

ONS Return to Sport - ACL

Welcome to the ONS return to sport for assessing patients recovering from an ACL injury. The goal of this assessment is to determine when a patient may resume physical activity with little risk for re-injury. The patient will be scored out of a total possible score of 100, with a score of 85 or higher being considered passing. Scores from each segment should be recorded on the right side of the page, and the number in parentheses indicates the maximum number of points possible for that section/part of the assessment.

Part 1 - Mobility

1. PROM L Knee _____ R Knee _____
 2. AROM L Knee _____ R Knee _____
 3. Pain
- 0 1 2 3 4 5 6 7 8 9 10

To move on to further testing, ROM should be within 10% of each other and pain 24 hours after activity should be less than or equal to 3/10.

Part 2 - Strength

2. Hamstring Curl - 10 Rep Max - Use hamstring curl machine or cable machine – 1-leg

Involved _____ Uninvolved _____

Involved/Uninvolved _____ x 10 = (2b)

3. Hamstring strength should be at least 70% of quadriceps strength. Check the appropriate response.

(2c) Equal to/greater than 70% _____ (10) Less than 70% _____ (0)

Total score from the strength section (30)

2a _____ (10)

1. Quadriceps extension - 10 Rep Max - Use Leg Press – 1-leg

Involved _____
Uninvolved _____

Involved/
Uninvolved _____
x 10 = (2a)

Scoring

2b _____ (10)

2c _____ (10)

Part 2 Total _____ (30)

Part 3 - Hop Tests

1. Single Leg Vertical Hop

Use chalk or tape to mark height on wall

R Leg

Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in.
 L Leg
 Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in.

Use the best result from the 2 trials to calculate:
 Involved/Uninvolved ____ x 15 = (3a)

2. Single Leg Long Jump

R Leg Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in. 3a ____ (15)
 L Leg Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in.

Use the best result from the 2 trials to calculate:
 Involved/Uninvolved ____ x 15 = (3b)

3. Single Leg 6m Timed Hop

R Leg Trial 1 ____ sec Trial 2 ____ sec
 L Leg Trial 1 ____ sec Trial 2 ____ sec 3b ____ (15)

Use the best result from the 2 trials to calculate:
 Involved/Uninvolved ____ x 15 = (3c)

4. Single Leg Crossover Hop for Distance

R Leg Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in. 3c ____ (15)
 L Leg Trial 1 ____ ft. ____ in. Trial 2 ____ ft. ____ in.

Involved/Uninvolved ____ x 15 = (3d)

Total Score from the Hop Tests Section (60)

3d ____ (15)

Part 3 Total ____ (60)

Part 4 - Drop Vertical Jump

Circle the appropriate answers upon observing the drop vertical jump from the front and side. We recommend using the “Coach’s Eye” app to record this jump test and to view it back in slow motion.

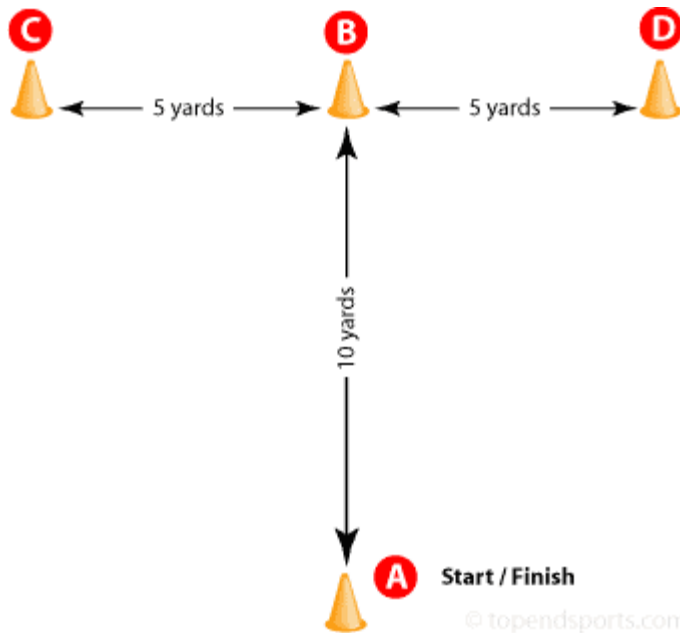
Table 2. Landing Error Scoring System Scoring Sheet (6)	
Observing from the front view	Observing from the side view
1. Stance Width <ul style="list-style-type: none"> <input type="radio"/> Normal (0) <input type="radio"/> Wide (1) <input type="radio"/> Narrow (1) 	6. Initial Landing of feet <ul style="list-style-type: none"> <input type="radio"/> Toe-to-heel (0) <input type="radio"/> Heel-to-toe (1) <input type="radio"/> Flat feet (1)
2. Maximum foot rotation position <ul style="list-style-type: none"> <input type="radio"/> Normal (0) <input type="radio"/> Moderately externally rotated (1) <input type="radio"/> Slightly internally rotated (1) 	7. Amount of knee flexion displacement <ul style="list-style-type: none"> <input type="radio"/> Large (0) <input type="radio"/> Average (1) <input type="radio"/> Small (2)
3. Initial foot contact <ul style="list-style-type: none"> <input type="radio"/> Symmetric (0) <input type="radio"/> Not symmetric (1) 	8. Amount of trunk flexion displacement <ul style="list-style-type: none"> <input type="radio"/> Large (0) <input type="radio"/> Average (1) <input type="radio"/> Small (2)
4. Maximum Knee Valgus Angle <ul style="list-style-type: none"> <input type="radio"/> None (0) <input type="radio"/> Small (1) <input type="radio"/> Large (2) 	9. Total joint displacement in the sagittal plane <ul style="list-style-type: none"> <input type="radio"/> Soft (0) <input type="radio"/> Average (1) <input type="radio"/> Stiff (2)
5. Amount of Trunk Lateral Flexion <ul style="list-style-type: none"> <input type="radio"/> None (0) <input type="radio"/> Small to moderate (1) 	10. Overall impression <ul style="list-style-type: none"> <input type="radio"/> Excellent (0) <input type="radio"/> Average (1) <input type="radio"/> Poor (2)
Total =	

