

INTERVAL THROWING PROGRAM (2019)

An interval throwing program transitions the thrower back to the playing field. None of the exercises performed in rehabilitation or training can truly reproduce the forces and loads of throwing. The program prepares the thrower for the workloads required for competition. It may be utilized by players rehabilitating from injury or surgery, as well as by a healthy player training in the off-season. This interval throwing program is designed to minimize the chance of re-injury and can be adapted for pitchers and all position players.

The program:

- Progresses throwing volume, intensity, distance and rest
- Consists of long tosses to improve arm strength and short tosses of higher intensity to reproduce the demands of each position
- Is designed to be progressed individually based on any symptoms the player may have

Prior to beginning the program, the player should be cleared by a physician and physical therapist. Strength, ROM and flexibility should be normal and the player should be asymptomatic. Proper mechanics should be emphasized. Throwing velocity should only be sufficient to reach to target.

Stretching and an active warm-up are encouraged to elevate one's core temperature prior to throwing. This is critical to minimize the chance of re-injury.

Dull pain or soreness is not uncommon during this program. However one should never attempt to throw through sharp pain. If this pain persists, one should consult with their physician.

Finally, when beginning the throwing program, players should continue their training program to maintain strength, flexibility and endurance, as there is a tendency to "break down" as one begins advancing the throwing distance.

Instructions: (Non-operative, mild injury)

- Warm-up and stretching to be performed prior to throwing
- If the athlete has sharp pain during throwing **STOP** immediately until pain ceases. Contact Physician or Physical Therapist with continued pain
- Crow-hop or side step should be used for flat ground throwing
- If step is performed pain free <u>PERFORM IT TWICE</u> before moving to the next step
- Do not continue with throwing if pain and soreness is noticed. Stop step for that day and return to same step after additional rest day.

Phase 1-6: 50% effort
Phase 7-10: 75% effort
Phase 10+: 100% effort

Instructions: (Tendon/ligament injury: Severe/Post-op)

- Warm-up and stretching to be performed prior to throwing
- If the athlete has sharp pain during throwing **STOP** immediately until pain ceases. Contact Physician or Physical Therapist with continued pain
- Crow-hop or side step should be used for flat ground throwing
- Phase 1-12: PERFORM EACH STEP **THREE TIMES** without pain before advancing to next step.
- Throw every 3 days with 2 days of active rest following each workout.
- Phase 12 +: If step is performed pain free PERFORM IT TWICE before moving to the next step

| PHASE 1 (50%) | | |
|---------------|------------------|------------|
| Distance | Number of throws | Rest |
| 30' | 20 | 5 minutes |
| 30' | 20 | 10 minutes |
| 45' | 10 | |
| PHASE 2 (50%) | | |
| Distance | Number of throws | Rest |
| 30' | 20 | 5 minutes |
| 30' | 20 | 10 minutes |
| 45' | 20 | |
| PHASE 3 (50%) | | |
| Distance | Number of throws | Rest |
| 45' | 20 | 5 minutes |
| 45' | 20 | 10 minutes |
| 60' | 10 | |
| PHASE 4 (50%) | | |
| Distance | Number of throws | Rest |
| 45' | 20 | 5 minutes |
| 45' | 20 | 10 minutes |
| 60' | 20 | |
| PHASE 5 (50%) | | |
| Distance | Number of throws | Rest |
| 60' | 20 | 5 minutes |
| 60' | 20 | 10 minutes |
| 75' | 10 | |
| PHASE 6 (50%) | | |
| Distance | Number of throws | Rest |
| 60' | 20 | 5 minutes |
| 60' | 20 | 5 minutes |
| 75' | 20 | |
| PHASE 7 (75%) | | |
| Distance | Number of throws | Rest |
| 75' | 15 | 5 minutes |
| 75' | 15 | 10 minutes |
| 90' | 10 | |
| PHASE 8 (75%) | | |
| Distance | Number of throws | Rest |
| 75' | 20 | 5 minutes |

| 75' | 15 | 10 minutes |
|-------------------------------------|---------------------|--------------|
| 90' | 15 | |
| PHASE 9 (75%) | | |
| Distance | Number of throws | Rest |
| 90' | 20 | 5 minutes |
| 90' | 20 | 10 minutes |
| 120' | 10 | |
| PHASE 10 (75%) | | |
| Distance | Number of throws | Rest |
| 90' | 20 | 5 minutes |
| 90' | 20 | 10 minutes |
| 120' | 20 | |
| PHASE 11 (100%) | | |
| Distance | Number of throws | Rest |
| 90' | 10 | 5 minutes |
| 120' | 20 | 10 minutes |
| 120' | 20 | |
| PHASE 12 (100%) | | |
| Distance | Number of throws | Rest |
| 120' | 20 | 10 minutes |
| 120' | 20 | 10 minutes |
| 120' | 20 | |
| PHASE 13* (Optional) | | |
| Distance | Number of throws | Rest |
| 120' | 10 | 5 minutes |
| 150' | 20 | 5 minutes |
| 150' | 20 | |
| PHASE 14* (Optional) | | |
| Distance | Number of throws | Rest |
| 150' | 20 | 10 minutes |
| 150' | 20 | 10 minutes |
| 150' | 20 | |
| PHASE 15 * (Optional) | | |
| Distance | Number of throws | Rest |
| 150' | 15 | 5 minutes |
| 180' | 20 | 10 main utas |
| | 20 | 10 minutes |
| 180' | 20 20 | 10 minutes |
| | | 10 minutes |
| 180' | | Rest |
| 180' PHASE 16 * (Optional) | 20 | |
| 180' PHASE 16 * (Optional) Distance | 20 Number of throws | Rest |

Following Phase 16, position players progress to position specific drills and then to simulated games. Pitchers progress to the following Pitching Program.

