

# JUVENILE CORRECTIONS OFFICER

PHYSICAL CONDITIONING

MANUAL

(OPTIONAL)

Revised June 29, 2020



# <u>Topic 23 – Agency Specific Training</u> Physical Tasks and Conditioning Instructional Time: 11.5 hours

#### A note about physical conditioning:

A. This manual outlines an optional exercise program for the JCO core. If you use this as an optional training activity during the JCO core, certify this content as agency specific training under Topic 23. The classes included here are not tested and are to be used as additional information and practice for physical conditioning. The testing portion has been removed and is included in the JCO core under Topic 22. The practice sessions included here should be disbursed throughout the core following the schedule listed within.

## Class #1: ORIENTATION - PHYSICAL CONDITIONING BASICS

Instructional Time: 1 hour 30 minutes

#### **Training Notes:**

- Explain key components of a performance-based fitness program and the ways each contributes to fitness:
- · cardiovascular conditioning
- strength
- endurance
- flexibility
- agility
- speed
- 2. Define common terms used in physical conditioning, such as:
- core strength
- cardiovascular exercises
- resistance training
- flexibility exercises
- plyometrics
- recovery time
- duration
- frequency
- sets
- reps
- 3. Explain the role of Rating of Perceived Exertion (RPE) in a physical conditioning program.

#### Discussion

- 4. Examine the Borg Perceived Exertion Scale as described in the Guidelines for Exercise Testing and Prescription, American College of Sports Medicine, Seventh Edition.
- Very, very light
- Very light
- Fairly light
- Somewhat hard

- Hard
- Very hard
- · Very, very hard

#### Discussion

- 5. Identify common mistakes people make when participating in a physical conditioning program, such as the following:
- weekend warrior
- pacing
- lack of recovery time
- · roadblocks to regular exercise
- improper lifting mechanics
- poor body positioning
- insufficient instruction
- no training plan
- training too hard
- training when injured
- poor nutrition following exercise
- poor re-hydration practices
- over hydration
- 6. Discuss equipment and clothing needed when participating in a fitness program.

#### Discussion

 Explain the purpose and goals of performance-based conditioning for juvenile corrections officers.

#### Discussion

- 8. Identify common injuries during training that might disable a juvenile corrections officer, such as the following:
- hamstring pulls
- knee injuries
- back injuries
- ankle sprains
- 9. Identify signs of overexertion and/or potential dangers during a physical conditioning program, including the following:
- heat exhaustion
- heat stroke
- irregular heart beat
- dehydration signs
- shortness of breath
- light headedness
- nausea
- chest pain
- blurred vision
- limb pain

10. Identify the importance of warm-up and cool-down during a physical conditioning program.

Discussion

11. Explain the difference between static stretching and dynamic stretching and the appropriate applications for each type of stretching.

Discussion

#### Class #2: CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

Participate in <u>Dynamic Warm-up</u> exercises as described in **Segment A, Week 1** (page 12).

- 10 complete Arm Circles in each direction
- 2-3 Side Bends per side
- 10-20 Windmills
- One set Trunk Twists, 8 reps per side

Practice

Participate in Low Intensity Strength exercises as described in Segment A, Week 1 (page 12).

- One set Stomach Flutter Kicks for 7 reps
- One set Knee-to-Forehead for 5-7 reps per leg
- One set (up to 20 reps) Push-ups (military or modified)
- One set Sit-ups for 10-20 reps
- One set Side Leg Raises for 10-12 reps per leg

**Practice** 

Participate in Core Strength exercises as described in **Segment A, Week 1** (page 12).

- 3 sets of Prone Planks for 10 seconds each set; rest 10 seconds between each set
- 3 sets of Right Side Hover for 10 seconds each set; rest 10 seconds between each set
- 3 sets of Left Side Hover for 10 seconds each; rest 10 seconds between each set.

Practice

Participate in Low Intensity Plyometric exercises as described in Segment A, Week 1 (page 12).

- 3 sets of warm-up Skipping for 10 skips each set; rest 30 seconds in between each set.
- 3 sets of Skipping-for-Height for 10 skips each set; rest 1 minute between each set.

**Practice** 

Participate in <u>Upper Body Strength</u> exercises as described in **Segment B, Week 1** (page 13).

One set Wrist Curls for 3 reps with weight of "somewhat hard."

One to three sets of Arm Curls for 6 reps with weight of "somewhat hard."

Practice

Participate in Lower Body Plyometric exercises as described in Segment B, Week 1 (page 13).

- One set of Two-Foot Hops 10 times.
- One set of Single-foot, Side-to-Side Hops 10 times.
- One set of Two-Foot, Side-to-Side Hops 10 times.

Practice

Participate in Lower Body Strength exercises as described in Segment B, Week 1 (page 13).

