

APEX MOTION

PITCHING

ATHLETE PERFORMANCE BLUEPRINT

Sample Athlete

4'6" · 70 lbs · Right / Right · Velocity not yet measured

● YOUTH DEVELOPMENT ATHLETE — FIRST STRUCTURED PROGRAM

PRIMARY LIMITER

Hip-Shoulder Separation

The trunk starts turning too soon after the hips do.

MAJOR LIMITER

Force Transfer

The delivery is squeezed together in the middle instead of building step by step.

CURRENT STRENGTH

Force Acceptance

He lands balanced and organized every time.

DEVELOPMENT THESIS

You already move better than most kids your age who are just starting out. You land on balance, your arm works in a clean path, and your hips turn the way they should. Nothing about your delivery is broken.

What's happening is a timing thing. Your hips start to open first — which is correct — but your chest follows almost immediately instead of waiting its turn. When that happens, the whole middle of your delivery gets squeezed into one motion instead of unfolding piece by piece, and the last part of your turn never really gets to happen.

The next twelve weeks are about teaching your body the order: hips first, chest second, arm last. Everything in your program is built around giving each piece its own turn.

CATEGORY STATUS BOARD

HSS Hip-Shoulder Separation PRIMARY LIMITER	FT Force Transfer MAJOR LIMITER	RO Rotational Output DEVELOPMENT PRIORITY	LLB Lead Leg Braking DEVELOPMENT PRIORITY
AO Arm Output DEVELOPMENT PRIORITY	FA Force Acceptance CURRENT STRENGTH	AA Arm Action CURRENT STRENGTH	HIR Hip Internal Rotation CURRENT STRENGTH

DEVELOPMENT THEME

Give every piece of the delivery its own turn.

DEVELOPMENT PRIORITY RANKING

01	Hip-Shoulder Separation	PRIMARY LIMITER
02	Force Transfer	MAJOR LIMITER
03	Rotational Output	DEVELOPMENT PRIORITY
04	Lead Leg Braking — monitoring only this cycle	DEVELOPMENT PRIORITY
05	Arm Output — monitoring only this cycle	DEVELOPMENT PRIORITY

PHYSICAL PROFILE SNAPSHOT

STRENGTH Developing	POWER Developing	ELASTICITY Untested	ROTATIONAL POTENTIAL Untested
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You can squat, hang, push up and jump — the basics are there. Everything else on this row simply hasn't been measured yet, which is exactly what we'd expect for someone who has never been in a structured program. "Untested" is not the same as "weak."

BIGGEST VELOCITY LIMITER

Nothing gets a chance to build

Because the chest follows the hips almost immediately, the delivery never gets that stacking effect where each part hands off to a faster one.

BIGGEST MECHANICAL LIMITER

How long separation is held

The order is right. The holding is what's missing — the gap between hips and chest closes almost as soon as it opens.

BIGGEST PHYSICAL LIMITER

None identified

No physical restriction was found. This is a first structured program, not a physical problem to fix.

ATHLETE ARCHETYPE

Hip-Shoulder Separation Limited

A pitcher whose delivery is organized and healthy, but whose chest joins in too early for the throw to build the way it could.

EXECUTIVE SUMMARY

Across every angle we looked at, the same thing kept showing up: this is an organized delivery with one squeezed section in the middle.

The parts that work are genuinely good. The leg lift is controlled with no balance loss. The landing accepts contact cleanly — the front knee bends, but the hips and chest stay organized through it, which is the thing that actually matters. The arm follows a normal path and gets where it needs to be on time. The hips turn through a real range.

The part that doesn't work as well sits between the gather and the throw. The build toward the plate is modest, the back side doesn't load deeply, and once the hips start to open the chest comes with them almost right away. That means the last portion of the chest's turn — the part that usually delivers the most — never has room to happen.

Two things were genuinely unclear from the video and are being tracked rather than trained. The first is how hard the front leg brakes: the knee firms up as the chest comes through, but regular video can't measure that, and there wasn't a clear repeated problem to point at. The second is arm speed, which regular video also can't measure. Neither one is being called a problem or a strength, and neither one gets specific work this cycle.

One more thing worth saying plainly: none of this describes a flaw. A nine-year-old who has never followed a throwing program is going to have a delivery that hasn't fully organized itself yet. That's expected. What we found is a specific, trainable timing habit — and being this early is the best possible time to work on it.

