



MOVE STRONG
HEALTH & PERFORMANCE

REHAB PROGRAM

ACL INJURY / REPAIR

12-WEEK REHAB PROGRAM

3-PHASE PROGRESSION | HEALING | ACCUMULATION | INTENSIFICATION

The information in this document is for movement and performance purposes only, not medical diagnosis or treatment. Athletes should be cleared by a qualified healthcare professional before progressive loading.

PROGRAM OVERVIEW

A 12-week, 3-phase progressive rehabilitation program for ACL injury or post-surgical repair. The program advances from tissue healing and neuromuscular re-education through strength accumulation to reactive and sport-specific intensification. Progression between phases is criteria-based, not time-based.

FREQUENCY

2-3 sessions per week. Allow at least one full rest day between sessions, especially in Phases I and II.

PAIN GUIDE

0-2/10 is acceptable during exercise. Any sharp, catching, or joint-line pain warrants immediate regression. Swelling after sessions is a key indicator – reduce volume if present.

PROGRESSION

Increase range, then volume, then load, then speed. Do not advance phases based on time alone – advance based on meeting all criteria for the current phase.

SWELLING PROTOCOL

Ice and elevation after sessions in Phase I as needed. If swelling increases week-over-week, consult your healthcare provider before continuing.

PHASE I HEALING & NEUROMUSCULAR RE-EDUCATION (WEEKS 1-4)

GOAL: Restore full ROM, reduce swelling, reactivate quad and glute function, and establish single-leg stability.

EXERCISE	METHOD / TEMPO	WEEK 1	WEEK 2	WEEK 3	WEEK 4	REST
MOBILIZATION						
A. Supine heel slides	Active ROM, pain-free	2×10	2×12	2×15	2×15	–
B. Prone knee flexion hang	Gravity-assisted	2×60s	2×60s	2×90s	2×90s	–
ACTIVATION						
A. Quad sets (isometric)	ISO hold, full extension	3×10×10s	3×10×10s	3×12×10s	3×12×10s	30s
B. Glute bridge	3-1-1-0	3×12	3×15	3×15	3×15	30s
C. Side-lying hip abduction	Controlled, no hip hike	3×12	3×15	3×15	3×20	30s
INTEGRATION - NEUROMUSCULAR						
A. Single-leg stance (eyes open)	Controlled, no valgus	3×20s	3×30s	3×40s	3×45s	30s
B. Pallof press (bilateral stance)	Anti-rotation	3×10	3×12	3×12	3×15	45s
INTEGRATION - STRENGTHENING						
A. Terminal knee extension (TKE)	Controlled, full extension	3×15	3×15	3×20	3×20	45s
B. Step-up (low box)	3-1-1-0	3×8/side	3×10/side	3×12/side	3×12/side	60s
C. Romanian deadlift (bilateral)	3-1-1-0	3×10	3×12	3×12	3×15	60s

COACHING NOTES

Phase I is about quality, not load. Monitor swelling after every session – if the knee is warmer or more swollen the next day, reduce volume by 30%. The single-leg stance is a key diagnostic for neuromuscular control. Avoid any valgus collapse or trunk lean throughout.

PHASE II STRENGTH ACCUMULATION & SINGLE-LEG LOADING (WEEKS 5-8)

GOAL: Develop single-leg strength, eccentric control, and progressive loading tolerance through the full range of motion.

EXERCISE	METHOD / TEMPO	WEEK 1	WEEK 2	WEEK 3	WEEK 4	REST
MOBILIZATION						
A. Hip 90/90 stretch	Active ROM	2×45s/side	2×45s/side	2×60s/side	2×60s/side	—
B. Calf / Achilles stretch	Gentle, knee straight then bent	2×45s	2×45s	2×60s	2×60s	—
ACTIVATION						
A. Single-leg glute bridge	3-1-1-0	3×10/side	3×12/side	3×12/side	3×15/side	45s
B. Pallof press (split stance)	Anti-rotation	3×10/side	3×12/side	3×12/side	3×15/side	45s
INTEGRATION - NEUROMUSCULAR						
A. Single-leg ball slam	Absorption	3×5/side	3×6/side	4×6/side	4×8/side	60s
INTEGRATION - STRENGTHENING						
A. Loaded lateral step-overs	Externally paced	3×8	3×8	3×6	3×6	120s
B. Lateral step-downs	Pause on eccentric	3-4×8	3-4×8	3-4×6	3-4×6	60-90s
C. Bench glute raise - 2 → 2/1	3-0-1-0	3-4×8	3-4×8	3-4×6	3-4×6	60-90s
D. Bulgarian split squat	3-1-1-0	3×8/side	3×10/side	4×8/side	4×10/side	90s
E. Trap bar deadlift	3-1-1-0	3×8	3×10	4×8-10	4×10-12	90s

COACHING NOTES

Phase II introduces single-leg loading and eccentric control. The lateral step-down is a key diagnostic — watch for valgus collapse, trunk lean, or loss of pelvic control. The single-leg ball slam should emphasise soft, controlled landing mechanics before any speed is added. Glute raise progression from bilateral to unilateral should be earned, not rushed.

