

SELF STRETCHING GUIDE

FOR STIFF & PAINFUL SHOULDERS



BRIAN SCHIFF, PT, CSCS



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BRIAN SCHIFF, PT, CSCS

graduated from The Ohio State University in 1996 with a Bachelor of Science degree of Physical Therapy in Allied Health Professions. Since then, he has practiced as a licensed physical therapist specializing in sports medicine. Through the National Strength and Conditioning Association, Brian became a certified strength and conditioning specialist (CSCS) in 1998. He is a founding member of The American Association of Personal Trainers, and recently contributed a chapter on periodization to a fitness book entitled *The Power of Champions*. Schiff also co-authored a breakthrough manual on ACL injury prevention entitled *Protecting the Athlete's Knee*.

Currently, he owns a private fitness studio and performance enhancement company specializing in sport specific training programs for athletes of all sports and ages. Brian is also a strength and conditioning coach for The Columbus Crew Major League Soccer Team. He has presented at professional conferences and coaches' clinics on topics including training for shoulder stability, baseball specific training, soccer specific conditioning and sport specific training, ACL injury prevention and safe shoulder training.





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Many people suffering from shoulder pain and dysfunction also have limited or restricted movement of their shoulder. Limited range of motion is common for those experiencing rotator cuff related pain or injury, frozen shoulder, arthritis, impingement and shoulder bursitis.

It is important to fully understand the relationship between the decreased motion and pain in the shoulder. Many make the assumption that the decreased movement is the result of stiffness. In actuality, it is often affected by pain. Simply put, pain prevents many shoulder pain sufferers from moving their arm through a full arc of motion or in certain ways.

With that said, stiffness definitely limits motion. But in many cases, pain leads to avoidance of specific movements, which in turn is what really causes the stiffness. Below I will review normal shoulder motion values to give you a better idea of how a normal shoulder moves.

Shoulder Range of Motion

<u>Movement pattern</u>	<u>Normal motion</u>	<u>Functional motion</u>
Flexion (FW elevation)	180 °	120 - 150 °
Abduction	180 °	120 - 150 °
External Rot. @ side	90 °	65 - 90 °
Horizontal External Rot.	90 ° or more	65 - 90 °
Horizontal Internal Rot.	75 °	60 - 75 °
Reach behind back	Bottom of shoulder blade	Top of hip

Continued »





- Abduction: elevation away from the side of the body up toward the ear
- Horizontal external rot.: motion is similar to that of cocking to throw a ball
- Horizontal internal rot.: opposite (downward) rotation of external rotation

If you found the previous section a bit confusing, not to worry. I simply wanted to give you an idea of what a normal amount of shoulder motion really is. The reality is that the majority of healthy people do not have full range of motion. However, to perform most activities of daily living, it is only necessary to have the functional range of motion listed. This is important, as I do not want people to expect full motion or push too hard in an attempt to achieve it.





In the following section, I will outline different types of shoulder pathology and how it affects your shoulder motion. It is possible to suffer from more than one condition at the same time (e.g. arthritis and rotator cuff tendonitis).

Osteoarthritis

Unfortunately, the aging process takes a toll on most of us over time. Normal wear and tear occurs with daily life, but it may be accelerated based on participation in overhead sports, manual labor and repetitive use. Eventually, most of us will become affected by arthritis if we live long enough. It usually affects adults as they enter their 5th and 6th decades of life, but may also occur earlier based on trauma or higher intensity activity levels.

It is possible to suffer arthritis in the shoulder itself (glenohumeral joint), which means the actual cartilage on the end of the arm bone degenerates and the space between the head of the humerus (upper arm bone) and the shoulder blade become smaller. This leads to increased friction and compression. In turn, the typical symptoms include grating, grinding, pain and stiffness. The affected shoulder is often stiff in the morning and sore as the day goes along.

Another source of limited motion is arthritis at the acromio-clavicular joint (place where the clavicle meets the top of the shoulder blade). This site is a common spot for bone spur development and potential rotator cuff damage related to the spur. The spur bites down into the soft tissue and eventually creates a small tear or hole in the rotator cuff. It is often painful with reaching overhead, across the body or behind the back. Therefore these motions may be limited.

There is no cure for arthritis. Stretching and exercise are helpful in reducing pain and improving/maintaining range of motion. Much like exercise, I do not advise pushing through painful range of motion. However, if the only problem is arthritis (no soft tissue





damage or tear) it is acceptable to stretch to the point of mild discomfort provided the discomfort does not increase with repeated stretches or linger for any significant period of time following the stretching or range of motion exercise. Moderation is the real key to managing osteoarthritis. On a scale of 1-10, with 10 being the worst possible pain imaginable, I do not advise enduring any discomfort with stretching that exceeds a 2-3/10. Pain is subjective, so ultimately you are in charge of monitoring and adjusting the stretching program based on your own body.

Rotator Cuff Tendonitis, Tears, Impingement or Bursitis

Damage to the rotator cuff is an entirely different condition compared to arthritis or pure shoulder stiffness. In this scenario, the motion is primarily limited by pain. This is not to say that you will not have some muscular and/or joint tightness, but the real cause for the restricted movement is plain and simple shoulder pain! Without eliminating or significantly reducing the shoulder inflammation, you will not eliminate the pain and regain full use of the shoulder again.

