UVA Orthopaedic Trauma Shoulder Maintenance Program

Instructions

- Weightbearing as tolerated with upper extremity
- Progress upper extremity activities as tolerated using pain as a guide
- Continue maintenance home exercise program

Exercise Program

- Regular exercises to restore motion and flexibility to your shoulder and a gradual return to your everyday activities are important for your full recovery. You should exercise for 10 to 15 minutes, 2 or 3 times a day during your early recovery period. In addition, remember to always **use pain as your guide when exercising**. You should not feel pain during these exercises. Doing too much, too soon may delay healing.
- After an injury or surgery, an exercise conditioning program will help you return to daily activities and enjoy a more active, healthy lifestyle. Following a well-structured conditioning program will also help you return to sports and other recreational activities. This is a general conditioning program that provides a wide range of exercises.
 - <u>Strength</u>: Strengthening the muscles that support your shoulder will help keep your shoulder joint stable. Keeping these muscles strong can relieve shoulder pain and prevent further injury.
 - <u>Flexibility</u>: Stretching the muscles that you strengthen is important for restoring range of motion and preventing injury. Gently stretching after strengthening exercises can help reduce muscle soreness and keep your muscles long and flexible.
 - <u>Target Muscles</u>: The muscle groups targeted in this conditioning program include:
 - Deltoids (front, back and over the shoulder)
 - Trapezius muscles (upper back)
 - Rhomboid muscles (upper back)
 - Teres muscles (supporting the shoulder joint)
 - Supraspinatus (supporting the shoulder joint)
 - Infraspinatus (supporting the shoulder joint)
 - Subscapularis (front of shoulder)
 - Biceps (front of upper arm)
 - Triceps (back of upper arm)
 - Length of program: This shoulder conditioning program should be continued for 4 to 6 weeks, unless otherwise specified by your doctor or physical therapist. After your recovery, these exercises can be continued as a maintenance program for lifelong protection and health of your shoulders. Performing the exercises two to three days a week will maintain strength and range of motion in your shoulders.

Flexibility Exercises

• Aim to complete these 5 days per week



Passive External Rotation

Main muscles worked: Infraspinatus, teres minor You should feel this stretch in the back of your shoulder Equipment needed: Light stick, such as a yardstick Repetitions: 4 times on each side Step-by-step directions

- Grasp the stick with one hand and cup the other end of the stick with the other hand.
- Keep the elbow of the shoulder you are stretching against the side of your body and push the stick horizontally as shown to the point of feeling a pull without pain.
- Hold for 30 seconds and then relax for 30 seconds.
- Repeat on the other side.
- Tip: Keep your hips facing forward and do not twist.

Sleeper Stretch

Main muscles worked: Infraspinatus, teres minor You should feel this stretch in your outer upper back, behind your shoulder

Repetitions: 4 reps, 3x a day

Step-by-step directions

- Lie on your side on a firm, flat surface with the affected shoulder under you and your arm bent, as shown. You can place your head on a pillow for comfort, if needed.
- Use your unaffected arm to push your other arm down. Stop pressing down when you feel a stretch in the back of your affected shoulder.
- Hold this position for 30 seconds, then relax your arm for 30 seconds.

Tip: Do not bend your wrist or press down on your wrist.

Scapula Setting

Main muscles worked: Middle trapezius, serratus

You should feel this exercise in your upper back, at your shoulder blade

Repetitions: 10

Step-by-step directions

- Lie on your stomach with your arms by your sides.
- Place a pillow under your forehead for comfort, if required.
- Gently draw your shoulder blades together and down your back as far as possible.
- Ease about halfway off from this position and hold for 10 seconds.
- Relax and repeat 10 times.

Tip: Do not tense up in your neck.





Finish

Start



Strength Exercises (with resistance bands)

- Equipment needed- An elastic stretch band of comfortable resistance
- Aim to complete these 3 days per week
- Aim for 3 sets of 8, and as the exercises become easier, you can add additional repetitions or add an additional resistance band

Standing Row

Main muscles worked: Middle and lower trapezius

You should feel this exercise at the back of your shoulder and into your upper back

Step-by-step directions:

- Make a 3-foot-long loop with the elastic band and tie the ends together. Attach the loop to a doorknob or other stable object.
- Stand holding the band with your elbow bent and at your side, as shown in the start position.
- Keep your arm close to your side and slowly pull your elbow straight back.
- Slowly return to the start position and repeat.

Tip: Squeeze your shoulder blades together as you pull.

External Rotation With Arm Abducted 90°

Main muscles worked: Infraspinatus and teres minor You should feel this exercise at the back of your shoulder and into your upper back

Step-by-step directions

- Make a 3-foot-long loop with the elastic band and tie the ends together. Attach the loop to a doorknob or other stable object.
- Stand holding the band with your elbow bent 90° and raised to shoulder-height, as shown in the start position.
- Keeping your shoulder and elbow level, slowly raise your hand until it is in line with your head.
- Slowly return to the start position and repeat.

