

INTERVAL THROWING PROGRAM FOR LITTLE LEAGUETM AGE ATHLETES

 Name:
 Age:
 MPH:

From age and velocity the target distance is defined and the appropriate Interval Throwing Program is selected. The target distance is 90% of the predicted maximum throwing distance established from data collected from more than 1000 Little LeagueTM age athletes (9-12 years of age) with the assistance of several Delaware based organizations. The interval Throwing Program (ITP) is functional, practical and progressive.

Functional in that a throwing athlete must throw **Practical** in that only baseball and field are needed **Progressive** in that it increases from lower intensity to higher intensity

THROWING PROGRAM WARM-UP AND COOL DOWN

- 1) Break a sweat
- 2) Shoulder stretches

THEN: THROWING PROGRAM

- 3) Shoulder strengthening exercises (dumbbells, bands, isometrics)
- 4) Shoulder stretches
- 5) Ice for 20 minutes (optional)

- In the ITP, the target distances recommended are rounded to the nearest 10 feet.

- To each **Phase** there is a **short toss**, a **15 minute rest** <u>and</u> a **long toss** component to be performed at each workout.

Soreness Rules

- 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 but soreness is gone within the first 15 throws, repeat the previous workout. If shoulder/elbow becomes sore during this workout, stop and take 2 days off. Upon return to throwing, drop down 1 phase.

Interval Throwing Program cont.

Sorness Rules cont.

- 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 1 phase.

- If no soreness, advance 1 phase every throwing day.

- Do not advance more than 2 phases per week.

Off Season Maintenance Program:

Throw 2-3 times per week at Phase VII or VIII with at least 1 day of rest between workouts.

In Season:

| Day 0 – Game | Day 2 – Throw Phase VII |
|-------------------------|-------------------------|
| Day 1 – Throw Phase III | Day 3 – Throw Phase IV |

After an injury (When cleared by doctor):

Begin with Phase I. Take 2-3 days rest between sessions and advance as soreness Rules allow.

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| Interval Throwing Program Target Distance, Velocity/Age ^a | | | | je ^a |
|--|--------------------------------|-------|-----------------|-----------------|
| Valacity (muh) | Age and target distance (feet) | | | |
| Velocity (mph) | 9 | 10 | 11 | 12 |
| 35 | 69.4 | 80.8 | OR ^b | OR |
| 35.5 | 70.9 | 81.9 | OR | OR |
| 36 | 72.3 | 83.2 | 83.0 | OR |
| 36.5 | 73.8 | 84.4 | 84.4 | 77.0 |
| 37 | 75.3 | 85.7 | 85.8 | 78.6 |
| 37.5 | 78.4 | 88.2 | 88.6 | 81.9 |
| 38 | 78.4 | 88.2 | 88.6 | 81.9 |
| 38.5 | 79.9 | 89.5 | 90.1 | 83.6 |
| 39 | 81.5 | 90.8 | 91.5 | 85.3 |
| 39.5 | 83.0 | 92.1 | 93 | 86.9 |
| 40 | 84.6 | 93.4 | 94.5 | 88.7 |
| 40.5 | 86.2 | 94.7 | 96.0 | 90.4 |
| 41 | 87.7 | 96.1 | 97.5 | 92.2 |
| 41.5 | 89.3 | 97.4 | 99.0 | 93.9 |
| 42 | 90.9 | 98.8 | 100.5 | 95.6 |
| 42.5 | 92.5 | 100.2 | 102.1 | 97.4 |
| 43 | 94.2 | 101.6 | 103.6 | 99.2 |
| 43.5 | 95.8 | 103.0 | 105.2 | 101.0 |
| 44 | 97.4 | 104.4 | 106.8 | 102.8 |
| 44.5 | 99.1 | 105.9 | 108.4 | 104.6 |
| 45 | 100.7 | 107.3 | 110.0 | 106.4 |
| 45.5 | 102.4 | 108.8 | 111.6 | 108.2 |
| 46 | 104.1 | 110.2 | 113.3 | 110.0 |
| 46.5 | 105.8 | 111.7 | 114.9 | 111.9 |
| 47 | 107.5 | 113.2 | 116.6 | 113.7 |
| 47.5 | 109.2 | 114.7 | 118.3 | 115.6 |
| 48 | 110.9 | 116.2 | 120.0 | 117.4 |
| 48.5 | 112.6 | 117.8 | 121.7 | 119.3 |
| 49 | 114.3 | 119.3 | 123.4 | 121.3 |
| 49.5 | 116.1 | 120.9 | 125.2 | 123.2 |
| 50 | 117.8 | 122.5 | 126.9 | 125.1 |
| 50.5 | 119.6 | 124.1 | 128.7 | 127.0 |
| 51 | 121.4 | 125.7 | 130.5 | 128.9 |
| 51.5 | 123.24 | 127.3 | 132.3 | 130.9 |
| 52 | 124.9 | 128.9 | 134.1 | 132.8 |
| 52.5 | 126.7 | 130.5 | 135.9 | 134.8 |
| 53 | 128.6 | 132.2 | 137.8 | 136.8 |
| 53.5 | 130.4 | 133.9 | 139.6 | 138.7 |
| 54 | 132.2 | 135.5 | 141.5 | 140.7 |
| 54.5 | OR | 137.2 | 143.4 | 142.7 |
| 55 | OR | 138.9 | 145.3 | 144.7 |
| 55.5 | OR | 140.7 | 147.2 | 146.8 |
| 56 | OR | 142.4 | 149.1 | 148.8 |
| 56.5 | OR | 144.1 | 151.0 | 150.8 |

