



Mark Ayzenberg, MD

Interval Throwing Program

The following information will assist the throwing athlete back into the game. This is a distinctly spelled out program that in its variety of forms has had good success in the paced return of the overhead throwing athlete. This should be done with/observed by someone who has knowledge of the correct mechanics for throwing.

Instructions to start this program:

1. If injury involve the non-throwing arm (can include legs, etc.):
 - a. Need medical clearance to begin
 - b. Begin with Step 4
 - c. Follow soreness rules
2. If mild injury of throwing arm;
 - a. Need medical clearance to begin
 - b. Begin with Step 1
 - c. Follow soreness rules
3. If moderate/severe injury or had surgery of throwing arm:
 - a. Need medical clearance to begin
 - b. Begin with Step 1
 - c. Follow soreness rules
4. if no injury and just returning to throwing after time off:
 - a. Begin with Step 4
 - b. Follow soreness rules

Progressions

Start with Step 4
Progress 1 step daily*

Progress 1 step every other day*
Steps 8-12 throw every 3rd day*
Progress 1 step every other day after
Step 13*

Steps 1-12 progress every 3 days with
Warm up /Long toss other 2 days*
Step 13-16 progress 1 step every other
day, warm up/long toss other days*
Step 17-21 advance daily*

Start with Step 4
Progress 1 step daily*

*Following soreness rules

Soreness Rules:

1. If no soreness, advance to next step following noted progressions
2. Soreness with warm up that goes away within 15 throws, repeat previous workout. If soreness continues this workout, stop, take 2 days off, and drop down 1 step
3. If sore more than 1 hour after throwing, or the next day, take a day off and repeat the most recent throwing program
4. If sore during warm up and soreness continues through the 1st 15 throws, stop, take 2 days off and drop down one step

****If there is a break in form (poor mechanics) this should be treated as soreness and dropping down to the previous level to correct is necessary before advancing.**



Warm Up:

1. Jog until sweating
2. Stretching Program: neck, UE's, Trunk, LE's

Throwing form to follow for flat ground Throwing:

Crow Hop: hop-skip-throw...Increase the intensity of this motion as distances increase

Warm Up Tosses:

3-5 throws at 10-15'(Little Leaguers) and 3-5 throws at 25-30 feet for teens and older Increase 10-15' every 3-5 throws until the indicated long toss distance has been reached

After completing the final long tosses at the end of each step:

1. Jog to break a sweat
2. Ice shoulder and elbow for 15-20 minutes (keep barrier between ice and skin to avoid a burn)

Cardiovascular workouts and Home Exercise Program training are to be done on non-throwing days.

Again, proper mechanics is necessary to progress through each level. If proper mechanics/form is lost, this should be treated as soreness and taking a step back to the previous level to correct the form is necessary.