What does this mean to you? First, you must recognize that forcing the arm to move through a painful arc of motion will not help resolve the problem. With rotator cuff problems, once the inflammation subsides the motion automatically improves. The reason for this is that the motion is only inhibited by pain and not truly limited by tightness. Therefore, it is best to limit stretching or range of motion within the comfortable to slightly uncomfortable zone. You will be able to gauge the status of the pain and inflammation merely by the available pain free motion in the shoulder itself.

With tendonitis, the most restricted motion with regard to pain is typically between 70 and 120 degrees of elevation, extreme overhead positions, and reaching behind the back. However, this is not always universally true for all people. If you have a tear, you may see similar restrictions, but at times with a complete tear there be little





or no pain with motion just plain weakness. In this case, it is best to attempt to move the arm through as much range as possible to avoid contractures (shortening of the soft tissue) and joint stiffness.

Impingement is really not much different. With this situation, the person typically has pain related to compression of the rotator cuff or bursa related to arthritis, calcification or bone spurs. This inflammation may be transient and occur during times of extra stress or increased load on the shoulder. It is best to once again be cognizant of the pain and not force the shoulder through a painful or limited range of motion.

Bursitis, often confused with tendonitis, is treated in the same way as rotator cuff tendonitis. Again, move the shoulder as tolerated based on your pain. As the bursitis resolves, your shoulder will move easier and further without pain. Gradually increase the stretching and range of motion based on pain. Forcing beyond the comfortable level only serves to increase the inflammation and perpetuate the pain and limited motion

Frozen Shoulder

This is a diagnosis that is easily made based on the limited motion in the shoulder itself. It is more common in women and most people affected by this condition will exhibit a capsular pattern. This simply explains the motions that are limited in an increasing order as follows:

External Rotation > Abduction > Internal Rotation

While not a hard fast rule, this pattern of tightness is generally true. What is a frozen shoulder? Within the shoulder joint, you have a soft tissue sack or expansion known as the capsule. These folds of tissue serve to stabilize the shoulder and exist in three distinct portions: anterior, posterior and inferior.





The medical terminology given to this condition is adhesive capsulitis. In plain terms, this means that portions of the capsule become inflamed and consequently shortened. This leads to shoulder tightness, exquisite pain and significantly limited range of motion.

Frozen shoulder is more prevalent in women than in men and typically affects the non-dominant arm. It may take anywhere from 6 months to 2-3 years to completely resolve, but it will eventually go away on its own. Physical therapy is often prescribed and may have limited results based on the individual.

There are 3 phases of a frozen shoulder: Freezing (1-6 months), Frozen (6-18 months) and Thawing (12-36 months). These are general time frames and not necessarily exact.

The treatment for a frozen shoulder typically involves moist heat prior to joint mobilization, stretching, selected range of motion exercises, low level strengthening and ice following activity or exercise. Non steroidal anti-inflammatory meds are also prescribed to ease pain and inflammation.

Note: It is critical to move and use the arm as much as you can in a tolerable range of motion. Favoring the arm or discontinuing use will only make it worse!

If conservative measures fail to improve the pain and use of the arm, your physician may inject the shoulder with cortisone. Beyond this, the next step is manipulation under anesthesia, in which the physician manipulates the arm to break up the adhesions. This usually frees some motion immediately, but in my experience typically creates additional inflammation and yields minimal gains in most cases. It also necessitates daily therapy for at least 1-2 weeks to help ensure the adhesions don't form again.





The final option is usually surgery to cut the adhesions loose. I have not seen this done often, but some surgeons will use this if the person is extremely affected and no other course of treatment has helped. I have again seen only mixed results with this procedure.

Ultimately, I recommend minimizing abusive activities (those that cause pain) and following a daily stretching and range of motion program based on the restricted movements in the shoulder. Heat and ice are typically helpful. You must remember that this condition takes time to improve. I have seen great results in 3-4 weeks and also known patients who did not get better for 12-18 months.

In the coming sections, I will discuss the differences between static stretching and range of motion exercises. More importantly, I will help you determine which exercises are best for your condition so you can improve motion without increasing your symptoms. This is a key point in determining how fast you will recover.





Stretching Versus Range of Motion Exercises

Many people become confused about what they should actually do to improve shoulder motion and reduce stiffness. Hopefully, I clearly made the distinction between pain inhibited range of motion and true stiffness in the previous section about shoulder pathology. Based on your condition, you may only need to do stretching or range of motion. In most cases, you will require both types of exercises to solve your problem.

Stretching

For the purposes of this guide, stretching will really equate to static stretching. This means taking the joint to a certain point in the range of motion and holding that position for a specified amount of time. It does not mean bouncing up and down, rocking back and forth or holding the stretch for any less than 5-10 seconds.

Passive stretching is very effective in improving range of motion when done properly. Did you get that? It must be done the right way time and time again. Below I will outline the key aspects of effective static stretching.

1. *Gradually ease into the stretch (never move rapidly)*
2. *Go to a point of mild stretch or slight discomfort (no > 2-3/10 pain)*
3. *Hold the stretch between 5 and 30 seconds*
4. *During the stretch, attempt to stretch further if tolerated*
5. *Maintain proper alignment at all times*
6. *Slowly return to start position after completion and repeat*

Now, when it comes to stretching I will not pull any punches. To be successful, you need to do it everyday! Soft tissue has memory and it only lasts for 24 hours. So, stretching every other day will really do you no good if you have stiffness.