 Table 5

 Interval Throwing Program Target Distance, Velocity/Age^a

a At 90% statistical model predicted distance

b Out of range

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| Velocity (mph) 9 10 57 OR 145 | | a | | |
|---|--------------------------------|-------|--|--|
| 9 10 | Age and target distance (feet) | | | |
| 57 OR 145 | 11 | 12 | | |
| | 5.9 153.0 | 152.9 | | |
| 57.5 OR 147 | 7.6 154.9 | 155.0 | | |
| 58 OR OR | 156.9 | 157.0 | | |
| 58.5 OR OR | 158.9 | 159.0 | | |
| 59 OR OR | 160.9 | 161.2 | | |
| 59.5 OR OR | 162.9 | 163.3 | | |
| 60 OR OR | 164.9 | 165.4 | | |
| 60.5 OR OR | 167.0 | 167.5 | | |
| 61 OR OR | OR | 169.7 | | |
| 61.5 OR OR | OR | 171.8 | | |
| 62 OR OR | OR | 174.0 | | |
| 62.5 OR OR | OR | 176.1 | | |
| 63 OR OR | OR | 178.3 | | |
| 63.5 OR OR | OR | 180.5 | | |
| 64 OR OR | OR | 182.7 | | |
| 64.5 OR OR | OR | 18.9 | | |
| 65 OR OR | OR | OR | | |

 Table 5

 Interval Throwing Program Target Distance, Velocity/Age^a

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Interval Throwing Program for Little League Aged Athletes

Little Leaguer **Interval Throwing Program**

| PHASE I Short toss Feet Rest time Throws Intensity | Rest between short & long (10 min) (20') (12 sec/throws & 6-8 min/sets) Set 1 2 3 Throws 15 15 20 (work to tolerance) | PHASE I Long toss Feet Rest time Throws Intensity | <pre>65% target distance(12 sec/throws)(25)(to tolerance)</pre> |
|---|---|--|--|
| PHASE II Short toss Feet Rest time Throws Intensity | Rest between short & long (10 min) (30') (12 sec/throws & 6-8 min/sets) Set 1 2 3 Throws 15 15 20 (work to tolerance) | PHASE II Long toss Feet Rest time Throws Intensity | <pre>70% target distance (12 sec/throws) (25) (to tolerance)</pre> |
| PHASE III Short toss Feet Rest time Throws Intensity | Rest between short & long (10 min) (40') (12 sec/throws & 6-8 min/sets) Set 1 2 3 Throws 15 15 20 (work to tolerance) | PHASE III Long toss Feet Rest time Throws Intensity | <pre>75% target distance (12 sec/throws) (25) (to tolerance)</pre> |
| PHASE IV Short toss Feet Rest time Throws Intensity | Rest between short & long (10 min) (46') (12 sec/throws & 6-8 min/sets) Set 1 2 3 Throws 15 20 20 (up to ½ speed) | PHASE IV Long toss Feet Rest time Throws Intensity | <pre>80% target distance (12 sec/throws) (25) (to tolerance)</pre> |

Figure 4. Sample interval throwing program. Reproduced with permission of Michael J. Axe, MD/ First State Orthopaedics Special Thanks to Piedmont Babe RuthTM

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Interval Throwing Program for Little League Aged Athletes

Little Leaguer Interval Throwing Program

| PHASE V | | PHASE V | | |
|------------|---|------------|----------------------|--|
| | Rest between short & long (10 min) | | | |
| Short toss | | Long toss | | |
| Feet | (46') | Feet | 85% target distance | |
| Rest time | (12 sec/throws & 6-8 min/sets) | Rest time | (12 sec/throws) | |
| Throws | Set 1 2 3 | Throws | (25) | |
| | Throws 15 20 20 | Intensity | (to tolerance) | |
| Intensity | (up to ³ / ₄ speed) | | | |
| PHASE VI | | PHASE VI | | |
| | Rest between short & long (10 min) | | | |
| Short toss | | Long toss | | |
| Feet | (46') | Feet | 90% target distance | |
| Rest time | (12 sec/throws & 6-8 min/sets) | Rest time | (12 sec/throws) | |
| Throws | Set 1 2 3 | Throws | (25) | |
| Intensity | Throws 20 20 20 (mound, full speed) | Intensity | (to tolerance) | |
| Intensity | | | | |
| PHASE VII | | PHASE VII | | |
| | Rest between short & long (10 min) | | | |
| Short toss | | Long toss | | |
| Feet | (40') | Feet | 95% target distance | |
| Rest time | (12 sec/throws & 6-8 min/sets) | Rest time | (12 sec/throws) | |
| Throws | Set 1 2 3 | Throws | (25) | |
| | Throws 20 20 25 | Intensity | (to tolerance) | |
| Intensity | (mound, full speed: breadking ball 3 | :1) | | |
| PHASE VIII | | PHASE VIII | | |
| | Rest between short & long (10 min) | | | |
| Short toss | | Long toss | | |
| Feet | (46') | Feet | 100% target distance | |
| Rest time | (12 sec/throws & 6-8 min/sets) | Rest time | (12 sec/throws) | |
| Throws | Set 1 2 3 | Throws | (25) | |

Intensity _____(to tolerance)

PHASE IX

Intensity

____ Simulated Game

Throws 20 25 25

(mound, full speed: breaking ball 3:1)