

Article Title: *The Landing Error Score System (LESS) as a Screening Tool for an Anterior Cruciate Ligament (ACL) Injury – Prevention Program in Elite-Youth Soccer Athletes*
By: Padua et al. (2015)

Researchers and clinicians alike have been searching for a reliable test to screen for risk of injury in all sports. Soccer in particular is a dynamic sport with high risk for injury, in particular anterior cruciate ligament (ACL) injuries. Research has shown that 25% of people with ACL injuries do not return to their previous activity level. Adolescent female soccer players appear to be at greater risk for negative long-term consequences following an ACL injury. More than 22% undergo either surgery to their other knee or a revision of their injured knee during a 5-year time period. This begs the question; what can be done? The answer is prevention!

There are two different types of risk factors associated with injuries; modifiable and non-modifiable. Non-modifiable risk factors are factors that we have no influence over. Modifiable risk factors are factors that we can change or control such as abnormal lower extremity movements, strength, etc. The *Landing Error Score System (LESS)* is a quick, reliable, and valid test that can be scored by trained professionals. The data collected can be used to gauge whether an athlete is at high, moderate, or low risk for an ACL injury. Based on the outcomes, the athlete can be given certain exercises or seek professional physical therapy training to learn proper mechanics that can help reduce the risk of an ACL injury.

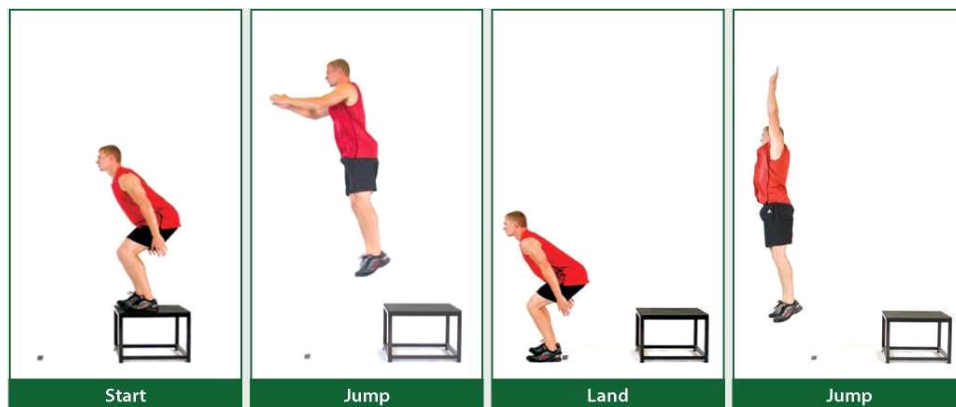


Figure 1: Shows the LESS test. There are different viewpoints that the tester would observe from and collect data about the athlete.

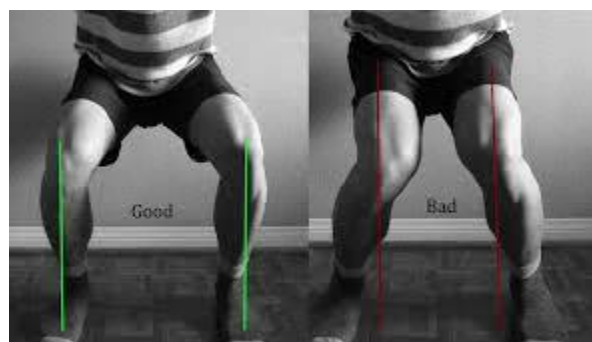


Figure 2: On the left, the athlete is demonstrating good mechanics with a squat. As you can see the knees are not "diving" or falling in. On the right, the athlete is demonstrating bad mechanics. As you can see, the knees are diving in while the athlete squats. The picture on the right, with the bad mechanics, can put the ACL into a precarious situation which could lead to an ACL injury.

Based on the outcomes, the athlete can be given certain exercises from one of our Therapeutic Associates physical therapists located at various Oregon Medical Group locations. The physical therapists can tailor exercises with proper mechanics to help reduce the risk of an ACL injury. The athlete will be guaranteed a physical therapy evaluation within 48 hours.

If you are interested, starting in July Therapeutic Associates will be doing free 15-minute screens to test for potential ACL injuries. Please contact David Holte at dholte@taipt.com or call (541)-242-4172 if you have any questions or want to sign up for a screen.