

Plyometrics

Phases I-IV = All Athletes

Phase V = Sport Specific

**By: Michael R. Rankin, CSCS, USAW, USATF, NSCA-CPT
Head Strength & Conditioning Coach
Drexel University**

This program is designed to be one part of the workout routine and not as a routine done by itself.

Phase I - Plyometrics

Forward (2 Leg) Box Jump: Stand facing the box with feet shoulder width apart and hands behind your head or by your side. Jump up and land as soft as possible (less noise the better) with both feet on the box. Step back off the box and repeat. The box height should be between 12 and 42 inches and the landing should be toward the center of the box and “quiet” or soft.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Box_Jump

Lateral (2 Leg) Box Jump: Stand at the side of the box with feet shoulder width apart. Jump onto the box landing softly towards the center with both feet. Step down off the box and repeat. Finish one side and then move onto the next.

Sets x Reps: Week 1 = 3x5 each side = 30 contacts
Week 2 = 4x5 each side = 40 contacts
Week 3 = 5x5 each side = 50 contacts



http://video.kudda.com/clinic/Lateral_Plyometrics_/Plyometric_Lateral_Box_Jump

Phase I – Plyometrics

Single Leg Box Jumps: Stand facing the box with one foot contacting the ground and hands behind your head or by your side. Jump up and land as soft as possible (less noise the better) with the foot you jumped off of. Step back off the box and repeat.

Sets x Reps: Week 1 = 3x5 each foot = 30 contacts/15 each
Week 2 = 4x5 each foot = 40 contacts/20 each
Week 3 = 5x5 each foot = 50 contacts/25 each



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometrics_Single_Leg_Box_Jump

Single Leg Lateral Box Jump: Stand at the side of the box with one foot contacting the ground. Jump onto the box landing softly towards the center with the same foot. Jump first towards the mid-line of your body (center) then turn jumping from same foot and jump laterally (side). Step down off the box and repeat until both sides of the foot have been completed. Finish one foot and then move onto the next.

Sets x Reps: 3x5 each foot both Medial & Lateral = 30 contacts each



http://video.kudda.com/clinic/Lateral_Plyometrics/Plyometric_Lateral_Single_Leg_Box_Jump

Phase II – Plyometrics

Hurdle Hop with Stability: Stand at the end of the hurdles (12-36” high) and jump forward and over the barrier landing with your feet together in a chest up butt back position. Remember to land soft. Hold this position for a one one thousand count then repeat over the next hurdle. The hurdles should be set up in a row of five spaced accordingly.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometrics:_Hurdle_Hop_with_Stability

Lateral Hurdle Hop (cone) with Stability: start by setting up 1 to 5 hurdles or cones spaced accordingly. Stand with feet shoulder width apart at the end of the line of hurdles. Jump laterally (sideways) down the row of hurdles holding each landing for a one one thousand count or until stable.

Sets x Reps: *if using one hurdle 5x10 = 50 contacts

*if using a series of 5 hurdles 5x5 each way = 50 contacts

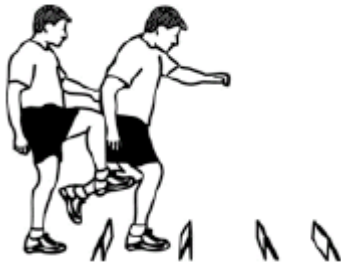


http://video.kudda.com/clinic/Lateral_Plyometrics_/Plyometric_Lateral_Hurdle_Hop_with_Stability

Phase II – Plyometrics

Single Leg Hurdle Hop with Stabilization: Stand at the end of the hurdles (12-36" high) and jump forward and over the barrier landing with the same foot you jumped off of in a chest up butt back position. Remember to land soft. Hold this position for a one one thousand count then repeat over the next hurdle. The hurdles should be set up in a row of five spaced accordingly.

Sets x Reps: 5x5 each foot = 25 contacts each



http://video.kudda.com/clinic/Linear_Plyometrics/Single_Leg_Hurdle_Hop_with_Stabilization

Heiden with Stabilization: The heiden is performed by jumping up and to the side landing on the opposite foot you took off on. Jump left to right holding the landing for one second before jumping back.

Sets x Reps: 5x10 = 50 contacts

http://video.kudda.com/clinic/Lateral_Plyometrics_/Plyometric_Heidens

Phase III – Plyometrics

Hurdle Hop with Bounce: Stand at the end of the hurdles (12-36” high) and jump forward and over the barrier landing with your feet together in a chest up butt back position. Upon landing bounce once and then continue jumping forward over hurdles. Keep your momentum moving forward. The bounce should “not” move backwards. The hurdles should be set up in a row of five spaced accordingly.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Hurdle_Hop_with_Bounce

Lateral Hurdle Hop: start by setting up 1 to 5 hurdles or cones spaced accordingly. Stand with feet shoulder width apart at the end of the line of hurdles. Jump laterally (sideways) down the row of hurdles keeping a smooth and even movement.

