GUIDELINE

### Purpose:

The Interval Throwing Program (ITP) for baseball players 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 performed under the supervision of the rehabilitation team. After completion of Phase I 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. The program is set up to minimize the chance of re-injury and emphasize pre-throwing warm up and stretching:

- 1) The act of throwing the baseball involves the transfer of energy from the feet through the legs, pelvis, trunk, and out the shoulder through the elbow and hand
  - a) Therefore, any return to throwing after injury must include attention to the entire body
- 2) The chance for re-injury is lessened by a graduated progression of interval throwing
- 3) Proper warm-up is essential
- 4) Most injuries occur as the result of fatigue
- 5) Proper throwing mechanics lessen the incidence of re-injury
- 6) Baseline requirements for throwing include:
  - a) Pain-free range of motion
  - b) Adequate muscle power
  - c) Adequate muscle resistance to fatigue

Phase 1 is for return to throwing program and Phase 2 is for return to pitching program. Phase 2 is to be completed with a pitching coach. Emphasis on proper form and may use radar gun to gauge effort.

### Phase I:

Throwing program should be performed every other day, with one day of rest between steps, unless otherwise specified by your physician. Perform each step 2 times before progressing to the next step.

PHASE I: INTERVAL THROWING PROGRAM				
DISTANCE	STEP	THROWING PROGRESSION		
45' Throws	Step 1	<ul> <li>Warm up throwing</li> <li>25 throws at 45'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 45'</li> </ul>		
45' Throws	Step 2	<ul><li>Warm up throwing</li><li>25 throws at 45'</li></ul>		

## GUIDELINE

REHAB SERVICES

		<ul> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 45'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 45'</li> </ul>
60' Throws	Step 3	<ul> <li>Warm up throwing</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 60'</li> </ul>
60' Throws	Step 4	<ul> <li>Warm up throwing</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 60'</li> </ul>
60' & 75' Throws	Step 5	<ul> <li>Warm up throwing</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>25 throws at 60'</li> </ul>
60' & 75' Throws	Step 6	<ul> <li>Warm up throwing</li> <li>25 throws at 60'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 75'</li> <li>Rest 3-5 min</li> <li>Warm up throwing</li> <li>25 throws at 75'</li> </ul>
90' Throws	Step 7	• 10 throws at 60'



## GUIDELINE

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		<ul> <li>20 throws at 90'</li> <li>Rest 3-5 min</li> <li>10 throws at 60'</li> <li>20 throws at 90'</li> </ul>
90' Throws	Step 8	<ul> <li>7 throws at 60'</li> <li>18 throws at 90'</li> <li>Rest 3-5 min</li> <li>7 throws at 60'</li> <li>18 throws at 90'</li> <li>Rest 3-5 min</li> <li>7 throws at 60'</li> <li>18 throws at 60'</li> <li>18 throws at 90'</li> </ul>
120' Throws	Step 9	<ul> <li>5-7 throws at 60'</li> <li>5-7 throws at 90'</li> <li>15 throws at 120'</li> <li>Rest 3-5 min</li> <li>5-7 throws at 60'</li> <li>5-7 throws at 90'</li> <li>15 throws at 120'</li> </ul>
120' Throws	Step 10	<ul> <li>5 throws at 60'</li> <li>10 throws at 90'</li> <li>15 throws at 120'</li> <li>Rest 3-5 min</li> <li>5 throws at 60'</li> <li>10 throws at 90'</li> <li>15 throws at 120'</li> <li>Rest 3-5 min</li> <li>5 throws at 60'</li> <li>10 throws at 90'</li> <li>15 throws at 90'</li> <li>15 throws at 120'</li> </ul>
Flat Ground Throwing	Step 11	<ul> <li>10-15 throws at 60'</li> <li>5-10 throws at 75'</li> <li>10 throws at 90'</li> <li>10 throws at 120'</li> </ul>

### GUIDELINE

• 20-30 throws at 60' flat ground Step 12 Flat Ground Throwing 10-15 throws at 60' ٠ 5-10 throws at 75' • 10 throws at 90' ٠ 10 throws at 120' ٠ • 20-30 throws at 60' flat ground Rest 3-5 min • 10-15 throws at 60' • 20-30 throws at 60' flat ground ٠

#### Phase II:

All throwing off the mound should be done in the presence of your pitching coach to stress proper throwing mechanics (use radar gun to aid in effort control if available).

PHASE II: RETURN TO PITCHING PROGRAM – THROWING OFF THE MOUND				
STEP	THROWING PROGRESSION			
Step 1	15 throws off mound at 50%			
Step 2	30 throws off mound at 50%			
Step 3	45 throws off mound at 50%			
Step 4	60 throws off mound at 50%			
Step 5	70 throws off mound at 50%			
Step 6	<ul><li>45 throws off mound at 50%</li><li>30 throws off mount at 75%</li></ul>			
Step 7	<ul><li> 30 throws off mound at 50%</li><li> 45 throws off mound at 75%</li></ul>			
Step 8	<ul><li>65 throws off mound at 75%</li><li>10 throws off mound at 50%</li></ul>			
Step 9	<ul> <li>60 throws off mound at 75%</li> <li>15 throws in batting practice</li> </ul>			
	STEPStep 1Step 2Step 3Step 4Step 5Step 6Step 7Step 8			

## GUIDELINE

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	Step 10	<ul> <li>50-60 throws off mound at 75%</li> <li>30 throws in batting practice</li> </ul>
	Step 11	<ul> <li>45-50 throws off mound at 75%</li> <li>45 throws in batting practice</li> </ul>
Stage 3: Breaking Balls	Step 12	<ul> <li>30 throws off mound at 75% (warm up)</li> <li>15 throws off mound at 50% breaking balls</li> <li>45-60 throws in batting practice</li> </ul>
	Step 13	<ul> <li>30 throws off mound at 75% (warm up)</li> <li>30 breaking balls at 75%</li> <li>30 throws in batting practice</li> </ul>
	Step 14	<ul> <li>30 throws off mound at 75% (warm up)</li> <li>60-90 throws in batting practice <ul> <li>Gradually increase breaking balls</li> </ul> </li> </ul>
	Step 15	Simulated game: progressing by 15 throws per workout