PROGRESS TO PHASE III WHEN

- Single-leg lateral step-down with controlled eccentric — no valgus, no trunk lean
- Single-leg ball slam landing with quiet, aligned mechanics
- Pallof press-out on single leg for 20-30s without loss of pelvic control
- No swelling or pain response following sessions
- Symmetrical glute strength on unilateral bench glute raise

PHASE III INTENSIFICATION & RETURN-TO-ACTIVITY (WEEKS 9-12)

GOAL: Develop reactive strength, sport-specific movement patterns, and return-to-activity readiness.

EXERCISE	METHOD / TEMPO	WEEK 1	WEEK 2	WEEK 3	WEEK 4	REST
MOBILIZATION						
A. Hip PNF patterns	Active ROM	1×8/8	1×8/8	1×8/8	1×8/8	—
B. Active tibial rotation	Active ROM	1×1 min	1×1 min	1×1 min	1×1 min	—
ACTIVATION						
A. Single-leg multidirectional object pick-ups	Controlled	2×60s	2×60s	2×60s	2×60s	30s
B. Single-leg drop landings	Soft landing	2×5	2×5	2×8	2×8	90s
INTEGRATION - NEUROMUSCULAR						
A. Forward lunge with ball throw	Reset at each rep	4×3-5	4×5-6	4×5-6	4×8-10	60-90s
B. 2-leg lateral jumps	Reset at each rep	3×6	3×6	3×6	3×6	60-90s
INTEGRATION - STRENGTHENING						
A. Reverse cross-body lunge	Pause on concentric	3×6	3×6	3×5	3×5	120s
B. Backwards walking lunge	Dead-start each rep	3-4×6	3-4×6	3-4×5	3-4×5	120s
C. Staggered RDL / Nordic curl	Controlled eccentric	3-4×6	3-4×6	3-4×5	3-4×5	120s

COACHING NOTES

Phase III introduces reactive and plyometric loading. Drop landings must demonstrate soft, aligned mechanics before progressing to jump variations. The lateral jump should be bilateral before any single-leg plyometric work is introduced. The Nordic curl / staggered RDL builds posterior chain resilience critical for ACL re-injury prevention. Monitor for any anterior knee pain or effusion after sessions.

RETURN-TO-ACTIVITY CRITERIA

- Single-leg drop landing with quiet, aligned mechanics — no valgus, no trunk lean
- Bilateral lateral jumps with consistent landing control
- Limb symmetry index $\geq 90\%$ on single-leg strength testing
- No swelling, pain, or effusion after plyometric sessions
- Clearance from treating clinician before return to sport or high-load activity

PROGRAM GUIDELINES

FREQUENCY

2–3 sessions per week. Allow at least one full rest day between sessions, especially in Phases I and II.

PAIN GUIDE

0–2/10 is acceptable during exercise. Any sharp, catching, or joint-line pain warrants immediate regression. Swelling after sessions is a key indicator – reduce volume if present.

PROGRESSION




Increase range, then volume, then load, then speed. Do not advance phases based on time alone – advance based on meeting all criteria for the current phase.

SWELLING PROTOCOL

Ice and elevation after sessions in Phase I as needed. If swelling increases week-over-week, consult your healthcare provider before continuing.

RED FLAGS – STOP & SEEK CARE

Pause progression and consult a qualified healthcare professional if any of the following occur:

-  Sudden increase in swelling or warmth in the joint
-  Feelings of instability, giving way, or locking
-  Sharp or catching pain during any exercise
-  Pain above 4/10 during or after sessions
-  Numbness or tingling in the lower extremity
-  No improvement after 3–4 weeks of appropriate loading

PHASE SNAPSHOT

PHASE	FOCUS	WEEKS	KEY GOAL
Phase I	<i>Healing & Neuromuscular Re-Education</i>	1–4	Full ROM, swelling control, quad/glute activation, single-leg stability
Phase II	<i>Strength Accumulation & Single-Leg Loading</i>	5–8	Single-leg strength, eccentric control, progressive loading tolerance
Phase III	<i>Intensification & Return-to-Activity</i>	9–12	Reactive strength, sport-specific patterns, return-to-activity readiness

REMINDER

This program is presented to improve movement and performance, not to diagnose or treat medical conditions. It is not a substitute for medical advice. Athletes should be cleared by an appropriate healthcare professional before beginning progressive loading and before returning to sport or high-intensity activity.