 One to three sets of 6 reps Leg Press with a weight that feels "somewhat hard", or Modified Wall Sits (up to 30-40 second hold), 2 reps

**Practice** 

Participate in <u>Cardiovascular</u> exercise by walking or jogging 1 mile as described in **Segment D** (page 14).

maintain intensity that is "somewhat hard"

Practice

Participate in <u>Cool Down</u> exercises as described in **Segment E, Week 1** (page 14). Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If duration of more than 3 minutes is required, it should be extended for safety reasons.

- 3 sets of Calf Stretch for 5 seconds each set; rest 15 seconds between sets.
- 3 sets of Quad Stretch for 5 seconds each set; rest 15 seconds between sets.
- 3 sets of Knee Hugs for 5 seconds each set; rest 15 seconds between sets.
- 3 sets of Stride Stretches for 5 seconds each set; rest 15 seconds between sets.

Practice

#### **Class #3: CONDITIONING EXERCISES**

Instructional Time: 1.5 hour

Repeat Class #2

#### Class #4: CONDITIONING EXERCISES

Instructional Time: 2 hours

Perform <u>Defensive Tactics Footwork</u> as taught in **CLASS 20.4 FOOTWORK AND BALANCE** as <u>cardiovascular</u> exercise.

**Practice** 

Participate in Dynamic Warm-up exercises as described in **Segment A, Week 2** (page 12).

- 10 complete Arm Circles in each direction
- 2-3 Side Bends per side
- 10-20 Windmills
- One set Trunk Twists, 8 reps per side

**Practice** 

Participate in Low Intensity Strength exercises as described in Segment A, Week 2 (page 12).

- Two sets Stomach Flutter Kicks for 7 reps
- One set Knee-to-Forehead for 8-10 reps per leg
- One set (up to 20 reps) Push-ups (military or modified)
- One set Sit-ups for 10-20 reps
- Two sets Side Leg Raises for 13-15 reps per leg

Practice

Participate in Core Strength exercises as described in Segment A, Week 2 (page 12).

- 3 sets of Prone Planks for 15 seconds each set; rest 15 seconds between each set
- 3 sets of Right Side Hover for 15 seconds each set; rest 15 seconds between each set
- 3 sets of Left Side Hover for 15 seconds each; rest 15 seconds between each set.

**Practice** 

Participate in Low Intensity Plyometric exercises as described in Segment A, Week 2 (page 12).

- 3 sets of warm-up Skipping for 10 skips each set; rest 20 seconds in between each set.
- 3 sets of Skipping-for-Height for 10 skips each set; rest 1 minute between each set.

Practice

Participate in two <u>Upper Body Plyometric</u> exercises as described in **Segment B**, **Week 2** (page 13).

- 3 sets of Wheel Barrow for 16 steps\*
- 3 sets of Explosive Wall Push-ups for 10 reps\*\*

\*If equipment is available, choose one of two options below:

- Alternative: Overhead throw with medicine ball or basketball (same # sets and reps), or
- Alternative: Supine single arm overhead throw with medicine ball or basketball (same # sets and reps)

\*\*If equipment is available, choose one of two options below:

- Alternative: Chest pass with medicine ball or basketball (same # sets and reps), or,
- o Alternative: Chest push with medicine ball or basketball (same # sets and reps).

Note: at least 1 to 2 minutes should separate each exercise.

**Practice** 

Participate in <u>Upper Body Strength</u> exercises as described in **Segment B, Week 2** (page 13).

One set Wrist Curls for 6-8 reps with weight of "somewhat hard"

One to three sets of Arm Curls for 6-8reps with weight of "somewhat hard."

Practice

Participate in Lower Body Plyometric exercises as described in Segment B, Week 2 (page 13).

- One set of Single-foot, Side-to-Side Hops 10 times.
- One set of Two-Foot, Side-to-Side Hops 10 times.
- One set of Standing Long Jump for 10 times
- One set of Standing Jump/Reach for 10 times.
- One set of Jump Over Barrier not exceeding 1.5 feet for 10 times.

Practice

Participate in Lower Body Strength exercises as described in Segment B, Week 2 (page 13).

 One to three sets of 6-8 reps Leg Press with a weight that feels "somewhat hard", or Modified Wall Sits (up to 30-40 second hold), 2 reps. (Work up to 2-3 sets if previously at one set.)

Practice

Practice the four Work Sample Tests in the following order:

- 1) 75-yard Sprint in 30 seconds or less: (Segment C-- page 14)
  - use moderate speed in initial sprints to avoid hamstring injury
  - use a straight track
- 2) 150-pound bag/dummy support (page 18)
- 3) Weighted agility run (page 19)
- 4) Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds (page 20).

Practice

Participate in <u>Cardiovascular</u> exercise by walking or jogging 1.5 miles as described in **Segment D**, **Week 2** (page 14).

maintain intensity that is "somewhat hard"

Practice

Participate in <u>Cool Down</u> exercises as described in **Segment E, Week 2** (page 14). Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If duration of more than 3 minutes is required, it should be extended for safety reasons.

