Return to Throwing Program for Baseball

The object of the throwing program is to return the athlete to his previous level of competition, while minimizing the risk of re-injury. Adequate warm-up and stretching, involving the whole body, attention to proper mechanics, and a gradual progression are keys to an effective recovery.

Prerequisites
Before entering the throwing program the athlete should have achieved the following:

1) Full pain free range of motion of the shoulder and elbow
2) Synchrony of shoulder and scapulothoracic (shoulder blade) motion
3) Adequate strength development as determined by your physician, physical therapist, and/or athletic trainer.

Rate of Progression
Close supervision of the program is essential. Each athlete will progress at his own rate. Mild soreness and stiffness is to be expected; however, if any pain is felt in the shoulder or elbow, throwing should be stopped until pain free. The athlete is not allowed to progress to the next phase unless he can complete the previous phase pain free.

Warm Up and Stretching
The athlete should begin each session with jogging or other light activity to increase circulation and muscle temperature. This should be followed by stretching for the full body, including legs, trunk, shoulder, and arm prior to beginning the warm up throws.

Weight Training
Maintaining proper strength and endurance of the rotator cuff and upper back musculature is essential to long term success. Strength training should consist of low weight, high repetition exercises to target these muscles. They should be performed on throwing days, but only after throwing has been completed.

Mechanics
Proper mechanics of throwing is essential in reducing stress and injury. The athlete’s coach should be enlisted to aid in achieving a normal and consistent throwing motion. The crow-hop method (first a hop, then a skip, followed by the throw) may be used to ensure proper alignment of the body to begin the throwing motion. Flat-footed throwing encourages improper mechanics, and should be avoided. The ball should be thrown just hard enough to reach the target.

Variations
1) Mirror throwing
2) Frequency
3) Count throws
4) Intervals
5) Youth athletes (i.e. those playing on a smaller field) may modify by starting Phase I at 30 feet, and work up to 90 feet as a max distance before starting Phase II
6) Adapt to other sports
Phase I - Sample Progression

Begin with warm up and stretching as described on the first sheet. Do 5 minutes of easy warm up throwing at about 30 feet and then gradually move back to the prescribed distance. You can throw 2 days in a row or every other day. Plan this around your practice schedule and weather forecast for the upcoming week. Rest on any day that persistent soreness or pain in the shoulder or elbow is present. Once at 90 feet and beyond, return to 60 feet for the last 5 minutes of throwing if you are a pitcher. This will give you extra practice at locating your throws and hitting targets.

Day 1  Throw 45’  10 minutes
Day 2  REST
Day 3  Throw 45’  15 minutes
Day 4  REST
Day 5  Throw 60’  15 minutes
Day 6  REST
Day 7  Throw 60’  15-20 minutes
Day 8  REST
Day 9  Throw 90’  15 minutes
Day 10 REST
Day 11 Throw 90’  15-20 minutes
Day 12 REST
Day 13 Throw 120’  15 minutes
Day 14 REST
Day 15 Throw 120’  15-20 minutes
Day 16 REST
Day 17 Throw 150’  15 minutes
Day 18 REST
Day 19 Throw 150’  15-20 minutes
Day 20 REST
Day 21 Throw 180’  15 minutes
Day 22 REST
Day 23 Throw 180’  15-20 minutes
Day 24 REST
Day 25 Begin Phase II making throws from position or begin mound routine (next page) at 50% effort.

Phase II- Sample Progression

After the athlete is able to throw 180 feet for 15-20 minutes without pain, specific position drills may begin. Pitchers begin throwing fastballs (FB) only at 50% effort from the mound. Position players may throw in drills starting at 50% effort. Sample progressions follow. Use interval throwing to 120 feet as warm up. If you are not old enough to throw breaking balls (BB) then substitute with change ups.

Pitchers

Day 1  Interval throwing to 120 feet as warm up.  50% FB only – 25 throws
Day 2  OFF
Day 3  Interval throwing to 120 feet as warm up.  50% FB only – 35 throws
Day 4  OFF
Day 5  Interval throwing to 120 feet as warm up.  75% FB only – 35 throws
Day 6  OFF
Day 7  Interval throwing to 120 feet as warm up.  75% FB only – 50 throws

*Developed in conjunction with the Physicians at OrthoCarolina.*

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Day 8  OFF
Day 9  Interval throwing to 120 feet as warm up.  75% FB – 40 throws; 50% BB – 20 throws
Day 10  OFF
Day 11  Interval throwing to 120 feet as warm up.  90% FB – 30 throws; 75% BB – 20 throws
Day 12  OFF
Day 13  Interval throwing to 120 feet as warm up.  95% FB – 30 throws; 95% BB – 20 throws
Day 14  OFF
Day 15  Simulated Game – 2-3 innings
Day 16  5-10 minutes interval throwing to 90 feet
Day 17  Simulated Game – 2-3 innings
Day 18  5-10 minutes interval throwing to 90 feet
Day 19  OFF
Day 20  Live scrimmage
Day 21  5-10 minutes interval throwing to 90 feet
Day 22  OFF
Day 23  Released for competition

Fielders – Start with 25 throws and work up 30-40 throws

Day 1  50% effort  Day 8  90%
Day 2  50%  Day 9  OFF
Day 3  OFF  Day 10  95%
Day 4  75%  Day 11  95%
Day 5  75%  Day 12  OFF
Day 6  OFF  Day 13  Live Scrimmage (95%)
Day 7  90%  Day 14  Released for competition

Suggested Readings


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