



INTERVAL THROWING RETURN TO SPORT PROTOCOL

TALLGRASSORTHOPEDICS.COM

Patient Name:
Date of Surgery:

General Principles:

The **Interval Throwing Program** is designed to help athletes re-introduce throwing to their rehabilitation program. The program is divided into 2 protocols. The **Distance/Endurance Protocol** is designed to develop those specific qualities in the throwing motion. The **Pitching Protocol** is a progression from the first protocol and is designed to further develop the pitching motion in both strength and endurance. A speed gun may be used to aid in the assessment of effort for the **Pitching Protocol**. All throwing off the mound should be performed in the presence of a pitching coach or qualified person to stress proper mechanics. Both protocols should be used in combination with the **Throwing Athlete Exercise Program**.

The athlete should ice the affected extremity for 20 minutes following all throwing activity. The athlete should only progress to the next step of each phase if he/she was able to complete the present step without pain or difficulty. Under the direction of a therapist or athletic trainer, the athlete may progress through the steps and phases as tolerated. Emphasis should be placed on developing and maintaining proper throwing mechanics without developing symptoms.

Distance/Endurance Protocol:

45° Phase:

Step 1: Warm-up throwing
45° (25 throws)
Rest 6 minutes
Warm-up throwing
45° (25 throws)

Step 2: Warm-up throwing
45° (25 throws)
Rest 6 minutes
Warm-up throwing
45° (25 throws)
Rest 6 minutes
Warm-up throwing

45° (25 throws)

60° Phase

Step 3: Warm-up throwing
60° (25 throws)
Rest 6 minutes
Warm-up throwing
60° (25 throws)

Step 4: Warm-up throwing
60° (25 throws)
Rest 6 minutes
Warm-up throwing
60° (25 throws)
Rest 6 minutes
Warm-up throwing
60° (25 throws)

90° Phase

Step 5: Warm-up throwing
90° (25 throws)
Rest 6 minutes
Warm-up throwing
90° (25 throws)

Step 6: Warm-up throwing
90° (25 throws)
Rest 6 minutes
Warm-up throwing
90° (25 throws)
Rest 6 minutes
Warm-up throwing
90° (25 throws)

120° Phase

Step 7: Warm-up throwing
120° (25 throws)
Rest 9 minutes
Warm-up throwing
120° (25 throws)

Step 8: Warm-up throwing
120° (25 throws)
Rest 9 minutes
Warm-up throwing
120° (25 throws)
Rest 9 minutes
Warm-up throwing
120° (25 throws)

150° Phase

Step 9: Warm-up throwing

150° (25 throws)

Rest 10 minutes

Warm-up throwing

150° (25 throws)

Step 10: Warm-up throwing

150° (25 throws)

Rest 10 minutes

Warm-up throwing

150° (25 throws)

Rest 10 minutes

Warm-up throwing

150° (25 throws)

180° Phase

Step 11: Warm-up throwing

180° (25 throws)

Rest 10 minutes

Warm-up throwing

180° (25 throws)

Step 12: Warm-up throwing

180° (25 throws)

Rest 10 minutes

Warm-up throwing

180° (25 throws)

Rest 10 minutes

Warm-up throwing

180° (25 throws)

Step 13: Warm-up throwing

180° (25 throws)

Rest 10 minutes

Warm-up throwing

180° (25 throws)

Rest 10 minutes

Warm-up throwing

180° (25 throws)

Pitching Protocol:

Phase I: (Fastball Only – normal stride)

Step 1: Interval throwing
15 throws off mound 50%
Rest 6 minutes
20 throws off mound 50%

Step 2: Interval throwing
20 throws off mound 50%
Rest 6 minutes
25 throws off mound 50%

Step 3: Interval throwing
25 throws off mound 50%
Rest 6 minutes
30 throws off mound 50%

Step 4: Interval throwing
45 throws off mound 50%
Rest 6 minutes
50 throws off mound 50%

Step 5: Interval throwing
35 throws off mound 75%

Step 6: 35 throws off mound 75%
Rest 6 minutes
45 throws off mound 50%

Step 7: 45 shows off mound 75%
Rest 6 minutes
15 shows off mound 50%

Step 8: 60 throws off mound 75%

Phase II: (Fastball Only – normal stride)

Step 9: 45 throws off mound 75%
Rest 6 minutes
15 throws in batting practice

Step 10: 45 throws off mound 75%
Rest 6 minutes
30 throws in batting practice

Step 11: 45 throws off mound 75%
Rest 6 minutes
35 throws in batting practice

Phase III:

Step 12: 30 throws off mound 75% warm-up
Rest 4 minutes
15 throws off mound 50% breaking balls
Rest 4 minutes
45-60 throws in batting practice (fastball only)

Step 13: 30 throws off mound 75%
Rest 4 minutes
30 breaking balls 75%
Rest 4 minutes
30 throws in batting practice

Step 14: 30 throws off mound 75%
Rest 4 minutes
60-90 throws in batting practice 25% breaking balls

Step 15: Simulated game

Simulated Game:

- 10 minute warm up of 50-60 pitches with gradually increasing velocity
- 5-8 Innings for starters, 3-5 innings for relievers, 2-3 innings for closers
- 15-20 Pitches per inning, includes 10-15 fastballs
- 9 Minutes rest between innings