- 3 sets of Calf Stretch for 10 seconds each set; rest 20 seconds between sets.
- 3 sets of Quad Stretch for 10 seconds each set; rest 20 seconds between sets.
- 3 sets of Knee Hugs for 10 seconds each set; rest 20 seconds between sets.
- 3 sets of Stride Stretches for 10 seconds each set; rest 20 seconds between sets.

**Practice** 

#### **Class #5: CONDITIONING EXERCISES**

Instructional Time: 2 hours

#### Repeat Class #4

#### Class #6: CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

Note: No sprint training during Week 3: This is incorporated in the Lower Plyometric Circuit Exercises.

Perform <u>Defensive Tactics Footwork</u> as taught in **CLASS 20.4 FOOTWORK AND BALANCE** for cardiovascular exercise.

Practice

Participate in **Dynamic Warm-up** exercises as described in **Segment A, Week 3 (**page 12).

- 10 complete Arm Circles in each direction
- 2-3 Side Bends per side
- 10-20 Windmills
- One set Trunk Twists, 8 reps per side

**Practice** 

Participate in Low Intensity Strength exercises as described in Segment A, Week 3 (page 12).

- Three sets Stomach Flutter Kicks for 7 reps
- One set Knee-to-Forehead for 11-13 reps per leg
- One set (up to 20 reps) Push-Ups (military or modified)
- One set Sit-ups for 10-20 reps
- Two sets Side Leg Raises for 16-18 reps per leg

**Practice** 

Participate in Core Strength exercises as described in Segment A, Week 3 (page 12).

- 3 sets of Prone Planks for 20 seconds each set; rest 20 seconds between each set
- 3 sets of Right Side Hover for 20 seconds each set; rest 20 seconds between each set
- 3 sets of Left Side Hover for 20 seconds each; rest 20 seconds between each set.

Practice

Participate in Lower Body Strength exercises as described in **Segment B**, **Week 3** (page 13).

 One to three sets of 6-8 reps Leg Press with a weight that feels "somewhat hard", or Modified Wall Sits (up to 30-40 second hold), 2 reps

Practice

Participate in Lower Body Plyometric exercises as described in **Segment B**, **Week 3** (page 13).

- 2 Hexagon Drills for 24 touches each drill
  - Flexing knees, jump forward to 12 o'clock position, then back to starting point; repeat to 2, 4, 6, 8, and 10 o'clock positions.

- 2 Multi Jumps for Height for 10 jumps each set
  - Flexing knees, jump into the air as high as possible, reaching up with arm extended upward

Note: rest for 1 minute between each set above.

**Practice** 

Participate in one of three <u>Lower Body Plyometric Circuits</u> as described in **Segment B, Week 3** (page 13). See diagrams on pages 15, 16, and 17. Perform 3 circuits. Take 5-minute rest.

#### Plyo Circuit I:

- o 3 Two Footed Hops
- fast Jog or Run for 25 to 75 yards
- 3 Single Foot Side-to-side Hops
- o fast Jog or Run for 25 to 75 yards
- 3 Standing Long Jumps
- fast Jog or Run for 25 to 75 yards
- 3 Two Footed Side-to-side Hops
- Six 25 to 75-yard Sprints; walk back to start between each sprint

#### Or,

# Plyo Circuit II:

- o 3 Two Footed Hops
- o fast Jog or Run for 25 to 75 yards
- 3 Single Foot Side-to-side Hops
- o fast Jog or Run for 25 to 75 yards
- o 3 Jump Over Barriers
- o fast Jog or Run for 25 to 75 yards
- o 3 Two Footed Side-to-side Hops
- Six 25 to 75-yard Sprints; walk back to start between each sprint

#### Or,

#### Plyo Circuit III:

- 3 Two Footed Hops
- o fast Jog or Run for 25 to 75 yards
- 3 Standing Long Jumps
- o fast Jog or Run for 25 to 75 yards
- o 3 Skips for Height
- o fast Jog or Run for 25 to 75 yards
- 3 Single Foot Side-to-side Hops
- Six 25 to 75-yard Sprints; walk back to start between each sprint

#### Practice

Participate in three <u>Upper Body Plyometric</u> exercises as described in **Segment B**, **Week 3** (page 13).

- 3 sets of Wheel Barrow for 16 steps\*
- 3 sets of Explosive Wall Push-ups for 10 reps\*\*
- One set Push-up Jump for 8 reps\*\*\*

\*If equipment is available, choose one of two options below:

Alternative: Overhead throw with medicine ball or basketball (same # sets and reps), or

 Alternative: Supine single arm overhead throw with medicine ball or basketball (same # sets and reps)

\*\*If equipment is available, choose one of two options below:

- Alternative: Chest pass with medicine ball or basketball (same # sets and reps), or,
- Alternative: Chest push with medicine ball or basketball (same # sets and reps).

\*\*\*If equipment is available, choose one of two options below:

- o Alternative: Heavy bag thrust (same # sets and reps) or,
- o Alternative: Heavy bag stroke (same # sets and reps) or,
- Advance Alternative: Catch and Overhead Throw with medicine ball (same # sets and reps).

