

## ACL Prevention Exercises

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**Goal:** Avoid dynamic valgus of the knee

**Exercises:** Hamstring flexibility, Quadriceps Strength, Abductor Strength, Knee Proprioception, Improved Landing Techniques

### Standard Program:

Designed to be implemented with limited distraction from current regimen. Should be initiated during pre-season conditioning and continued with in-season practice and games done each day during warm-ups and stretching.

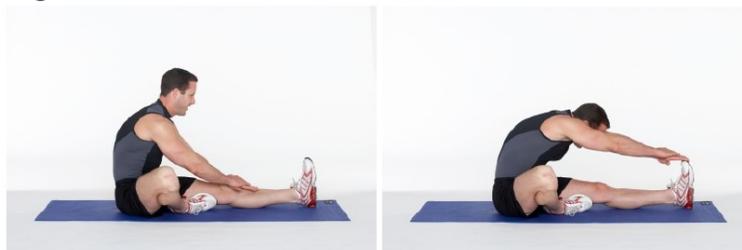
#### 1) Hamstring Flexibility

- This may be included in pre-practice stretching already, but should be included as follows:

*Standing Hamstring Stretch* – while standing with knees completely extended, bend down to touch your toes until you feel stretching in the back of your knees and hamstrings. This should be held for 15 seconds. Avoid hopping up and down during the stretch, and don't let knees bend during the stretch.



*Sitting Hamstring Stretch* – While seated, extend one leg out to the side and reach with your hand toward the toes and hold this stretch for 15 seconds. Repeat this for the other leg.



## 2) Hip Abductor Strengthening

- Focus on isolating the abductors in the hip and during the exercises, should feel the active firing of the abductors and avoid compensating with other muscles about the hip.

*The "Jazzercise"*- While laying on your side, extend you up leg 30 degrees behind you and then raise you leg up with your foot above the level of your elbow. Repeat this exercise for 15 reps, doing 2 sets for each leg. Be sure to keep your pelvis aligned straight up and not to lean too forward or back and focus on firing the abductor (Gluteus Medius/Minimus) in the hip during this exercise. Once more comfortable, can add 5-10 pound ankle weights as well.



### 3) Quad strength, Pelvis stability, Knee proprioception, Landing Techniques

- Involves knee flexion and bending down while maintaining proper form to keep the pelvis/hip from dropping down and the knee from bending inward (valgus). More important to do proper technique than it is to do more reps.

*Single leg squat* – Standing on one leg with the other leg out in front of you, flex the knee down to shy of 90 degrees. Proper technique is paramount and can be aided by initially doing this in front of a mirror. Squat down by keeping the knee directly in front of you and not letting it bend inward and also keeping your pelvis/hip upright and not dropping the opposite side down. Perform 15 reps with 2 sets for each leg.

Correct:



Incorrect:



*Lunges* – With one leg out in front of the other, flex the knee down with the opposite knee leaning toward the ground. Maintain proper technique with the knee stable in front of you and not bending to either side and keep the pelvis aligned and not dipping to one side or the other. Perform 15 reps with 2 sets per leg. This exercise may be helpful to perform initially prior to the single leg squat to gain initial strength and balance.



*Single leg step down* – While on a step or elevation, place one leg out in front of the other and bend the leg to squat down similar to the single leg squat. 15 reps of 2 sets per leg.



Please contact your trainer or call our office or visit our website if any questions or concerns

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