



## ***Interval Throwing Program***

### *Rehabilitation Guideline*

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This Interval Throwing Program (ITP) is designed to return overhead athletes to baseball or softball as quickly and safely as possible, while also minimizing risk for future injury. This program is meant as a guide and should be supervised by your Physical Therapist or Athletic Trainer until the athlete is comfortable continuing on their own without having any pain or difficulty. Distances should be modified for softball athletes and also determined by age of the athlete.

# General Guidelines/Precautions:

- Prior to beginning the ITP, the athlete must meet all guidelines set forth by the rehabilitation specialist and have clearance from the referring physician.
- A rough timeline for return to full throwing activity using the operative ITP is 2-3 months for position players and 3-4 months for pitchers depending on age, ability level and response to the ITP. Timeline can also be modified by the rehabilitation specialist as they see fit. The non-operative ITP may take anywhere from 3-8 weeks for full return.
- Regarding weight training, it is beneficial to supplement the ITP with a specific exercise program to assist in developing endurance of the rotator cuff and scapular musculature to reduce the risk for injury. This should be completed on the same day of throwing, after the ITP.
- Ensure proper throwing mechanics when returning to throwing. This can also limit the risk for re-injury. For steps 5 and beyond, the athlete should be using either the shuffle method or the crow-hop method, which both assist in using the lower body and reducing stress to the arm during the throw.
- Ensure a proper warm up prior to throwing for the day. This includes a total body warm up as well as any specific stability, mobility or stretching exercises that have been recommended to the athlete. Warm up throws can consist of 10-20 throws progressing back to the specified working distance for that step.
- During throwing, the goal of each step is to throw TO the selected distance using an easy throwing motion. There should be an arc on each throw. Throwing “on a line” or “through” your partner should not occur until the later steps of the program (specified by the rehabilitation specialist).
- A post throwing stretching routine should also be utilized immediately after throwing and can be individualized by the rehabilitation specialist based on each athlete’s specific needs.

# NON-SURGICAL INTERVAL THROWING PROGRAM

Complete every other day unless otherwise specified.

STEP	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION
<i>Step 1: 60'</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 60'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 60'</li> <li>• Post throwing routine</li> </ul>	<p>Repeat each step 2-3 times with no pain prior to progressing to the next step. If pain occurs during any step of the program, the player must return to the last completed symptom-free step and progress when symptoms subside. Depending on the athlete, this may take anywhere from 3-8 weeks for full return.</p>
<i>Step 2: 90'</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Post throwing routine</li> </ul>	<p>For softball players, add <b>Step 1.5</b> (2x20 throws at 75') and <b>Step 2.5</b> (2x20 throws at 105'), then program can usually end around Step 3 depending on progress and the needs of the individual athlete.</p>
<i>Step 3: 120'</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Post throwing routine</li> </ul>	
<i>Step 4: 150'</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 150'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 150'</li> <li>• Post throwing routine</li> </ul>	<p>If athlete is a pitcher, begin throwing off of mound after Step 4 has been successfully completed. If athlete is NOT a pitcher, begin at usual position with drill work.</p>
<i>Step 5: 180'</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 180'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 180'</li> <li>• Post throwing routine</li> </ul>	

# POST SURGICAL INTERVAL THROWING PROGRAM

Complete every other day unless otherwise specified.

STEP	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION
<b>Step 1: 45'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 45'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 45'</li> <li>• Post throwing routine</li> </ul>	Repeat each step at least 2 times with no pain prior to progressing to the next step. If pain occurs during any step of the program, the player must return to the last completed symptom-free step and progress when symptoms subside.
<b>Step 2: 60'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 60'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 60'</li> <li>• Post throwing routine</li> </ul>	
<b>Step 3: 90'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Post throwing routine</li> </ul>	
<b>Step 4: 90'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 90'</li> <li>• Post throwing routine</li> </ul>	
<b>Step 5: 120'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Post throwing routine</li> </ul>	
<b>Step 6: 120'</b>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• Post throwing routine</li> </ul>	

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# POST SURGICAL INTERVAL THROWING PROGRAM

