will strengthen muscles surrounding the injured knee and promote flexibility without excessive stress to the injured joint.
- When you can perform each of the exercises easily and without discomfort it is time to move to the next stage.
- Helpful Hint: Take deep even breaths while completing stretches and concentrate on the exercises with slow steady movements.

Stage 1 Exercises:
Return Range of Motion

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<th>Exercise</th>
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<tbody>
<tr>
<td>Alphabet Exercise</td>
<td>1</td>
<td>1-3/day</td>
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PREP: Apply ice pack to your ankle for 20 minutes.
EXERCISE: Hang your foot over the edge of a table or couch. Trace the alphabet with your big toe. Discontinue this exercise when full mobility returns to ankle.

Stage 2 Exercises:
Increase Endurance

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<tbody>
<tr>
<td>Plantar Flexion</td>
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PREP: Acquire an elastic band loop 36” long.
EXERCISE: Secure one end of elastic band around secure object. Place other end of the elastic band around the ball of your foot. Push the ball of your foot away from your body. Hold, count to three, then return to starting position.

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<tbody>
<tr>
<td>Dorsiflexion</td>
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PREP: Acquire an elastic band loop 36” long.
EXERCISE: Secure one end of elastic band around secure object. Place the other end of the elastic band around the top of your foot. Pull your toes toward your body. Hold, count to three, then return to starting position.
**Ankle Injury Rehabilitation Exercises**

**Stage 2 Exercises (continued): Increase Endurance**

2. **Ankle Inversion**

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**PREP:** Acquire an elastic band loop 36” long.

**EXERCISE:** Secure one end of elastic band around secure object. From a seated position, place other end of the elastic band around the ball of your foot. Turn your toes inward while keeping your heel firmly on the floor. Hold, count to three, then return to starting position.

2. **Ankle Eversion**

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**PREP:** Acquire an elastic band loop 36” long.

**EXERCISE:** Secure one end of elastic band around secure object. From a seated position, place other end of the elastic band around the ball of your foot. Turn your toes outward while keeping your heel firmly on the floor. Hold, count to three, then return to starting position.

**Stage 3 Exercises: Strengthening**

3. **Heel Raises**

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**EXERCISE:**

STEP 1: While standing with both feet on a secure step, let your heels drop slightly below the front edge of the step. Hold, count to three, then return to starting position.

STEP 2: While standing with both feet on a secure step, lift your heels so that you are standing on the ball of your foot and toes. Hold, count to three, then return to starting position.

STEP 3: While standing on injured foot on a secure step, lift your heel so that you are standing on the ball of your foot and toes. Hold, count to three, then return to starting position.
### Ankle Injury Rehabilitation Exercises

#### Stage 4 Exercises: Balance

**Stork Leg**

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**EXERCISE:**

STEP 1: From a standing position, raise your left foot off the floor. Hold this position for one minute then return to starting position. Perform this exercise with your eyes closed as you become more comfortable.

STEP 2: From a standing position, raise your right foot off the floor. Hold this position for one minute then return to starting position. Perform this exercise with your eyes closed as you become more comfortable.

#### Stage 5 Exercises (continued): Normal Activities

**“Figure 8” Walk or Jog**

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**EXERCISE:** Walk or jog in a figure 8 pattern on a smooth surface. This exercise should only be performed when you can walk without pain or limping.

#### Stage 6 Exercises (continued): Advanced Activities

**“Zig-Zag” Walk or Jog**

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**EXERCISE:** Walk or jog in a zig-zag pattern on a smooth surface. This exercise should only be performed when you can walk without pain or limping.
GENERAL GUIDELINES:
Prior to Returning to Normal Activity

- Ankle swelling should be resolved or almost resolved before resuming full activity.
- Full mobility (movement) has returned to ankle.
- Pain should have resolved or be MINIMAL.
- Injured ankle should regain normal strength and be comparable to uninjured knee.
- Apply pass or fail tests before returning to sport activity.

BEFORE RETURNING TO SPORT ACTIVITY:
Apply These Pass or Fail Tests

If you are able to complete these tasks, you are less likely to cause re-injury. Remember these are guidelines, NOT guarantees.

PASS or FAIL Tests

GOAL = PASS ALL FIVE

1. Jog without limping
2. Run without limping
3. Sprint and cut to the right. Repeat and cut to the left. You should not be compensating with good knee.
4. Jump up and down on both legs 5-10 times.
5. Hop only on injured ankle 5-10 times.

CONSULT YOUR HEALTHCARE PROVIDER IF ANKLE INJURY FAILS TO IMPROVE.