



JUVENILE CORRECTIONS OFFICER

PHYSICAL CONDITIONING MANUAL (OPTIONAL)



Board of State & Community Corrections
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Unit 17.0
Physical Tasks and Conditioning
Instructional Time: 17 hours 30 minutes

A note about physical conditioning:

A **minimum of 48 hours** is required between segments of physical conditioning and defensive tactics training that is physically challenging in order to minimize the risk of injury and to allow adequate time for students to assimilate skills. For any course instruction day that includes physically challenging training, the following course instruction day can include physical activity, if that physical activity is not strenuous or challenging. Physical conditioning modules (17.2, 17.3, 17.4, 17.5, 17.6, 17.6, 17.8 17.9, 17.10, and 17.11) should not be presented in blocks of more than two (2) hours, respectively. Module 17.3 should not be presented until **after week two** of the course. Modules 17.10 and 17.11 should not be presented until **after week three** of the course. Instructors may also present (2) hours of physical conditioning and (2) hours of defensive tactics in one day of instruction.

Module 17.1 ORIENTATION – PHYSICAL CONDITIONING BASICS

Instructional Time: 1 hour 30 minutes

INSTRUCTIONAL OBJECTIVES:

17.1.1 Explain key components of a performance-based fitness program and the ways each contributes to fitness:

- cardiovascular conditioning
- strength
- endurance
- flexibility
- agility
- speed

JKT 2 items

17.1.2 Define common terms used in physical conditioning, such as:

- core strength
- cardiovascular exercises
- resistance training
- flexibility exercises
- plyometrics
- recovery time
- duration
- frequency
- sets
- reps

JKT 3 items

17.1.3 Explain the role of Rating of Perceived Exertion (RPE) in a physical conditioning program.

Discussion

17.1.4 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

17.1.5 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

JKT 3 items

17.1.6 Discuss equipment and clothing needed when participating in a fitness program.

Discussion

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

Discussion

17.1.8 Identify common injuries during training that might disable a juvenile corrections officer, such as the following:

- hamstring pulls
- knee injuries
- back injuries
- ankle sprains

JKT 1 item

17.1.9 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

JKT 3 items

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

Discussion

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

Discussion

Module 17.2 CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

INSTRUCTIONAL OBJECTIVES:

17.2.1 Participate in Dynamic Warm-up exercises as described in **Segment A, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.2 Participate in Low Intensity Strength exercises as described in **Segment A, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.3 Participate in Core Strength exercises as described in **Segment A, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.4 Participate in Low Intensity Plyometric exercises as described in **Segment A, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.5 Participate in Upper Body Strength exercises as described in **Segment B, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.6 Participate in Lower Body Plyometric exercises as described in **Segment B, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.7 Participate in Lower Body Strength exercises as described in **Segment B, Week 1**, of the **Physical Tasks Training Manual**.

- 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

17.2.8 Participate in Cardiovascular exercise by walking or jogging 1 mile as described in **Segment D** of the **Physical Tasks Training Manual**.

- maintain intensity that is “somewhat hard”

Practice

17.2.9 Participate in Cool Down exercises as described in **Segment E, Week 1**, of the **Physical Tasks Training Manual**. 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

Module 17.3 INITIAL ASSESSMENT

Instructional Time: 1 hour

INSTRUCTIONAL OBJECTIVES:

17.3.1 Practice the following two Work Sample Tests as described in the **Physical Tasks Training Manual**.

Remember you should not test the dummy drag or 75 yard sprint until after the second week of the course.

- Dummy Lift: With knees bent, wrap arms around a hanging bag or dummy weighing up to 150 pounds, get a firm hold on it, then straighten legs to lift the bag or dummy high enough to create slack in the rope/chain; aim to hold for 30 seconds. Start with a 120-130 pound bag or dummy. As able to support bag or dummy successfully, increase weight in 10-20 pound increments and/or time spent supporting the bag or dummy.
- 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, walking briskly. Aim for completing the full course in 30 seconds.

