

## John Conway MD Softball Interval Throwing Program

**Infielders:** complete the program through the 120 feet phase.  
**Outfielders:** complete the program through the 150 feet phase.

If you want to throw hard and throw accurately you must throw hard and throw repeatedly ... However, *your shoulder and arm must have time to heal and adapt to the imposed demand.* Progression too rapidly in the throwing program will **DELAY** your recovery and return to sport.

The interval-throwing program is just a guide and this guide should be adapted or modified to meet your individual progress and problems. Your athletic trainer, physical therapist or doctor may help tailor the program to have a slow, normal or accelerated pace based on several factors: the extent of your injury, the type of treatment or repair, the effectiveness of your strengthening program and the time away from throwing. In most cases, the more complicated the problem, the slower you should progress.

Typically, plan to throw every other day or 3 times a week. The number of throwing sessions at a given level will depend on how slowly you are progressing through the program.

### Progression Examples:

### Time (weeks) to complete 45-120 feet level

Elbow Arthroscopy or Nerve Decompression	4 - 8 weeks
Elbow Tommy Ligament Repair	10 - 14 weeks
Elbow Ligament Reconstruction	12 - 20 weeks
Older, bigger, harder throwing pitchers should take longer	
Shoulder Debridement - without repair	10 - 14 weeks
Shoulder Debridement - with repair	12 - 20 weeks

**Pain requires attention.** You are adding progressively greater loads on your arm as you add throwing distance. However, if you are having problems at a given level, return to the previous level until your problem is corrected or resolves. Do not hesitate to take an extra day or two off if you are having problems.

**If you have a bad day, take a day off.**

**If you are having discomfort or trouble at a level, drop down a level.**

While it is not uncommon to have occasional discomfort, you should not have pain. **If your problems do not resolve, see your athletic trainer, physical therapist or doctor.**

**Throwing with a qualified coach or pitching instructor** will improve your ability to progress in the throwing program.

**Video** your throwing workout at least once a week to analyze your throwing motion and your progress. There are many phone Apps available that will allow you to record and analyze your progress. HUDL: Slow Motion Video is one free option that seems to work well.

**3D Biomechanical Motion Analysis** is another available tool to assist your effort to recovery, improve your performance and potentially limit your risk for further injury and lost playing time. If you are interested, contact Craig Garrison, PT, PhD at Texas Health Sports Medicine for an appointment and assessment in the THSM ERA (Evaluation of Rotational Athletes) Lab. (<http://www.texashealth.org/sports-medicine>)

**Throw to your target, not through your target.** Throw on line, but throw with sub-maximal effort and throw within your comfort level. Hard line throwing has been shown to generate as much upper extremity load as pitching, even at the shortest distances. Remember that you are not playing “Burn Out” at 45 feet – simply throw hard enough to throw at that level and no more. You will add effort as you add distance. If you cannot throw on line at a given distance, do not lob or arc the ball up in an attempt to move to the next level.

**Always pay careful attention to your throwing motion / mechanics:**

- Use a gathering step or crow hop to initiate your throwing motion on all throws,  
This will keep your lower body and trunk involved in the throwing motion
- Use a 4-seam grip to allow better view of ball rotation,
- Stay on top of the ball,
- Throw over the top without leaning your trunk (your eyes should stay level with the target),
- Keep your elbow at or above shoulder level,
- Avoid trunk extension or shoulder dip (causes high arc on throws),
- Use your legs,
- Follow through with your arm and trunk. Emphasize your follow through during the throwing program to promote good mechanics,
- Feel like you are throwing the ball with your body, not your arm: Active trunk, quiet arm.

**Progression to the next throwing level in the program is based on your ability to perform the elements of the current throwing level. So, you must meet the following criteria to move to the next level:**

- No pain or stiffness while throwing,
- No pain or stiffness after throwing,  
It's ok to have some exercise related muscle soreness,
- Goal based, acceptable, reproducible throwing motion and mechanics,
- Consistent throwing accuracy throughout the current level,
- Dependably flat, on line throws,
- Good strength throughout the current level with little fatigue.
- And when moving to the next level, you may transition by throwing the first set at the previous level and the second set at the next level for 1-2 days or until you are comfortable throwing two sets at the next level distance.

**Continue your upper trunk, scapula and rotator cuff rehabilitation program throughout the interval-throwing program.** On throwing days, warm up with aerobic and light stretch cord exercises, then go through the throwing session. Cool down, complete the maintenance trunk and upper extremity exercises that you learned in the rehabilitation process and then ice down. The off day should include light stretch cord exercises for your arm (but just for blood flow and technique – not strengthening) as well as lower body and trunk performance conditioning exercise.

