

Mobility Exercises

Mobility: The body's ability to move easily, movement that allows the body to move freely and with physical quality; By increasing cervical spine and thoracic spine mobility the athlete is able to dissipate energy through the spine – thus protecting the cervical spine and head upon impact, sudden movement with change in direction, falls.

PNF D1 Dot Flexion Squat

Equipment: Five dot mat, dumbbells, partner or coach

Description: Starting position - athlete stands on center dot of mat with arms straight beside body holding dumbbells, with instruction given from partner/coach, athlete will step out and squat to designated area while arms cross over head with dumbbells, athlete will also integrate a neck position as well under instruction then return to starting position

*Partner/coach will instruct the athlete to move in any direction related to the dot mat likewise utilizing lateral movements as well, additionally instruct the athletes to move their neck in any normal range of motion positions.

Suggested beginning reps: three sets of 10 and give slow-mod instruction

Progressive techniques: perform exercise standing on BOSU ball or having the athlete close eyes, also giving mod-fast instructions.

PNF D2 Dot Flexion Lung

Equipment: Five dot mat, dumbbells, partner or coach

Description: Starting position-athlete stands on center dot of mat with arms straight crossed in front of abdomen holding dumbbells, with instruction given from partner/coach, athlete will step out to a crossover lunge position to designated area while arms straighten in "Y" position over head, athlete will also integrate a neck position as well under instruction then return to starting position;

*Partner/coach will instruct the athlete to move in any direction related to the dot mat likewise utilizing lateral movements as well, additively instruct the athletes to move their neck in any normal range of motion positions.

Suggested beginning reps: three sets of 10 and give slow-mod instruction

Progressive techniques: perform exercise standing on BOSU ball or having the athlete close eyes, also giving mod-fast instruction

Mobility Exercises

PNF D1 Dot Theraball Extension

Equipment: Theraball, resistance bands

Description: Place resistance band securely over head on stationary object, Athlete lies supine on the theraball with knees bent at 90 degrees, with feet firmly on the floor athlete will then with arms extended overhead in "Y" position, pull down to arms crossed position in front of waist, simultaneously raising straight leg while alternating

Suggested beginning reps: three sets of 15 reps

Progressive techniques: perform exercise with feet placed on uneven surface, BOSU ball or with eyes closed

PNF D2 Theraball Extention

Equipment: Theraball, resistance bands

Description: Place resistance band securely over head on stationary object, athlete lies supine on the theraball with knee bent at 90 degrees, with feet fixed on the floor, athlete crosses arms overhead and pulls down to arms straight beside body position simultaneously raising straight leg while alternating

Suggested beginning reps: three sets of 15 reps

Progressive techniques: perform exercise with feet placed on uneven surface, BOSU ball or with eyes closed

4-Point Lunge With Rotional-Alternating Arm Extends

Equipment: Dumbbells, partner or coach

Description: starting position-athlete in deep lunge with both hands touching the floor; athlete will begin with lifting one arm off the floor and rotating to the side; returning to starting position then repeat exercise on the other side

Suggested beginning reps: two sets of 10 reps

Progressive techniques: perform exercise with light dumbbells in hands, have athlete close eyes or perform the exercise on uneven surface

Mobility Exercises

3-Point ½ Kneeling Multi-Directional Arm Lifts

Equipment: Dumbbells, partner or coach

Description: starting position- athlete in ½ kneeling stance with arms straight beside body holding dumbbells, with instruction given from partner/coach; athlete will begin multi-directional and rotational movements with arms and upper body, returning to original starting position with arms; perform exercise bilateral

*Partner/coach will instruct the athlete to move in any direction with both arms away from the body, utilizing lateral and rotational movements, additionally instruct the athlete to move head/neck in any normal range of motions.

Suggested beginning reps: three sets of 10; slow to moderate instruction

Progressive techniques: perform exercises kneeling on bosu ball or have the athlete close eyes, also giving moderate to fast instruction.

Boxing Punches (Partner or Group Activity)

Equipment: Boxing gloves and mits, partner or coach

Description: Athlete with partner will alternate punches utilizing various boxing punches against mits while partner blocks each punches.

*Partner/coach will instruct the athlete to punch in the following boxing punches: forward, forward crossover, hook, uppercuts and any combination punches above

Suggested beginning reps: three x 20-30 sec. each

Progressive techniques: perform exercise super set punches for quickness and sharpness

SPORT SPECIFIC BOXING PUNCH DRILLS

Sports Specific Boxing Drills

Football Specific Punch Drills

- Palm punch forward -lateral shuffle- crossover punch- swim
 - Palm punch forward-lateral shuffle-hook punch-swim
 - Quick feet palm punch-crossover punch
 - Squat thrusts-palm punch-squat thrust-hook punch
 - Isometric neck hold-right, left crossover punch
 - Suggested beginning reps: five x 20-30 sec.