Interval Throwing Program

Level 1			
	Little League	Early Teen	High School/College/Pro
Step 1 – 50% effort	Warm Up Warm Up Toss up to 40' 15 throws @ 20' x 3 sets 6-10 min. rest between sets 20 long tosses @ up to 40'	Warm Up Warm Up Toss to 60' 15 throws @ 30' x 3 sets 6-10 min. rest between sets 20 long tosses @ 60'	Warm Up Warm Up Toss to 60' 15 throws @ 30' x 3 sets 6-10 min. rest between sets 20 long tosses @ 60'
Step 2 – 50% effort	Warm Up Warm up toss up to 60' 15 throws @ 30' x 3 sets 6-10 min. rest between sets 20 long tosses @ up to 50'	Warm Up Warm up toss to 75' 15 throws @ 45' x 3 sets 6-10 min. rest between sets 20 long tosses @ 75'	Warm Up Warm up toss to 75' 15 throws @ 45' x 3 sets 6-10 min. rest between sets 20 long tosses @ 75'
Step 3 – 50 % effort	Warm Up Warm up toss to 75' 15 throws @ 40' x 3 sets 6-10 min. rests between sets 20 long tosses @ 75'	Warm Up Warm up toss to 90' 15 throws @ 60' x 3 sets 6-10 min. rests between sets 20 long tosses @ 90'	Warm Up Warm up toss to 90' 15 throws @ 60' x 3 sets 6-10 min. rests between sets 20 long tosses @ 90'
Step 4 – 50 % effort	Warm Up Warm up toss to 80' 15 throws @ 46' x 3 sets 6-10 min. rest between sets 20 long tosses @ up to 80'	Warm Up Warm up toss to 105' 15 throws @ 90' x 3 sets 6-10 min. rest between sets 20 long tosses @ 105'	Warm Up Warm up toss to 105' 15 throws @ 90' x 3 sets 6-10 min. rest between sets 20 long tosses @ 105'
Step 5 – 50 % effort	Warm Up Warm up toss up to 90' 18 throws @ 46' x 3 sets 6-10 min. rest between sets 20 long tosses @ up to 90'	Warm Up Warm up toss to 120' 18 throws @ 90' x 3 sets 6-10 min. rest between sets 20 long tosses @ 120'	Warm Up Warm up toss to 120' 18 throws @ 90' x 3 sets 6-10 min. rest between sets 20 long tosses @ 120'
Step 6 – 50 % effort	Warm Up Warm up toss up to 100' 20 throws @ 46' x 3 sets 6-10 min. rest between sets 20 long tosses @ up to 100'	Warm Up Warm up toss to 120' 18-20 throws @ 105' x 3 sets 6- 10 min. rest between sets 20 long tosses @ 120'	Warm Up Warm up toss to 120' 18-20 throws @ 105' x 3 sets 6- 10 min. rest between sets 20 long tosses @ 120'
Step 7 – 50 % effort	Warm Up Warm up toss up to 110' 22 throws @ 46' x 3 sets 6-10 min. rests between sets 20 long tosses @ up to 110'	Warm Up Warm up toss to 120' 20 throws @ 120' x 3 sets 6-10 min. rests between sets 20 long tosses @ 120'	Warm Up Warm up toss to 120' 20 throws @ 120' x 3 sets 6-10 min. rests between sets 20 long tosses @ 120'
Level 2			
Step 8 – note % effort Flat Ground	Warm Up Warm Up toss up to 120' 22 throws @ 46' x 3 sets (75%) 6-10 min. rest between sets 20 long tosses @ up to 120'	Warm Up Warm Up toss to 120' 18 Throws @ 60'6" x 2 sets (50%) 18 Throws @ 60'6" x 2 sets (75%) 6- 10 min. rest between sets 25 long tosses @ 160'	Warm Up Warm Up toss to 120' 18 Throws @ 60'6" x 4 sets (75%) 6- 10 min. rest between sets 25 long tosses @ 160'

Interval Throwing Program

Step 9 – note % effort Note "from"	Warm Up Warm Up toss up to 120' from flat ground 22 throws @ 46' x 3 sets (100%) 6-10 min. rest between sets 20 long tosses @ up to 120'	Warm Up Warm Up toss to 120' From mound 24 Throws @ 60'6" x 2 sets (50%) 24 Throws @ 60'6" x 2 sets (75%) 6- 10 min. rest between sets 25 long tosses @ 160'	Warm Up Warm Up toss to 120' from flat ground 20 Throws @ 60'6" x 4 sets (75%) 6- 10 min. rest between sets 25 long tosses @ 160'
Level 2 cont.			
Step 10 – note % effort Note "from"	Little League Warm Up Warm Up toss up to 120' From Mound 20 throws @ 46' x 3 sets (100%) 6- 10 min. rest between sets 20 long tosses @ up to 120'	Early Teen Warm Up Warm Up toss to 120' From mound 24 throws @ 60'6" x 4 (75%) 6- 10 min. rest between sets 25 long tosses @ 160'	High School/College/Pro Warm Up Warm Up toss to 120' Flat Ground 20 throws @ 60'6" x 4 (50%) 25 throws @ 60'6" x 1 (75%) 6- 10 min. rest between sets 25 long tosses @ 160'
Step 11 – note % effort Note "from"	Warm Up Warm Up toss up to 120' From Mound 24 throws @ 46' x 3 sets (100%) 6-10 min. rest between sets 20 long tosses @ up to 120'	Warm Up Warm Up toss to 120' Flat Ground 20 throws @ 60'6" x 2 set (75%) 15 throws @ 80' x 2 set (75%) 6- 10 min. rest between sets 25 long tosses @ 160'	Warm Up Warm Up toss to 120' Flat Ground 20 throws @ 60'6" x 2 (50%) 20 throws @ 60'6" x 3 (75%) 6- 10 min. rest between sets 25 long tosses @ 160'
Step 12	Warm Up Warm Up toss up to 120' From mound 24 throws @ 46' x 3 sets (100%) 1 out of 6 pitches to be off speed 6-10 min. rest between sets 20 long tosses @ up to 120'	Warm Up Warm Up toss to 120' From mound 20 throws @ 60'6" x 2 set (75%) 20 throws @ 60'6" x 2 set (100%) 6 off speed pitches (75%) 20 throws @ 60'6" x 2 set (75%) 6-10 min. rest between sets 25 long tosses @ 160'	Warm Up Warm Up toss to 120' from flat ground 25 throws @ 60'6" x 1 set (50%) 20 throws @ 60'6" x 4 sets (75%) 6- 10 min. rest between sets 6 off speed pitches (75%) 25 long tosses @ 160'
Level 3			
Step 13	Warm Up Warm Up toss up to 120' From mound 24 throws @ 46' x 3 sets (100%) 1 out of 6 pitches to be off speed 6-10 min. rest between sets 20 long tosses @ up to 120'	Warm up Warm up toss to 120' from flat ground 20 throws @ 60' x 2 sets (75%) 20 throws @ 80' x 2 sets (75%) 6-10 min. rest between sets	Warm Up Warm Up toss to 120' From mound 25 fastballs (75%) 20 fastballs (100%) 10 fastballs (75%) 15 fastballs (100%) 25 fastballs (75%) 25 long tosses @ 160'