Sets x Reps: *if using one hurdle 5x10 = 50 contacts

*if using a series of 5 hurdles 5x5 each way = 50 contacts



Phase III – Plyometrics

Single Leg (Forward/Backward) Line Hop: stand on one foot facing a line or athletic tape. Proceed to jump forward and back as fast as possible paying close attention to landing over the line. At the completion of the exercise stick and hold the last contact.

Sets x Reps: Week 1 = 5x15 seconds.

Week 2 = 4x20 seconds.

Week 3 = 3x30 seconds.

Heiden: The heiden is performed by jumping up and to the side landing on the opposite foot you took off on. Jump left to right focusing on getting as much height as possible. Land absorbing the ground and push off as quickly as possible.

Sets x Reps: 5x10 = 50 contacts

http://video.kudda.com/clinic/Lateral_Plyometrics_/Plyometric_Heidens

Phase IV – Plyometrics

Continuous Hurdle Hop with Sprint: Stand at the end of the hurdles (12-36" high) and jump forward and over the barrier landing with your feet together in a chest up butt back position. Upon landing continue jumping forward over the five hurdles. Keep your momentum moving forward. After jumping over the last hurdle stick and hold for a one one thousand count – then sprint 5 – 10 yards to cone or line. The hurdles should be set up in a row of five spaced accordingly.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Continuous_Hurdle_Hop

Lateral Hurdle Hop with Sprint: start by setting up 1 to 5 hurdles or cones spaced accordingly. Stand with feet shoulder width apart at the end of the line of hurdles. Jump laterally (sideways) down the row of hurdles keeping a smooth and even movement. When you reach the last hurdle sprint forward 10 yards break down and stop at a specified cone or line.

Sets x Reps: *if using one hurdle 5x10 = 50 contacts

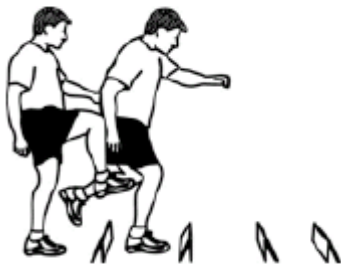
*if using a series of 5 hurdles 5x5 each way = 50 contacts



Phase IV – Plyometrics

Single Leg Hurdle Hop: Stand at the end of the hurdles (12-36” high) and jump forward and over the barrier landing with the same foot you jumped off of in a chest up butt back position so you can jump again as soon as possible. After jumping over the last hurdle or cone stick and hold the landing for a one one thousand count.

Sets x Reps: 5x5 each foot = 25 contacts each



http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Single_Leg_Hurdle_Hop

Single Leg Lateral Hurdle Hop with Sprint: begin by setting up 1-5 cones or hurdles and stand sideways at one end on one foot. Jump down the line of cones or hurdles holding the last jump for a one one thousand count before sprinting 5-10 yards.

Sets x Reps: 5x5 each way = 50 contacts

Phase V – Plyometrics

BASKETBALL

Depth Jump with Pass – Jump and Reach: Stand on a box 12-42” high. Step off the box and land on both feet. Jump up and forward, extend your arms, and catch a pass from your partner or coach. Upon landing, explode up again and reach for the basket with the medicine ball.

Sets x Reps: 5x5 = 25 contacts

Quarter Eagle Chest Pass: Assume a ready position with a partner in front of you, in back of you, and to each side. When coach call out “right” or “left,” turn the body quickly a quarter turn and pass the ball to the person facing you.

Sets x Reps: 2x 10-12 passes each athlete

Band Resisted Rim Touches: Stand under rim with two bands (Jump Stretch Monster Mini – Average) over opposite shoulders. Two partners will stand beside you to hold bands down. Perform a quarter squat and jump up towards the rim using two feet. Land on two feet and repeat as fast as possible.

Sets x Reps: Week 1 = 5x10 = 50 contacts
Week 2 = 6x10 = 60 contacts
Week 3 = 6x10 = 60 contacts



5-5-5 Squat Jump: Stand with feet shoulder width apart and medicine ball behind head. Perform five controlled squats to a thigh parallel position, then drop into the squat position quickly five times, then drop into the squat position and explode vertically five times. Maintain the weight in contact with the shoulders or behind head throughout the jumps.

http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Wave_Squat
Sets x Reps: 5x5=25 contacts

Phase V – Plyometrics Cheerleading/Dance

Straight Pike Jump: stand with feet shoulder width apart and the body straight from head to toe. Jump up and bring the legs up together in front of the body. Attempt to flex the body only at the hips. Touch your toes at the peak of the jump and return to the starting position. Repeat.

