

Plyometrics

Plyometric exercises are good for power, speed and strength. These exercises are not easy so you need to be in good shape before doing them. Check with your coach and/or trainer before adding plyometrics to your conditioning routine.

Plyometrics Safety Tips

- Plyometrics are recommended only for well-conditioned athletes
- You should have high levels of leg strength prior to performing plyometrics
- Warm up thoroughly before starting plyometrics
- Start slowly with small jumps and gradually build up
- Land softly (see above) to absorb shock
- Allow plenty of rest between plyometric workouts
- Stop immediately if you feel any pain in your joints
- Pay attention to injury warning signs.
- Use footwear with plenty of cushioning
- Perform plyometrics on soft or cushioned surfaces only

Ankle Bounces

1. Stand with feet shoulder-width apart and knees slightly bent. Arms should be at sides and bent up to 90°.
2. Hop continuously on both feet using only the ankles to project body up.
3. Remember to extend the ankles to their maximum range on each hop to ensure proper mechanics (or full plantar flexion).



Bounding

1. Jog into the start of the drill for forward momentum.
2. After a few feet, forcefully push off with the left foot and bring the leg forward. At same time drive your right arm forward.
3. Repeat with other leg and arm
4. This exercise is an exaggerated running motion focusing on foot push-off and air time.



Butt Kuck

Kick Start with a light jog
Pull the heel of the lower leg up to and bounce off the butt.
Your knee should come forward and up during the movement.



Explosive Start Throws

Stand with feet slightly wider than hip-width apart. Knees should be slightly bent.
Pick medicine ball up to chest level.
Quickly explode up and press the ball straight out as far and fast as you can.
As you press the ball forward explode with either leg so that you actually sprint forward a couple of steps.



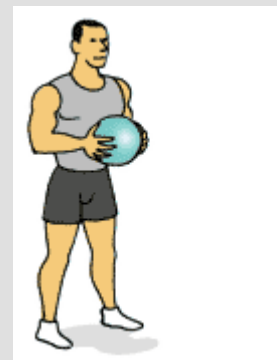
Fast Feet on Box

1. Stand behind box and place one foot on top of box, heel close to the closest edge.
2. Push off the box and explode vertically to bring the other foot onto the box.
3. Step back down with your feet reversed.
4. Repeat with other leg and continue according to prescribed number of repetitions.



Frontal Reach

- 1) Start position: Stand with feet hip width apart. Hold medicine ball or dumbbell at waist.
- 2) Step laterally 2-3 feet with the heel striking first and lean torso forward. With both hands, reach down in front of you so that finger tips touch the floor. DO NOT allow front knee to extend past the big toe - may cause injury.
- 3) Pushing off left foot, return to start position. Continue with same leg or alternate as prescribed.
- 4) Remember to keep head and back in a neutral position. Reaching forward should be performed at the hips and not the low back. Shoulders and hips should remain squared at all times.



Heel Sprints

Run keeping the legs straight and the foot

plantar flexed (toes curled up) so that you are on your heels.
Focus on minimal ground contact and pull through with the heel.



Heel to Toe Walks

Walk with an exaggerated heel to toe walk. During the swing phase of your leg curl your toes up so that you land on the back part of your heel and roll your foot down and up onto your toes. This should be a fluid motion. Repeat with the other foot.



High Knee Drill

1. Stand in place with feet hip width apart.
2. Drive knee up towards chest and quickly place the foot back on the ground.
3. Drive other knee up in a moderate to fast jog with minimal ground contact time.



Jump Rope (alternating foot)

Start with the jump rope in each hand. Jump off the ground and start swinging the jump rope under your feet. Continue jumping up and down alternating your feet touching the ground as you bring the jump rope under your feet. Continue for the prescribed number of jumps or time.



Jump Rope (backwards)

Start with the jump rope in each hand. Jump off the ground and start swinging the jump rope up over your head and then towards your feet. Continue jumping up and down as you bring the jump rope from behind under your feet. Continue for the prescribed number of jumps or time.