Soccer Specific Punch Drills (BOSU ball needed)

- BOSU ball taps-crossover punch
- Up and over BOSU ball-crossover punch
- Quick-feet "T" on BOSU ball-combo punches
- 180 Jumps on BOSU ball-hook punch
- Suggested beginning reps: three x 20-30 sec.

Volleyball Specific Punch Drills

- Wall tap-180 jump-crossover punch (changing directions)
- Lateral shuffle-combo punch (multi-directional)
- Forward/backward shuffle-crossover punches (multi-directional)
- Squat thrust-combo punches (multi-directional)
- Suggested beginning reps: three x 20-30 sec.

SPORT SPECIFIC BOXING PUNCH DRILLS

Basketball Specific Punch Drills

- Squat thrust (burpee)-crossover punch
- Defensive slide right then left-hook punch
- Toe touch, deep squat wall taps-combo punch
- Back pedal, floor tap, forward sprint- combo punches
- Suggested beginning reps: three x 20-30 sec.

Softball Specific Punch Drills

- Squat thrust (burpee) 180 jump on and off-hook punches
- 360 degree moving squats-combo punches
- Lateral shuffle-combo punch (multi-directional)
- ½ kneeling forward throw punch
- Suggested beginning reps: three x 20-30 sec.

Baseball Specific Punch Drills

- Squat thrust (burpee) 180 jump on and off bosu ball-hook punches
- 360 degree moving squats-combo punches
- Lateral shuffle-combo punch (multi-directional)
- ½ kneeling forward throw punch
- Suggested beginning reps: three x 20-30 sec.

Wrestling Specific Punch Drills

- Forward punches (left/right)- 1,2 shoot
- Left hook punch- clockwise pivot; repeat on other side
- Right hook sprawl; repeat on other side
- 360 degree moving squats-combo punches
- Suggested beginning reps: five reps or 2 x 20-30 sec.

Agility Exercises

Agility: The body's ability to move about swiftly, quickly and easily in any situation

Note: Agility drills should be done specific to enhance desired sports movement

Plyometric box jumps

Acceleration-floor to box jumps with two feet or single leg

Deceleration-box to floor jumps with two feet or single leg

Agility ladder

(You may use both single and double leg approach for each exercise, incorporate both the use of arms with the exercise or no arms)

- One foot in each square- forward
- One foot in each square-lateral
- One foot in each square-backward
- In, in, out, out, forward
- In, in, out, out, lateral
- In, in, out, out backward
- Double leg hops forward
- Double leg hops lateral
- Double leg hops backward

Cone/hurdle drills

- Double leg jumps forward
- Double leg jumps lateral
- Double leg jumps backwards
- Double leg weave jumps forward
- Double leg weave jumps lateral
- Double leg weave jumps backward
- Single leg jumps forward
- Single leg jumps lateral
- Single leg jumps backward

Agility Exercises

Weight vest and parachute drills

Athlete may perform any forward, lateral, and backwards drills from above with the agility ladder or cones with the weight vest or parachute. In addition, you may have the athlete perform any sprints or any other multi-directional quick agility movements.

BOSU Ball

- Up an over
- Ball taps
- One leg hops
- Bilateral (two feet) hops

Stability Exercises

Stability/Balance: The body's ability to be firmly fixed or not likely to move or change. A position in which the weight is equally divided so that it can stay in one position and in a controlled manner.

Trunk Extension

Equipment: stability theraball

Description: Athlete lies prone at the hips on the stability ball with arms behind placed on lower back, balls of the feet are fixed firmly on the floor. The athlete gently extends trunk upward contracting entire back musculature.

SAFETY PRECAUTION! DO NOT THROW OR THRUST UPPER BODY INTO EXTENSION AND WATCH EXCESSIVE HYPEREXTENSION..!

Suggested beginning reps: three sets of 15

Progressive technique: add medicine ball with hands at chest level

Russian Twists

Equipment: Medicine ball

Description: Athlete begins in half sit up position with medicine ball at mid section, athlete rotates from side to side keeping the core engaged.

Suggested beginning reps: two sets of 20 sec.

Progressive technique: perform exercise on bosu ball (flat side down) while tossing medicine ball to partner

Stability Theraball Sit Up Toss

Equipment: Stability theraball, medicine ball

Description: Athlete lies supine at the lower back on the stability ball with medicine ball at the chest, athlete performs a sit up and tosses the medicine ball to partner.

Suggested beginning reps: three sets of 15

Progressive technique: perform a Russian twist with sit up while on stability ball

Stability Exercises

Kneeling BOSU Ball Twists

Equipment: BOSU ball, medicine ball

Description: Athlete kneels on bosu ball (flat side down) with arm extended holding medicine ball, athlete twists horizontally in a controlled manner while maintaining core activation.