Note: at least 1 to 2 minutes should separate each exercise.

Practice

Participate in Upper Body Strength exercises as described in Segment B, Week 3 (page 13).

- One set Wrist Curls for 6-8 reps with weight of "somewhat hard."
- One to three sets of Arm Curls for 6-8 reps with weight of "somewhat hard."

Practice

Practice the four Work Sample Tests as described on pages 18 - 19 in the following order:

- 1) Sprint 75-yards on a straight track in 30 seconds or less.
- 2) Support the weight of a hanging 150-pound bag or dummy so that all the stress is taken off the rope or chain from which it is suspended for 30 seconds.
- 3) Walk briskly or jog through a 150-foot zigzag barrier course consisting of three sharp turns, pick up a 20-pound fire extinguisher or weighted tube bag at the 75-foot mark and carry it back through the course, walking briskly. Complete the full course within 30 seconds.
- 4) Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.

**Practice** 

Participate in <u>Cardiovascular</u> exercises by walking or jogging 2 miles as described in **Segment D**, **Week 3** (page 14).

maintain intensity that is "somewhat hard"

**Practice** 

Participate in <u>Cool Down</u> exercises as described in **Segment E**, **Week 3** (page 14). Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If a duration of more than 3 minutes is required, it should be for safety reasons.

- 3 sets of Calf Stretch for 15 seconds each set; rest 25 seconds between sets.
- 3 sets of Quad Stretch for 15 seconds each set: rest 25 seconds between sets.
- 3 sets of Knee Hugs for 15 seconds each set; rest 25 seconds between sets.
- 3 sets of Stride Stretches for 15 seconds each set; rest 25 seconds between sets.

# Practice

# CLASS #7: CONDITIONING EXERCISES Instructional Time: 1 hour 30 minutes

Repeat Class #6

# Segment A

Exercise	Week 1	Week 2	Week 3	
Planks Prone	3 x 10 sec Rest 10 sec	3 x 15 sec Rest 15 sec	3 x 20 sec Rest 20 sec	
R. Hover	3 x 10 sec Rest 10 sec	3 x 15 sec Rest 15 sec	3 x 20 sec Rest 20 sec	
L. Hover	3 x 10 sec Rest 10 sec	3 x 15 sec Rest 15 sec	3 x 20 sec Rest 20 sec	
Skips	2 x 10 skips 30 sec between Recommend walking b	2 x 10 skips 20 sec between etween sets to maintain	2 x 10 skips 10 sec between warm-up	
Skips for Ht	2 x 10 skips 2 x 15 skips 2 x 20 skips 1 min between 1 min between Recommend walking between sets to maintain warm-up		1 min between	
DT Footwork	Used at the start of the Segment A as an aerobic warm-up starting week 2 after the footwork is introduced in DT training the first week. Duration = 10 min			
Arm Circles	10 each direction	same	same	
Side Bends	1x2-3 per side	same	same	
Windmills	1x10-20	same	same	
Trunk Twists	1x8 reps per side	same	same	
Stomach Flutter Kicks	1x7 reps	2x7 reps	3x7 reps	
Knee-to-Forehead	1x5-7 reps per leg	1x8-10 reps	1x11-13 reps	
Push-ups	1x up to 20 reps	same	same	
Sit-ups	1x10-20 reps	same	same	
Side Leg Raises	1x10-12 reps per leg	2x13-15	2x16-18	

#### Segment B

Exercise	Week 1	Week 2	Week 3
Lower Plyos			
Two-Foot Hops Single-Foot S to S Hops Two-Foot S to S Hops Standing Long Jump Standing Jump/Reach Jump Over Barrier Hexagon Drill Multi Jumps for Height	1 x 10 1 x 10 1 x 10	1 x 10 1 x 10 1 x 10 1 x 10 1 x 10	2 Drills (24 Touches) 2 x 10 jumps 1 min between sets 5 min rest before circuits 3 x Plyo Circuit Choose a circuit
At least 1 to 2 min should	l separate each e	xercise.	See Diagrams

# Upper Plyos

Wheel barrow*	-	3 x 16 steps	3 x 16 steps
Explosive wall push up**	-	3 x 10 reps	3 x 10 reps
Push up jump***	-	-	1 x 8 reps

#### \*Alternative Exercises

Overhead throw w/med ball or basketball

Supine single arm overhead throw w/med ball or basketball

Chest pass w/med ball or basketball Chest push w/med ball or basketball

Heavy bag thrust

Heavy bag stroke

Catch and Overhead Throw w/med ball (Advanced)

# **Upper Body Strength**

Wrist Curls	1x6-8 reps	same	same
Arm Curls	1x6-8 reps	same	same

#### **Lower Body Strength**

Leg Press 1x6-8 reps same same

or

Modified Wall Sit 1x30-40 sec hold x 2 reps same 2-3x30-40 sec hold x 2 reps

<sup>\*\*</sup>Alternative Exercises

<sup>\*\*\*</sup>Alternative Exercises

# Segment C

Exercise	Week 1	Week 2	Week 3
			_
75 Yard Sprint	2 <sup>nd</sup> session	Χ	

No Sprint training on week 1 or 3. Sprint training is incorporated in the plyo circuits during week 3.