Interval Throwing Program

Step 14	<p>Warm Up Warm up toss up to 120' Simulated game</p>	<p>Warm Up Warm Up toss to 120'</p> <p>From mound</p> <p>20 fastball (75%) 6 off speed pitches (75%)* 20 fastball (75%) 4 throws to 1st (100%) 15 fastballs (100%) 10 off speed pitches (100%)* 20 fastballs (100%) 5 off speed pitches (100%)* 20 fastballs (75%) 4 throws to 1st (75%) 25 long tosses @ 160'</p>	<p>Warm up Warm Up toss to 120'</p> <p>20 throws @ 80' x 4 sets 6-10 min. rests between sets 25 long tosses @ 160'</p>
----------------	---	---	--

Step 15		<p>Warm Up Warm up toss up to 120' Same as Step 14 but at 100% – except - Last 20 fastballs and throws to 1st as 75% 25 long tosses @ 160'</p>	<p>Warm Up Warm up toss up to 120'</p> <p>20 fastballs (75%)* 20 fastballs (100%) 5 off speed pitches* 15 fastballs (100%) 5 offspeed pitches* 20 fastballs (100%) 5 off speed pitches* Field bunts and comebackers 25 long tosses @ 160'</p> <p><i>relievers and closers can go step21</i></p>
Step 16	* 9 minute rest	<p>Warm up Warm up toss up to 120' Batting practice 100-110 pitches 10 throws to 1st base Field bunts and comebackers 25 long tosses @ 160'</p>	<p>Warm up Warm up toss up to 120'</p> <p>20 fastballs (100%) 15 fastballs (100%) 5 off speed pitches 5 throws to 1st base* 20 fastballs (100%) 5 offspeed pitches* 20 fastballs (100%) 5 off speed pitches 25 long tosses @ 160'</p>

Interval Throwing Program

Step 17		Simulated game	Warm up Warm up toss up to 120' 15 fastballs (100%) 5 off speed pitches* 15 fastballs (100%) 3 throws to 1st base* 20 fastballs (100%) 5 offspeed pitches* 15 fastballs (100%) 3 throws to 2nd* 15 fastballs (100%) 5 off speed pitches* 25 long tosses @ 160'
Step 18			Repeat Step 14
Step 19			Warm up Warm up toss up to 120' 15 fastballs (100%) 5 off speed pitches* 15 fastballs (100%) 3 throws to 1st base* 20 fastballs (100%) 5 offspeed pitches* 15 fastballs (100%) 3 throws to 2nd* 15 fastballs (100%) 5 off speed pitches* 15 fastballs (100%) 5 off speed pitches* 25 long tosses @ 160'
Step 20			Warm up Warm up toss up to 120' Batting practice 100-110 pitches 10 throws to 1st base Field bunts and comebackers 25 long tosses @ 160'
Step 21			Simulated game