Sets x Reps: 5x5 = 25 contacts



Wave Squat: begin by placing a medicine ball weighing 6 lbs. – 60% of bodyweight on shoulders or behind head. Squat into a quarter squat position and start moving forward by performing three double leg hops with resistance on shoulders or behind the head. Flex the knees to 130 degrees on the first three hops. On the fourth descend to 90 degrees of knee flexion and perform a maximal vertical jump.

http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Wave_Squat

Sets x Reps: 5x5 = 100 contacts

Phase V – Plyometrics Crew/Rowing

Multiple Box to Box Squat Jump: Start by setting up a series of boxes all the same height according to ability. Stand in a deep squat position with feet shoulder width apart looking down the row of boxes, hands clasped behind the head or on hips. Jump to the first box, landing softly in a squat position. Maintaining the squat position, jump off the box on the other side and immediately onto and off of the following boxes. Keep hands on the hips or behind the head.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Multiple_Box_to_Box_Jump

Trunk Rotations: sit on the floor with your legs spread and a medicine ball behind your back. Rotate to the right, pick up the ball, bring it around to your left side, and replace it behind your back. The ball should make a complete circle. Repeat in opposite direction after reps are complete.

Sets x Reps: 3x10 each side = 60 contacts



Backward Throw: Stand about 10 yards in front of your partner, facing the same direction holding a medicine ball. Hold the ball between your legs, squat down and then toss the ball up and over your head to your partner. (Partner should not attempt to catch the medicine ball) Pay attention to bending your knees, bend from your hips, and keep your back flat.

Sets x Reps: 4x10 = 40 contacts



Phase V – Plyometrics

Diving

Alternating Push Off: Stand on the ground and place one foot on a box 6-12" high. Push off of the foot on the box to gain as much height as possible by extending through the entire leg and foot; land with feet reversed (box foot lands a split second before the ground foot). Use a double arm swing for height and balance.

Sets x Reps: 5x5 each leg = 50 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Alternating_Explosive_Step_Up

Straight Pike Jump: stand with feet shoulder width apart and the body straight from head to toe. Jump up and bring the legs up together in front of the body. Attempt to flex the body only at the hips. Touch your toes at the peak of the jump and return to the starting position. Repeat.

Sets x Reps: 5x5 = 25 contacts



Phase V – Plyometrics
Field Hockey

3 Point Stance Hurdle Hop: Using 12-18” hurdles (5) in a row assume a three point stance position 24-30” in front of the hurdle. Jump up and over the hurdle by pushing off of the forward foot. Drop quickly into a three point stance again and repeat over the hurdles.

Sets x Reps: 3x5 each foot forward = 30 contacts

30-60-90 Box Drill: Stand beside a 12-20” box with feet shoulder width apart. Jump onto the box and back down to the ground on the opposite side and then back onto the box.

Sets x Reps: 1 = 30 contacts in 30 seconds
2 = 60 contacts in 60 seconds
3 = 90 contacts in 90 seconds

3x30 if making all contacts
2x60 if making all contacts
1x90 if completed the first two successfully in a prior training session



http://video.kudda.com/clinic/Lateral_Plyometrics_/30_60_90_Drill

Phase V – Plyometrics

Football

Depth Jump with Blocking Pad or with Pass Catching: Stand on a box 12-42” high with toes close to the edge. Have a partner or coach stand facing the box, about four feet away with a blocking pad. If a wide receiver have partner stand about 5-10 yards away with a football ready to pass. Step off the box and land on both feet. Upon landing, explode into the blocking bag shoulder first. Wide receivers upon landing can jump forward and catch ball.

Sets x Reps: 5x5 = 25 contacts

30-60-90 Box Drill: Stand beside a 12-20” box with feet shoulder width apart. Jump onto the box and back down to the ground on the opposite side and then back onto the box.

Sets x Reps: 1 = 30 contacts in 30 seconds
2 = 60 contacts in 60 seconds
3 = 90 contacts in 90 seconds

Level 1 = 3x30 if making all contacts

Level 2 = 2x60 if completed previous level successfully

Level 3 = 1x90 if completed all previous levels successfully



http://video.kudda.com/clinic/Lateral_Plyometrics_/30_60_90_Drill

Phase V – Plyometrics

Lacrosse

Depth Jump with Blocking Pad or with Pass Catching: Stand on a box 12-42” high with toes close to the edge with stick in hand. Have a partner or coach stand facing the box, about four feet away with a blocking pad. Or have partner stand about 5-10 yards away ready to pass. Step off the box and land on both feet. Upon landing, explode into the blocking bag shoulder first. If receiving a catch; upon landing jump forward and catch ball. Women always receive catch.

Sets x Reps: 5x5 = 25 contacts

30-60-90 Box Drill: Stand beside a 12-20” box with feet shoulder width apart. Jump onto the box and back down to the ground on the opposite side and then back onto the box.