Trainees should be encouraged to improve their times as much as is possible.

# Segment D

Exercise	Week 1	Week 2	Week 3
Walk/Jog	1.0 mi	1.5 mi	2.0 mi

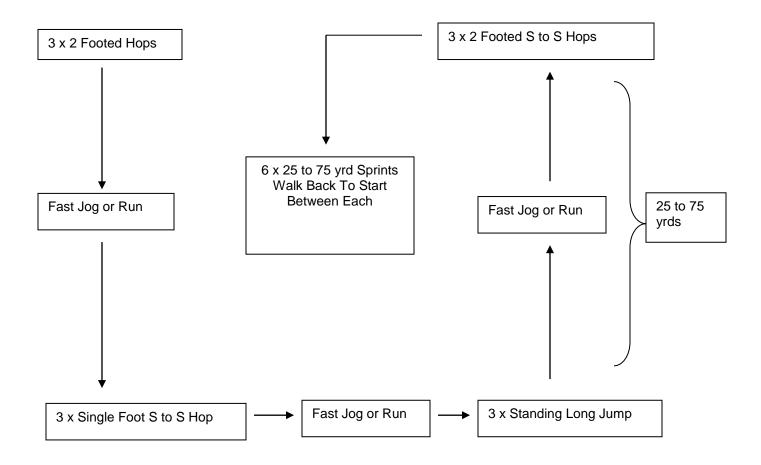
Maintain an intensity that is "somewhat hard."

# Segment E

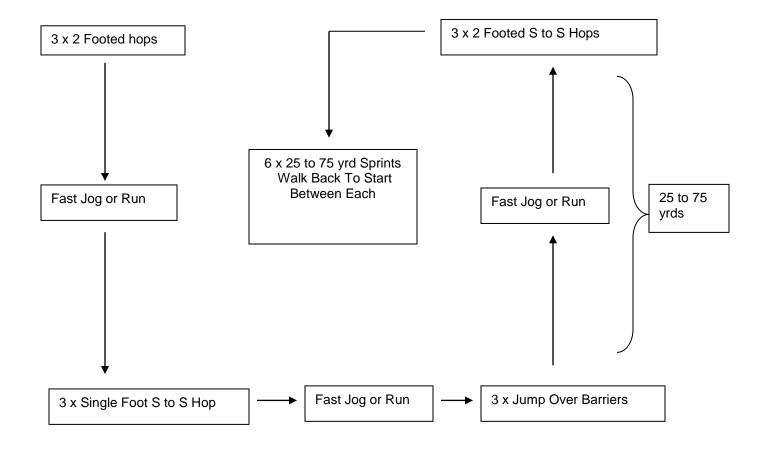
Exercis	e	Week 1	Week 2	Week 3
Walk Stretch		3 min*	3 min*	3 min*
	Calf stretch	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
	Quad stretch	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
	Knee hugs	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
	Stride Stretches	s3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec

<sup>\*</sup>Cool down exercise is provided to bring a slow decline in HR back towards near pre-exercise level. If a duration of >3 min is required it should be used for safety reasons.

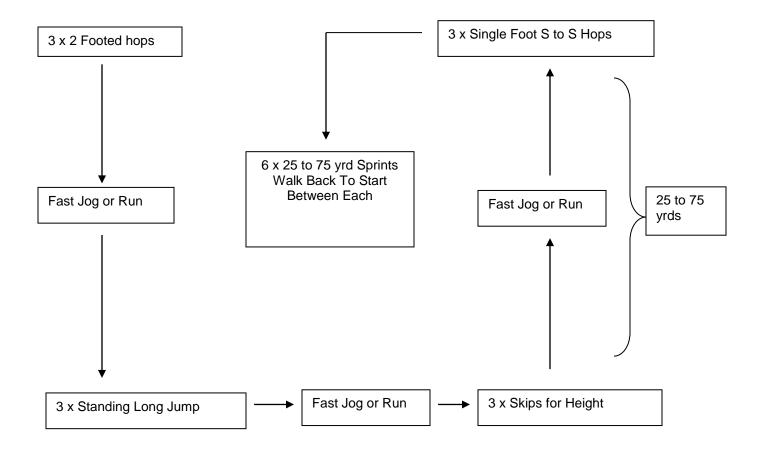
# Plyo Circuit I



# **Plyo Circuit II**



# **Plyo Circuit III**



# **Dummy Lift**

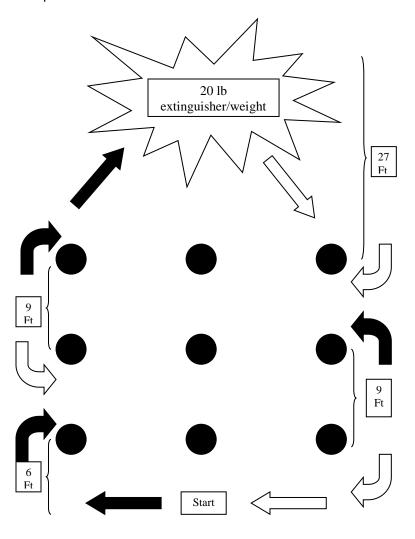
For 30 seconds, support the weight of a hanging 150-pound bag or dummy so that all stress is taken off the rope or chain from which it is suspended.

