

## Return to Hitting Protocol Following Prolonged Shut Down or Shoulder/Elbow Surgery

This return to hitting program is designed to provide a **safe, structured, and progressive return to hitting** following a prolonged time away from the game or while recovering from shoulder or elbow surgery. The goal is to restore hitting mechanics, endurance, and confidence while minimizing the risk of reinjury.

This program reflects the principles used in our sports medicine practice to guide athletes back to competition through a **graduated, symptom-guided progression**. Athletes should progress only when each phase is completed **completely pain-free**, with no increase in soreness, stiffness, or loss of motion the following day.

### Hitting Progression

- Progression is **individualized**—there is no mandatory timeline.
- Advancement occurs only when the current step is completed **without pain or abnormal fatigue**.
- It is OK to go through this program slower than what is planned if your body needs additional time to recover. However, regardless of how you feel, **you cannot progress through the program faster than planned**. Trying to advance too quickly will likely ultimately delay your recovery and return to play.
- Do not make more than 15 swings at a time without taking a 10-minute break

### Hitting Mechanics

- Proper hitting mechanics are key to preventing reinjury and maximizing performance. If possible, hit under the supervision of a qualified coach, instructor, physical therapist, or athletic trainer. Now is the time to perfect mechanics.
- A fungo bat is used intentionally during the early portions of the hitting program to reacclimate the body to swinging while avoiding the full stress of swinging a regulation / game bat

### Weightlifting / Strength Training

- Rest is an integral part of the hitting program. At the beginning of the program, this will not seem important, but as the program progresses, it will become increasingly taxing and strenuous
- Non-hitting days are meant for recovery
- Do not perform any hitting-related drills on non-hitting days; these should be done on hitting days after the hitting program has been completed (it is safe to perform pitch recognition drills if they don't require initiation of swing)

**Structured Warm-Up Routine** – To be performed prior to everything throwing session. No exceptions.

**General Warm-Up**

- Begin each session with light aerobic activity (jogging, cycling, jump rope, etc.) to increase blood flow and tissue temperature. Once a light sweat is achieved, proceed to stretching.

**Stretching**

- Full-body stretching is emphasized to optimize mobility and reduce injury risk. Efficient hitting requires coordinated motion from the legs, core, and upper extremity—not the upper body alone.
- Shoulder cross body adduction stretch – 2 x 20 seconds
- Sleeper stretch – 2 x 20 seconds

**Shoulder Activation**

- Band pull-apart – 2 x 15 reps
- Banded A-T-Y raises – 1 x 8 reps in each position
- Standing scapula slides – 2 x 10 reps
- Banded internal and external rotation – 2 x 12 reps in each direction

**Standard Post-Hit Routine**

- NISMAT Arm Care 2 x 10 reps each exercise (can be exchanged with Advanced Throwers Ten if athlete/therapist/trainer prefers)
- Baseball bat forearm pronation in 90° of elbow flexion 2 x 10 reps
- Baseball bat ulnar deviation 2 x 10 reps
- Wrist roller 10 down and ups with elbows fully extended
- Dead hangs (elbows, shoulders, back, and core engaged) – 30 second hang x 2 (increase length of hang as able)
- Wind sprints 60 feet x 10
- Full body stretching
- Wrist flexion and extension stretches with the elbow fully extended – 2 x 20 seconds in each direction
- Shoulder cross body adduction stretch – 2 x 20 seconds
- Sleeper stretch – 2 x 20 seconds



## Phase 1: Reintroduction to Swinging with Proper Mechanics

| Day    | Activity                | Hitting Device        | Quantity/Volume                        |
|--------|-------------------------|-----------------------|----------------------------------------|
| Day 1  | Dry swings (no contact) | Fungo bat (underload) | 10 swings                              |
| Day 2  |                         |                       |                                        |
| Day 3  | Dry swings              | Fungo bat             | 10 swings                              |
| Day 4  |                         |                       |                                        |
| Day 5  | Dry swings              | Fungo bat             | 20 swings                              |
| Day 6  |                         |                       |                                        |
| Day 7  | Dry swings              | Fungo bat             | 20 swings                              |
| Day 8  |                         |                       |                                        |
| Day 9  | Dry swings              | Fungo bat + game bat  | 10 swings with fungo, 10 with game bat |
| Day 10 |                         |                       |                                        |
| Day 11 | Dry swings              | Fungo bat + game bat  | 10 swings with fungo, 10 with game bat |
| Day 12 |                         |                       |                                        |
| Day 13 | Dry swings              | Game bat              | 20 swings                              |
| Day 14 |                         |                       |                                        |
| Day 15 | Dry swings              | Game bat              | 20 swings                              |
| Day 16 |                         |                       |                                        |
| Day 17 | Dry swings              | Game bat              | 30 swings                              |
| Day 18 |                         |                       |                                        |
| Day 19 | Dry swings              | Game bat              | 30 swings                              |
| Day 20 |                         |                       |                                        |

