

## Interval Throwing Program

The interval throwing program (ITP) is designed to gradually return motion, strength, and confidence in the throwing arm after injury. It is performed under the supervision of the rehabilitation team. Baseline requirements for throwing include pain-free range-of-motion, adequate muscle power, and adequate muscle resistance to fatigue. There is no set timetable for completion of the program; however, it is recommended to follow the program rigidly.

The athlete should supplement the ITP with a high repetition, low weight exercise program. This will not increase throwing velocity, but will increase resistance to fatigue and injury. This should be done after throwing on the same day, using the day in between for flexibility exercises. Other important aspects include a warm up period (break light sweat), stretching all muscle groups, and maintenance of proper throwing mechanics.

The use of the Crow-hop method simulates the throwing act and includes a hop, then a skip, followed by a throw. The velocity of the throw is determined by the distance, whereas the ball should have only enough momentum to travel each designed distance. If the athlete has increased pain, the throwing program should be backed off and re-advanced under the direction of the rehabilitation team.

### 13/14 Year Old Throwing Program

#### Phase 1 (Return to throwing at 50% effort)

##### Step 1

- Warm-up toss to 60 feet
- 15 throws at 30 feet\*
- 15 throws at 30 feet\*
- 15 throws at 30 feet
- 20 long tosses to 60 feet

##### Step 2

- Warm-up toss to 75 feet
- 15 throws at 45 feet
- 15 throws at 45 feet\*
- 15 throws at 45 feet\*
- 20 long tosses to 75 feet .

##### Step 3

- Warm-up toss to 90 feet
- 15 throws at 60 feet\*
- 15 throws at 60 feet\*
- 15 throws at 60 feet
- 20 long tosses to 90 feet

#### Phase 2 (Return to pitching with fast balls)

##### Step 4

- Warm-up toss to 105 feet
- 20 fastballs (50%)\*
- 16 fastballs (50%)\*
- 16 fastballs (50%)\*
- 25 long tosses to 105 feet

##### Step 5

- Warm-up toss to 120 feet
- 20 fastballs (50%)\*
- 20 fastballs (50%)\*
- 20 fastballs (50%)\*
- 25 long tosses to 120 feet

##### Step 6

- Warm-up toss to 120 feet
- 16 fastballs (50%)\*
- 20 fastballs (50%)\*
- 20 fastballs (50%)\*
- 16 fastballs (50%)\*
- 25 long tosses to 160 feet

### Step 13

### Phase 3 (Intensified pitching with normal stride)

#### Step 7

- Warm-up toss to 120 feet
- 20 fastballs (75%)
- 20 fastballs (75%)
- 20 fastballs (50%)
- 25 long tosses to 160 feet

- 20 fastballs (75%)
- 6 off speed pitches (75%)
- 25 long tosses to 160 feet
- Warm-up toss to 120 feet
- 20 fastballs (75%)
- 4 throws to 1st (75%)
- 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 to 160 feet

#### Step 8 Warm-up toss to 120 feet

- 20 fastballs (75%)
- 21 fastballs (50%)
- 20 fastballs (75%)
- 21 fastballs (50%)
- 25 long tosses to 160 feet

### Step 14

#### Step 9

- Warm-up toss to 120 feet
- 25 fastballs (50%)
- 24 fastballs (75%)
- 24 fastballs (75%)
- 25 fastballs (50%)
- 25 long tosses to 160 feet

- Warm-up toss to 120 feet
- 20 fastballs (100%)
- 4 throws to 1st (100%)
- 15 fastballs (100%)
- 10 off speed pitches (100%)
- 20 fastballs (100%)
- 5 off speed pitches (100%)
- 20 fastballs (75%)
- 5 throws to 1st (75%)
- 25 long tosses to 160 feet

#### Step 10

- Warm-up toss to 120 feet
- 25 fastballs (75%)
- 25 fastballs (75%)
- 25 fastballs (75%)
- 20 fastballs (75%)
- 25 long tosses to 160 feet

### Step 15

- Batting practice
- 100-110 pitches
- 10 throws to 1st field
- Bunts and comebacks

#### Step 11 (Active rest)

- Warm-up toss to 120 feet

### Step 16 Simulated game

- 20 throws at 60 feet (75%)
- 15 throws at 80 feet (75%)

#### Step 12

- 20 throws at 60 feet (75%)
- 15 throws at 80 feet (75%)
- 20 long tosses to 160 feet
- Warm-up toss to 120 feet
- 20 fastballs (100%)
- 20 fastballs (75%)
- 6 off speed pitches (75%)
- 20 fastballs (100%)

#### SIMULATED GAME

1. 10 minutes warm-up of 50-80 pitches with gradually increasing velocity
2. 5 innings
3. 22-27 pitches per inning, including 15-20 fastballs
4. 6 minutes rest between innings

\*Rest 6 minutes after these sets