

Functional Movement Screen (FMS)

What is it?

The Functional Movement Screen (FMS) is a ranking and grading system consisting of seven movement patterns that are foundations of normal movement. The FMS analyzes the contribution of the entire body to each movement, giving an accurate picture of how our bodies actual function in day-to-day life. By screening these patterns, which include elements of stability, mobility, and symmetry of movement, the FMS readily identifies functional limitations and determines future risk of injury.



Why is it important?

Numerous studies have been conducted in professional athletes, fire fighters, and the military on the effectiveness of the FMS in predicting injury risk. These studies have found that low FMS scores, typically below 14, are strong indicators of elevated risk of injury. In particular, the Functional Movement Screen identifies asymmetrical movement restrictions that can go undetected by the individual. These asymmetries result in overuse of various tissues and can lead to serious injury in athletic, exercise, or even occupational settings. Detecting and correcting these functional limitations are essential to ensuring safe and productive exercise and activities of daily living.

How is it assessed?

The test makes use of a measuring device, hurdle, and measuring stick and is composed of seven movement tests: a deep squat, a hurdle step, an in line lunge, a shoulder mobility test, a leg raise, a push up, and a rotational stability test. A subject is assigned a score between 0 and 3 after completing each exercise. A "0" indicates that the individual has felt some sort of pain during the exercise, regardless of how well the pattern was performed. A "1" indicates that the individual could not complete the movement using proper posture. A "2" is assigned when the individual is able to complete the movement, but requires some degree of compensation to do so. Finally, a "3" is awarded when the individual completes the movement flawlessly with no compensation. Based on the cumulative score, the subject's injury risk is determined. A low FMS score, typically considered to be less than or equal to 14 (out of 21 possible), indicates a significantly higher risk for injury. Additionally, a score of 1, or differing scores between the left and right side, on any individual movement pattern identifies a "weak link" that should be corrected to decrease injury risk.

What to expect during the assessment:

1. Under the supervision of one of our trained staff members, you will be asked to perform the seven movements to the best of your ability.
2. The FMS is designed to identify the limits of your movement capability. Several of the movements require you to attempt to either lower yourself to, or get up from, the ground. Please alert the supervising staff of any conditions that may make this difficult or impractical.
3. If any movement causes significant pain, do not continue with the exercise. Simply, stop and alert the supervising staff. You will still be allowed to continue the rest of the assessment.

Participant preparation:

Test validity and data accuracy are greatly improved by adhering to the following guidelines prior to your assessment. Your test(s) will be given on the assumption that you have followed these recommendations:

1. Refrain from ingesting heavy meals, alcohol, caffeine and tobacco products within 5 hours of testing
2. You should be well rested for the test: avoid significant exertion or exercise 24 hours prior to testing and get a good night's sleep
3. Clothing should permit freedom of movement and be appropriate for exercise