

Exercises for Return to Pitching

The goal of this program will be to gradually aid recovery of the throwing arm. This pamphlet may be a home program or a guideline for your physical therapist. Before starting this program, you must have no pain when moving your arm, adequate muscle power, and adequate endurance.

Although many athletes desire to return to sport as soon as possible, you must safely follow the program exactly to avoid injury to the arm. During this program, you may have dull aches or soreness. If you have acute pain or pain for longer than 30 minutes, stop the program. If the pain persists, alert your doctor. If symptoms allow, you should do one step every other day. Along with this program, you should do a weight program with high repetition and low weights. Lift weights on throw days (after throwing). On the rest of the days between, focus on recovery and stretching. Always warm up (until a light sweat) before activity with jogging or biking. Before throwing, stretch all muscle groups.

Phase I: Crow Hop Throw on Flat Ground

Flat-footed throwing greatly stresses the arm and can cause injury. The crow hop consists of a hop, skip, then throw.

Warm up throws should be at a relaxed distance (around 35-40 feet). Increase the distance according to step.

To move onto the next step, you must be able to throw at each step two to three times without pain or symptoms. At the end, you should have the ability to do 75 throws at every distance painlessly.

Step 1: Warm up throws 25 throws of 45 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 45 feet.

Step 2: Warm up throws 25 throws of 45 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 45 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 45 feet.

Step 2: Warm up throws 25 throws of 45 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 45 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 45 feet.

Step 3: Warm up throws 25 throws of 60 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 60 feet.

Step 4: Warm up throws 25 throws of 60 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 60 feet. Rest for 5 to 10 minutes. Warm up throws 25 throws of 60 feet.

Use the same protocol as above for steps 5 and 6 with 9- foot throws, steps 7 and 8 with 120 feet throws, steps 9 and 10 with 150 feet throws, steps 11 and 12 with 180 feet throws. When you can do 75 throws of 180 feet comfortably, proceed to the next activity.

Exercises for Return to Pitching

Flat ground throws:

Warm up throws

- 10 to 15 throws of 60 feet
- 10 throws of 90 feet
- 10 throws of 120 feet
- 20 to 30 throws of 60 feet using pitching mechanics (flat ground)
- 10 to 15 throws of 60 to 90 feet
- 20 throws of 60 feet using pitching mechanics (flat ground)

If Phase 1 is done without pain, you can return to your position and throw off the mound.

Phase II: Throw off the mound and simulated games

By this phase, you should have full strength back into your arm. If you have pain, stop the program and proceed when your symptoms decrease.

Stage I: Fastball only

Step 1: Interval throws of 120 feet for warm-up. At 50% velocity, do 30 throws off the mound.

Step 2: Interval throws of 120 feet for warm-up. At 50% velocity, do 30 throws off the mound.

Step 3: Interval throws of 120 feet for warm-up. At 50% velocity, do 45 throws off the mound.

Step 4: Interval throws of 120 feet for warm-up. At 50% velocity, do 60 throws off the mound.

Step 5: Interval throws of 120 feet for warm-up. At 50% velocity, do 70 throws off the mound.

Step 6: At 50% velocity, do 45 throws off the mound. At 75% velocity, do 30 throws off the mound.

Step 7: At 50% velocity, do 30 throws off the mound. At 75% velocity, do 45 throws off the mound.

Step 8: At 75% velocity, do 65 throws off the mound. At 50% velocity, do 10 throws off the mound.

Stage II: Fastball only

Step 9: At 75% velocity, do 60 throws off the mound. 15 throws in batting practice.

Step 10: At 75% velocity, do 50 to 60 off the mound. 30 throws in batting practice.

Step 11: At 75% velocity, do 45 to 50 throws off the mound. 45 throws in batting practice.

Exercises for Return to Pitching

Stage III: Initiate breaking ball pitches

Step 12: At 75% velocity, do 30 throws off the mound (warm-up). At 50% velocity, do 15 throws off the mound (breaking balls). 45 to 60 throws in batting practice (fastballs).

Step 13: At 75% velocity, do 30 throws off the mound (warm-up). At 75% velocity, do 30 throws off the mound (breaking balls). 30 throws in batting practice.

Step 14: At 75% velocity, do 30 throws off the mound (warm-up). 60 to 90 throws in batting practice, slowly increase breaking balls.

Step 15: Simulated games, proceed with 15 throws per workout (keep track of pitches)

*Adapted from the Interval Throwing Program by the University of Massachusetts Department of Orthopaedics.

Training Log

DATE	STEP	PAIN LEVEL
	Step 1 (45 feet)	
	Step 2 (45 feet)	
	Step 3 (60 feet)	
	Step 4 (60 feet)	
	Step 5 (90 feet)	
	Step 6 (90 feet)	
	Step 7 (120 feet)	
	Step 8 (120 feet)	
	Step 9 (150 feet)	
	Step 10 (150 feet)	
	Step 11 (180 feet)	
	Step 12 (180 feet)	
	Step 13 (180 feet, same as step 11 & 12)	
	Flat Ground Throwing	
	Stage I: Step 1	
	Stage I: Step 2	
	Stage I: Step 3	
	Stage I: Step 4	
	Stage I: Step 5	
	Stage I: Step 6	

Exercises for Return to Pitching

DATE	STEP	PAIN LEVEL
	Stage I: Step 7	
	Stage I: Step 8	
	Stage II: Step 9	
	Stage II: Step 10	
	Stage II: Step 11	
	Stage III: Step 12	
	Stage III: Step 13	
	Stage III: Step 14	
	Simulated Game 1	
	Simulated Game 2	
	Simulated Game 3	