

Criteria to initiate program:

* Proper alignment and eccentric control with bilateral and unilateral closed chain movements.
* Complete 4 week return to jogging program to build aerobic base to prepare for more intense runs. Athlete should be able to jog for 10 consecutive minutes prior to starting program. Goal is not speed or distance when jogging 10 minutes but having a solid aerobic foundation to build upon.
* Single leg single hop test and single leg press >70% on Limb Symmetry Index to initiate Phase I if lower extremity injury.
* Perform Upper Extremity Functional Test at >70% to initiate Phase I if upper extremity injury.
* Upper and lower extremity MMT 5/5 and pain free in all directions.

Key notes:

* Perform program on every other day basis to allow for 24-48 hours recovery time.
* Perform each level 2-3 sessions before moving on to next level- move to next level once able to complete with proper mechanics, good strength, and without symptoms.
* Athletes will progress at different rates through the program dependent upon confidence, degree of inflammation, severity of injury, age, and type of surgical intervention. Pain and swelling are the best guides to determining tolerance at each phase and whether an athlete should progress to the next step. Progression through the phases is combined evaluation and guidance of rehab provider and coach.
* Setbacks are common during return to sport progressions and sound judgment should be used regarding an extra rest day(s) or regressing back to prior phase if pain and swelling are problematic.
* Continue with strengthening exercises 2-3 times a week while progressing through program- strengthening exercises may overlap days of program and be performed after; however, must have one complete rest day per week.
* Active warm-up to initiate each session with cooldown following. Ice for 10-15 minutes following session as pain and swelling dictate.

Active warm-up

Pre-running drills (15 yards down and back each): jogging, skipping, side shuffle, backpedal, high knees, butt kicks, grapevine

Dynamic stretching (10 yards down and back each): single leg RDL, quad stretch, side lunge, forward lunge, reverse lunge, knee tucks, glute stretch, inchworms, arm swings

Footwork drills: speed ladder or hurdles

Cool down

 5-10 minutes global upper extremity, trunk, and lower extremity stretching

Ice for 10-15 minutes as pain and swelling dictates

Phase I:

* Goal: build confidence with running, linear running drills with acceleration and deceleration, build confidence with swing technique, no participation in team drills
* Limb Symmetry Index: >70% with single leg single hop and single leg press
* Level 1:
	+ 40 yard run at 50-60% intensity x 10 repetitions (10 yard acceleration with 50-60% as top speed and then gradual deceleration), jog back for rest time
	+ 10 yards backpedal run at 50% intensity x 10 repetitions, jog back for rest time
* Level 2:
	+ 40 yard run at 60-75% intensity x 10 repetitions (decrease acceleration distance to 5 yards and deceleration distance to 5 yards), jog back for rest time
	+ 10 yard backpedal run at 60-75% intensity x 5 repetitions
	+ Sprint transition at 50% intensity (5 yards forwards/5 yards backwards) x 5
	+ Sprint transition at 50% intensity (5 yards backwards/5 yards forwards) x 5
		- Focus on planting with involved leg during sprint transitions
	+ Box drills at 50-60% intensity x 3 repetitions each direction
		- Cones mark box that is 20 feet each side
		- Forward, shuffle, backpedal, shuffle
* Level 3:
	+ 40 yard run at 75-85% intensity x 10 repetitions (5 yard acceleration and deceleration distance), 20 second rest time
	+ 10 yard backpedal run at 75-85% intensity x 5 repetitions, 20 second rest time
	+ Sprint transitions at 60-75%
		- 5 yards forward/5 yards backwards x 5-10
		- 5 yards backwards/5 yards forwards x 5-10
	+ Box drills at 60-75% intensity x 3 repetitions each direction
		- Cones mark box that is 20 feet each side
		- Forward, shuffle, backpedal, shuffle

Sport specific:

* Heel-toe-knee walking
* Footwork: penetrating step stance, sprawl to stance, pivoting
* Shadow wrestling drills:
	+ Perform square and staggered stance incorporating lateral direction, forward/backwards, pivoting, sprawl to stance, and sprawl to penetrating step stance.
	+ Incorporate hands with arm drags.
	+ Maintaining proper form while building endurance in position and focus on footwork
	+ Initiate at 50% effort and progress to 75% effort.
	+ Perform for 30 seconds and increase time to build endurance.