Jump Rope (basic 2 feet)

Start with the jump rope in each hand.
Jump off the ground and start swinging the jump rope under your feet.
Continue jumping up and down as you bring the jump rope under your feet.
Continue for the prescribed number of jumps or time.



Lateral Bounds

1. Stand to the left of the box. Jump using left foot onto the box.
2. Raise body using the right foot only until leg is extended
3. Lower to start position with both feet back on the ground. Repeat with other leg according to exercise prescription.



Lateral Step Up with Hop

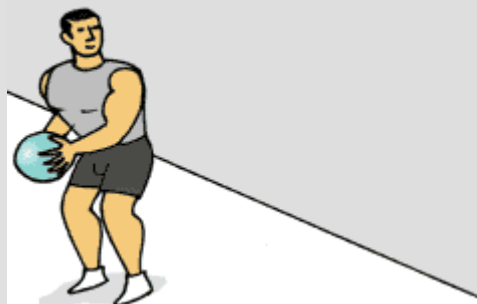
1. Stand to left side of box and place right foot on top of box.
2. Push off the box using the right leg only and explode vertically as high as possible. Drive the arms forward and up for maximum height.
3. Land with opposite foot onto box. Repeat with the other foot.
4. Repeat according to prescribed number of repetitions.



Modified Hammer Throw

1. Stand with feet hip-width apart; place right foot approximately one foot in front of left foot.
2. Hold medicine ball with both hands and arms only slightly bent.
3. Swing ball over to the left hip and forcefully underhand toss ball forward to a partner or wall. Keep the stomach drawn in to maximize proper usage of muscle.

Catch ball on the bounce from your partner and repeat according to prescribed repetitions



One Foot Zig Zap Hops

Stand to the left of the ladder approximately 1-2 feet away.

Forcefully push off one foot and land the on the other side of the ladder with the same foot. Repeat and land foot back on the other side, continue repeating and so on down the ladder. Do not "double hop" upon each landing. Repeat with other leg.



Over the Back Toss

1. Stand with feet slightly wider than hip-width apart. Have a partner or trainer stand approximately 10-15 yards behind you.
2. Grasp ball and lower body into a semi-squat position. Explode up extending the entire body and throwing medicine ball up and over the body.
3. The goal is to throw the ball behind you as far as you and generating most of the power in the legs.
4. Catch ball on the bounce from your partner and repeat according to prescribed repetitions.



Side Throws

1. Stand with feet hip-width apart; place left foot approximately one foot in front of right foot.
2. Hold medicine ball with both hands and arms only slightly bent.
3. Swing ball over to the right hip and forcefully underhand toss ball forward to a partner or wall. Keep the stomach drawn in to maximize proper usage of muscle.
4. Catch ball on the bounce from your partner or wall and repeat according to prescribed repetitions.



Skip

Start with both feet together and begin by driving your left leg into the air and explode with the right ankle so that both feet are off the ground. Upon landing with the right foot bring the left foot down and drive the right leg into the air and repeat. Continue this bouncing, alternating motion until desired repetitions are met.



Squat Jump

- 1) Stand with feet shoulder-width apart, trunk flexed forward slightly with back straight in a neutral position.
- 2) Arms should be in the "ready" position with elbows flexed at approximately 90°.
- 3) Lower body where thighs are parallel to ground.
- 4) Explode vertically and drive arms up.
- 5) Land on both feet and repeat.
- 6) Prior to takeoff extend the ankles to their maximum range (full plantar flexion) to ensure proper mechanics.



Squat Throw (full body)

1. Stand in quarter-squat position with trunk flexed forward and ball held between legs. Arms should be slightly bent.
 2. Perform underhand toss as high as you can, using the legs to explode up.
- Have partner catch ball on the bounce and return the ball. Athlete should catch ball after a bounce and repeat as prescribed.