**Hat drills:** The hat drill program is designed to improve your ability to throw flat or slightly down with better strength and throwing accuracy. When you reach the hat drill phase indicated for your position, place a hat at 120 feet (infielders) or 150 feet (outfielders) from your position. Your throwing partner is positioned behind the hat to catch the ball on one bounce. Your goal is to throw with effort, imagining that you are throwing through the chest of another throwing partner standing 45 feet (infielders and outfielders) in front of the hat. Attempt to hit the hat.

## Flat Ground Throwing Program

### 30 Foot Phase

<b>First Day</b>	Warm-up throws at 20 - 30 feet Throws at 45 feet Warm-down throws <b>1 Set</b> only / Rest the next day	25 Throws
<b>Level 1</b>	Warm-up throws at 20 - 30 feet Throws at 30 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws
<b>Level 2</b>	Warm-up throws at 20 - 30 feet Throws at 30 feet <b>3 Sets</b> / Rest 5 - 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws

### 45 Foot Phase

<b>Level 1</b>	Warm-up throws at 20 - 45 feet Throws at 45 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws
<b>Level 2</b>	Warm-up throws at 20 - 45 feet Throws at 45 feet <b>3 Sets</b> / Rest 5 - 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws

### 60 Foot Phase

<b>Level 1</b>	Warm-up throws at 20 - 60 feet Throws at 60 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws
<b>Level 2</b>	Warm-up throws at 20 - 60 feet Throws at 60 feet <b>3 Sets</b> / Rest 5 - 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws

## 75 Foot Phase

<b>Level 1</b>	Warm-up throws at 20 - 75 feet Throws at 75 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws
<b>Level 2</b>	Warm-up throws at 20 - 75 feet Throws at 75 feet <b>3 Sets</b> / Rest 5 - 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws

**Note:** After completing the 75-foot phase, the thrower may elect to work through the remainder of the long toss program as outlined up to 120 feet – **or – elect to throw only 2 sets of 25 throws on each day in the program (omitting the third set of 25 throws: only 50 throws / day)**. It is also an option to mix phases, such as throwing one set of 25 throws at 75 feet and the next set of 25 throws at 90 feet; **and to have an easy toss set of 25 throws at 45 feet on the off days**.

## 90 Foot Phase

<b>Level 1</b>	Warm-up throws at 20 - 90 feet Throws at 90 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week)	25 Throws
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## 105 Foot Phase

<b>Level 1</b>	Warm-up throws at 20 - 105 feet Throws at 105 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week) Easy 8 – 10 minute toss at 45 feet on off day	25 Throws
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## 120 Foot Phase

### (Hat Drills for Infielders)

Warm-up throws at 20 - 120 feet Throws at 120 feet <b>2 Sets</b> / Rest 10 minutes between sets Warm-down throws Throw on alternate days (3 days / week) 10 minute toss at 60 feet on off day	25 Throws
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**Hat Drills for Infielders:** After completing the 120 foot phase, infielders throw 2 normal sets of 25 throws at 120 feet then throw one Hat Drill set of 25 throws (as described above) at 120 feet, then at 90 feet and finally at 60 feet, over 10-15 days before beginning unrestricted field practice / play.

**135 Foot Phase****(Hat Drills for Infielders)**

Warm-up throws at 20 - 135 feet

Throws at 135 feet

25 Throws

**2 Sets** / Rest 10 minutes between sets

Warm-down throws

Throw on alternate days (3 days / week)

10 minute toss at 60-75 feet on off day

**150 Foot Phase****(Hat Drills for Outfielders)**

Warm-up throws at 20 - 150 feet

Hat drill throws at 150 feet

25 Throws

**2 Sets** / Rest 10 minutes between sets

Warm-down throws

Throw on alternate days (3 days / week)

10 minute toss at 60-75 feet on off day

**Hat Drills for Outfielders:** After completing the 150 foot phase, outfielders throw 2 normal sets of 25 throws at 150 feet then throw one Hat Drill set of 25 throws (as described above) at 150 feet, then at 120 feet and finally at 190 feet, over 10-15 days before beginning unrestricted field practice / play.

**Extended Distance Long Toss for Infielders and Outfielders:** Infielders and Outfielders should continue to extend the distance of the long toss program at 15-foot increments over time based on symptoms, arm strength and endurance.