Sets x Reps: 1 = 30 contacts in 30 seconds
2 = 60 contacts in 60 seconds
3 = 90 contacts in 90 seconds

Level 1 = 3x30 if making all contacts

Level 2 = 2x60 if completed previous level successfully

Level 3 = 1x90 if completed all previous levels successfully



http://video.kudda.com/clinic/Lateral_Plyometrics_/30_60_90_Drill

Phase V – Plyometrics
Ice Hockey

30-60-90 Box Drill: Stand beside a 12-20” box with feet shoulder width apart. Jump onto the box and back down to the ground on the opposite side and then back onto the box.

Sets x Reps: 1 = 30 contacts in 30 seconds
2 = 60 contacts in 60 seconds
3 = 90 contacts in 90 seconds

Level 1 = 3x30 if making all contacts
Level 2 = 2x60 if completed previous level successfully
Level 3 = 1x90 if completed all previous levels successfully



http://video.kudda.com/clinic/Lateral_Plyometrics_/30_60_90_Drill

4 Square Drill: Using a four square or plyometric pattern made up of two lines 48: long crossing at right angles forming squares 24' in each direction. Follow the following programs.

Both Legs: Jump from box 1-2 Max. in 20 sec.
Jump box 1-2-3 Max. in 20 sec.
Jump box 1-3-2 Max in 20 sec.
Jump box 1-2-3-4 Max in 20 sec.

Single Leg: Jump box 1-2 Max. in 10 sec.
Jump box 1-4 Max in 10 sec.
Jump box 1-3 Max in 10 sec.
Jump box 4-2 Max in 10 sec.

3	4
1	2

Phase V – Plyometrics
Softball/Baseball

Standing Long Jump: start in a semi squat with feet shoulder width apart. Using a big arm swing and a countermovement of the legs, jump forward as far as possible.

Sets x Reps: 5x5 = 25 contacts



Alternate Bounding with Single Arm Action: Jog into the start of the drill to increase forward momentum. As you jog, start the drill with the right foot forward and the left foot back. This drill is simply an exaggerated running action. Push off with the left foot and bring the leg forward, with the knee bent and the thigh parallel to the ground. At the same time reach forward with the right arm. As the left leg comes through, the right leg extends back and remains extended for the duration of the push off. Repeat on opposite side attempting to travel as far as possible on each push.

Sets x Reps: 5x5 each leg = 50 contacts

Phase V – Plyometrics Weightlifting

Multiple Box to Box Squat Jump: Start by setting up a series of boxes all the same height according to ability. Stand in a deep squat position with feet shoulder width apart looking down the row of boxes, hands clasped behind the head or on hips. Jump to the first box, landing softly in a squat position. Maintaining the squat position, jump off the box on the other side and immediately onto and off of the following boxes. Keep hands on the hips or behind the head.

Sets x Reps: 5x5 = 25 contacts



http://video.kudda.com/clinic/Linear_Plyometrics/Multiple_Box_to_Box_Jump

Split Squat Jump: Begin by spreading the feet far apart, front to back, and bend the front leg 90 degrees at the hip and 90 degrees at the knee. Jump up, using arms to help and hold the split squat position. Land in the same position and immediately repeat the jump.

http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Split_Jump

Sets x Reps: 5x5 each leg = 50 contacts



Phase V – Plyometrics

Wrestling

Depth Jump with Shot: Stand on a box 12-42” high with toes close to the edge. Have a partner or coach stand facing the box, about four feet away with a dummy. Step off the box and land on both feet. Upon landing, quickly shoot on the dummy.

Sets x Reps: 5x5 = 25 contacts

Crustaldi Push Up Jumps:

http://video.kudda.com/clinic/Lateral_Plyometrics_/Plyometric_Crustaldi_Jumps

Sets x Reps: Week 1 = 3x10 30 contacts
Week 2 = 4x10 40 contacts
Week 3 = 5x10 50 contacts

5-5-5 Squat Jump: Stand with feet shoulder width apart and medicine ball behind head. Perform five controlled squats to a thigh parallel position, then drop into the squat position quickly five times, then drop into the squat position and explode vertically five times. Maintain the weight in contact with the shoulders or behind head throughout the jumps.

http://video.kudda.com/clinic/Linear_Plyometrics/Plyometric_Wave_Squat

Sets x Reps: 5x5=25 contacts

Wheelbarrow Drill: Have a partner hold athletes feet while they perform a predetermined pattern or task walking on hands. This should be done as quickly as possible maintaining a tight straight body. This can be performed forwards, backwards, left, right, diagonal, etc... To make this even more difficult prescribe jumps instead of running.

Sets x Reps: Week 1 = 5x10 yards
Week 2 = 5x15 yards
Week 3 = 5x20 yards