

FMS – Functional Movement Screen

- Uses seven fundamental movement patterns
- Require a balance of mobility and stability (including neuromuscular/motor control)
- Place individuals in extreme positions where weaknesses and imbalances become noticeable
- Athletes who cannot perform these movements are likely adopting compensatory movement patterns during their activities, leading to poor biomechanics, inefficient movements and increased injury risk.
- FMS was designed to identify individuals who have developed compensatory movement patterns within the kinetic chain – accomplished by screening for left-right imbalances as well as observing mobility and stability dysfunction.

Scoring the FMS

- 0 pain anywhere in the body during the test
 - 1 unable to complete the movement pattern/assume the position required.
 - 2 Able to complete the movement but must compensate in some way
 - 3 Performs the movement correctly without any compensation
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- For bilateral tests, both sides are scored but the lowest is used for the total score
 - Three tests have a 'clearing screen' – any pain when performing these results in a 0 for that test
 - Highest possible score is 21

Deep Squat

- Feet shoulder width apart in the sagittal plane
- Dowel on head, elbows at 90 degrees
- Dowel is pressed directly overhead, elbows extended
- Descend as deep into a squat as possible maintaining upright torso, and heels and dowel in position
- Hold for count of 1 then return to start
- Do up to 3 reps
- If score of '3' is not achieved, place heels on the block and try again
- If in doubt, score low.

Hurdle Step

- Feet together, toes touching base
- Hurdle height adjusted to height of tibial tuberosity
- Dowel held in both hands, behind the neck and across the shoulders
- Maintain an upright posture and step over the hurdle, raising the foot toward the shin, and maintaining alignment between the foot, knee, and hip.
- Do not lock knee of stance leg.
- Touch heel to the floor (without accepting weight) while maintaining the stance leg in an extended position.
- Return moving leg to start position
- Should be performed in slow and controlled manner
- Up to three times each leg – 3 can be awarded for that leg if one rep is performed correctly
- Lowest score from both legs is used for total

In-line lunge

- Record the tibial length from the hurdle step test (height of hurdle)
- Stand on FMS board, toe of rear foot to the line
- Heel of front foot should be at the distance of tibial length
- Feet flat and toes pointing forward.
- Dowel is placed vertically behind back, touching head.
- Opposite hand to front foot grasps dowel at cervical spine (behind neck)
- Other hand grasps dowel at lumbar spine (lower back).
- Dowel must stay in contact with head, thoracic spine and sacrum throughout.
- Lower back knee to touch board, maintaining upright posture.
- Return to start position
- Up to three reps performed in slow and controlled manner.
- If one rep is performed correctly, a '3' can be given for that leg.
- Front leg is the one being scored.

Shoulder Mobility

- Measure hand length from distal wrist crease to tip of third digit
- Make a fist with each hand, thumb inside fist
- In one movement, place right fist over head and down back as far as possible, while simultaneously taking left fist up back as far as possible.
- Do not 'creep' hands closer after initial placement
- Measure distance between hands
- Top hand is side being measured
- Up to three reps each side
- If fists are within one hand length, score 3
- If fists are writhing 1.5 hand lengths score 2

- If fists are more than 1.5 hand lengths apart, score 1

Clearing exam

- Place hand on opposite shoulder then point elbow upwards
- If pain is experienced, score 0 for the whole shoulder mobility test.

Active Straight Leg Raise

- Lie supine, arms in anatomical position over board, head on floor
- Dowel is placed vertically at the mid-point between the anterior superior iliac spine (hip bone) and the mid point of the patella (knee cap)
- Slowly lift test leg with dorsiflexed ankle and extended knee
- Opposite leg must stay in contact with ground, and toes pointing upwards, head must stay in contact with floor
- Score 3 if malleolus (ankle bone) is beyond the dowel
- If malleolus does not reach dowel at end point, move dowel until it is in line with malleolus. Score 2 if dowel is between mid-thigh and knee.
- Score 1 if dowel is below knee joint

Trunk Stability Push Up

- Assume prone position with feet together (face down on floor).
- Hands shoulder width apart – males thumbs in line with top of forehead, females thumbs in line with chin
- Knees fully extended, ankles dorsiflexed
- Perform one push up from this position
- Body should be lifted as one unit – no arch in back
- Chest and stomach come off ground at same time
- Score 3 if able to complete one rep

- If unable to perform push up, move to next position as try again (thumbs at chin level for males, shoulder level for females).
Score 2 if able to complete this rep.
- Score 1 if unable to complete 1 rep.
- Maximum three attempts.

Clearing exam

- Assume press-up position and raise chest while keeping hips on floor
- If any pain is experienced, score 0 for the whole test

Rotary Stability

- Start on all fours, shoulders and hips at 90 degrees, FMS board between arms and legs
- Knees at 90 degrees and ankles dorsiflexed.
- Flex shoulder and extend hip and knee on same side sufficient for leg and hand to clear floor by at least 6 inches
- Bring elbow and knee together to touch. Moving limbs must remain over the FMS board.
- Up to three attempts – if successfully completed, score 3
- If unable to complete, attempt opposite knee and elbow touch (three attempts) – score 2 if successful.
- Score 1 if unable to complete either successfully.
- The arm being used denotes the side being scored.

Clearing Exam

- On all fours, rock back so that buttocks touch heels, chest on thighs and arms reach out as far as possible.
- Any pain experienced, score 0 for whole test.