Squat Throw from Chest

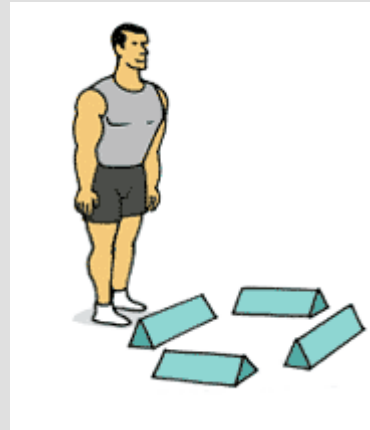
1. Stand with feet slightly wider than hip-width apart. Knees should be slightly bent.
 2. Hold medicine ball at chest level and squat down to a parallel position.
 3. Quickly explode up and jump as high as you can. As you start your jump you should start to shoulder press the ball up and reach full extensions with the arms when you are at the peak of your jump. Push ball as high as possible into the air. Try to minimize the time spent in the squatted position. It should be a real quick squat and jump.
- Catch ball on the bounce and repeat according to prescribed repetitions.



5 Star Jumps

1. Stand with feet slightly wider than hip-width apart in

center of hexagon or star.
2. Jump forward to front side of hexagon/star and then back to the center.
3. Continue to each side of the hexagon/star in a clockwise motion and until you reach the prescribed number of revolutions.
4. Jumps should be done on the balls of feet quickly yet controlled.



Step Jumps

1. Stand beside object to be cleared.
2. Bring knees up and jump vertically but also laterally off ground and over the barrier.
3. Land on both feet and jump the other direction over barrier.



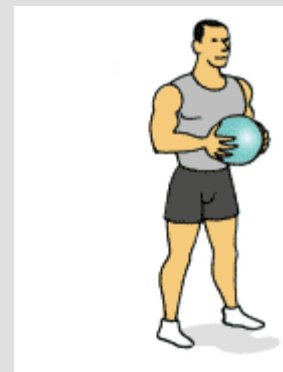
Straight Leg Bounds

Run keeping your legs straight and the feet neutral with the ground
Focus on minimizing ground contact with the foot and pull through with the leg.



Transverse Reach

1) Start position: Stand with feet hip width apart. Hold medicine ball at waist.
2) Take right foot and step 2-3 feet out to the right side (or the 3 o'clock position). Lean torso forward and sit the right glute back. Reach ball down towards the right foot so that finger tips touch the floor. DO NOT allow lunging knee to extend past the big toe - may cause injury.
3) Pushing off lunging foot, return to start position. Continue with same leg or alternate as prescribed.
4) Remember to keep head and back in a neutral position. Reaching forward should be performed primarily at the hips and not the low back.
5) Watch for proper knee alignment - do not let lunging knee extend past big toe or deviate laterally or medially. Opposite leg should remain straight during lunging phase as shown.



Two Foot Zig Zap Hops

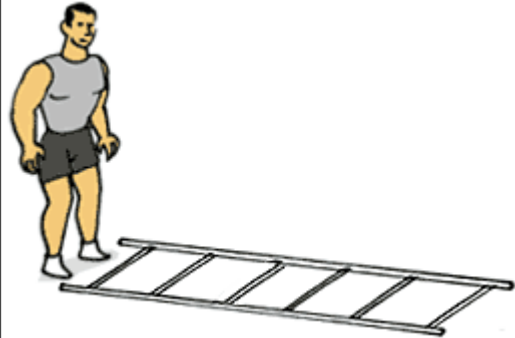
1. Stand to the left of the ladder approximately 1-2 feet

- away.
2. Forcefully push off both feet and land the on the other side of the ladder.
 3. Repeat and land feet back on the other side, continue repeating and so on down the ladder.
 4. Do not "double hop" upon each landing.



Up, Over, In (ladder)

1. Stand at foot of agility ladder.
2. Drive knee up towards chest and place that foot in first square.
3. Drive other knee up and land in next square then place your back leg into the same square as the second leg. Start with opposite leg and repeat on down the ladder.



graphics courtesy of Ryan Publishing and Fitnessgenerator.