With that said, I will now address the frequency and duration of stretching. Research has been clear that holding a stretch for 20-30 seconds seems to be most effective. Any more is not necessarily better, but any less is not as productive. However, some stretching is better than none. So, if you can only hold the stretch for 5-10 seconds to start, that is okay. Gradually work to increase your time or simply do more repetitions of the same stretch.

In terms of how many stretches you do, I typically advocate doing each particular stretch 2-3 times and repeat the routine twice per day. While this is not an absolute rule, I have found it yields the best results. In some cases, you may start with 2 stretches @ 20 seconds once per day, and eventually work up to 3 stretches @ 30 seconds twice per day. Do not get hung up on the exact numbers, but rather focus on strict form, daily execution of the stretches and being respectful of your shoulder pain and allowable motion at the time.

Range of Motion

Range of motion exercises are completely different from stretching. By my definition, these exercises simply involve moving the shoulder through the available range of motion at a specified pace and repeating the action for a set number of times. These exercises are extremely effective for treating all of the aforementioned problems.

The most important thing to remember with these exercises is to remain respectful of the tolerable motion you have based on the pain. In other words, you should not force the range of motion at the expense of increasing the pain in the shoulder. Over time, the range should naturally improve as the pain and stiffness resolve simultaneously. This does require patience on your part, but I can assure you will pay big dividends in the end.

Most people will have limited motion in certain directions and require very specific range of motion drills. This is often the case with rotator





cuff tendonitis, tears and bursitis. With arthritis and frozen shoulders, most people will need to do a full spectrum of exercise to make sure they are actually moving all parts of the shoulder.

Now, on the following page I will further define range of motion and stretching into 3 categories or movement. These categories will help guide you in choosing how to administer your own exercises. It is a logical progression based on the severity of your pain and limitations with regard to strength deficits and your present functional level.

Categories of Stretching and Range of Motion Exercise

1. **Passive:** *This means you use the unaffected arm to move the affected or injured shoulder through the range of motion. The injured shoulder does absolutely no work. This is often best for extremely painful shoulders that have little to no movement or very limited strength.*

2. **Active Assistive:** *In this approach, you allow the injured shoulder to do some of the work or movement on its own, but you predominantly utilize the unaffected shoulder or arm to guide the movement and perform the majority of the work. This is often chosen in cases where there is some documented stiffness coupled with weakness. Assisting will help reduce inflammation, especially with exercises that are performed against gravity.*

3. **Active:** *Now you let the affected shoulder do all of the work throughout the entire movement. This is effective for a shoulder with tendonitis that is mildly painful but not significantly weak. It can also be used in cases of a mild frozen shoulder and arthritis. Moving to this level of exercise is the goal for everyone, but it should only be done when the pain is decreasing and not inhibiting the motion on a large scale. This particular method is also effective for strengthening the shoulder affected by a partial or complete rotator cuff tear.*





While there is no exact science to selecting the appropriate method for your shoulder, I always advise to error on the side of caution. Shoulders are very susceptible to increased inflammation through overaggressive stretching and range of motion. Therefore, if you have any doubts, begin with passive exercise and gradually advance to active exercise.

Typically, I recommend performing a single set of 10-20 repetitions for any particular range of motion exercise. This should be done 1-2 times per day based on your pain tolerance and degree of limited motion.

Note: Performing stretching/range of motion against gravity is significantly harder on the shoulder than doing it with the assistance of gravity. For example, standing and raising the arm overhead is much more challenging than raising the arm overhead while lying on our back. Keep this in mind as you exercise, as it can play a big role in managing your pain and recovery.





Static Shoulder Stretches

The following section will reveal some effective passive (static) stretching techniques to improve shoulder function and range of motion. The goal of these exercises is to elongate the muscles, tendons, and joint capsule. A low intensity sustained stretch is ideal for tissue relaxation and gaining pain free motion.

Remember to observe the following rules when executing these on your own:

- 1. Begin with shoulder pendulums as a warm-up*
- 2. Always maintain proper form and alignment*
- 3. Attempt to hold the stretch for 20-30 seconds*
- 4. Do not bounce or rock back and forth*
- 5. Do not stretch into significant pain*

The pendulum exercise pictured on the following page is designed to increase the joint space between the humerus and the scapula, while stimulating nerve receptors that diminish pain.





WARM-UP - SHOULDER PENDULUM SERIES

Using a light dumbbell or soup can let the arm dangle and move the body in a circular motion allowing the arm to follow. Do 15-25 reps in a clockwise and counterclockwise direction.





STRETCH #1 - SHOULDER FLEXION

This stretch is designed to improve elevation. It is performed using a small hand towel beneath the hand of the affected shoulder. If using a passive or active assistive approach, place the unaffected hand on the wrist of the affected arm. Now slide the affected arm up the wall until a comfortable stretch is felt. Hold for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.

If able, you can perform the stretch actively by using only the affected arm. Again, hold at the top as specified above and repeat for the necessary reps.