Suggested beginning reps: two sets of 30 sec.

Progressive technique: perform exercise with partner resistance against medicine ball

Reverse Hypers

Equipment: Stability theraball

Description: Athlete lies prone at the mid section on the stability ball with elbows bent fixed on the floor, athlete gently lifts lower body upward into extension and lowers down controlled keeping back musculature contracted

SAFETY PRECAUTION! DO NOT THROW OR THRUST LOWER BODY INTO EXTENSION AND WATCH EXCESSIVE HYPEREXTENSION...!!

Suggested beginning reps: two sets of 10

Progressive technique: perform exercise adding medicine ball between feet/ankles

Superman Holds

Equipment: BOSU ball

Description: Athlete lies prone on mid section/hips on bosu ball (flat side down), with arm and legs extended athlete stresses outward stretching lengthening of arms, legs and torso, head in neutral alignment

Suggested beginning reps: three sets of 30 sec. holds

Progressive technique: perform exercise while holding dumbbells in hands

Stability Exercises

Cobra Holds

Equipment: BOSU ball

Description: Athlete lies prone on mid section/hips on bosu ball (flat side down), with arms extended beside hips thumbs up, legs straight and feet fixed on the floor emphasis placed on holding prolonged extended stretch keeping trunk engaged

SAFETY PRECAUTION! WATCH EXCESSIVE HYPEREXTENSION..!!

Suggested beginning reps: three sets of 20 sec. holds

Progressive technique: perform exercise while holding dumbbells in hands

"Around The World" Push Up

Equipment: BOSU ball

Description: Athlete is in a push up position with hands on flat side of the bosu ball, while maintaining a push up hold use core and trunk to twist the bosu ball in a semi-circular motion around completing a 90 degree circle to both sides

Suggested beginning reps: x four (90 degree circles)

Progressive techniques: perform exercise with a push up between twists

Stability Theraball Twists

Equipment: Stability theraball, medicine ball

Description: Athlete lies supine on upper thoracic back on stability ball, hips are lifted, knees flexed at 90 degrees, feet planted on the floor and with arms extended upward holding medicine ball, athlete rotates side to side maintaining core oblique muscle contraction

Suggested beginning reps: three sets of 15

Progressive techniques: perform exercise with partner resistance against medicine ball.

Stability Exercises

Plank Holds

Equipment: None

Description: Exercises can be performed in holds: prone, side or pillar position

Prone- Athlete prone supported on elbows 90 degrees bent, legs extended and balls of the feet fixed on the floor maintaining head and total body alignment

Side- Athlete lying on side supported on one 90 degree bent elbow, knees bent or extended and on sides of the feet stacked on the floor maintaining head and total body alignment; repeat on opposite side

Pillar- Athlete supine supported on hands, arms extended underneath shoulders, legs extended with hips pressed outward and feet on floor maintaining head and total body alignment (reverse push up position)

Suggested beginning reps: five x 15 sec. hold

Progressive techniques: perform exercise with feet on BOSU or stability theraball

1-Leg Balance Medicine Ball Toss

Equipment: Medicine ball, partner needed

Description: Athlete stands on one leg facing partner, athlete tosses medicine ball to partner with chest pass; repeat on opposite leg

Suggested beginning reps: two sets of 10

Progressive techniques: perform exercise with touching the medicine ball to the floor before the toss, also using BOSU ball for standing

Progressive techniques: perform exercise on BOSU ball (flat side down), also with alternating toss directions

Stability Exercises

1-Leg Balance- Plyometrics Squat Toss

Equipment: Plyometric box, medicine ball, partner needed

Description: Athlete stands facing away from plyo box with one leg bent 90 degrees behind on box, while standing in squat position on other leg, athlete tosses medicine ball to partner with chest pass; repeat on opposite leg

Suggested beginning reps: two sets of 10

Progressive techniques: perform exercise on BOSU ball (flat side down), also with medicine ball touch and alternating direction toss, may also replace psychometric box with theraball.

1-Leg Balance Spectrum

Equipment: Tape 5 line spectrum, medicine ball (light wt suggested)

Description: Athlete stands in middle of spectrum on one leg while holding medicine ball, athlete squats and touches medicine ball starting at the first line on the spectrum returning to stand position and repeating through the entire spectrum

Suggested beginning reps: three times through spectrum

Progressive techniques: perform exercise on BOSU ball (flat side down)

3- Way Spectrum Lunge

Equipment: Tape 3 line spectrum, Medicine ball

Description: Athlete stands in middle of spectrum, athlete lunges forward while doing a chest press, returning to stand position, athlete repeats exercise in lateral and backward directions, also repeating on opposite leg

Suggested beginning reps: five times on each leg

Progressive techniques: perform exercises standing on BOSU ball or lunging on BOSU ball, also holding medicine ball in overhead position.