Total Score from the Drop Vertical Jump Section _____ (Out of 15)

Part 5 - T-test

Procedure: Set out four cones as illustrated in the diagram above (5 yards = 4.57 m, 10 yards = 9.14 m). 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 will be based on activity level of the athlete prior to injury. Due to high reliability only 1 trial of the T-test is needed

Time (to 2 decimal places) _____ seconds

Select patient's level of activity before injury. If it is close, select the lesser of the two activity levels. Check off the appropriate response and use the corresponding grading rubric below.

Exercising less than 3 days per week, less than 30 minutes per day, and not competing in any organized sport activities _____ (E1)

Exercising at least 3 days per week for 30 minutes or more _____ (E2)

Training at least 5 days per week for one hour or more and competing in athletic events _____ (E3)

Grading for E1 patients

FEMALE

≤14.22 _____ (15)

14.22 < x ≤ 14.89 _____ (12)

14.89 < x ≤ 15.56 _____ (9)

MALE

≤11.20 _____ (15)

11.20 < x ≤ 11.60 _____ (12)

12.00 < x ≤ 12.40 _____ (9)

15.56 < x ≤ 16.23 _____ (6)
16.23 < x ≤ 16.90 _____ (3)
16.90 < x _____ (0)

12.40 < x ≤ 12.80 _____ (6)
12.80 < x ≤ 13.20 _____ (3)
13.20 < x _____ (0)

Quality of movements from 0-5 _____ (5)

Grading for E2 patients

FEMALE

≤12.97 _____ (15)
12.97 < x ≤ 13.42 _____ (12)
13.42 < x ≤ 13.87 _____ (9)
13.87 < x ≤ 14.32 _____ (6)
14.32 < x ≤ 14.77 _____ (3)
14.77 < x _____ (0)

MALE

≤10.94 _____ (15)
10.94 < x ≤ 11.39 _____ (12)
11.39 < x ≤ 11.84 _____ (9)
11.84 < x ≤ 12.29 _____ (6)
12.74 < x ≤ 13.19 _____ (3)
13.19 < x _____ (0)

Quality of movements from 0-5 _____ (5)

Grading for E3 patients

FEMALE

≤11.24 _____ (15)
11.24 < x ≤ 11.54 _____ (12)
11.54 < x ≤ 11.84 _____ (9)
11.84 < x ≤ 12.14 _____ (6)
12.44 < x ≤ 12.74 _____ (3)
12.74 < x _____ (0)

MALE

≤9.94 _____ (15)
9.94 < x ≤ 10.19 _____ (12)
10.19 < x ≤ 10.44 _____ (9)
10.69 < x ≤ 10.94 _____ (6)
10.94 < x ≤ 11.19 _____ (3)
11.19 < x _____ (0)

Quality of movement from 0-5 _____ (5)

Total Score from T-test Section (Out of 20) _____

Please have the patient complete this section.

Tampa Scale-11 (TSK-11)

This is a list of phrases which other patients have used to express how they view their condition. Please circle the number that best describes how you feel about each statement

1 - Strongly Disagree 2 - Somewhat Disagree 3 - Somewhat Agree 4 - Strongly Agree

1. I'm afraid I might injure myself if I exercise. 1 2 3 4
2. If I were to try to overcome it, my pain would increase. 1 2 3 4
3. My body is telling me I have something dangerously wrong. 1 2 3 4
4. People aren't taking my medical condition serious enough. 1 2 3 4
5. My accident/problem has put my body at risk for the rest of my life. 1 2 3 4
6. Pain always means I have injured my body. 1 2 3 4
7. Simply being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening. 1 2 3 4
8. I wouldn't have this much pain if there wasn't something potentially dangerous going on in my body. 1 2 3 4
9. Pain lets me know when to stop exercising so that I don't injure myself. 1 2 3 4
10. I can't do all the things normal people do because it's too easy for me to get injured. 1 2 3 4
11. No one should have to exercise when he/she is in pain. 1 2 3 4

Total Score from Tampa scale of kinesiophobia _____ x .91 = _____ (10-40)

Final Scoring Rubric:

Input the scores from each section

Part 2 - Strength _____ (30)

Part 4 - Drop Vertical Jump _____(15)

Part 3 - Hop Tests _____ (60)

Part 6 - TSK - 11 _____ (10-40)

Part 5 - T-test _____ (20)

Sum of Sections 2, 3, and 5 _____ (110)

Sum of Sections 4, and 6 _____ (10-55)

Subtract the sum of Sections 4, and 6 from Sections 2, 3, and 5
_____ (110) - _____ (10-55) = _____ (55-100)

Passing for return to sports is a total score greater than or equal to 85.