With knees bent, wrap arms around the 150-pound bag or dummy. Get a firm hold, and then straighten legs to lift the bag or dummy high enough to create slack in the rope/chain.



# Weighted agility run

Walk briskly or jog through a 150-foot zigzag barrier course consisting of three sharp turns. Pick up a 20-pound fire extinguisher or weighted tube bag at the 75-foot mark and carry it back through the course. Complete the full course within 30 seconds.





#### **Dummy drag**

Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.

Wrap arms around the dummy under the arms. Extend the legs while maintaining a straight back. Now walk backward with the dummy elevated to not interfere with the knees until the required distance is completed.



#### **EXPLANATION OF PLYOMETRIC EXERCISES**

#### **Arm Circles**

Standing with arms out, slowly move hands in a circle, gradually increasing the size of the circle. Increase to full arm circles for 10 complete circles. Repeat in opposite direction.



#### **Side Bends**

With feet more than shoulder width apart, bend sideways as far as possible. Return to upright position then bend sideways again, 2 to 3 times on each side.



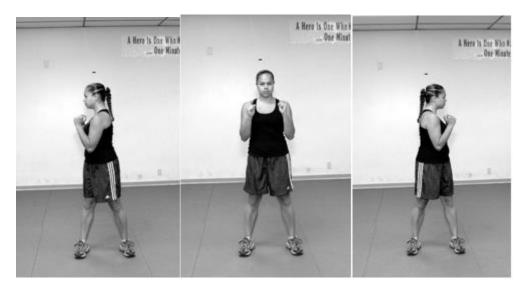
#### **Windmills**

Stand erect, feet shoulder width apart, arms out to the side. Keeping the legs straight, bring right hand across the body reaching for the left foot. Return to starting position and reach for right foot with the left hand. Repeat the full cycle 10-20 repetitions.



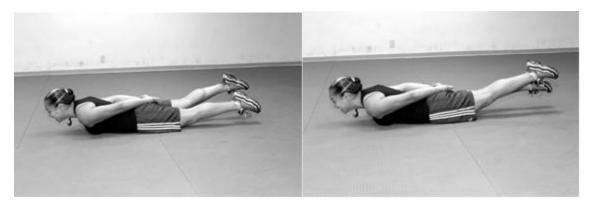
#### **Trunk Twists**

Standing, twist gently from right to left and reverse. Hands can be outstretched or in front with elbows bent. Perform 8 times per side.



#### **Stomach Flutter Kicks**

Lie on stomach with hands under the thighs. Keeping the legs straight, flutter feet alternately 7 times.



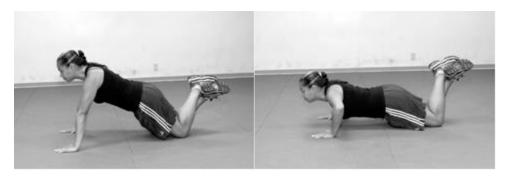
#### **Knee-to-Forehead**

With hands and knees on the floor, bring one knee toward the forehead (flexing the neck), then straighten the leg back as far as possible. Perform 5-7 leg extensions before switching to the other leg.



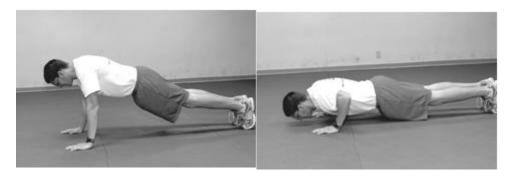
## Push-ups (modified)

On the stomach with body straight from shoulder to knees and hands beside the shoulders, push the body upward until arms are straight. Bend arms to lower body back to the starting position. In the modified movement, weight is supported at the knees.



# **Push-ups (military)**

On the stomach with body straight from the shoulders to the toes, hands beside the shoulders, push the body upward until arms are straight. Bend arms to lower the body back to the starting position.



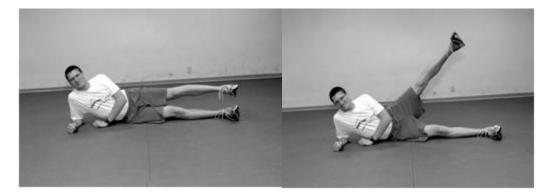
#### Sit-ups

Start on the back, knees bent at a 90-degree angle with hands behind the head. Raise the head and upper part of the body, curling up from the waist. Perform 10-20 reps.



#### **Side Leg Raises**

While on the side with legs straight, slowly raise the top leg 18" and return. After 10 leg raises, roll to the opposite side and repeat with the other leg. Perform 10-20 reps per leg.