Practice

Module 17.4 CONDITIONING EXERCISES

Instructional Time: 1 hour

17.4.1 Repeat Module 17.2

Module 17.5 CONDITIONING EXERCISES

Instructional Time: 2 hours

INSTRUCTIONAL OBJECTIVES:

17.5.1 Perform Defensive Tactics Footwork as taught in Module 8.2 as cardiovascular exercise.

Practice

17.5.2 Participate in Dynamic Warm-up exercises as described in **Segment A, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.3 Participate in Low Intensity Strength exercises as described in **Segment A, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.4 Participate in Core Strength exercises as described in **Segment A, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.5 Participate in Low Intensity Plyometric exercises as described in **Segment A, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.6 Participate in two Upper Body Plyometric exercises as described in **Segment B, Week 2**, of the **Physical Tasks Training Manual**.

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

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

Practice

17.5.7 Participate in Upper Body Strength exercises as described in **Segment B, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.8 Participate in Lower Body Plyometric exercises as described in **Segment B, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.9 Participate in Lower Body Strength exercises as described in **Segment B, Week 2**, of the **Physical Tasks Training Manual**.

- 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

17.5.10 Practice the four Work Sample Tests as described in the **Physical Tasks Training Manual** in the following order:

- 1) 75 yard Sprint in 30 seconds or less: **(Segment C)**
 - use moderate speed in initial sprints to avoid hamstring injury
 - use a straight track
- 2) 150-pound bag/dummy support as described in instructional objective 17.3.1.
- 3) Weighted agility run as described in instructional objective 17.3.1.
- 4) Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.

Practice

17.5.11 Participate in Cardiovascular exercise by walking or jogging 1.5 miles as described in **Segment D, Week 2**, of the **Physical Tasks Training Manual**.

- maintain intensity that is “somewhat hard”

Practice

17.5.12 Participate in Cool Down exercises as described in **Segment E, Week 2**, of the **Physical Tasks Training Manual**. 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

Module 17.6 CONDITIONING EXERCISES

Instructional Time: 2 hours

INSTRUCTIONAL OBJECTIVES:

17.6.1 Repeat Module 17.5

Module 17.7 CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

INSTRUCTIONAL OBJECTIVES:

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

17.7.1 Perform Defensive Tactics Footwork as taught in Module 8.2 for cardiovascular exercise.

Practice

17.7.2 Participate in Dynamic Warm-up exercises as described in **Segment A, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.3 Participate in Low Intensity Strength exercises as described in **Segment A, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.4 Participate in Core Strength exercises as described in **Segment A, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.5 Participate in Lower Body Strength exercises as described in **Segment B, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.6 Participate in Lower Body Plyometric exercises as described in **Segment B, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.7 Participate in one of three Lower Body Plyometric Circuits as described in **Segment B, Week 3**, of the **Physical Tasks Training Manual**. See diagrams. Perform 3 circuits. Take 5-minute rest between 17.7.7 and 17.7.8.

- Plyo Circuit I:
 - 3 Two Footed Hops
 - fast Jog or Run for 25 to 75 yards
 - 3 Single Foot Side-to-side Hops

- 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:
 - 3 Two Footed Hops
 - fast Jog or Run for 25 to 75 yards
 - 3 Single Foot Side-to-side Hops
 - fast Jog or Run for 25 to 75 yards
 - 3 Jump Over Barriers
 - 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 III:
 - 3 Two Footed Hops
 - fast Jog or Run for 25 to 75 yards
 - 3 Standing Long Jumps
 - fast Jog or Run for 25 to 75 yards
 - 3 Skips for Height
 - 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

17.7.8 Participate in three Upper Body Plyometric exercises as described in **Segment B, Week 3**, of the **Physical Tasks Training Manual**.