Active Progression



Shoulder Flexion Passive or Active Assistive Progression



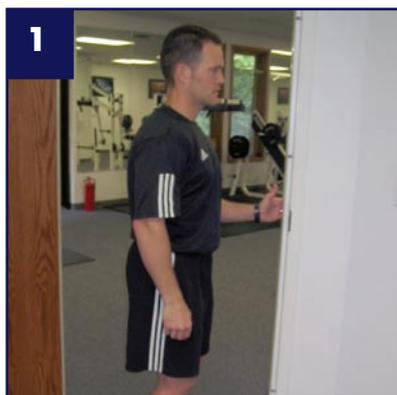


STRETCH #2 - EXTERNAL ROTATION @ 0° Abduction (side)

This stretch is particularly effective in stretching out the anterior shoulder capsule and promoting increased external rotation of the shoulder. Using a doorway or free standing wall, place the palm of the hand on the affected arm against the wall, while keeping the elbow in at your side. Next gradually rotate the lower body, effectively externally rotating the arm until a comfortable stretch is felt.

Hold that position for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.

Doorway Method



Note: The rotation of the lower body accomplishes the stretch, while the hand and elbow position remain unchanged. This is important. You do not want the elbow to lose contact with the body during the stretch.



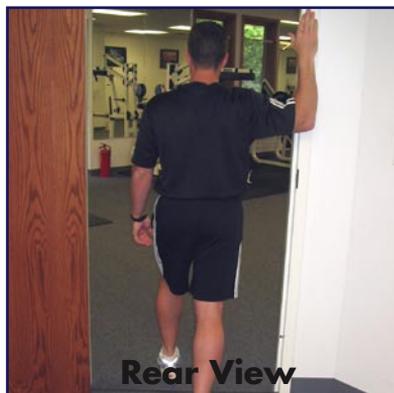
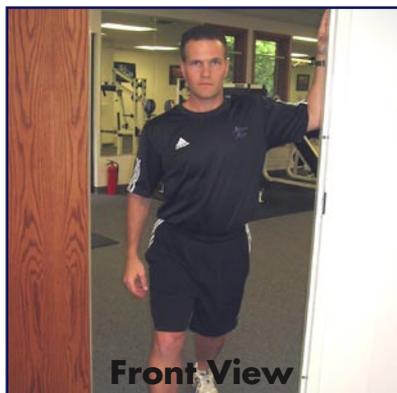


STRETCH #2 - EXTERNAL ROTATION @ 90° ABDUCTION

This stretch is a progression from the previous one and should be done with caution. This places far more stress on the anterior portion of the shoulder and may be uncomfortable for those suffering from adhesive capsulitis or significant rotator cuff pain. It aims to improve external rotation with the arm positioned away from the side of the body as needed for many activities of daily living, such as dressing, fastening your seat belt and any type of throwing motions.

Again, using a doorway or wall, position the affected arm with the elbow bent to 90° against the door frame or wall. Next, gradually lean forward in a staggered stance position until a comfortable stretch is felt. Your body weight and forward lean will accomplish the stretch. Hold that position for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.

Doorway Method

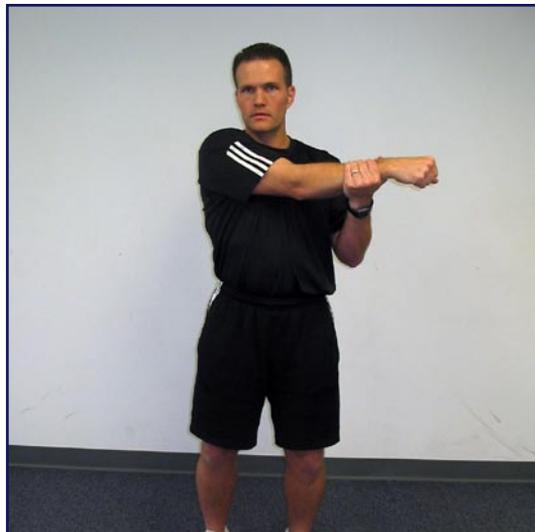




STRETCH #4 - POSTERIOR CAPSULE IN STANDING

This stretch is not my preferred method of stretching the posterior capsule, but it is generally an easy method to perform and improve motion. I am including it because it is often less painful and easier to do than my preferred method (which I will show in the next stretch). This stretch is particularly useful for those with posterior capsular tightness, limited internal rotation and flexion, and all overhead athletes such as pitchers, swimmers, volleyball players and baseball/softball players.

Stand with the knees slightly bent. Using the unaffected hand, place it around the forearm of the affected arm and gently pull the arm across the front of your body until a comfortable stretch is felt. Keep the affected arm at the level of the unaffected shoulder. Hold that position for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.



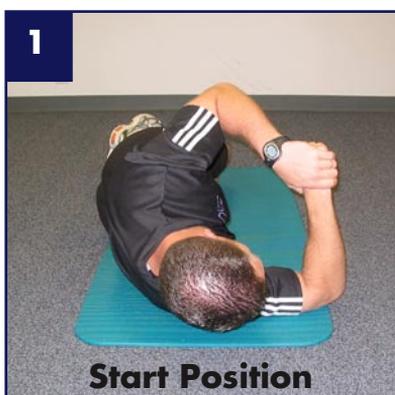


STRETCH #5 - POSTERIOR CAPSULE in Lying

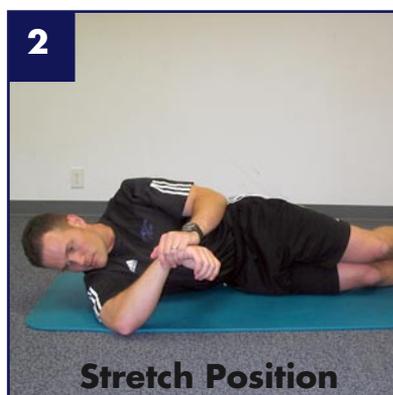
As mentioned earlier, this stretch is more effective in isolating the posterior capsule for stretching. However, it is technically much harder to do properly and it is generally uncomfortable for most people to do. But given my desire to provide the most complete information available, I am showing it to you here.

