



Department of Rehabilitation Services
Physical Therapy

Return to Throwing Program

The intent of these guidelines is to provide the athlete with a framework for return to sports activity following injury. These guidelines should not take the place of medical advice if attempting to return to sports following an injury. If an athlete requires assistance in the progression of a return to sport program they should consult with their primary care physician, surgeon, or physical therapist.

These guidelines are based on a modified program from:

Reinold, M. Wilk, K. Reed, J. Crenshaw, K. Andrews, JR. Interval Sport Programs: Guidelines for Baseball, Tennis, and Golf. *Journal of Orthopedic & Sports Physical Therapy*. 32(6): 293-298.

Rehabilitation Program

Mon, Wed, Fri	Tue, Thur, Sat	Sun
<ul style="list-style-type: none"> • Throwers Ten UE Strengthening Program • Plyometrics • Control Drills • Stretching • Sport Specific Program 	<ul style="list-style-type: none"> • LE Strengthening • Cardiovascular • Core Stability • Stretching • Rotator Cuff & Scapular Strengthening 	<ul style="list-style-type: none"> • Light ROM • Stretching

Throwing Sport Specific Program:

- **During warm-up, it is very important to use heat prior to stretching (e.g., hot pack, whirlpool, hot shower, etc.). Heat increases circulation and activates some of the natural lubricants of the body.**
- **Perform stretching exercises after applying the heat modality and then proceed with the throwing program.**
- **Throw on line, sub maximal, pain free / comfort zone**
- **Pay attention to mechanics**
- **Use ice after throwing to reduce cellular damage and decrease the inflammatory response to microtrauma.**

Criteria for progression to the next level:

- **No pain or stiffness when throwing**
- **No pain or stiffness after throwing**
- **All throwing should be effortless motion**
- **Every other day – may go to every 3rd day if fatigue/soreness persists**
- **Satisfactory response following 3 days of activity at each level**

45 FEET:

First day

Warm-up throws at 20-45 feet

25 throws at 45 feet

1 set only

Rest next day

Warm-down throws

Level 2:

Warm-up throws at 20-45 feet

25 throws at 45 feet

2 sets

Rest 10 minutes between sets

Warm-down throws

Throw on alternate days

60 FEET:

Level 1

Warm-up throws at 20-60 feet

25 throws at 60 feet

2 sets

Rest 10 minutes between sets

Warm-down throws

Throw on alternate days

Level 2

Warm-up throws at 20-60 feet

25 throws at 60 feet

3 sets

Rest 5-10 minutes between sets

Warm-down throws

Throw on alternate days

90 FEET:

Level 1

Light warm-up throws at 20-90 feet
25 throws at 90 feet
2 sets
Rest 10 minutes between sets
Warm-down throws
Throw on alternate days.

Level 2

Light warm-up throws at 20-90 feet
25 throws at 90 feet
3 sets
Rest 5-10 minutes between sets
Warm-down throws
Throw on alternate days

105 FEET:

Level 1

Warm-up throws at 20-105 feet
25 throws at 105 feet
2 sets
Rest 10 minutes between sets
Warm-down throws
Throw on alternate days.

Level 2

Warm-up throws at 20-105 feet
25 throws at 105 feet
3 sets
Rest 5-10 minutes between sets
Warm-down throws
Throw on alternate days

120 FEET

Level 1

Warm-up throws at 20-120 feet
Throws at 120 feet (25 throws)
2 sets
Rest 10 minutes between sets
Warm-down throws
Throw on alternate days
10 minute toss on off day

Level 2

Warm-up throws at 20-120 feet

Throws at 120 feet (25 throws)

3 sets

Rest 5-10 minutes between sets

Warm-down throws

Begin flat ground pitching at 45 feet

Throw on alternate days

10 minute toss on off day

MOUND PROGRAM:

Fast Ball (FB), Change (CH), Breaking Ball (BrB), Bullpen/Batting Practice (BP)