PITCHING PROGRAM

| PHASE 1: FLAT GROUND (75%) | | | | |
|--------------------------------|------------------|-----------|--|--|
| Distance | Number of throws | Rest | | |
| 60' | 15 | 5 minutes | | |
| 90' | 15 | 5 minutes | | |
| 60' (Using pitching mechanics) | 15 | | | |
| PHASE 2: FLAT GROUND (100%) | | | | |
| Distance | Number of throws | Rest | | |
| 60' | 10 | 5 minutes | | |
| 90' | 15 | 5 minutes | | |
| 60' (Using pitching mechanics) | 15 | | | |
| PHASE 3: FLAT GROUND/ MOUND | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 20 | 5 minutes | | |
| 20 Fastballs at 50% (Mound) | | 5 minutes | | |
| 10 Fastballs at 50% (Mound) | | | | |
| PHASE 4 | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 20 | 5 minutes | | |
| 20 Fastballs at 50% (Mound) | | 5 minutes | | |
| 15 Fastballs at 50% (Mound) | | | | |
| PHASE 5 | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 15 | 5 minutes | | |
| 20 Fastballs at 50% (Mound) | | 5 minutes | | |
| 15 Fastballs at 50% (Mound) | | 5 minutes | | |
| 10 Fastballs at 50% (Mound) | | | | |
| PHASE 6 | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 15 | 5 minutes | | |
| 20 Fastballs at 50% | | 5 minutes | | |
| 15 Fastballs at 75% | | 5 minutes | | |
| 10 Fastballs at 75% | | | | |
| PHASE 7 | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 15 | 5 minutes | | |
| 20 Fastballs at 50% | | 5 minutes | | |
| 20 Fastballs at 75% | | 5 minutes | | |
| 15 Fastballs at 75% | | | | |
| PHASE 8 | | | | |
| Distance | Number of throws | Rest | | |
| 60' (Flat Ground 75%) | 15 | 5 minutes | | |

| 20 Fastballs at 75% | | 5 minutes |
|---|--|---|
| 20 Fastballs at 75% | | 5 minutes |
| 20 Fastballs at 75% | | 3 minutes |
| PHASE 9 | | |
| Distance | Number of throws | Rest |
| 60' (Flat Ground 75%) | 15 | 5 minutes |
| 20 Fastballs at 75% | 13 | 5 minutes |
| 20 Fastballs at 75% | | 5 minutes |
| 20 Fastballs at 100% | | 3 minutes |
| PHASE 10 | | |
| Distance | Number of throws | Rest |
| 60' (Flat Ground 75%) | 15 | 10 minutes |
| 20 Fastballs at 100% | | 10 minutes |
| 15 Breaking balls & Changeups | | 10 minutes |
| 20 Fastballs at 100% | | 10 minutes |
| PHASE 11 | | |
| Distance | Number of throws | Rest |
| 60' (Flat Ground 75%) | 15 | 5 minutes |
| 20 Fastballs at 100% | | 10 minutes |
| 15 Breaking Balls & Changeups | | 10 minutes |
| 20 Fastballs at 100% | | |
| 10 Breaking Balls & Changeups | | |
| | | |
| PHASE 12 | | |
| Distance | Number of throws | Rest |
| | Number of throws 15 | Rest 5 minutes |
| Distance | | |
| Distance 60' (Flat Ground 75%) | | |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% | | 5 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups | | 5 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% | | 5 minutes 10 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups | | 5 minutes 10 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% | | 5 minutes 10 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 | 15 | 5 minutes 10 minutes 10 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance | Number of throws 10 10 | 5 minutes 10 minutes 10 minutes Rest |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' | Number of throws 10 | 5 minutes 10 minutes 10 minutes Rest 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch | Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' | Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes 2 minutes 2 minutes 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance | Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' | Number of throws 10 10 5 nes Number of throws 10 | 5 minutes 10 minutes 10 minutes Rest 2 minutes 2 minutes 2 minutes 2 minutes 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' 90' | Number of throws 10 10 5 nes Number of throws 10 10 10 10 10 10 | 5 minutes 10 minutes 10 minutes Rest 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' 90' 120' | Number of throws 10 10 5 nes Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes 2 minutes 2 minutes 2 minutes 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' 90' 120' Batting Practice: 70 pitch | Number of throws 10 10 5 nes Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' 90' 120' Batting Practice: 70 pitch PHASE 15 | Number of throws 10 10 5 nes Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes |
| Distance 60' (Flat Ground 75%) 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% 10 Breaking Balls & Changeups 15 Fastballs at 100% PHASE 13 Distance 60' 90' 120' Batting Practice: 60 pitch PHASE 14 Distance 60' 90' 120' Batting Practice: 70 pitch PHASE 15 Simulated Game | Number of throws 10 10 5 nes Number of throws 10 10 5 | 5 minutes 10 minutes 10 minutes Rest 2 minutes |