

Lower Extremity Functional Testing Form

Clearance to Begin Running:

30 Step & Holds	PASS _____	FAIL _____
10 Single Leg Squats	PASS _____	FAIL _____
15 minutes of fast treadmill walking	PASS _____	FAIL _____

Pass Criteria:

- 30 Step & Holds without loss of balance or excessive motion outside of the sagittal plane
- 10 consecutive Single Leg Squats to 45° of knee flexion without loss of balance or excessive motion outside of the sagittal plane
- No abnormal gait patterns while walking as fast as they can on the treadmill
- Group A TEST SUMMARY: PASS FAIL

Run Progression Program:

- Alter-G Treadmill 0.6BW x 5 minutes
 - (Alternative: pool treadmill running)
 - Progress weight bearing to 0.9BW then:
- Treadmill running x 5 minutes
 - Progress to full running pace, then:
- Ground running x 5 minutes
 - Progress time, pace, or distance with each session

Functional Movement Screen

Functional Movement Screen (FMS)	Raw	Final	Comments & Corrective Exercise Prescribed
Deep Squat			
Hurdle Step L step over			
Hurdle Step R			
In Line Lunge L forward			
In Line Lunge R			
Shoulder Mobility L superior			
Shoulder Mobility R			
Active Impingement L			
Active Impingement R			
Active Straight Leg Raise L			
Active Straight Leg Raise R			
Trunk Stability Push Up			
Extension (Lumbar)			
Rotatory Stability L reaching			
Rotatory Stability R			
Flexion (Lumbar)			
TOTAL			

Raw Score: _____

- Score ≥ 15 : PASS/GREEN
- Score 12-14: CONDITIONAL/YELLOW
- Score < 12 : FAIL/RED

Based on deficits noted during FMS screening, corrective exercises should be initiated to guide this phase (see Appendix): Ankle Mobility/Core Mobility/Hip Mobility/Shoulder Mobility

GOALS

- 90% contralateral strength
- 90% contralateral on hop tests
- FMS score ≥ 15
- Deceleration shuttle testing without deficits
- Sports specific training without pain, swelling, or difficulty

Functional Screening:

- Perform the following screening tests at the start of “return to train” phase to develop rehabilitation training protocol to address deficits
- Perform at end of phase or when considering clearing patient for returning to sport-specific training

Strength Testing

Biodex – Flexion/Extension, Con/Con @ 60°

Extension Peak Torque Right	_____	Extension Peak Torque Left	_____	Deficit _____%
Flexion Peak Torque Right	_____	Flexion Peak Torque Left	_____	Deficit _____%
Extension Peak TQ/BW Right	_____	Extension Peak TQ/BW Left	_____	

OR

10-rep maximum on Leg Press	Involved/Uninvolved = _____/_____ = _____
10 Single Leg Squats with weights	Involved/Uninvolved = _____/_____ = _____

Functional Movement Screen

Raw Score: _____

- Score ≥ 15 : PASS/GREEN
- Score 12-14: CONDITIONAL/YELLOW
- Score < 12 : FAIL/RED

Assess progression in deficits from start of Phase IV; based on persistent deficits, adapt corrective exercises to optimize recovery at end of Phase V

(see Appendix): Ankle Mobility/Core Mobility/Hip Mobility/Shoulder Mobility

Deceleration Shuttle Testing

Multiple variation of deceleration testing available

Suggested test iteration:

“Rush” Deceleration/Direction Change Assessment

Set up: None

Test: Patient take 4-5 steps forward while accelerating with each step, comes to a sudden stop, then push-off into a back pedal with the involved leg, back pedal to starting position, then initiate forward run again; repeat 5 times for each leg

Instruct patient to start with a speed that is as fast as they are comfortable, then increase speed with each repetition;

Give cue to correct deficits:

- _____ Maintain constant motion during testing
- _____ Change direction unilaterally
- _____ Display knee flexion during their change of direction
- _____ Maintain a neutral hip, knee, and ankle alignment during transition to back pedal

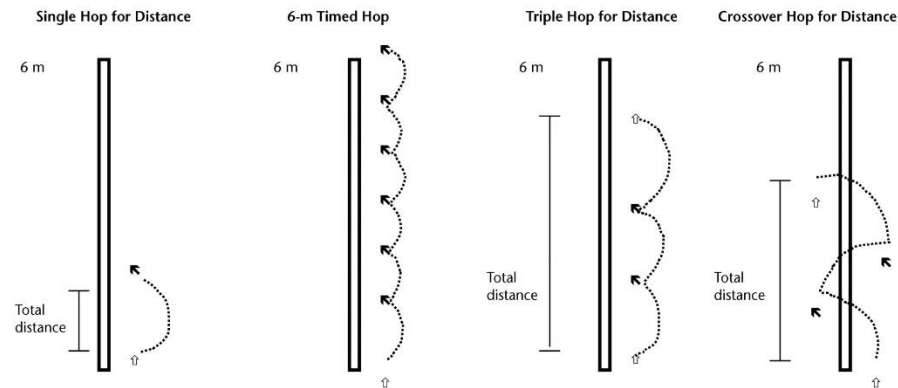
Assessment:

Evaluate for hip and knee stability during quick changes in direction and make corrections for:

