



Biomechanics of Sports

FMS Updates and Changes

April 6, 2020



Lesson: April 6, 2020

Objective/Learning Target:

The student will identify the changes made to the FMS Level 1 screen and be able to further understand and connect to real world application.

Instructions

Read the following passage and answer the follow up questions on the last page. Email to Coach Kolster @ jay_kolster@idschools.org

Ankle Clearing

PURPOSE

An important purpose for this screen is to identify pain and to ensure ankle mobility is not a barrier to movement pattern competency and capacity. The lower body motor control is adversely affected when ankle mobility is painful and/or dysfunctional/limited. Normal, adequate mobility without pain is a prerequisite for motor control needed in multiple movement patterns.

VERBAL INSTRUCTIONS

- Please let me know if there is any pain while performing any portion of the screen.
- Please lace or strap your shoes snugly.
- Place the outside of your left foot up next to the FMS test kit so that the outside foot is in contact with the kit.
- Place the right foot in front of the left foot so that you are in the heel-to-toe position with both feet touching each other and the FMS test kit and use a dowel for balance.
- I will adjust the FMS kit so that the red start line is at the front of the medial malleolus.
- While maintaining the heel-to-toe position drop straight down, bending the back knee and taking it as far as possible in front of your toes while keeping the heel down.
- Once you have reached your maximum distance, I will measure and ask you where you felt the stretch (Front, Back of Ankle, or no stretch).

Have the participant perform the ankle clearing screen at least three times for consistent measurement.

TIPS FOR TESTING

- The back foot is the ankle being tested.
- Adjust the FMS kit so that the red start line lines up with the front of the medial malleolus.
- Both feet must remain in the heel-to-toe position throughout the movement.
- Use the dowel for balance so that range of motion is not limited due to a lack of balance.
- The verbal instructions and setup should guide the individual to move the back knee laterally to avoid contact with the forward leg.
- If there is pain, refer to a healthcare professional.

Documenting Ankle Clearing

GREEN

- Knee moves beyond the medial malleolus of the front leg while the heel stays down.
- This indicates the ankle has cleared mobility requirements



YELLOW

- The knee resides within the width of the medial malleolus of the front leg while the heel stays down.
- This indicates a potential ankle mobility limitation.
- Failure on the Ankle Clearing screen implies that ankle mobility should be addressed and cleared.



RED

- The individual's knee does not reach the medial malleolus of the front leg while the heel stays down.
- This indicates a potential ankle mobility limitation.
- Failure on the Ankle Clearing screen implies that ankle mobility should be addressed and cleared.



ADDITIONAL CONSIDERATIONS

- **Pain** - If the individual experiences pain with this screen, indicate positive for pain in scoring and referral to a healthcare professional is recommended.
- **Stretch** - If the individual experiences a stretch or feeling of tightness of the ankle and it does not resolve with soft tissue or stretching applications, further assessment by a health care professional is needed.

Follow Up Questions

1. After reading the ankle clearance screen, why do you suppose FMS decided to add this to the In-Line Lunge movement screen?
2. Why is ankle mobility aid in fundamental bilateral and unilateral movements?
3. On your own, research and send me three ankle mobility drills that you would address with a client that scores a red for the ankle clearance test.