

Kevin Leonoff
August 8, 2012
Project 4
Injury Prevention Circuit

Common Preventable Injuries in Football

- Low Back Pain
 - Lower back pain commonly occurs due to overuse. This is typically found in offensive and defensive linemen. This could be due to inflexibility and also a lack of strength in the area.
- Patellar Tendinitis
 - Patellar Tendinitis is usually felt due to a lack of quadriceps strength. This could also occur because of overuse.
- Shoulder Dislocation and Injuries including Labrum
 - Shoulder Dislocation may occur to athletes in multiple positions. This commonly occurs due to a lack of flexibility and muscular strength combined with an impact force. The labrum could be injured due to lack of muscular strength to keep the joint stout.
- Acromioclavicular Joint Injuries (Separated Shoulder)
 - AC Joint injuries are common due to lack of flexibility in the ligaments and tendons surrounding the joint as well as a lack of muscular strength to keep the joint sturdy in combination with an impact force.
- Rotator Cuff Injuries
 - The rotator cuff is commonly injured due to overuse because of a lack of strength and flexibility surrounding the shoulder joint. This can occur with multiple positions, especially a quarterback.
- Hamstring Pulls
 - Hamstring pulls are usually seen while running. This can be caused due to a lack of flexibility in the hip and knee area as well as hamstring muscle group. Also a strength imbalance between the quadriceps group and hamstring group could cause a pull.
- Ankle Sprains
 - Ankle sprains commonly occur due to a lack of strength in the muscles surrounding the ankle joint. Due to the lack of muscular strength, ligaments are usually stretched beyond normal range of motion because of some external force.
- Knee Ligament Sprains/Tears (ACL, MCL, PCL, LCL)
 - Knee ligament injuries typically occur due to overuse and a lack of muscular strength in the muscles surrounding the knee joint. Lack of flexibility may also play a part in knee ligament injuries.

<http://www.stopsportsinjuries.org/football-injury-prevention.aspx>

<http://www.jointhehealing.com/pages/sports/football.html>

Lunges

Purpose:

To strengthen lower body muscles and improve dynamic balance

Equipment:

Dumbbells OR Large Resistance Tubing

Procedure:

1. Begin standing with feet shoulder width apart. Hold dumbbell in each hand OR use a long resistance band wrapped around core area.
2. Step forward with right foot leaving left foot planted to ground.
3. Lower hips towards ground, bending both knees.
4. Return right foot to starting position.
5. Repeat each step alternating each leg.

Duration:

Perform 2-4 sets of 10-15 repetitions. (1 rep = stepping with both feet)



Stiff Leg Deadlift (SLDL)

Purpose: To increase lower back, hamstring, and gluteal muscle group strength and flexibility.

Equipment: Olympic Bar with Weights OR Barbell OR Dumbbells

Procedure:

1. Begin standing with knees straight holding a straight bar at waist.
2. Slowly lower bar towards ground by lowering the upper body and bending at the waist, keeping knees straight. Keep an arched back throughout the motion.
3. When range of motion is complete, raise the bar back to waist by raising the upper body and bending at the waist, again keeping knees straight. Return to starting position.
4. Repeat.

Duration:

Perform 2-4 sets of 10-20 repetitions.



Med Ball Power Drop

Purpose: To increase upper body explosive strength in the chest, upper back, and shoulders.

Equipment: Medicine Ball

Procedure:

1. Begin by lying flat on the floor with hands in a catching position at chest level.
2. A partner will drop a medicine ball towards hands.
3. Catch the med ball and immediately throw (push) ball with both hands back to partner.
4. Repeat.

Duration:

Perform 2-4 sets of 15-25 repetitions.



Low to High Rows

Purpose: To increase whole body strength and flexibility in multiple planes of movement.

Equipment: Resistance Band OR Dumbbell OR Weight OR Medicine Ball

Procedure:

1. Begin with feet shoulder width apart and knees bent. Use a resistance band secured to a low object OR small weight OR medicine ball.
2. The resistance will be held with outside hand near the inside foot.
3. Raise body to standing position while twisting core outwards.
4. Extend outside arm to a 45 degree angle outside body.
5. Repeat.
6. Switch sides of body and repeat.

Duration:

2-4 sets of 10-20 repetitions on each side of body



Shoulder 90-90 External Rotation

Purpose: Strengthen the rotator cuff muscles and increase flexibility in shoulder joint.

Equipment: Resistance Band

Procedure:

1. Begin standing with feet shoulder width apart.
2. Attach resistance band at a medium to high level.
3. Facing the attachment, raise arm to the side at a parallel level to ground with elbow bent at 90 degrees and forearm and palm facing ground.
4. Rotate hand upwards and back leaving the forearm perpendicular to the ground. (The arm should not move – just rotate)
5. Return to starting position and repeat.
6. Switch arms and repeat.

Duration:

Perform 2-4 sets of 15-25 repetitions with each arm.