Tip: Make sure your elbow stays in line with your shoulder.

Internal Rotation

Main muscles worked: Pectoralis, subscapularis You should feel this exercise at your chest and shoulder Step-by-step directions:

- Make a 3-foot-long loop with the elastic band and tie the ends together. Attach the loop to a doorknob or other stable object.
- Stand holding the band with your elbow bent and at your side, as shown in the start position.
- Keep your elbow close to your side and bring your arm across your body.
- Slowly return to the start position and repeat.

Tip: Keep your elbow pressed into your side.







External Rotation

Main muscles worked: Infraspinatus, teres minor, posterior deltoid You should feel this stretch in the back of your shoulder and upper back

Step-by-step directions

- Make a 3-foot-long loop with the elastic band and tie the ends • together.
- Attach the loop to a doorknob or other stable object.
- Stand holding the band with your elbow bent and at your side, as shown in the start position.
- Keeping your elbow close to your side, slowly rotate your arm • outward.
- Slowly return to the start position and repeat. •

Tip: Squeeze your shoulder blades together when you pull your elbow back.



Strength Exercises (with weights)

- Equipment needed- A light weight that allows for 3 sets or 8 repetitions
- Aim to complete these 3 days per week
- As the exercises become easier, you can add additional repetitions (up to 12) or can slowly increase weight

Elbow Flexion

Main muscles worked: Biceps

You should feel this exercise at the front of your upper arm Step-by-step directions

- Stand tall with your weight evenly distributed over both feet.
- Keep your elbow close to your side and slowly bring the • weight up toward your shoulder as shown.
- Hold for 2 seconds.
- Slowly return to the starting position and repeat.

Tip: Do not do the exercise too guickly or swing your arm.



Elbow Extension

Main muscles worked: Triceps

You should feel this exercise at the back of your upper arm Step-by-step directions

- Stand tall with your weight evenly distributed over both feet.
- Raise your arm and bend your elbow with the weight behind your head.
- Support your arm by placing your opposite hand on your upper arm.
- Slowly straighten your elbow and bring the weight overhead.
- Hold for 2 seconds.
- Slowly lower your arm back down behind your head and repeat.

Tip: Keep your abdominal muscles tight and do not arch your back.

Trapezius Strengthening

Main muscles worked: Middle and posterior deltoid, supraspinatus, middle trapezius

You should feel this exercise at the back of your shoulder and into your upper back

Step-by-step directions

- Place your knee on a bench or chair and lean forward so that your hand reaches the bench and helps support your weight. Your other hand is at your side, palm facing your body.
- Slowly raise your arm, rotating your hand to the thumbs-up position and stopping when your hand is shoulder height, with your arm parallel to the floor.

• Slowly lower your arm to the original position to a count of 5.

Tip: Use a weight that makes the last few repetitions difficult, but pain-free.

Scapular Retraction/Protraction

Main muscles worked: Middle trapezius, serratus

You should feel this exercise in your upper back at your shoulder blade Step-by-step directions:

- Lie on your stomach on a table or bed with your injured arm hanging over the side.
- Keep your elbow straight and lift the weight slowly by squeezing your shoulder blade toward the opposite side as far as possible.
- Return slowly to the starting position and repeat.

Tip: Do not shrug your shoulder toward your ear.







Bent-Over Horizontal Abduction

Main muscles worked: Middle and lower trapezius, Infraspinatus, teres minor, posterior deltoid

You should feel this exercise at the back of your shoulder and into your upper back

Step-by-step directions:

- Lie on your stomach on a table or bed with your injured arm hanging over the side.
- Keep your arm straight and slowly raise it up to eye level.
- Slowly lower it back to the starting position and repeat.

Tip: Control the movement as you lower the weight.

External Rotation

Main muscles worked: Infraspinatus, teres minor, posterior deltoid You should feel this stretch in the back of your shoulder and upper back

Step-by-step directions:

- Lie on your side on a firm, flat surface with your unaffected arm under you, cradling your head.
- Hold your injured arm against your side as shown, with your elbow bent at a 90° angle.
- Keep your elbow against your side and slowly rotate your arm at the shoulder, raising the weight to a vertical position.
- Slowly lower the weight to the starting position to a count of 5.

Tip: Do not let your body roll back as you raise the weight.

Internal Rotation

Main muscles worked: Subscapularis, teres major You should feel this stretch in the front of your shoulder Step-by-step directions

- Lie on a firm, flat surface on the side of your affected arm.
- Place a pillow or folded cloth under your head to keep your spine straight.
- Hold your injured arm against your side as shown, with your elbow bent at a 90° angle.
- Keep your elbow bent and against your body and slowly rotate your arm at the shoulder, raising the weight to a vertical position.
- Slowly lower the weight to the starting position.

Tip: Do not let your body roll back as you raise the weight.









Finish