Shoulder Separation

What is a shoulder separation?
A shoulder separation occurs when you tear the ligaments that hold your collarbone (clavicle) to the joint where it meets the shoulder blade. Your collarbone may move out of its normal place and push up the skin on the top of your shoulder. Another term for shoulder separation is acromioclavicular (AC) separation or sprain.

Shoulder separations, or sprains, are graded I, II, or III, depending on how far the collarbone is separated from the shoulder. A grade I sprain has tenderness but no actual separation. A grade II sprain has slight separation of the clavicle from the shoulder, and grade III has a greater separation.

How does it occur?
A shoulder separation can result from a blow to your shoulder or a fall on your shoulder. It also can result from a fall on your outstretched hand or arm. It is a common injury in contact sports such as football, rugby, hockey, or lacrosse. It may occur from falling onto a hard surface, such as might happen during downhill skiing, volleyball, rock climbing, and soccer.

What are the symptoms?
Symptoms include the following:
► severe pain at the moment the injury occurs
► limited shoulder movement and tenderness on top of your shoulder at the end of your collarbone
► swelling and bruising of your shoulder area
► a misshapen shoulder.

How is it diagnosed?
Your health care provider will examine your shoulder for tenderness and a bump over the tip of your collarbone.

To make sure it is an AC separation and not a fracture, x-rays are necessary.

How is it treated?
Immediately after your injury put an ice pack on your shoulder for 20 to 30 minutes. Continue to put ice on your shoulder every 3 to 4 hours for the first 2 to 3 days, then as needed for the next several weeks. Cold helps reduce the pain, swelling, and inflammation.

The treatment of your separated shoulder depends on the severity. Grade I separations and some grade II and grade III separations may be placed in a sling or shoulder immobilizer. The sling or immobilizer will keep you from lifting your arm away from your chest and help healing of the ligaments. Your shoulder will be immobilized until you are pain free. Then you will begin rehabilitation exercises. Your health care provider may prescribe an anti-inflammatory medication or other pain medication.

For most grade II and grade III separations treatment is the same. However, in some situations sur-
surgery may be needed to reposition the bones or repair torn ligaments. Your arm will then be in a sling for up to 6 weeks to allow healing before you begin rehabilitation exercises. You should consult an orthopedic surgeon if you have a severe grade III injury.

How long will the effects of a shoulder separation last?

Some separations heal by themselves in 2 to 4 weeks without any loss of shoulder use. However, sometimes slight stiffness or loss of movement in the shoulder may occur, which may be temporary or, rarely, long-lasting.

A severe separation may take 2 months or more to heal, particularly if you have surgery to repair it.

You may have a permanent bump over your shoulder joint after a separation regardless of treatment. The bump does not normally cause other medical problems.

How can I take care of myself?

Avoid participating in sports until the injury has healed.

You should move your shoulder as the pain subsides to prevent a frozen or stiff shoulder.

With your health care provider’s permission, work with a trainer or physical therapist to strengthen your shoulder.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred.

You may safely return to your sport or activity when:

- Your injured shoulder has full range of motion without pain.
- Your injured shoulder has regained normal strength compared to the uninjured shoulder.

In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch and contact should progress from minimal contact to harder contact.

What can I do to help prevent recurring shoulder separation?

Exercise and lift weights under the supervision of a trainer or physical therapist to strengthen your shoulder muscles. Muscle-strengthening exercises will also help strengthen your ligaments and tendons. If you have symptoms, you should avoid activities that aggravate your pain, use ice packs, and take anti-inflammatory medication if needed.

### Shoulder Separation Rehabilitation Exercises

**Phase I**

1. **WAND EXERCISES**

   A. **FLEXION:** Stand upright and hold a stick in both hands, palms down. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.

   B. **EXTENSION:** Stand upright and hold a stick in both hands behind your back. Move the stick away from your back. Hold the end position for 5 seconds. Relax and return to the starting position. Repeat 10 times.

