



THROWING PROGRAM

Short Duration (21-Day) Interval Throwing Program

Day 1:	45' (20 Throws)	Day 12:	Rest
	60' (20 Throws)	Day 13:	60' (100 Throws)
Day 2:	45' (30 Throws)		Bullpen Pitching - Fastballs Only
	60' (30 Throws)		25 pitches @ 75% effort
Day 3:	60' (50 Throws)	Day 14:	45' (50 Throws)
Day 4:	60' (35 Throws)		60' (30 Throws)
	90' (20 Throws)		120' (20 Throws)
	60' (15 Throws)		45' (50 Throws)
Day 5:	Rest	Day 15:	60' (100 Throws)
Day 6:	60' (50 Throws)		Bullpen Pitching - Fast/Change
	90' (25 Throws)		35 pitches @ 80% effort
	60' (15 Throws)	Day 16:	Rest
Day 7:	60' (40 Throws)	Day 17:	60' (100 Throws)
	90' (40 Throws)		Bullpen Pitching - All Pitches
	60' (40 Throws)		45 pitches @100%
Day 8:	60' (40 Throws)	Day 18:	45' (50 Throws)
	90' (40 Throws)		90' (30 Throws)
	120' (25 Throws)		120' (20 Throws)
	60' (20 Throws)		45' (50 Throws)
Day 9:	Rest	Day 19:	Simulated Game (25 Pitches)
Day 10:	60' (50 Throws)	Day 20:	45' (50 Throws)
	90' (20 Throws)		90' (30 Throws)
	120' (50 Throws)		120' (20 Throws)
	60' (20 Throws)		45' (50 Throws)
Day 11:	60' (50 Throws)	Day 21:	Game (25-35 Pitches)
	90' (20 Throws)		
	120' (60 Throws)		
	60' (20 Throws)		



Interval Throwing Program For Baseball Players: Phase I

The Interval Throwing Program (ITP) is designed to gradually return motion, strength, and confidence in the throwing arm after injury or surgery by slowly progressing through graduated throwing distances. The ITP is initiated upon clearance by the athlete's physician to resume throwing, and is to be performed under supervision.

The program is set up to minimize the chance of re-injury and emphasize pre-throwing warm-up and stretching. Due to individualized variability in all athletes, there is no set timetable for completion of the program. During the recovery process, the athlete will probably experience soreness and a dull, diffuse aching sensation in the muscles and tendons. If the athlete experiences sharp pain, particularly in the joint, stop all throwing activity until this pain ceases. If there is continued pain, contact your physician. "Listen to your body – it will tell you when to slow down."

Weight Training: The athletes should supplement the ITP with a high repetition, low weight exercise program. Strengthening should address a good balance. Weight training will not increase throwing velocity, but will increase the resistance of the arm to fatigue and injury. Weight training should be done the same day as you throw; however, the majority of exercises should be after your throwing is completed, using the day in between for flexibility exercises and a recovery period. A weight training routine should be stressed as a "maintenance program." This routine and should accompany the athlete into and throughout the season as a deterrent to further injury.

Warm Up: Prior to ITP, it is recommended 1 set of 10 repetitions of rotator cuff exercises be performed. Jogging may also assist in warm-up. The athlete should jog until developing a light sweat, then progress to the stretching.

Throwing Mechanics: The development and maintenance of proper throwing mechanics is a critical aspect of the ITP. Use the crow-hop method which simulates the throwing act, allowing emphasis of the proper body mechanics. The velocity of the throw is determined by the distance, whereas the ball should have only enough momentum to travel each designated distance. In other words, throw to, not through, the target. Again, emphasis should be placed upon proper throwing mechanics when the athlete begins phase two: "Throwing off the Mound" or from the athlete's respective position, to decrease the chance of re-injury.

Throwing: The athlete should begin warm-up throws at a comfortable distance and then progress to the distance indicated for that phase. The program consists of throwing at each step 2 to 3 times without pain or symptoms before progressing to the next step. The object of each phase is for the athlete to be able to throw the ball, without pain, the specified number of times at the given distance. After the athlete can throw at a prescribed distance without pain, they will be ready for throwing from flat ground 60' 6" in the normal pitching mechanics or return to their respective position (step 10). At this point, full strength and confidence should be restored in the athlete's arm. The return to unrestricted throwing must follow the same principles. A pitcher should first only throw fast balls at 50%, progressing to 75% and 100%. At this time, he may start more stressful pitches such as breaking balls. The position player should simulate a game situation, again progressing at 50-75-100%. If an athlete has increased pain, particularly in the joint, the throwing program should be backed off and re-advanced as tolerated.

Summary: In using the ITP in conjunction with a structured rehabilitation program, the athlete should be able to return to full competition status, minimizing any chance of re-injury. The program and its progression should be modified to meet the specific needs of each individual athlete. A comprehensive program consisting of maintenance strength and flexibility

programs, appropriate warm-up and cool down procedures, proper pitching mechanics, and progressive throwing and batting will assist the baseball player in returning safely to competition.

