

Study Identifies 2 Shoulder Weaknesses That Increase Injury Risk

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With Fall upon us and THE NEED TO STOP THROWING and recover from the 8-month season:

<http://www.asmi.org/asmiweb/usabaseball.htm>

*"Specifically, **baseball pitchers need a period of "active rest" after their season ends and before the next preseason begins.** During active rest a pitcher is encouraged to participate in physical activities that do not include a great amount of overhand throwing."*

WHAT SPECIFIC EXERCISES CAN HELP PREVENT SHOULDER INJURY?

A new study in the American Journal of Sports Medicine:

<http://ajs.sagepub.com/content/38/7/1375.abstract>

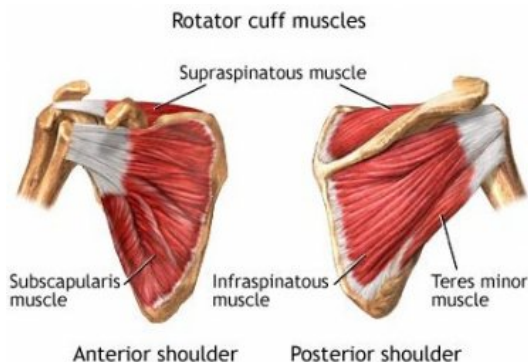
Byram IR. **Preseason Shoulder Strength Measurements in Professional Baseball Pitchers: Identifying Players at Risk for Injury.** *Amer Jou Sports Med* 2010; 38: 1375-1382

found 2 specific areas to focus on:

*"Preseason **weakness of external rotation and [supraspinatus muscle] strength** is associated with in-season throwing-related injury resulting in surgical intervention in professional baseball pitchers."*

How Do I Strengthen My External Rotators?

External rotation is done mostly by one of largest rotator cuff muscle called **the Infraspinatus Muscle** in the back of shoulder:



The ASMI's "Thrower's Ten" program is very good as it has a range of very good tubing exercises.

BUT...

Do NOT do the external rotation shown in the handout as it's incorrect:



This is the proper way, with having a towel under the arm as it moves the elbow away from your hip and better isolates the infraspinatus:



You can find this in my newsletter on SICK Scapula

<http://www.pitchingdoc.com/fileupload/Pitching%20Newsletters/Is%20Your%20Shoulder%20SICK%20-%20203.16.09.pdf>

How Do I Strengthen My Supraspinatus Muscle?

The supraspinatus plays a very important role in slowing the arm down after ball release (called "deceleration"). As a result, it's one of the most stressed rotator cuff muscles.

A study published in 2007:

Reinold MR. **Electromyographic Analysis of the Supraspinatus and Deltoid Muscles During 3 Common Rehabilitation Exercises.** *Athl Train.* 2007; 42(4): 464-469
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2140071/?report=abstract>

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Found that:

"...the full-can exercise may be best to maximize the amount of supraspinatus activity with the least amount of deltoid muscle activity."

Here is how to do the full-can exercise, with the thump UP:



Hope that helps. Best of luck.

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