Begin lying on the affected side (this will rule out some of you from the start if this causes pain). Position the affected arm at 90° of abduction with the elbow bent to 90° as well. Now place the unaffected hand on top of the wrist of the affected arm. Gently pull the affected arm down toward the floor until a comfortable stretch is felt. Be sure to keep the elbow bent 90° throughout.

Hold that position for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.



Start Position



Stretch Position

Note: If you feel any pain with this stretch, I would caution you to stop until you can do it without discomfort or reduce the range of motion. It is an awkward position to begin with, but is the best way to stretch the posterior capsule. It is preferred over the previous stretch because you do not have soft tissue (muscles) stretching or limiting the stretch of the capsule with this method.





STRETCH #6 - INTERNAL ROTATION BEHIND THE BACK

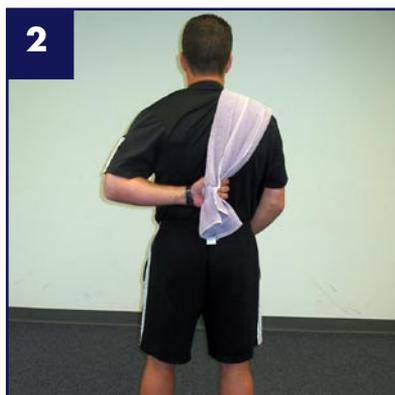
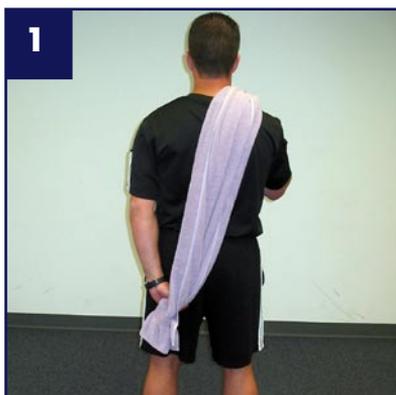
This is perhaps the most painful or difficult motion for an inflamed shoulder to perform. It is also typically the last motion to return during your recovery from shoulder pain. With that said, it is important to regain the use of this range of motion for activities of daily living.

In standing, I recommend the use of a towel for this stretch. This allows you to achieve the stretch using the unaffected arm and then allow the unaffected arm to rest during the stretch hold. Otherwise, your unaffected arm may fatigue and get sore with the stretching.

Using a bath towel, grasp one end with the affected hand (back hand) and the other end with the unaffected hand (forward hand). Next, gently pull the towel upward and forward with the unaffected hand until a comfortable stretch is felt in the affected shoulder. At this point, allow the unaffected hand and arm to relax down along the front of the body.

Hold that position for 5-30 seconds and repeat. The goal for total stretch time should be 60-90 seconds. However, do what you can tolerate and work up to that.

Internal Rotation Towel Stretch for Shoulder





In this final section of the stretching guide, I will demonstrate several cane exercises that are highly effective in improving range of motion for people suffering from shoulder pain and those recovering from surgery. I suggest using a small lightweight dowel rod (3-4 feet long) or cane to do these exercises.

Since these are range of motion exercises and not stretches, it is not as important to hold for a long period of time at the end range of motion. Range of motion exercises are effective at increasing blood flow and promoting healing of injured tissue, while improving motion. As such, you will do more repetitions to accomplish the desired effect of the exercise.

Depending on your pain, weakness, age and specific situation, you may want to perform these passively at first and then gradually advance to active assistive and finally active range of motion. Again, use pain as your guide and do not be too overzealous when you start. It takes much longer to resolve inflammation than it does to create it. Keep that in mind as you do these exercises.

In the following pictures, I am pictured using a small body bar. It weighs approximately 8 #. You should begin with a cane or dowel rod. As you make steady progress but need a little extra resistance to achieve greater range, you may elect to attach a small cuff weight around the dowel rod or cane. This is a more advanced progression, but it is an effective way to gain a greater stretch and is useful in later stages of recovery and rehab.

As far as how much weight to use, I generally prescribe adding one pound increments after you can achieve 20 repetitions at the current weight without pain and without feeling a good stretch. Remember, the weight is not necessary for the exercise to be effective. It simply serves to increase resistance (mild form of strengthening) and add more overpressure at the end of the stretch itself, which may be necessary to restore full motion in some cases.

As a general rule, try to do (1) set of these exercises 1-2 times per day. More is not always better! Use pain and progress as your ultimate guide.

