

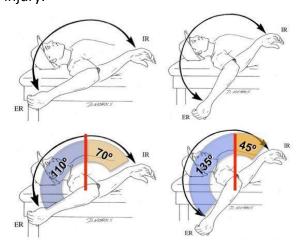
Arm Care

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It is absolutely essential for a baseball player to be performing arm care. The obvious reason for doing arm care is to prevent injury and keep the arm and body strong. However, if you dedicate yourself to a good program the improvements in this area can help increase performance as well. When we talk about arm care it doesn't just involve arm strengthening. So, if you are just doing Jaeger Bands or weighted balls you are missing the boat. The areas you need to work on in regards to arm care are:

- 1. Shoulder range of motion and overall body mobility
- 2. Rotator cuff strength
- 3. Scapular stabilization
- 4. Core strength
- 5. Balance

Measuring your range of motion you should have a difference of <15-20 degrees comparing your throwing arm to your non-dominant with internal rotation. The total arc of motion (internal rotation + external rotation) should be around 5 degrees difference. This is a huge injury marker and if you have a tighter throwing shoulder you would be more susceptible to injury.

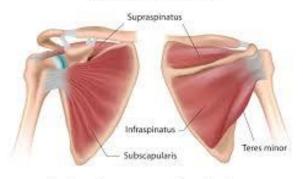


Rotator Cuff Strength

The rotator cuff is made up of four small muscles in the shoulder (Supraspinatus, Infraspinatus, Teres Minor, and Subscapularis). We are looking to do more endurance work with these muscles with lower weight and higher repetitions. More advanced exercises with pertubations (i.e. Bodyblade exercises) can help the proprioception of the shoulder. These should be

performed later in the program. This is important as you will have more control over your arm as forces are placed on it. So, this means you may be able to get an extra inning or two before that fatigue mark sets in.

Rotator Cuff Muscles



Anterior view

Posterior view

Full Cans



Band Throwing



Deceleration Throw





Scapular Stabilization

A common weakness seen is with the upper back muscles and supporting the shoulder blades. How the shoulder blades move throughout the throw affects the health of your shoulder joint. Strengthening the middle and lower trapezius muscles should be targeted as they are where we see deficiencies. It is important to "set your scapulas" before these exercises (really should do it for all upper body exercises). You do this by depressing and retracting your shoulders. Hold them in this position and do the exercise.





Core Strength

Core strength is more than just abdominal strength. Some popular exercises that are great include: bridges, supermans, side planks, front planks, and bird dogs. It helps to stabilize with core strengthening by performing an isometric abdominal contraction while doing the exercise. Hip strengthening can be neglected and glute weakness can be an injury indicator. Include abdominal, back, and hip/glute exercises in the program.

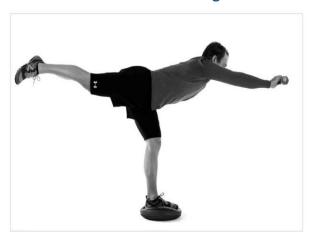
Band Walks (Side to Side; Diagonal Forward and Back)



Balance

Think about it...a baseball player needs balance within most aspects of the game. Throwing (especially pitching) requires transferring body weight from one leg to another. Hitting involves being able to stay balanced with hips/legs in determining pitch type to time the swing. Improving balance needs to be addressed if performance wants to be increased. The progression should be mastering an exercise on the ground and then progress to foam/cushions and lastly to a disc or BOSU ball.

Release Point Balance with Weight



Pitcher's Squats



The best way to perform arm care would be within an established program that a medical professional can watch your technique and your tempo of doing the exercise. For example, we see many of our injuries to pitchers from that release point and decelerating the arm. Why not train in these phases and gain more endurance through isometrics (holding for longer period) and eccentrics (slowly coming down)?

It is important to do arm care a few months before your season to prepare yourself. However, best practice would be to do arm care year round. What we have seen is players make nice gains by doing the program, but then quit doing arm care in-season (Spring and Summer) and lose those gains they have made. This would be similar to you going to the weight room and seeing success, but losing it after you took a month off.

As you can see with some of the examples of exercises provided that they are baseball-specific and you should focus on performing the movement patterns that you would when you play. So training this way can help translate to field better. Also, it helps that the exercises be multifaceted and training a couple of things at once. For example, performing a lunge (core) with a scapular squeeze using a band (scapular stabilization) trains two areas with one exercise. Injuries in baseball are on the rise and arm care could help in improving your deficiencies. A concentrated effort by players and coaches to establish a year round program could be the best defense in reducing these injuries.

Dan Christoffer is a certified athletic trainer at Mayo Clinic Sports Medicine. He is the head of the baseball and softball program there and works with all levels of baseball and softball athletes. Dan has worked in professional baseball with the Los Angeles Dodgers and players from many other organizations.

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