- 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:

- Alternative: Heavy bag thrust (same # sets and reps) or,
- 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

17.7.9 Participate in Upper Body Strength exercises as described in **Segment B, Week 3**, of the **Physical Tasks Training Manual**.

- 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

17.7.10 Practice the four Work Sample Tests as described in the **Physical Tasks Training Manual** 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

17.7.11 Participate in Cardiovascular exercises by walking or jogging 2 miles as described in **Segment D, Week 3**, of the **Physical Tasks Training Manual**.

- maintain intensity that is “somewhat hard”

Practice

17.7.12 Participate in Cool Down exercises as described in **Segment E, Week 3**, of the **Physical Tasks Training Manual**. 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

Module 17.8 CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

INSTRUCTIONAL OBJECTIVES:

17.8.1 Repeat Module 17.7

Module 17.9 CONDITIONING EXERCISES

Instructional Time: 1 hour 30 minutes

INSTRUCTIONAL OBJECTIVES:

17.9.1 Repeat Module 17.7

Module 17.10 FINAL ASSESSMENT AND FITNESS PLANNING: PART ONE

Instructional Time: 2 hours

INSTRUCTIONAL OBJECTIVES:

Remember you should not test the dummy drag or 75 yard sprint until after week three of the course. BST 36 through 39 should be tested in order to prevent injury.

17.10.1 On a straight track, complete a 75-yard sprint within 30 seconds.

BST #36

17.10.2 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.

BST #37

17.10.3 Within 30 seconds, jog or walk briskly 150 feet while maneuvering around obstacles; lift and carry a 20-pound weighted object (such as a fire extinguisher) for 75 feet of the 150 total feet.

BST #38

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

BST #39

17.10.5 In pairs or small groups of trainees, exchange ideas and goals for on-going, performance-based fitness plans at the conclusion of training, such as the following:

- How many days per week can you schedule exercise?
- How much time per session can you exercise?
- Name 3 Lower Body strength or Plyometric exercises you plan to do.
- Name 3 Upper Body strength or Plyometric exercises you plan to do.
- Name a form of cardiovascular exercise you plan to do.
- What would keep you from adhering to this program?
- Name 3 ways to eliminate roadblocks to adhering to this program.

During class, trainees are to write up goals and plans using a structured work sheet or other suitable format.

Discussion and Report Out to Class

Module 17.11 FINAL ASSESSMENT AND FITNESS PLANNING: PART TWO

Instructional Time: 2 hours

INSTRUCTIONAL OBJECTIVES:

Remember you should not test the dummy drag or 75 yard sprint until after week three of the course. BST 36 through 39 should be tested in order to prevent injury.

17.11.1 Repeat Module 17.10

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 between sets to maintain warm-up	2 x 10 skips 20 sec between	2 x 10 skips 10 sec between
Skips for Ht	2 x 10 skips 1 min between Recommend walking between sets to maintain warm-up	2 x 15 skips 1 min between	2 x 20 skips 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	1 x 10		
Single-Foot S to S Hops	1 x 10	1 x 10	
Two-Foot S to S Hops	1 x 10	1 x 10	
Standing Long Jump		1 x 10	
Standing Jump/Reach		1 x 10	
Jump Over Barrier		1 x 10	
Hexagon Drill			2 Drills (24 Touches)
Multi Jumps for Height			2 x 10 jumps 1 min between sets 5 min rest before circuits
			3 x Plyo Circuit Choose a circuit See Diagrams

At least 1 to 2 min should separate each exercise.