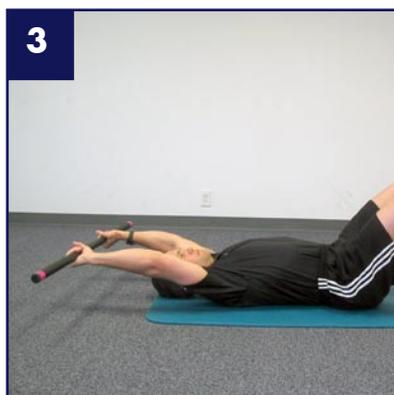
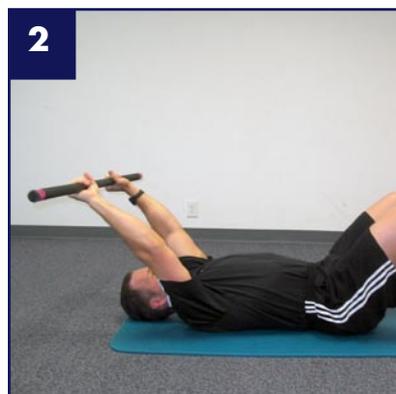
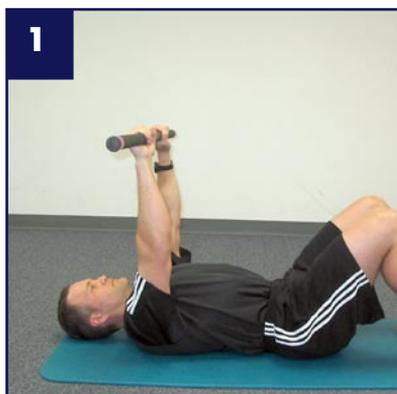




EXERCISE #1 - LYING FLEXION

Lying flat on the floor eliminates the resistance of gravity. This is a plus if your shoulder is already inflamed. You will begin holding the cane with the hands about shoulder width apart and the shoulder flexed to 90°. You do not start lower because lowering the cane below this point actually places strain on the rotator cuff, not to mention the fact that most people have no limits in that part of the range.

Next, slowly allow the cane to move overhead until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds and then return to the starting position. Do 10-20 repetitions. This exercise improves overhead reaching and elevation.

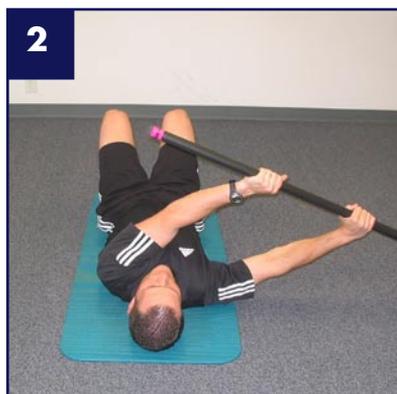
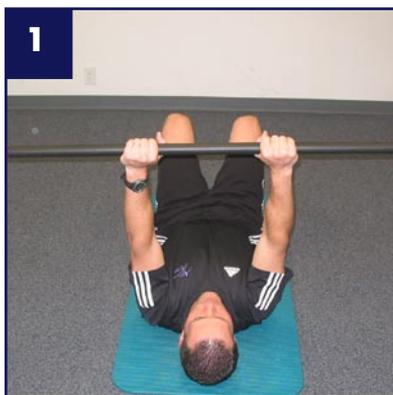




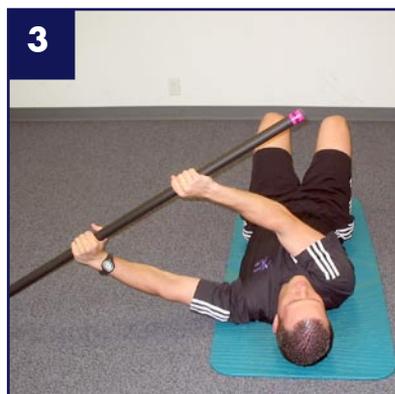
EXERCISE #2 - HORIZONTAL Abduction/Adduction

Lying on the floor, you will start in the same position as the lying flexion exercise. Keeping the elbows straight, you will slowly allow the arms to move toward one side of the body until a comfortable stretch is felt in the affected shoulder. Hold 2-5 seconds and then repeat to the other side until a comfortable stretch is felt in the affected shoulder. Do 10-20 repetitions.

This exercise will improve movement reaching across or away from the body and stretch the anterior and posterior aspect of the shoulder. It is generally more uncomfortable for the affected shoulder as it moves across the body and not away from it.



**Horizontal ABD Right,
ADD Left**



**Horizontal ABD Left,
ADD Right**



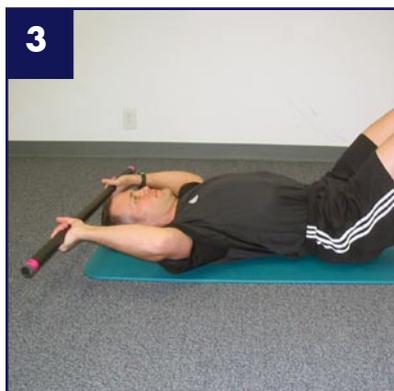
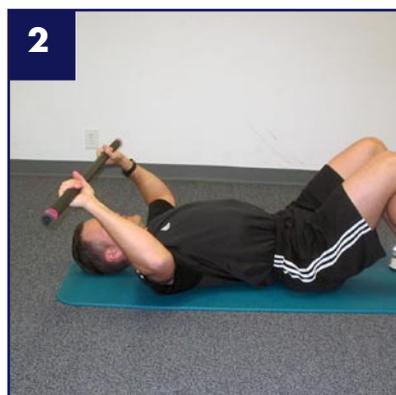
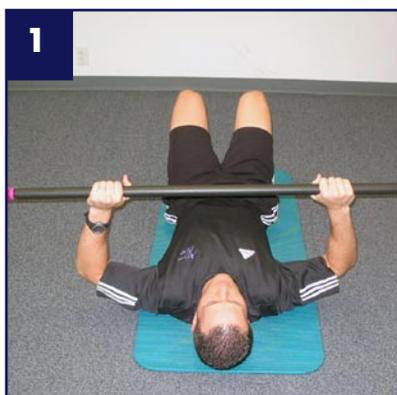