Level 1

Warm-up throws at 20-120 feet

1 set throws at 120 feet 25 throws

Rest 10 minutes

Throw from mount (FB only) 25 throws

50 foot throw – move catcher forward

Warm-down throws

Throw on alternate days

10 minute toss on off day

Rotate as follows: Thr/Off/Thr/Off/Off/Thr/Off/Thr/Off/Off

Level 2

Warm-up throws at 20-120 feet

1 set throws at 120 feet 25 throws

Rest 10 minutes

Throw from mount (FB, CH: 1 of 5 CH) 35 throws

55 foot throw – move catcher forward

Warm-down throws

Throw on alternate days

10 minute toss on off day

Rotate as follows: Thr/Off/Thr/Off/Off/Thr/Off/Thr/Off/Off

Level 3

Warm-up throws at 20-120 feet

1 set throws at 120 feet 25 throws

Rest 10 minutes

Throw from mount (FB, CH: 1 of 5 CH) 40 throws

55 foot throw – move catcher forward

Warm-down throws

Throw on alternate days

10 minute toss on off day

Rotate as follows: Thr/Off/Thr/Off/Off/Thr/Off/Thr/Off/Off

Level 4	Routine warm-up Short Bullpen (1 of 5 BrB) Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	8-10 minutes
Level 5	Routine warm-up Short Bullpen (1 of 5 BrB) Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	10-12 minutes
Level 6	Routine warm-up Full Bullpen Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	12-15 minutes
Level 7	Routine warm-up Short Batting Practice Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	8-10 minutes
Level 8	Routine warm-up Short Batting Practice Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	10-12 minutes
Level 9	Routine warm-up Batting Practice/Simulated Game Routine warm-down 10 minute toss on off day Rotate as follows: BP/Off/BP/Off/Off/BP/Off/BP/Off/Off	12-15 minutes
Level 10	Routine Pre-game warm-up Pitch in game (40 pitch count) Routine Post-game warm-down Increase pitch count and innings based on progress	1-2 Innings

Pitchers Post Injury Throwing Program

Goal: To establish a total body awareness and control of his throwing movement before being allowed to return to normal pitching duties.

Phase 1: Player starts at a distance of 15 steps, 2-3 sets of 25 throws on a line with 5 minutes recovery between sets.

PASS – FAIL:

If the player can complete this task pain-free, then he may progress to Phase 2 and start the progressive throwing program. If the player can not complete Phase 1 or shows signs of poor range of motion, pain and discomfort – the program must stop at this point. The player will then return to the training room or physical therapy clinic for more treatment and functional work.

Coaching Point:

During all phases of the throwing program, the player must use correct footwork and proper throwing mechanics. This is a must and needs to be monitored to ensure that a controllable amount of stress is placed on the injured area.

Phase 2:

The player should be going through this program, 2 days on, 1 day off. The player will perform only 1 step per day. The player must be pain-free, throw with good arm mechanics/footwork, and have good accuracy (75% of throws must hit in the center chest area) before the athlete may progress to the next step.

Pain with Throwing:

If the athlete experiences pain while throwing, he is to stop throwing at that point of the program, take the day off and drop back one phase in the throwing program the following day.

If the athlete experiences pain or soreness after throwing and the next day it does not improve after warm-up throwing, take the day off and drop back one phase in the throwing program the following day.

If the athlete does not experience pain or soreness while throwing, but experiences some soreness the following day and the soreness disappears after warm-up throwing, continue with the program at that step or phase. If the athlete experiences severe or chronic pain or soreness, he returns to the training room for more treatment and functional work. The athlete may need 1-2 days or more of rest and treatment before he returns to the throwing program. The athlete must be pain-free before he returns to the throwing program. If the athlete has been shut

Return to Throwing Program

down from throwing for a period of time, he should drop back one to two phases or more in the throwing program from where he experienced pain.

Rehab Program

The athlete should throw first, perform the Hitting Progression program second (if position player), rehab exercises third, and finally finish with the strength and conditioning program (with modifications per injury).

Formatted:

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