CATEGORY	STATUS	KEY FINDING	ADAPTATION GOAL
Hip-Shoulder Separation HSS	PRIMARY LIMITER	Hips open first, but the chest follows almost immediately — the gap between them barely gets held.	Hold the chest back longer as the throw gets bigger.
Force Transfer FT	MAJOR LIMITER	The order is right, but the transitions overlap; the arm starts before the body has finished building.	Let each segment finish its turn before the next one starts.
Rotational Output RO	DEVELOPMENT PRIORITY	Hips turn well. The chest's turn is shorter than it should be — mostly because it started early, not because it can't turn.	Recover the late part of the chest turn through better timing, not extra rotation work.
Lead Leg Braking LLB	DEVELOPMENT PRIORITY	Front knee stays bent and firms up progressively. Regular video can't say more than that.	Monitoring only — no braking work this cycle. Reviewed again at Week 12.
Arm Output AO	DEVELOPMENT PRIORITY	Arm accelerates into release and the release point repeats. Arm speed itself can't be established from video.	Monitoring only — no arm-output or overload work this cycle. Reviewed again at Week 12.
Force Acceptance Arm Action Hip Internal Rotation FA · AA · HIR	CURRENT STRENGTH	Landing stays organized through contact. The arm path is functional and repeatable. No hip rotation restriction was found.	Protect all three as throwing distance and volume increase.

REAR-SIDE GATHER → HIPS LEAD → CHEST WAITS → CHEST TURNS LATE → ARM COMES LAST

Every finding above comes from this athlete's own assessment. Where regular video couldn't establish something, it says so rather than filling the gap with a guess — that's why two categories read **monitoring only** instead of carrying a training target.

01 Hip-Shoulder Separation

GOAL Keep the chest loaded behind the hips for longer — and keep it there as the throw gets bigger.

FOCUS AREAS Simple throwing constraints that make early chest rotation hard to do · split-stance transfer work away from the full delivery · trunk control that lets him hold a position rather than rush through it.

EXPECTED ADAPTATION The gap between hips and chest starts to hold on its own, without having to think about it.

02 Force Transfer

GOAL Build a real gather on the back side, then let it travel forward in order.

FOCUS AREAS Step-back rhythm work that organizes the back leg before the throw · single-leg strength that gives him something to push against · rhythm and timing rather than effort.

EXPECTED ADAPTATION The delivery unfolds instead of firing all at once.

03 Rotational Output

GOAL Recover the late part of the chest's turn.

FOCUS AREAS Handled through the timing work above, not through separate rotational power training — nothing in the assessment showed his rotation is actually limited.

EXPECTED ADAPTATION The chest finishes its turn because it started at the right time, not because it got stronger.

Monitoring — Not Trained This Cycle

Lead Leg Braking and Arm Output are both flagged, but neither gets specific work in this program. Regular video couldn't establish enough about either one, and prescribing against an unclear finding is worse than waiting. Both get reassessed at Week 12.

This page is direction, not prescription — deliberately. The specific program (every drill, every set, every rep, every video) lives in the accompanying **Excel workbook**.

PHASE 1 • WEEKS 1-4

Foundation & Movement Literacy

OBJECTIVE Learn the movements and build a base. This phase is about doing things correctly at low volume, not about how much you can do.

FOCUS AREAS Introducing the separation constraint • the first structured throwing routine of your life • bodyweight strength and basic positions • the shortest long-toss distances of the whole program.

PHASE 2 • WEEKS 5-8

Sequencing & Separation

OBJECTIVE Start holding the separation while the throw gets bigger.

FOCUS AREAS More reps of the same drills, not different drills • long toss extends • the back-side gather becomes the emphasis • strength holds move from short to longer.

PHASE 3 • WEEKS 9-12

Putting It Together

OBJECTIVE Keep the order intact at your longest distances.

FOCUS AREAS Long toss escalates week by week toward your personal best • the same constraint drills at their highest volume • the timing has to hold up when the throw is at its biggest.

A NOTE FOR YOU

You are going to be tempted to throw harder than this program asks. Don't. Nothing in these twelve weeks is about how hard you throw — there is no radar gun in this plan on purpose, and there is no bullpen work and no weighted-ball work either. That is not because you aren't good enough. It is because you are nine, and the right thing to build right now is the order your body moves in. The hard throwing comes later, and it comes easier if this part is done properly first.

REASSESSMENT: WEEK 12