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

**Alternative Exercises

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

***Alternative Exercises

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 or Modified Wall Sit	1x6-8 reps 1x30-40 sec hold x 2 reps	same same	same 2-3x30-40 sec hold x 2 reps
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Segment C

<u>Exercise</u>	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>
75 Yard Sprint	2 nd session	x	

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

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

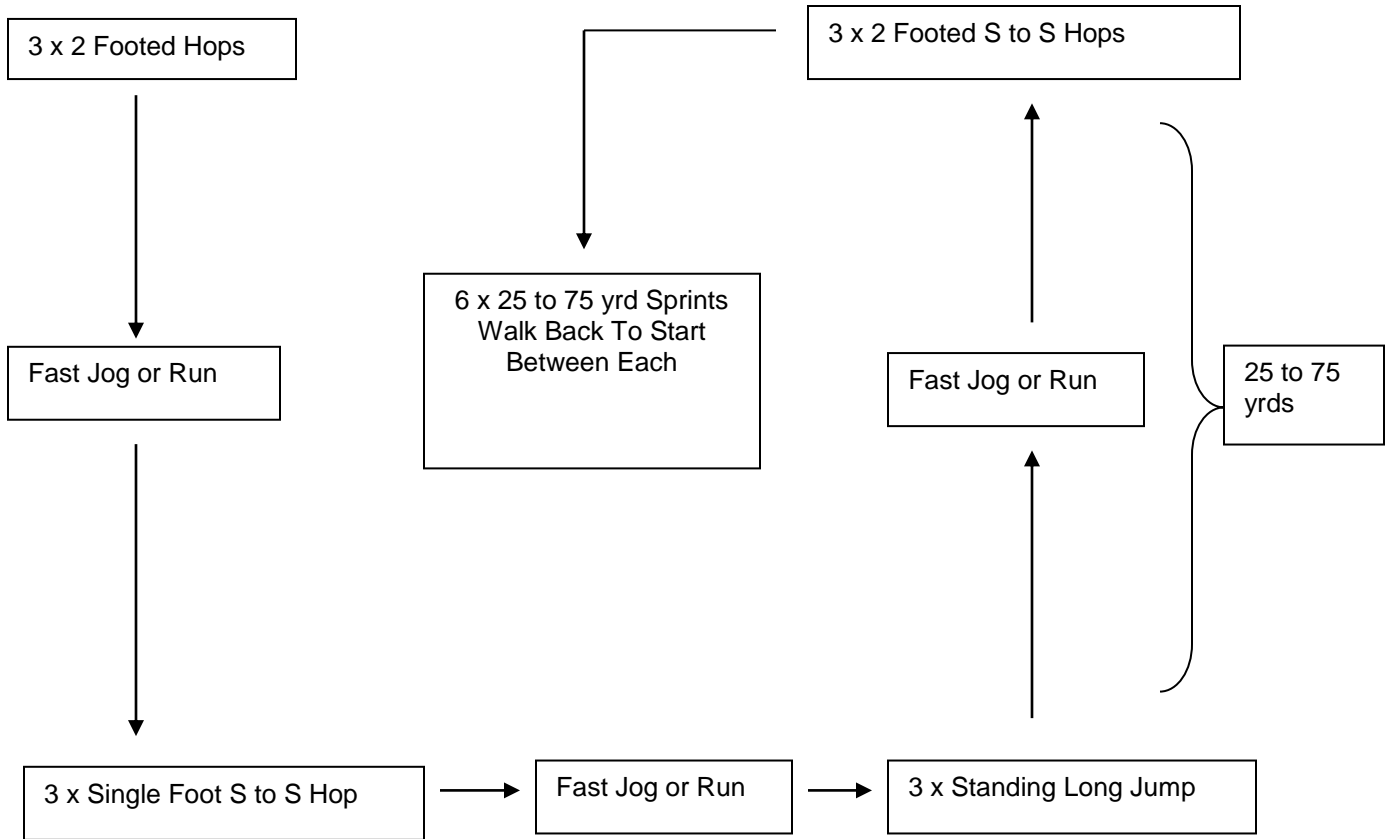
Maintain an intensity that is “somewhat hard.”