   C. **EXTERNAL ROTATION:** Lie on your back and hold a stick in both hands, palms up. Your upper arms should be resting on the floor, your elbows at your sides and bent 90°. Using your good arm, push your injured arm out away from your body while keeping the elbow of the injured arm at your side. Hold the stretch for 5 seconds. Repeat 10 times.
Phase I (continued)

D. INTERNAL ROTATION: Stand upright holding a stick with both hands behind your back. Place the hand on your uninjured side behind your head grasping the stick, and the hand on your injured side behind your back at your waist. Move the stick up and down your back by bending your elbows. Hold the bent position for 5 seconds and then return to the starting position. Repeat 10 times.

E. SHOULDER ABDUCTION AND ADDUCTION: Stand upright and hold a stick with both hands, palms down. Rest the stick against the front of your thighs. While keeping your elbows straight, use your good arm to push your injured arm out to the side and up as high as possible. Hold for 5 seconds. Repeat 10 times.

F. HORIZONTAL ABDUCTION AND ADDUCTION: Stand upright and hold a stick in both hands. Place your arms straight out in front of you at shoulder level. Keep your arms straight and swing the stick to one side, feel the stretch, and hold for 5 seconds. Then swing the stick to the other side, feel the stretch, and hold for 5 seconds. Repeat 10 times.

2. SHOULDER FLEXION:
Stand with your arms hanging down at your side. Keep your elbow straight and lift your arms up over your head as far as you can reach. Hold the end position for 5 seconds. Do 3 sets of 10.

3. SHOULDER ABDUCTION AND ADDUCTION:
Stand with your arms at your sides. Bring your arms up, out to the side, and toward the ceiling. Hold for 5 seconds. Return to the starting position. Repeat 10 times.

4. HORIZONTAL SHOULDER ABDUCTION AND ADDUCTION: Stand with your arms held straight out in front of you at shoulder level. Pull your arms apart and out to the sides as far as possible. Hold them back for 5 seconds, then bring them back together in front of you. Repeat 10 times. Remember to keep your arms at shoulder level throughout this exercise.

5. SHOULDER EXTENSION: Stand with your arms at your side. Move the arm on your injured side back, keeping your elbow straight. Hold this position for 5 seconds. Return to the starting position and repeat 10 times.

6. SCAPULAR RANGE OF MOTION: Stand and shrug your shoulders up and hold for 5 seconds. Then squeeze your shoulder blades back and together and hold 5 seconds. Next, pull your shoulder blades downward as if putting them in your back pocket. Relax. Repeat this sequence 10 times.
**Phase II**

7. **SIDELEYING HORIZONTAL ABDUCTION:** Lie on your uninjured side with your injured arm relaxed across your chest. Slowly bring your injured arm up off the floor, elbow straight, so that your hand is pointing toward the ceiling. Do 3 sets of 10. Hold a weight in your hand as the exercise becomes easier.

8. **PRONE SHOULDER EXTENSION:** Lie on your stomach on a table or a bed with the arm on your injured side hanging down over the edge. With your elbow straight, slowly lift your arm straight back and toward the ceiling. Return to the starting position. Do 3 sets of 10. As this becomes easier, hold a weight in your hand.

9. **BICEPS CURLS:** Stand and hold some kind of weight (soup can or hammer) in your hand. Bend your elbow and bring your hand (palm up) toward your shoulder. Hold 5 seconds. Slowly return to your starting position and straighten your elbow. Do 3 sets of 10.

10. **TRICEPS STRENGTHENING:** Lie on your back with your injured arm pointing toward the ceiling. Bend your elbow completely, so that your hand is resting on the same shoulder and your elbow is pointing toward the ceiling. Straighten the elbow completely so that your hand is pointing toward the ceiling. Return to the starting position. Do 3 sets of 10. Hold a weight in your hand when this becomes too easy.

11. **SINGLE ARM SHOULDER ABDUCTION:** Stand with your arms at your sides with your palms resting against your sides. With your elbow straight, lift the arm on your injured side out to the side and toward the ceiling. Hold the position for 5 seconds. Repeat 10 times. Add a weight to your hand as this exercise becomes easier.

12. **SINGLE ARM SHOULDER FLEXION:** Stand with your injured arm hanging down at your side. Keeping your elbow straight, bring your arm forward and up toward the ceiling. Hold this position for 5 seconds. Do 3 sets of 10. As this exercise becomes easier, add a weight.