

**Orthopedic Surgery • Sports Medicine**  
*Neil Kumar, MD*

## **Interval Throwing Program**

### **Softball Pitcher**

Each phase is designed to increase endurance and strength in a safe, pain-free manner. Every athlete will heal at different rates. Therefore, the “soreness rule” is used to prevent oversteering the soft tissues during progression.

- Each step should be performed 1 time with one day rest between each session
- If no soreness, advance 1 step every 2-3 throwing days.
- If sore during warm-up but soreness is gone within the first 15 throws, repeat the previous workout. If shoulder becomes sore during this workout, stop and take 2 days off. Upon return to throwing, drop down 1 step.
- If sore more than 1 hour after throwing or the next day, take 1 day off and repeat the most recent throwing program workout
- If sore during warm-up and soreness continues through the first 15 throws, stop throwing and take 2 days off. Upon return to throwing, drop down to previous workout.

It is recommended to be properly warmed up prior to the start of a work-out. A suggested work-out format includes: 10 minute dynamic warm-up (jogging, biking, etc), complete shoulder stretches, and complete designated throws for that day, complete peri-scapular strengthening exercises (high rep with low weight), repeat shoulder stretches, and finish with ice. Ice should be applied to the shoulder for 15-20 minutes following each step. Early supervision of the progression by an athletic trainer or rehabilitation professional is recommended.

If you are using this program as a return to throwing program due to an injury or surgery, you are to begin at phase one and progress through each phase.

If you are using this program as a preseason tool to prepare for your upcoming season without a recent injury or surgery, you may complete Steps 2 and 4 in phase I before completing all of phase II, III, and IV.

All long tosses begin with a crow-hop.

*\* Courtesy of Elite Sports Medicine, Hartford, Connecticut.*

**Phase I: Return to Throwing**

\*All throws up to 50% effort

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 30 ft</li> <li>• 10 throws at 30 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 30 ft</li> <li>• 10 long tosses at 45 ft</li> </ul>	<p><b>Step 2</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 45 ft</li> <li>• 10 throws at 45 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 45 ft</li> <li>• 10 long tosses at 60 ft</li> </ul>
<p><b>Step 3</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 60 ft</li> <li>• 10 throws at 60 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 10 long tosses at 75 ft</li> </ul>	<p><b>Step 4</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 75 ft</li> <li>• 10 throws at 75 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 75 ft</li> <li>• 10 long tosses at 90 ft</li> </ul>
<p><b>Step 5</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 90 ft</li> <li>• 10 throws at 90 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 90 ft</li> <li>• 10 long tosses at 105 ft</li> </ul>	<p><b>Step 6</b></p> <ul style="list-style-type: none"> <li>• Warm up toss at 105 ft</li> <li>• 10 throws at 105 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 10 long tosses at 120 ft</li> </ul>

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**Phase II: Return to Pitching – Fastballs Only**

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm-up tosses to 120 ft</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 20 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 5 pitches at 20 ft</li> <li>• 10 long tosses at 120 ft</li> </ul>	<p><b>Step 2</b></p> <ul style="list-style-type: none"> <li>• Warm-up tosses to 120 ft</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 35 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 35 ft</li> <li>• 10 long tosses at 120 ft</li> </ul>
<p><b>Step 3</b></p> <ul style="list-style-type: none"> <li>• Warm-up tosses to 120 ft</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 46 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 46 ft</li> <li>• 15 long tosses at 120 ft</li> </ul>	<p><b>Step 4</b></p> <ul style="list-style-type: none"> <li>• Warm-up tosses to 120 ft</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 46 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 pitches at 46 ft</li> <li>• Rest for 8 minutes</li> <li>• 10 throws at 60 ft</li> <li>• 10 pitches at 46 ft</li> <li>• 15 long tosses at 120 ft</li> </ul>

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**Phase III: Return to Pitching – Off-Speed Pitching**

\*\*Pitch set consists of 50% fastballs / 50% off-speed pitches

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 15 pitches (50% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 2</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 15 pitches (50% effort)**</li> <li>• 15 pitches (50% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>
<p><b>Step 3</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 4</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 20 pitches (50% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>
<p><b>Step 5</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (50% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (75% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 6</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 2 throws to each base (75% effort)</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (75% effort)**</li> <li>• 15 pitches (50% effort)**</li> <li>• 1 throw to each base (75% effort)</li> <li>• 15 pitches (50% effort)**</li> <li>• 20 long tosses to 120 ft</li> </ul>

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**Phase IV: Return to Pitching – Simulated Pitching**

^Pitch set consists of pre-injury pitch selection specific for each pitcher

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 1 throws to each base (100% effort)</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (75% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (75% effort)^</li> <li>• 1 throw to each base (75% effort)</li> <li>• 20 pitches (75% effort)^</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 2</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 1 throws to each base (100% effort)</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (75% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (75% effort)^</li> <li>• 1 throw to each base (100% effort)</li> <li>• 15 pitches (75% effort)^</li> <li>• 20 long tosses to 120 ft</li> </ul>
<p><b>Step 3</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 1 throws to each base (100% effort)</li> <li>• 20 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (100% effort)^</li> <li>• 1 throw to each base (100% effort)</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 4</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 1 throws to each base (100% effort)</li> <li>• 20 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 pitches (100% effort)^</li> <li>• 15 pitches (100% effort)^</li> <li>• 1 throw to each base (100% effort)</li> <li>• 15 pitches (100% effort)^</li> <li>• 20 long tosses to 120 ft</li> </ul>
<p><b>Step 5</b></p> <ul style="list-style-type: none"> <li>• Batting practice</li> <li>• Warm-up with long tosses to 120 ft</li> <li>• 100-120 pitches</li> <li>• 1 throw to each base every 25 pitches</li> <li>• 20 long tosses to 120 ft</li> </ul>	<p><b>Step 6 – Simulated game</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 7 innings               <ul style="list-style-type: none"> <li>○ 18-20 pitches/inning</li> <li>○ 8 minutes rest between innings</li> </ul> </li> </ul>