EXERCISE #3 - HORIZONTAL EXTERNAL ROTATION

Although this is a more advanced external rotation stretch, I am showing it now as it is performed on the floor, whereas the more simplified external rotation stretch is done in standing and will be demonstrated later.

Begin lying on your back. You will start with 90 ° of shoulder flexion, but in this case you will also bend each elbow to 90 °. Then, you allow the cane to slowly move beyond your head and lower until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions. It is important not to let the elbows drop below the level of the shoulders or the cane will not pass easily overhead. Keep the elbows bent at 90 ° throughout the motion.

As with the doorway stretch, this improves external rotation with arm away from the body and is essential for day to day function.





EXERCISE #4 - STANDING EXTERNAL ROTATION

Although this is a standing exercise, it is still easy on the shoulder as gravity is still eliminated and does not apply force against the shoulder. It also stretches the shoulder in 0° of abduction, whereas the lying version stretched it in 90° of abduction with gravity eliminated.

Begin holding the cane (palms up) with the elbows at the side. While maintaining constant contact with the elbows at the side, move the cane out away from the body to the affected shoulder's side until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions.



External Rotation Right



External Rotation Left

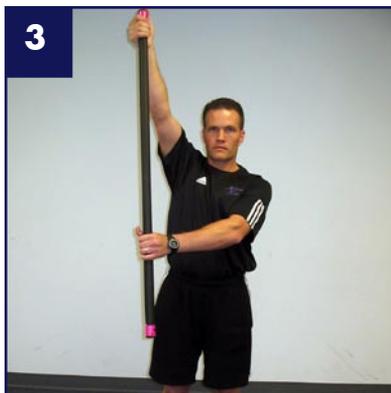
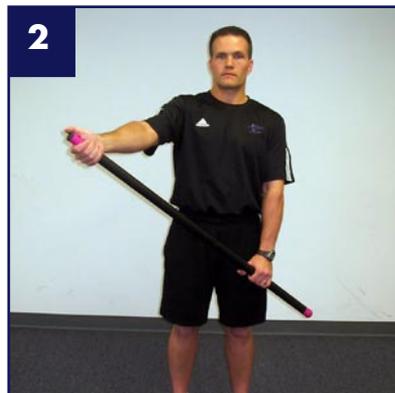
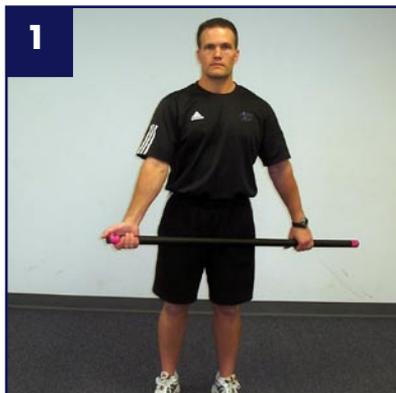




EXERCISE #5 - STANDING SCAPTION

This particular exercise is an effective way to improve overhead elevation without causing significant rotator cuff pain. This is possible by keeping the arm in the scapular plane, which is about 30-45 degrees to the left or right of straight ahead motion depending on the affected arm. This position allows the most freedom of movement for the shoulder and minimizes soft tissue compression.

Begin in standing with the affected shoulder's hand on the front end of the cane (thumb up position). The unaffected hand should rest comfortably on the lower end of the cane and guide and do much of the work to raise the cane. Next, slowly raise the cane up until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions. Be sure to lower slowly as well so as not to place any undue strain on the shoulder.

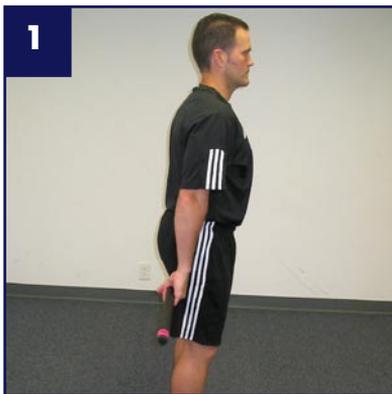




EXERCISE #6 - STANDING EXTENSION

The purpose of this exercise is to increase movement reaching behind the body and back. This motion is also necessary for effective walking and running mechanics. It also serves to stretch the anterior capsule.

In standing, begin by holding the cane with the palms facing backward away from the body and shoulder width apart. Slowly extend the cane backward until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions. Be careful not to lean the body forward during the exercise as this is how the body compensates for limited shoulder extension.