- _____ Hip internal rotation
- _____ Knee valgus
- _____ Trendelenburg/Pelvic drop
- _____ Lateral of forward trunk flexion
- _____ Confidence in placing weight on surgical leg

Add/adjust exercises to help correct deficits noted; improved performance during deceleration/direction changes reduces risk of non-contact ACL injury/re-injury

Cincinnati Hop Tests:



	1LH Right	1LH Left	6MTH Right	6MTH Left	1LTHD Right	1LTHD Left	CHFD Right	CHFD Left
1								
2								
Avg								
Injured/ Uninjured								

Hop must be maintained for 2 sec without any of the following: touching down with contra-lateral LE, touching down with either UE, loss of balance, or any additional hops

"Rush" Box Jump Landing to Vertical Jump

Set up: 12 inch plyometric box; mark line ½ the height of patient anterior to box

Test: Patient jumps anterior to the line, lands, then immediately performs a vertical jump with maximum effort, and lands

Assessment:

Repeat until 5 successful trials completed; view from anterior and sagittal positions; give cues to correct form; evaluate squat form (quadriceps force) and valgus knee loading by noting the following:

- _____ Ground contact at same time with both extremities
- _____ Demonstrate at least 30° knee flexion at both landings
- _____ Hip, knee, and ankle in neutral alignment upon landing
- _____ Stance is shoulder width
- _____ Symmetrical weight distribution (viewed anteriorly)

Note deficits and work on re-training by improving plyometric hip and knee control

Agility T-Test (For Soccer/Field Sports)

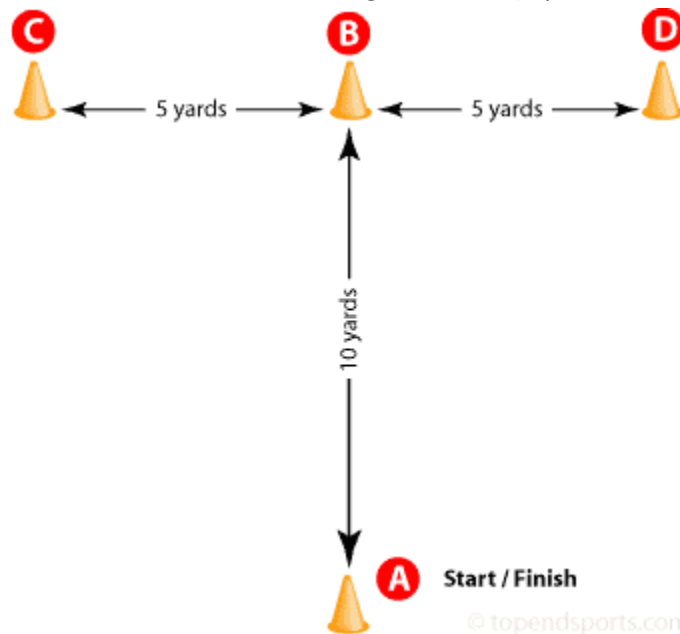
The T-Test is a simple running test of agility, involving forward, lateral, and backward movements, appropriate to a wide range of sports.

Purpose: the T-Test is a test of agility for athletes, and includes forward, lateral, and backwards running.

Equipment: [tape measure](#), [marking cones](#), [stopwatch](#), [timing gates](#) (optional)

Pre-test: Explain the test procedures to the subject. Measure and mark out test area. Perform an appropriate warm-up.

Test Setup: Set out four cones as illustrated in the diagram above (5 yards = 4.57 m, 10 yards = 9.14 m).



Procedure: The subject starts at cone A. On the command of the timer, the subject sprints to cone B and touches the base of the cone with their right hand. They then turn left and shuffle sideways to cone C, and also touches its base, this time with their left hand. Then shuffling sideways to the right to cone D and touching the base with the right hand. They then shuffle back to cone B touching with the left hand, and run backwards to cone A. The stopwatch is stopped as they pass cone A.

Scoring: The trial will not be counted if the subject crosses one foot in front of the other while shuffling, fails to touch the base of the cones, or fails to face forward throughout the test. Take the best time of three successful trials to the nearest 0.1 seconds. The table below shows some scores for adult team sport athletes.

	Males (seconds)	Females (seconds)
Excellent	< 9.5	< 10.5
Good	9.5 to 10.5	10.5 to 11.5
Average	10.5 to 11.5	11.5 to 12.5
Poor	> 11.5	> 12.5

Comments: Ensure that the subjects face forwards when shuffling and do not cross the feet over one another. For safety, a spotter should be positioned a few meters behind cone A to catch players in case they fall while running backward through the finish.

Reliability: the type of surface that is used should be consistent to ensure good test-retest reliability, and preferably performed on the type of surface the athlete will be playing on for their particular sport.

Score: _____

References:

- Semenick, D. (1990). The T-test. NSCA Journal, 12(1), 36-37.
- PAUOLE KAINOA; MADOLE, KENT; GARHAMMER, JOHN; LACOURSE, MICHAEL; ROZENЕК, RALPH. (2000). *Reliability and Validity of the T-Test as a Measure of Agility, Leg Power, and Leg Speed in College-Aged Men and Women*. **The Journal of Strength & Conditioning Research**. 14. 10.1519/00124278-200011000-00012.