SCAPULAR STRENGTH PROTOCOL

FOR THROWING ATHLETES

Evidence-Based Kinetic Chain Development | topvelocity.org

WHY SCAPULAR STRENGTH MATTERS

The scapula is the foundation of every throw. It must upwardly rotate, posteriorly tilt, and retract with precision — all within milliseconds — to protect your rotator cuff, labrum, and UCL under extreme loads. When scapular stability breaks down, subacromial space collapses, velocity drops, and injury risk skyrockets. This protocol builds bulletproof scapular function from the ground up.

Frequency	2–3x per week, preferably on non-throwing days	**Level**	All levels
Goal	Scapular stability, upward rotation & serratus anterior development	**Equipment**	Pull-up bar, resistance band, light dumbbells

THE PROTOCOL

01 DEAD HANGS

■ 3 Sets ■ 20–30 sec hold ■ 60 sec rest

Primary Muscles: Posterior capsule, decelerator muscles, lats

Purpose: Decompresses the glenohumeral joint and restores ROM through the posterior capsule and decelerator muscles. Allows full scapular depression under load — the critical first step before any strengthening work.

Coaching Cue: *Relax completely. Let the shoulders open. Breathe.*

02 BANDED SERRATUS WALL SLIDES

■ 3 Sets ■ 12–15 reps ■ 45 sec rest

Primary Muscles: Serratus anterior, upper trapezius

Purpose: Activates the serratus anterior — the primary muscle responsible for scapular protraction and upward rotation, critical for maintaining subacromial space during the throwing motion.

Coaching Cue: *Drive elbows into the wall. Feel the shoulder blade wrap around the ribcage.*

03 Y-RAISES

■ 3 Sets ■ 12–15 reps ■ 45 sec rest

Primary Muscles: Lower trapezius, mid trapezius, posterior deltoid

Purpose: Strengthens the lower trapezius and promotes scapular upward rotation. Counters the downward rotation pattern common in overhead athletes and directly supports healthy throwing mechanics.

Coaching Cue: *Thumbs up. Initiate from the shoulder blade, not the arm.*

04 SCAPULAR PUSH-UPS

■ 3 Sets ■ 15–20 reps ■ 45 sec rest

Primary Muscles: Serratus anterior, rhomboids

Purpose: Builds serratus anterior endurance under bodyweight load in a closed chain environment. Reinforces scapular protraction and retraction mechanics that directly transfer to the throwing motion.

Coaching Cue: *Keep arms locked. Only move is the shoulder blades — apart and together.*

05 OVERHEAD PLUS

■ 3 Sets ■ 10–12 reps ■ 60 sec rest

Primary Muscles: Serratus anterior, upper trapezius, rotator cuff

Purpose: Reinforces full scapular protraction at end range overhead — directly mimics the follow-through position in throwing and strengthens the serratus at its most vulnerable point in the kinetic chain.

Coaching Cue: *Press up, then reach an extra inch at the top. That final push is everything.*

06 OVERHEAD CARRIES

■ 3 Sets ■ 30–40 yards each arm ■ 60 sec rest

Primary Muscles: Serratus anterior, rotator cuff, core stabilizers

Purpose: Develops dynamic scapular stability under real load. Trains the rotator cuff and serratus to co-contract while the arm is overhead and the body is in motion — the closest gym transfer to actual throwing demands.

Coaching Cue: *Stack the weight over the shoulder. Ribs down. Don't lean away from the weight.*

THE SCIENCE BEHIND THE SEQUENCE

This sequence follows a deliberate progression: decompress first (Dead Hangs), activate the primary upward rotator (Serratus Wall Slides), reinforce the lower trap (Y-Raises), load the serratus in closed chain (Scapular Push-Ups), challenge end-range protraction (Overhead Plus), then integrate dynamic stability under load (Overhead Carries). Research consistently shows that scapular dyskinesis — altered scapular motion — is a primary risk factor for SLAP tears, rotator cuff pathology, and UCL stress in overhead athletes. This protocol directly addresses that dysfunction with evidence-based progressions.