Phase II:

* Goal: speed development and running technique, initiate change in direction with visual stimulus of place to change direction
* Level 1:
	+ 20 yard run at 80% intensity x 10 repetitions, 15 second rest break (jog or walk)
	+ Sprint transitions at 80% intensity x 5 each direction (forward to backwards and backwards to forwards, each at 5 yard distance)
	+ Shadow wrestling drills at 75% intensity
	+ Box drills at 75-85% intensity x 3 repetitions each direction
		- Cones mark box that is 15 feet each side
		- Forward, shuffle, backpedal, shuffle
* Level 2:
	+ 20 yard run at 90% intensity x 10 repetitions, 15 second rest break (jog or walk)
	+ Sprint transitions at 90% intensity x 5 each direction (forward to backwards and backwards to forwards, each at 5 yard distance)
	+ Shadow wrestling drills at 80% intensity
	+ Box drills at 80-90% intensity x 3 repetitions each direction
		- Cones mark 10 foot box
		- Forward, shuffle, backpedal, shuffle
* Level 3:
	+ 20 yard run at 90-100% intensity x 10 repetitions (jog or walk rest break, aim for 1:1 work: rest time ratio)
	+ Sprint transitions at 90-100% intensity x 5 repetitions, 15 second rest break (forward to backwards and backwards to forwards, each at 5 yard distance)
	+ Shadow wrestling drills at 80-90% intensity
	+ Box drills at 80-90% intensity x 3 repetitions each direction
		- Cones mark 10 foot box
		- Forward, shuffle, backpedal, shuffle
* Level 4:
	+ 20 yard run at 100% intensity x 12-15 repetitions (jog or walk rest break, aim for 1:1 work: rest time ratio)
	+ Sprint transitions at 100% intensity x 5 repetitions (jog or walk rest break, aim for 1:1 work: rest time ratio)
		- Forward to backwards and backwards to forwards, each at 5 yard distance
	+ Shadow wrestling drills at 100% intensity
	+ Box drills at 100% intensity x 3 repetitions each direction
		- Cones mark 10 foot box
		- Forward, shuffle, backpedal, shuffle
* Level 5:
	+ 20 yard run at 100% intensity x 15 repetitions (jog or walk rest break, aim for 1:1 work: rest time ratio)
	+ Sprint transitions at 100% intensity x 6-8 repetitions (jog or walk rest break, aim for 1:1 work: rest time ratio)
		- Forward to backwards and backwards to forwards, each at 5 yard distance
	+ Shadow wrestling drills at 100% intensity, work on increasing time to build endurance
	+ Box drills at 100% intensity x 5 repetitions each direction
		- Cones mark 10 foot box
		- Forward, shuffle, backpedal, shuffle

Sport specific:

* Increase speed with footwork: penetrating step stance, sprawl to stance, pivoting
* Shadow wrestling drills:
	+ Perform square and staggered stance incorporating lateral direction, forward/backwards, pivoting, sprawl to stance, and sprawl to penetrating step stance.
	+ Incorporate hands with arm drags.
	+ Maintaining proper form while building endurance in position and focus on footwork
	+ Perform at 75% effort and progress to 100% effort.
	+ Perform for 30 seconds and increase time to build endurance.
* Progress to individual moves with controlled environment (i.e. against coach at decreased intensity/speed)
	+ Perform at 50% intensity. Focus on technique.
	+ STOP immediately if athlete experiences pain.
		- Leg cradle
		- Head and arm
		- Spladle
		- Crossface
		- Grapevine pin
		- Underhook wrist leg attack
		- Take down drill
		- Half nelson
		- Learn to escape
		- Chicken wing
		- Cross face cradle

Phase III:

* Participation in team conditioning at full intensity.
* Participation in team drills initiating at 60% effort progressing to 75% effort.
	+ Paired up with coach in drills to focus on technique and avoid excessive stress/loading at joint.
* No participation in scrimmages.

Phase IV:

* Participation in team conditioning at full intensity
* Participation in team drills initiating at 75% effort progressing to 100% effort
* Participation in scrimmages at 75% effort.

Phase V:

* Participation in team conditioning at full intensity.
* Full intensity in training sessions in all scenarios with limited match time initially progressed to unlimited time to prepare for competition