#### **Prone Planks**

Start in the prone position and prop the body up onto the toes and forearms. Hold this position with the body maintaining a flat back and rigid position for the prescribed amount of time.



#### Right & Left Side Hover

Lying on the side, elevate the body off of the ground so that it is supported by the side of the foot and the elbow. Maintain the body in a straight, rigid position for the prescribed amount of time.



#### Skipping

Begin in the standing position and skip from right to left foot. A strenuous effort is not required when completing these. Be sure to follow the prescribed number of touches and recovery duration.



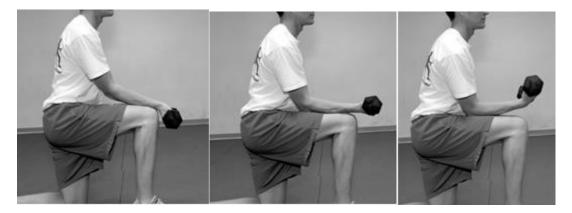
#### **Skipping-for-Height**

Complete skipping from right to left foot as described above. Be sure to use an exaggerated arm movement and try to come as far off of the ground as possible. Be sure to follow the prescribed number of touches and the recovery duration.



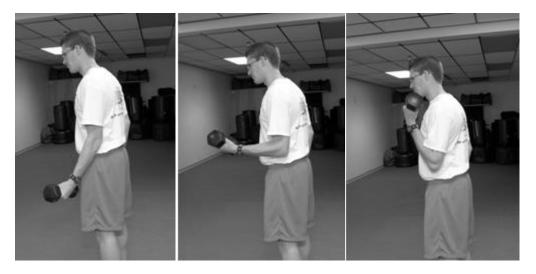
#### **Wrist Curls**

Selecting a weight of "somewhat hard", take a kneeling position with the arm supported by the leg. Curl the weight up with hand palm side up. Perform the prescribed number of repetitions.



#### **Arm Curls**

Selecting a weight of "somewhat hard", raise weight from the extended position and then lower it back down slowly. Keep back straight and knees slightly bent. Do not hold breath during the movement. Perform the prescribed number of repetitions.



#### **Leg Press**

Selecting a weight of "somewhat hard", start in a press position and extend leg until nearly straight. Do not lock out the knees. Return leg to the start position slowly. Perform the prescribed number of repetitions.



#### **Modified Wall Sit**

Partners sit facing opposite directions, back-to-back, with arms hooked at elbows, backs erect, and knees bent at right angles. Partners then perform a simultaneous backward push and standing effort, rising to a half knee bend and holding position for 30-40 seconds. Perform the prescribed number of repetitions



#### **Calf Stretch**

Facing the wall, put feet together about 36" from the wall, and place hands on the wall. Keep feet flat on the floor and knees straight. Start at 3 sets for 5 seconds and work up to 3 sets for 15 seconds over the course of the program.



#### **Quad Stretch**

While standing and supporting the body with one hand on a wall or other support, grab the ankle and arch the back. Pull up on the ankle until adequate stretch is felt in the front thigh.



## **Knee Hugs**

Lying on back, slowly raise knee to chest, grasp knee with both hands, and pull to the chest. Keep opposite leg straight. Hold leg for three seconds, then follow same procedure with other leg, again keeping opposite leg straight. Alternate six times.



#### **Stride Stretches**

Start in a push-up position with one knee tucked forward to chest level and the other leg extended. Alternate forward and extend legs. Start at 3 sets of 5 repetitions and work up to 3 sets of 15 repetitions over the course of the program.



#### **Two-Foot Hops**

Start in the standing position, flex the knee slightly and hop into the air. Hopping should be done in place. Continue hopping in place for the recommended number of hops in the set.



## Single Foot Side-to-Side Hop

Begin by standing on one foot and flex the knee slightly hopping to the side landing on the opposite foot. After landing on the opposite side, flex the knee and hop back to the other side. Continue hoping back and forth for the recommended number in the set. Distance between hops should be about three feet.



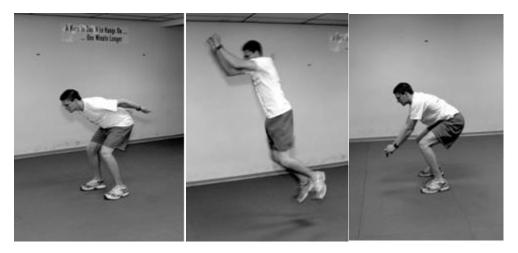


#### **Two Foot Side-to-Side Hop**

Start in the standing position with the feet approximately shoulder width apart. Flex the knee slightly and hop to the side. After landing on the opposite side, again flex the knee and hop to other side. Continue hopping from side to side for the recommended number in the set. Maintain feet at approximately shoulders width apart. Distance between hops should be about two feet.