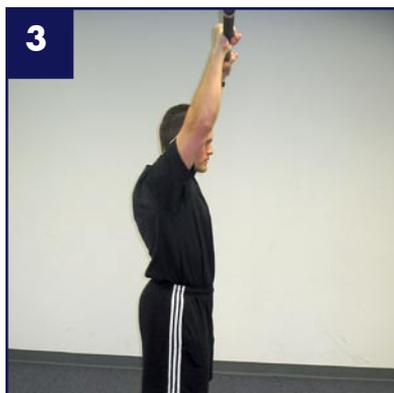
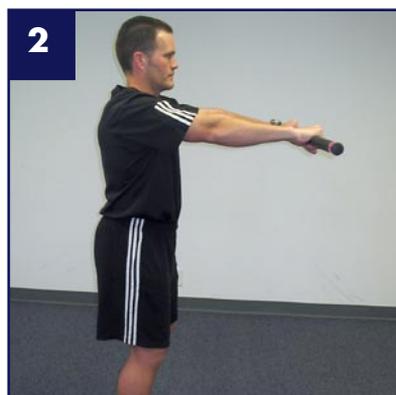
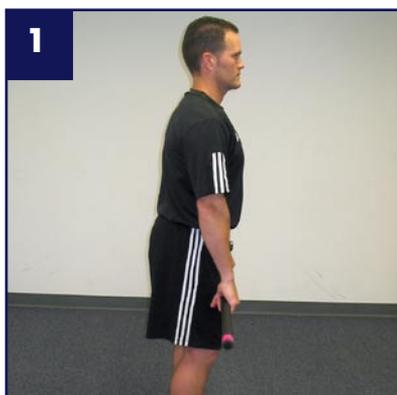




EXERCISE #7 - STANDING FLEXION

This is the progression to the lying flexion exercise pictured earlier. This version is more difficult because now you have to raise the cane against gravity which makes it more challenging. You will need to adjust the contribution of the unaffected arm based on pain or weakness in the affected shoulder.

Begin with the cane flat against the body with the hands shoulder width apart. Next, slowly raise the cane overhead or as far as possible until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions. Be sure to lower slowly as well so as not to place any undue strain on the shoulder.





EXERCISE #8 - STANDING INTERNAL ROTATION

This exercise is intended to improve your ability to reach behind the back for daily activities including fastening a bra, tucking a shirt in, getting a wallet out of the back pocket or even putting a belt on. As mentioned earlier, this movement is perhaps the most difficult to restore and it certainly places the most stress on the shoulder and rotator cuff.

Begin in standing similar to the standing extension start position. With the palms facing backward and away from the body, raise the cane straight up toward the ceiling until a comfortable stretch is felt in the affected shoulder. Hold for 2-5 seconds. Do 10-20 repetitions. Keep the cane against the body during the movement. Remember not to force the motion as this exercise if done too aggressively will certainly increase your pain and inflammation.





In conclusion, I want to remind you that you may not need all of these exercises to improve your shoulder function. To the best of your ability, you should test your range of motion to see what is painful and limited. Use that information to help guide your selection in the end. With that being said, here are some general guidelines to follow:

Key Exercises for Rotator Cuff Tendonitis/Tears, Impingement or Bursitis

Acute Onset symptoms have been present for less than 4-6 weeks

1. *Pendulums*
 2. *Wall slides*
 3. *Posterior capsule stretching (choose method based on pain)*
 4. *Towel internal rotation stretch*
 5. *Cane Scaption*
- * Perform these exercises once per day*

Sub acute/Chronic Onset symptoms have been present longer than 6 weeks

1. *Pendulums*
 2. *All stretches as tolerated*
 3. *Cane Flexion (choose method based on pain)*
 4. *Cane Horizontal External Rotation*
 5. *Cane Internal Rotation*
 6. *Cane Scaption*
- * Perform these exercises once per day*

Key exercises for a Frozen Shoulder

Stretches

Perform all of the stretches based on your pain tolerance twice daily. It is best to do them after a warm shower or using a heat pack for 15 -20 minutes.

Range of Motion

Perform all of the exercises based on your pain tolerance twice daily. Even if you do have full motion in one direction, I am of the opinion it is wise to maintain that in addition to improving the stiff motions.





Key Exercises for Osteoarthritis

Stretches

Perform all of them with the exception of the lying posterior capsule stretch 1-2 times per day. Due to the delicate nature of the stretch coupled with a sore degenerative joint, I feel the risk generally outweighs any benefit derived from attempting this stretch.

Range of Motion

Perform all of the exercises 1-2 times per day based on your level of stiffness and as tolerated according to your pain level.

Medical Disclaimer

The information contained within this stretching guide is not intended to replace professional medical care by a physician or physical therapist. It is simply designed to improve shoulder function and range of motion related to the previously specified shoulder disorders. If you suffer acute injury, persistent pain or significantly limited daily function and use of your arm, it is recommended that you seek a complete professional evaluation from your physician.

In closing, I sincerely hope you can reap the benefits of putting these exercise strategies to work in your quest for improved shoulder function. These methods have been clinically tested, and I am supremely confident that you will enjoy a happier healthier life by utilizing these concepts in your recovery.

For more information about my products, training or consulting services you can e-mail me at bschiff@thefitnessedge.cc or visit www.thefitnessedge.cc.