## Phase 2: Reintroduction to Ball Contact

| Day    | Activity                | Hitting Device   | Quantity/Volume              |
|--------|-------------------------|------------------|------------------------------|
| Day 21 | Dry swings + Tee swings | Fungo            | 20 dry swings, 10 tee swings |
| Day 22 |                         |                  |                              |
| Day 23 | Dry swings + Tee swings | Fungo            | 15 dry, 15 tee               |
| Day 24 |                         |                  |                              |
| Day 25 | Dry swings + Tee swings | Fungo            | 20 dry, 20 tee               |
| Day 26 |                         |                  |                              |
| Day 27 | Dry swings + Tee swings | Fungo            | 10 dry, 30 tee               |
| Day 28 |                         |                  |                              |
| Day 29 | Tee swings              | Fungo            | 30 tee                       |
| Day 30 |                         |                  |                              |
| Day 31 | Tee swings              | Fungo            | 30 tee                       |
| Day 32 |                         |                  |                              |
| Day 33 | Tee swings              | Fungo + game bat | 20 fungo, 10 game bat        |
| Day 34 |                         |                  |                              |
| Day 35 | Tee swings              | Fungo + game bat | 20 fungo, 10 game bat        |
| Day 36 |                         |                  |                              |
| Day 37 | Tee swings              | Fungo + game bat | 10 fungo, 20 game bat        |
| Day 38 |                         |                  |                              |
| Day 39 | Tee swings              | Fungo + game bat | 10 fungo, 20 game bat        |
| Day 40 |                         |                  |                              |
| Day 41 | Tee swings              | Game bat         | 30 swings                    |
| Day 42 |                         |                  |                              |
| Day 43 | Tee swings              | Game bat         | 30 swings                    |
| Day 44 |                         |                  |                              |



## Phase 3: Reintroduction to Hitting a Moving Target - Soft Toss and Batting Practice

| Day    | Activity               | Hitting Device | Quantity/Volume            |
|--------|------------------------|----------------|----------------------------|
| Day 45 | Tee swings + Soft toss | Game bat       | 15 tee, 15 soft toss       |
| Day 46 |                        |                |                            |
| Day 47 | Tee swings + Soft toss | Game bat       | 15 tee, 15 soft toss       |
| Day 48 |                        |                |                            |
| Day 49 | Tee swings + Soft toss | Game bat       | 10 tee, 25 soft toss       |
| Day 50 |                        |                |                            |
| Day 51 | Tee swings + Soft toss | Game bat       | 10 tee, 25 soft toss       |
| Day 52 |                        |                |                            |
| Day 53 | Soft toss              | Game bat       | 35 soft toss               |
| Day 54 |                        |                |                            |
| Day 55 | Soft toss              | Game bat       | 35 soft toss               |
| Day 56 |                        |                |                            |
| Day 57 | Soft toss              | Game bat       | 40 soft toss               |
| Day 58 |                        |                |                            |
| Day 59 | Soft toss              | Game bat       | 50 soft toss               |
| Day 60 |                        |                |                            |
| Day 61 | Soft toss + BP swings  | Game bat       | 30 soft toss, 10 BP swings |
| Day 62 |                        |                |                            |
| Day 63 | Soft toss + BP swings  | Game bat       | 25 soft toss, 15 BP swings |
| Day 64 |                        |                |                            |
| Day 65 | Soft toss + BP swings  | Game bat       | 20 soft toss, 20 BP swings |
| Day 66 |                        |                |                            |
| Day 67 | Soft toss + BP swings  | Game bat       | 10 soft toss, 25 BP swings |
| Day 68 |                        |                |                            |
| Day 69 | Soft toss + BP swings  | Game bat       | 10 soft toss, 30 BP swings |
| Day 70 |                        |                |                            |
| Day 71 | BP swings              | Game bat       | 35 BP swings               |
| Day 72 |                        |                |                            |
| Day 73 | BP swings              | Game bat       | 35 BP swings               |
| Day 74 |                        |                |                            |

## Phase 4: Reintroduction to Live Pitching\*

| Day    | Activity                 | Hitting Device | Quantity/Volume                        |
|--------|--------------------------|----------------|----------------------------------------|
| Day 75 | BP swings + Live         | Game bat       | 30 BP swings, 5 live swings – FB only  |
| Day 76 |                          |                |                                        |
| Day 77 | BP swings + Live         | Game bat       | 30 BP swings, 5 live swings – FB only  |
| Day 78 |                          |                |                                        |
| Day 79 | BP swings + Live         | Game bat       | 25 BP swings, 10 live swings – FB only |
| Day 80 |                          |                |                                        |
| Day 81 | BP swings + Live         | Game bat       | 25 BP swings, 10 live swings – FB only |
| Day 82 |                          |                |                                        |
| Day 83 | BP swings + Live         | Game bat       | 20 BP swings, 15 live swings           |
| Day 84 | BP swings + Live         | Game bat       | 20 BP swings, 15 live swings           |
| Day 85 |                          |                |                                        |
| Day 86 | BP swings + Live         | Game bat       | 20 BP swings, 15 live swings           |
| Day 87 | BP swings + Live         | Game bat       | 20 BP swings, 15 live swings           |
| Day 88 | BP swings + Live         | Game bat       | 20 BP swings, 15 live swings           |
| Day 89 |                          |                |                                        |
| Day 90 | Ready for Return To Play |                |                                        |

\*The first week of live at bats are fastball only. This can be done from a live pitcher, pitching machine, or Trajekt system