<p><b>Step 7: 150'</b></p>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 150'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 150'</li> <li>• Post throwing routine</li> </ul>	
<p><b>Step 8: 180'</b></p>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 180'</li> <li>• Rest 5-10 min</li> <li>• Warm up</li> <li>• 20 throws @ 180'</li> <li>• Post throwing routine</li> </ul>	
<p><b>Step 9</b></p>	<p>Begin throwing flat ground with pitching mechanics or begin at usual position with positional drill work.</p>	
<p><b>Step 10</b></p>	<p>Flat Ground Throwing</p> <ul style="list-style-type: none"> <li>• Warm up</li> <li>• Work back to 120' w/ 20-25 throws</li> <li>• Easy 20-30 throws at 60' on flat ground w/ pitching mechanics</li> <li>• Post throwing routine</li> </ul>	
<p><b>Step 11</b></p>	<p>Flat Ground Throwing</p> <ul style="list-style-type: none"> <li>• Warm up</li> <li>• Work back to 120' w/ 20-25 throws</li> <li>• 20-30 throws at 60' on flat ground w/ pitching mechanics</li> <li>• 10-15 throws at 60-90'</li> <li>• 20 throws at 60' on flat ground w/ pitching mechanics</li> <li>• Post throwing routine</li> </ul>	

# RETURN TO PITCHING PROGRAM

STEP	SUGGESTED INTERVENTIONS	STEP	SUGGESTED INTERVENTIONS
<b>STAGE ONE FASTBALLS ONLY</b>  <i>Step 1</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• 20 throws off mound 75%</li> <li>• Post throwing routine</li> <li>• One day off</li> </ul>	<i>Step 2</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• 30 throws off mound 75%</li> <li>• Post throwing routine</li> <li>• One day off</li> </ul>
<i>Step 3</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 20 throws @ 120'</li> <li>• 40 throws off mound 75% (2x20+, 5-10 min rest between)</li> <li>• Post throwing routine</li> <li>• One day off</li> </ul>	<i>Step 4</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 25 throws @ 120'</li> <li>• 60 throws off mound 75% (2x30, 5-10 min rest between)</li> <li>• Post throwing routine</li> <li>• 2-3 days off</li> </ul>
<i>Step 5</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 25 throws @ 120'</li> <li>• 30-40 throws off mound 90%</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on day 3</li> </ul>	<i>Step 6</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• 25 throws @120'</li> <li>• 40-50 throws off mound 90%</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on day 3</li> </ul>
<b>STAGE TWO CHANGE UPS</b>  <i>Step 7</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• Mix in Changeups off the mound</li> <li>• 30 throws off mound 90% (5-10 min rest after)</li> <li>• 30 throws off mound 90%</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on day 3</li> </ul>	<i>Step 8</i>	<ul style="list-style-type: none"> <li>• Warm up</li> <li>• Mix in Changeups off the mound</li> <li>• 40 throws off mound 90% (5-10 min rest between)</li> <li>• 40 throws off mound 90%</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on days 3 and 4</li> </ul>
<b>STAGE THREE BREAKING BALLS</b>  <i>Step 9</i>	<ul style="list-style-type: none"> <li>• (5-10 min rest after each set)</li> <li>• Warm up &amp; 5 throws off mound warm up</li> <li>• 30 throws off mound at 90% (mix pitches)</li> <li>• 30 throws off mound at 90% (mix pitches)</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on day 3</li> </ul>	<i>Step 10</i>	<ul style="list-style-type: none"> <li>• (5-10 min rest after each set)</li> <li>• Warm up &amp; 5 throws off mound warm up</li> <li>• 40 throws off mound 90% (mix pitches)</li> <li>• 40 throws off mound 90% (mix pitches)</li> <li>• Post throwing routine</li> <li>• Two days off then ITP Step 7 on day 3</li> </ul>
<b>STAGE FOUR SIMULATED GAMES</b>  <i>Step 11</i>	<ul style="list-style-type: none"> <li>• Warm up &amp; 10 throws off mound warm up</li> <li>• 40 pitches (pitches called by a catcher)</li> <li>• Simulated rest after each inning, throwing from wind up and stretch</li> <li>• Two days off then ITP Step 7 on days 3 and 4</li> </ul>	<i>Step 11 (continued)</i>	<ul style="list-style-type: none"> <li>• Progress by 15-20 pitches per simulated game</li> <li>• ITP Step 7 on day 4 once the athlete is throwing &gt;60 pitches in one session.</li> <li>• Begin throwing in games when athlete has demonstrated good control and full confidence in the arm with no lingering pain or soreness.</li> </ul>



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