#### **Standing Long Jumps**

Start in the standing position and flex the knees deeply while swinging the arms back. Now jump forward as far as possible. Repeat this action for the recommended number of repetitions in the set. A soft landing area (padding or sand) is highly recommended for this exercise. If none is available then the exercise may need to be avoided.



## Standing Jump/Reach

Start in the standing position with feet shoulders width apart. Flex the knees and jump into the air as high as possible. Raise the arms above the head as if trying to reach for something in the air. Repeat this exercise for the recommended number of repetitions in the set.



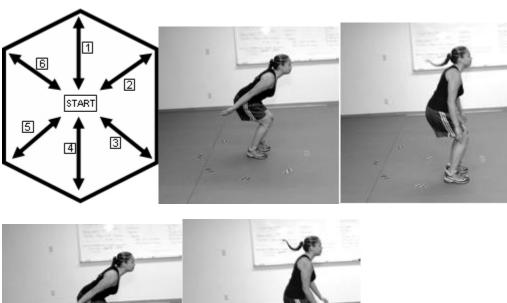
#### **Standing Jump Over Barrier**

Start in the standing position with feet approximately shoulder width apart. Flex the knees and jump up and forward over a barrier (cone or small cross rail). The barrier should not exceed one and a half feet in height. If no barrier is available then jump over an imaginary barrier.



## **Hexagon Drill**

Begin by standing with approximately six feet of space around each person. Next envision standing in the middle of a clock face. Now flex the knee and jump forward to the 12 o'clock position and then jump back to the starting position. Repeat this exercise jumping to the 2, 4, 6, 8, and 10 o'clock positions. Hexagon drill pattern: Distance between start and each jump can vary based on fitness and body size, but should be far enough out to provide reasonable effort. Also order of the jumps can be varied so long as all of the jumps are consecutive.



#### **Multi Jump for Height**

Begin standing in place. Next flex the knees and jump into the air as high as possible. As soon as landing, flex the knees and jump into air again as high as possible. Repeat for the recommended number of repetitions.

No picture.

#### Wheelbarrow

Begin in the push-up position. Have a partner pick up the persons feet, while they remain supported by their arms. Now both partners will walk forward for the recommended number of steps.

\*Note: It is a good idea to match partners based on body size to avoid injury.



#### **Explosive Wall Push-ups**

Begin standing on the floor facing a wall. Lean forward into the wall with arms extended (similar to the push-up position). Flex the elbows and lower the body toward the wall. Now rapidly contract the arms with enough force to push off of the wall. Fall back into the wall and repeat the motion for the number of recommended repetitions.





#### **Push-Up Jump**

Begin in the push-up position on the floor. Lower the body to the floor. Now explosively contract the arms with enough force to push off the ground. Now land on the floor and lower the body back to ground and repeat for the recommended number of repetitions. Rest 2 seconds between each push-up.

No picture.

#### **Alternative Upper Body Plyos**

#### Overhead throw w/med ball or basketball

Begin in the standing position and raise the ball over head. Next throw the ball over the head toward a partner. The partner will catch the ball and now perform the same motion. Partners will pass the ball back and forth until the indicated number of repetitions is completed.



#### Supine single arm overhead throw w/med ball or basketball

Begin by lying on the ground with one arm extended overhead with the ball in hand. Throw the ball forward and begin flexing the trunk upward similar to a stomach curl. Finish in a stomach curl position. Repeat the recommended number of repetitions.



#### Chest pass w/med ball or basketball

Begin in either the standing or kneeling position. Holding the ball in two hands, bring the ball to the chest and push out, passing the ball to a partner. The partner should be ready to receive the pass with their arms extended out in front of them. As the partner receives the pass they should slow the ball down as they bring it to their chest and then immediately pass the ball back to the opposing partner. Pass the ball back and forth until the recommended number of repetitions has been completed.



# Chest push w/med ball or basketball

Begin on the knees holding ball close to the chest as if a chest pass was going to be completed. Next crouch down. From the crouch position explode outward staying on the knees and throw the ball as far as possible or to a partner. Have the partner return the ball and repeat for the recommended number of repetitions.



# Heavy bag thrust

Begin by standing next to a suspended heavy bag with right shoulder lined up with the bag. Move the right foot back while the left foot stays next to the heavy bag for stability. Place the right hand on the heavy bag and use the arm and torso to push the bag forward. As the bag comes swinging back, have the exerciser and a partner slow the bag down and then repeat for the recommended number repetitions.



#### Heavy bag stroke (Advanced)

Follow the same procedure for the heavy bag thrust, however, when the heavy bag comes swinging back have exerciser catch the bag and begin to slow it down. As the bag swings back even with the body, immediately push it forward with an explosive motion. Repeat this sequence for the recommended number of repetitions



#### Catch and Overhead Throw w/med ball (Advanced)

Begin in the standing position with feet shoulder width apart and arms extended out and slightly over head. Have a partner pass the ball. Catch the ball overhead and pass it back to the partner. Repeat until the recommended number of repetitions has been completed.

\*Note: If a partner is not available, exerciser may throw ball against a wall and catch the rebounding ball.