INTERVAL THROWING PROGRAM – PHASE I

Rainbow Throwing Program: 30 throws @ 30' every other day for 2 weeks prior to starting 45' Phase			
<p>45' Phase (2-3x/step)</p> <p>A) Warm-Up Throwing B) 45' – 25 Throws C) Rest 2-5 minutes D) 45' – 25 Throws</p> <p>Step 2: A) Warm-Up Throwing B) 45' – 25 Throws C) Rest 2-5 minutes D) Warm-Up Throwing E) 45' – 25 Throws F) Rest 2-5 minutes G) Warm-Up Throwing H) 45' – 25 Throws</p>	<p>60' Phase (2-3x/step)</p> <p>Step 1: A) Warm-Up Throwing B) 60' – 25 Throws C) Rest 2-5 minutes D) 60' – 25 Throws</p> <p>Step 2: A) Warm-Up Throwing B) 60' – 25 Throws C) Rest 2-5 minutes D) Warm-Up Throwing E) 60' – 25 Throws F) Rest 2-5 minutes G) Warm-Up Throwing H) 60' – 25 Throws</p>	<p>90' Phase (2-3x/step)</p> <p>Step 1: A) 60' – 10 Throws B) 90' – 20 Throws C) Rest 2-5 minutes D) 60' – 10 Throws E) 90' – 20 Throws</p> <p>Step 2: A) 60' – 7 Throws B) 90' – 18 Throws C) Rest 2-5 minutes D) 60' – 7 Throws E) 90' – 18 Throws F) Rest 2-5 minutes G) 60' – 7 Throws H) 90' – 18 Throws</p>	<p>120' Phase (2-3x/step)</p> <p>Step 1: A) 60' – 5-7 Throws B) 90' – 5-7 Throws C) 120' – 15 Throws D) Rest 2-5 minutes E) 60' – 5-7 Throws F) 90' – 5-7 Throws G) 120' – 15 Throws</p> <p>Step 2: A) Warm-Up Throwing B) 120' – 25 Throws C) Rest 5-10 minutes D) Warm-Up Throwing E) 120' – 25 Throws F) Rest 5-10 minutes G) Warm-Up Throwing H) 120' – 25 Throws I) 60' – 5 Throws J) 90' – 10 Throws K) 120' – 10 Throws</p>
<p>Flat Throwing</p> <p>Step 9: A) Throw 60' – 10-15 Throws B) Throw 90' – 10 Throws C) Throw 120' – 10 Throws D) Throw 60' – Flat Ground 20-30 Throws</p> <p style="margin-left: 300px;">Step 10: A) Throw 60' – 10 Throws B) Throw 90' – 10 Throws C) Throw 120' – 10 Throws D) Throw 60' – Flat Ground 20 Throws E) Rest 2-5 minutes F) Throw 60-90' – 10 Throws G) Throw 60' – Flat Ground 20 Throws</p>			

INTERVAL THROWING PROGRAM FOR BASEBALL PITCHERS
THROWING OFF THE MOUND – PHASE II

The Interval Throwing Program (ITP) should be performed every other day, with at least one day of rest between steps, unless otherwise specified by your physician. Perform each step 2-3 times before progressing to the next step.

After the completion of the Phase I of the ITP, and the athlete can throw to the prescribed distance without pain, the athlete will be ready for throwing off the mound or return to their respective position. At this point, full strength and confidence should be restored in the athlete's arm. Just as the advancement to this point has been gradual and progressive, the return to unrestricted throwing must follow the same principles. A pitcher should first throw only fast balls at 50%, progressing to 75% and 100%. At this time, the athlete may start throwing more stressful pitches such as breaking balls. The position player should simulate a game situation, again progressing at 50-75-100%. Once again, if an athlete has increased pain, particularly at the joint, the throwing program should be backed off and re-advanced as tolerated.

Throwing: Warm-up using ITP 120' phase for Step 12, 13, 14. All throwing off the mound should be done under supervision to stress proper throwing mechanics. If possible, use speed gun to aid in effort control.

Summary: In using the ITP in conjunction with a structured rehabilitation program, the athlete should be able to return to full competition status, minimizing any chance of re-injury. The program and its progression should be modified to meet the specific needs of each individual athlete. A comprehensive program consisting of maintenance strength and flexibility, appropriate warm-up and cool-down procedures, proper pitching mechanics, and progressive throwing and batting will assist the baseball player in returning safely to competition.

STAGE ONE: FASTBALL ONLY

Step 1: Interval Throwing
15 Throws off mound 50%

Step 2: Interval Throwing
30 Throws off mound 50%

Step 3: Interval Throwing
45 Throws off mound 50%

Step 4: Interval Throwing MECHANICS
60 Throws off mound 50%

Step 5: Interval Throwing
70 Throws off mound 50%

Step 6: 45 Throws off mound 50%
30 Throws off mound 75%

Step 7: 30 Throws off mound 50%
45 Throws off mound 75%

Step 8: 10 Throws off mound 50%
65 Throws off mound 75%

STAGE TWO: FASTBALL ONLY

Step 9: 60 Throws off mound 75%
15 Throws in Batting Practice

Step 10: 50-60 Throws off mound 75%
30 Throws in Batting Practice

Step 11: 45-50 Throws off mound 75%
45 Throws in Batting Practice

STAGE THREE

Step 12: 30 Throws off mound 75% (warm-up)
15 Throws off mound 50% BREAKING BALLS
45-60 Throws in Batting Practice (Fastball Only)

Step 13: 30 Throws off mound 75% (warm-up)
30 Breaking Balls 75%
30 Throws in Batting Practice

Step 14: 30 Throws off mound 75% (warm-up)
60-90 Throws in Batting Practice
(Gradually Increase Breaking Balls)

Step 15: SIMULATED GAME, PROGRESSING BY 15
THROWS PER WORKOUT (Pitch Count)