Strength Exercises

Strength: The body's ability to do things that demand physical effort or the degree to which something is done strong or powerful.

Basic strengthening – Shoulders, chest, upper back, lats, biceps, triceps, quads, glutes, hamstrings, ab/adductors, calves, ankles

- Can be done alternating (not both arms/leg at same time)
- On one leg or BOSU– balance challenge
- Alternate speeds – fast/slow

Alternate planes – take it front to back, side to side, rotational

****Note: Exercises should be done in addition to usual sport specific strength training****

Neck Specific Strength

HEAD ISOMETRICS

Equipment: Stability theraball, dumbbells

Description: The athlete is kneeling on all fours with head isometrically pressed against the theraball with the forehead fixed, with dumbbells in hands lift to desired position while isometrically holding against stability ball; following desired positions: "I", "Y", "T", "W" also with hands flat on the floor pressing into shoulder shrug

Suggested beginning reps: two sets of 10 reps (I, Y, T, W); shrugs five times 15 sec. hold

Strength Exercises

Core/Trunk Strength (A-E)

A

Equipment: Stability theraball, resistance bands

Description: Athlete is lying supine on the theraball with knees bent at 90 degrees, using resistance bands that are securely attached over head, pull down with arms bent at 90 degrees

Suggested beginning reps: three sets 10 reps

Progressive techniques: perform exercises with medicine ball or dumbbells or with feet on uneven surface

B

Equipment: Stability theraball, resistance bands

Description: Athlete is lying supine on the theraball with knees bent at 90 degrees, using resistance bands that are securely attached over head, with arms extended overhead pull down to the right and left diagonals

Suggested beginning reps: three sets of 10 reps

Progressive techniques: perform exercises with medicine ball or dumbbells or with feet on uneven surface

C

Equipment: Stability theraball, resistance bands

Description: Athlete is lying supine on the theraball with knees bent at 90 degrees, using resistance bands that are securely attached over head, arms extended and abducted (FLY position) pull down towards body

Suggested beginning reps: three sets of 15 reps

Progressive techniques: perform exercises with feet on uneven surface

Strength Exercises

D

Equipment: Stability theraball, resistance bands

Description: Athlete is lying supine on the theraball with knees bent at 90 degrees, using resistance bands that are securely attached over head, arms over head extended perform a sit up motion while pulling down on band into crunch position

Suggested beginning reps: three sets of 15 reps

E

Equipment: Stability theraball, resistance bands

Description: Athlete is lying supine on the theraball with knees bent at 90 degrees, using resistance bands that are securely attached over head, arms over head extended perform an oblique sit up motion while pulling down with band into crunch position

Suggested beginning reps: three sets of 15 reps

Ab Roller

Equipment: AB roller

Suggested beginning reps: two sets of 10 reps

- Forward roll out- pull back in
- Oblique and diagonal roll outs and pull backs
- Combination roll out and pull backs

Roman Chair

Equipment: Roman chair machine

Suggested beginning reps: three sets of 15 reps

- Any general core specific roman chair exercises
- Any general trunk specific roman chair exercises

Flexibility Exercises

Flexibility: The quality of the body's ability to be able to change or be changed easily according to the stress that is placed on it in any situation.

Dynamic Stretches: Neck-Core-Trunk specific focus

Key Benefits~stretches and relaxes targeted muscle groups; helps maintain normal range of motion of the targeted muscle groups and enhances flexibility in those areas.

Neck Dynamic Stretches

Equipment: None

Suggested beginning reps: (1) five times 15 sec. hold; (2,3,4) two sets of 5-10 reps

1. Gentle normal range of motion self stretch (forward, lateral, forward-lateral, backward)
2. Shoulder shrugs with forward flexion and backward extension
3. Shoulder to shoulder lateral stretching
4. Shoulder to shoulder "V" forward-lateral stretching

Core and Trunk Stretches

Equipment: None

Suggested beginning reps: (1,2) three times 30 sec. Hold; (3,4,5) two sets of 5-10 reps

1. Gentle normal range of motion self stretch (flexion, extension, lateral bending)
2. Seated stretch alternating arm crossover with trunk twist
3. Standing torso twist
4. Forward and backward lunge walks with torso twist
5. Jumping jack with jumping torso twist alternating

Flexibility Exercises

Active Lower Body Stretches

Equipment: wall or stable surface; resistance bands

Suggested beginning reps: two sets of 5-10 reps

1. Active hamstring stretch with resistance band
2. Active abduction/adduction stretch with resistance band
3. Active quad stretch with resistance band
4. Active wall calf stretch
5. Active wall crossover calf stretch
6. Active