Abdominal Crunches

Purpose: To increase core strength.

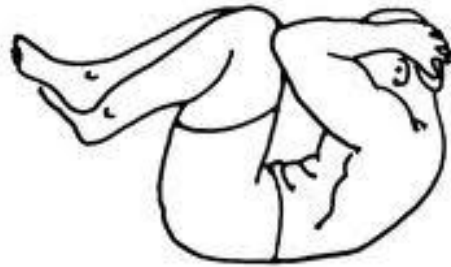
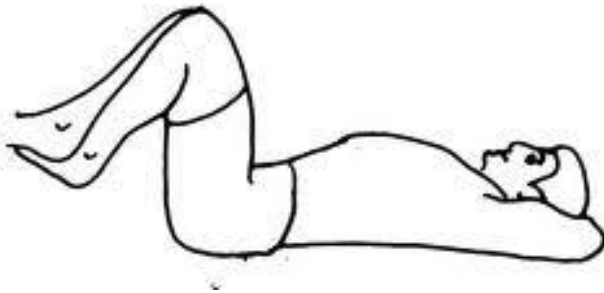
Equipment: Medicine Ball (if desired hold above head)

Procedure:

1. Begin by lying with shoulders on ground and knees bent at a 90 degree angle in air. Hands should be behind head.
2. Raise upper body upwards aiming to touch elbows and knees together.
3. Return upper body back to floor.
4. Repeat.

Duration:

Perform 2-4 sets of 20-50 repetitions.



Med Ball Squat Jump

Purpose: To increase strength and explosive power in lower body.

Equipment: Medicine Ball

Procedure:

1. Begin standing with feet shoulder width apart holding medicine ball above head.
2. Lower hips to squat position. (Knees should bend to 90 degrees with butt over heels)
3. Explode upwards, jumping with both feet off of ground.
4. Raise medicine ball over head while jumping.
5. Return to ground and repeat.

Duration:

Perform 2-4 sets of 10-20 repetitions.



Quadriceps Pull (Stretch)

Purpose: To increase flexibility in the quadriceps muscle group and related joints.

Equipment: None

Procedure:

1. Begin standing with both feet on ground.
2. With one hand grasping the outside of the same side ankle, pull heel towards butt while abducting hip slightly. (Aim knee outwards)
3. Hold this position.
4. Relax and repeat.
5. Switch legs.

Duration:

2-3 reps of 15-30 seconds each leg.



Toe Touch (Stretch)

Purpose: To increase flexibility in the hamstring muscle group and surrounding joints.

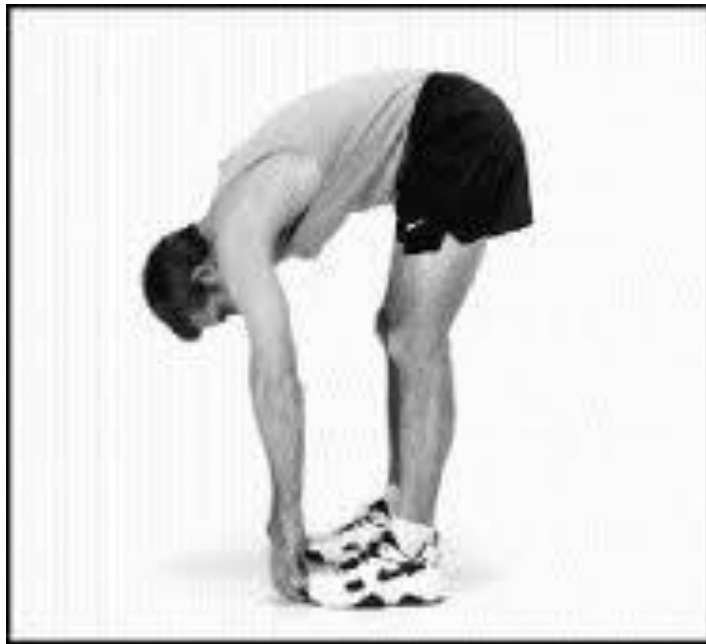
Equipment: None

Procedure:

1. Begin standing with feet close together and knees straight.
2. Lower the shoulders towards ground while keeping the knees straight and bending at the waist.
3. Try to touch toes and hold this position.
4. Relax and repeat.

Duration:

2-3 sets of 15-30 seconds



Shoulder Girdle Stretch

Purpose: To increase flexibility in the shoulder joint and surrounding muscles.

Equipment: None

Procedure:

Begin standing with feet shoulder width apart.

1. Hold one arm across chest with the inside of the other arm's elbow.
 2. Hold position.
 3. Relax and repeat with other arm.
 4. Repeat.
-
1. Hold one arm behind head with other hand on elbow.
 2. Hold position.
 3. Relax and repeat with other arm.
 4. Repeat.

Duration:

2-3 sets of 15-30 seconds each arm/position.

