

## ***Interval Throwing Program***

### **Instructions:**

A. Baseline/preseason

To establish a base for training and conditioning, begin with step 3 and advance one step daily to step 14, following soreness rules.

B. Nonthrowing arm injury

After medical clearance, begin with step 3 and advance on step daily to step 16 following soreness rules.

C. Throwing arm – bone or bruise involvement

After medical clearance, begin with step 1 and advance program as soreness rules allow, throwing no more than every other day.

D. Throwing arm – tendon/ligament injury (mild)

- After medical clearance, begin with step 1 and advance program to step 3 throwing every other day as soreness rules allow.
- Steps 4-8: Throw every third day on as soreness rules allow, with 2 days of active rest (warm-up and long tosses) following each workout.
- Steps 9-16: Return to throwing every other day as soreness rules allow.

E. Throwing arm – tendon/ligament injury (severe or post-op)

- After medical clearance, begin with step 1.
- Steps 1-8: Throw every third day on as soreness rules allow, with 2 days of active rest (warm-up and long tosses) following each workout.
- Steps 9-16: Return to throwing every other day as soreness rules allow.

### **Soreness Rules:**

- If no soreness, advance one step every throwing day
- If sore during warmup, but soreness is gone within first 15 throws, repeat the previous step. If shoulder becomes sore during this workout, **stop throwing** and take 2 days off. Upon return to throwing, drop down one step.
- If sore during warmup and continues through the first 15 throws, **stop throwing**, and take 2 days off. Upon return to throwing, drop down one step.
- If sore more than 1 hour after throwing, or the next day, take one day off and repeat most recent step.

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## Phase I: Return to Throwing

Instructions: All throws are at 50% effort. Rest 9 minutes between sets.

Step 1	Warm up toss to 60'			Step 5	Warm up toss to 120'
	15 throws at 30'				15 throws at 90'
	15 throws at 30'				20 throws at 90'
	15 throws at 30'				15 throws at 90'
	20 long tosses to 60'				20 long tosses to 120'
Step 2	Warm up toss to 75'			Step 6	Warm up toss to 120'
	15 throws at 45'				20 throws at 105'
	15 throws at 45'				20 throws at 105'
	15 throws at 45'				15 throws at 105'
	20 long tosses to 75'				20 long tosses to 120'
Step 3	Warm up toss to 90'			Step 7	Warm up toss to 120'
	15 throws at 60'				20 throws at 120'
	15 throws at 60'				20 throws at 120'
	15 throws at 60'				20 throws at 120'
	20 long tosses to 90'				20 long tosses to 120'
Step 4	Warm up toss to 105'				
	15 throws at 75'				
	15 throws at 75'				
	15 throws at 75'				
	20 long tosses to 105'				

## Phase II: Return to Pitching

Instructions: Begin steps with warmup toss to 120'. Throw at effort specified. Rest 9 minutes between sets. All fastballs are from level ground with a crow-hop. Finish steps in this phase with 25 long tosses to 160'.

Step 8	15 throws at 60'6" (75%)			Step 11	20 fastballs (50%)
	20 throws at 60'6" (75%)				20 fastballs (75%)
	20 throws at 60'6" (75%)				20 fastballs (50%)
	15 throws at 60'6" (75%)				15 fastballs (75%)
Step 9	20 throws at 60'6" (75%)				25 throws at 60'6" (75%)
	20 throws at 60'6" (75%)			Step 12	25 fastballs (50%)
	20 throws at 60'6" (75%)				20 fastballs (75%)
	20 throws at 60'6" (75%)				20 fastballs (75%)
Step 10	20 fastballs (50%)				20 fastballs (75%)
	20 fastballs (50%)				20 fastballs (75%)
	20 fastballs (50%)				
	20 fastballs (50%)				
	25 throws at 60'6" (75%)				

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## Phase III: Intensified Pitching

Instructions: Begin all steps with warmup toss to 120'. Throw at effort specified. Rest 9 minutes after every second set. All fastballs are from level ground with a crow-hop. Finish steps in this phase with 25 long tosses to 160'. Players less than 15yrs old, stop at Step 14.

Step 13	25 fastballs (75%)			Step 17	15 fastballs (100%)
	20 fastballs (100%)				5 off-speed pitches
	10 fastballs (75%)				15 fastballs (100%)
	15 fastballs (100%)				3 pickoff throws to 1st
	20 fastballs (75%)				20 fastballs (100%)
Step 14	(Active Rest Day)				5 off-speed pitches
	20 throws at 80'				15 fastballs (100%)
	20 throws at 80'				3 pickoff throws to 2nd
	20 throws at 80'				15 fastballs (100%)
	20 throws at 80'				5 off-speed pitches
Step 15	20 fastballs (75%)			Step 18	(Active Rest Day)
	20 fastballs (100%)				Repeat Step 14
	5 off-speed pitches			Step 19	20 fastballs (100%)
	15 fastballs (100%)				5 off-speed pitches
	5 off-speed pitches				20 fastballs (100%)
	20 fastballs (100%)				3 pickoff throws to 1st
	5 off-speed pitches				20 fastballs (100%)
	Field bunts and comebacks				3 pickoff throws to 2nd
Step 16	20 fastballs (100%)				15 fastballs (100%)
	15 fastballs (100%)				5 off-speed pitches
	5 off-speed pitches				15 fastballs (100%)
	5 pickoff throws to 1st				5 off-speed pitches
	20 fastballs (100%)			Step 20	Batting Practice
	5 off-speed pitches				110-120 pitches
	20 fastballs (100%)			Step 21	Simulated Game
	5 off-speed pitches				

### Simulated Game:

1. Ten minute warmup of 50-80 pitches with gradually increasing velocity
2. 5-8 innings for starters, 3-5 innings for relievers, 2-3 innings for closers
3. 15-20 pitches per inning, including 10-15 fastballs
4. 9 minutes rest between innings

Obtained from Axe M, Hurd W, Snyder-Mackler L. Sports Health. 2009 Mar; 1(2): 145-153.