

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

## **Interval Throwing Program**

### **Adolescent Baseball 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 and III.

All long tosses begin with a crow-hop.

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

**Phase I: Return to Throwing**

\*\*To progress to Step 4, the athlete should be able to throw 90ft, 50 times without pain. If the athlete has an increase in soreness and pain, the throwing program should not progress.

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm up throwing</li> <li>• 25 throws at 45 ft</li> <li>• Rest for 5 minutes</li> <li>• Warm up throwing</li> <li>• 25 throws at 45 ft</li> </ul>	<p><b>Step 2</b></p> <ul style="list-style-type: none"> <li>• Warm up throwing</li> <li>• 25 throws at 60 ft</li> <li>• Rest for 5 minutes</li> <li>• Warm up throwing</li> <li>• 25 throws at 60 ft</li> </ul>
<p><b>Step 3</b></p> <ul style="list-style-type: none"> <li>• Warm up throwing</li> <li>• 25 throws at 90 ft</li> <li>• Rest for 5 minutes</li> <li>• Warm up throwing</li> <li>• 25 throws at 90 ft</li> </ul>	<p><b>Step 4**</b></p> <ul style="list-style-type: none"> <li>• Warm up throwing</li> <li>• 25 throws off the mound</li> <li>• Rest for 5 minutes</li> <li>• Warm up throwing</li> <li>• 25 throws off the mound</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 with Step 4 from Phase I</li> <li>• 15 throws off the mound (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 Step 4 from Phase I</li> <li>• 20 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 25 throws off the mound (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 Step 4 from Phase I</li> <li>• 30 throws off the mound (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 Step 4 from Phase I</li> <li>• 20 throws off the mound (100% effort)</li> <li>• Rest for 5 minutes</li> <li>• 25 throws off the mound (100% effort)</li> <li>• 15 throws in batting practice</li> </ul>
<p><b>Step 5</b></p> <ul style="list-style-type: none"> <li>• Warm-up with Step 4 from Phase I</li> <li>• 20 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 25 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 30 throws in batting practice</li> </ul>	<p><b>Step 6</b></p> <ul style="list-style-type: none"> <li>• Warm-up with Step 4 from Phase I</li> <li>• 45 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 45 throws in batting practice</li> </ul>

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**Phase III: Return to Pitching – Breaking balls**

<p><b>Step 1</b></p> <ul style="list-style-type: none"> <li>• Warm-up with long tosses to 120 ft</li> <li>• 30 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 15 throws off the mound (50% effort) breaking balls</li> <li>• Rest for 5 minutes</li> <li>• 30 throws in batting practice, fastballs only</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>• 30 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 30 throws off the mound (75% effort) breaking pitches</li> <li>• Rest for 5 minutes</li> <li>• 30 throws in batting practice, alternate fastballs and breaking balls</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>• 30 throws off the mound (75% effort)</li> <li>• Rest for 5 minutes</li> <li>• 60-90 throws in batting practice, 25% breaking balls</li> </ul>	<p><b>Step 4</b></p> <ul style="list-style-type: none"> <li>• Simulated game</li> </ul>
<p><b>Step 5</b></p> <ul style="list-style-type: none"> <li>• Return to regular workout regimen</li> </ul>	