Segment E

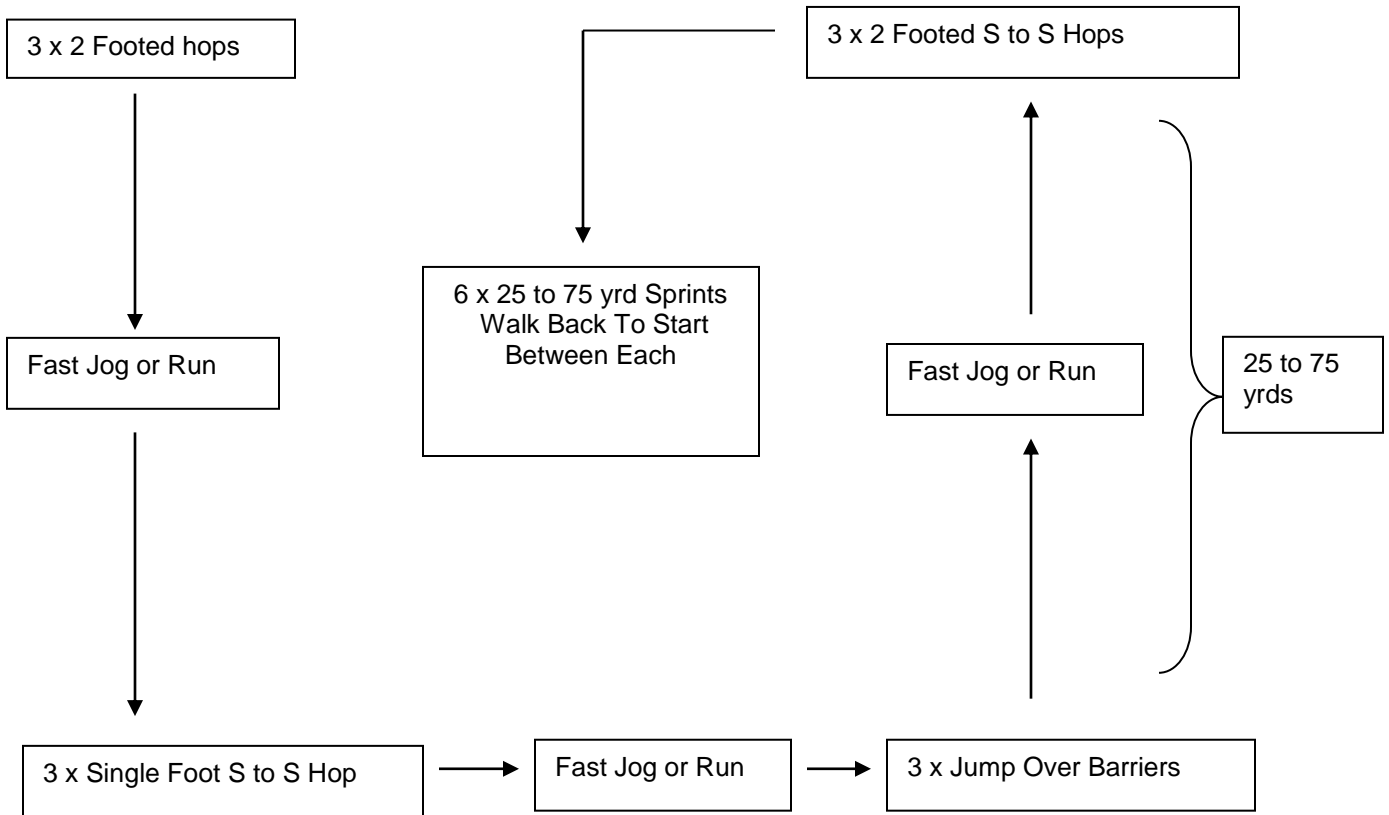
<u>Exercise</u>	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>
Walk Stretch	3 min*	3 min*	3 min*
Calf stretch	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
Quad stretch	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
Knee hugs	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec
Stride Stretches	3 x 5 sec Rest 15 sec	3 x 10 sec Rest 20 sec	3 x 15 sec Rest 25 sec

*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.

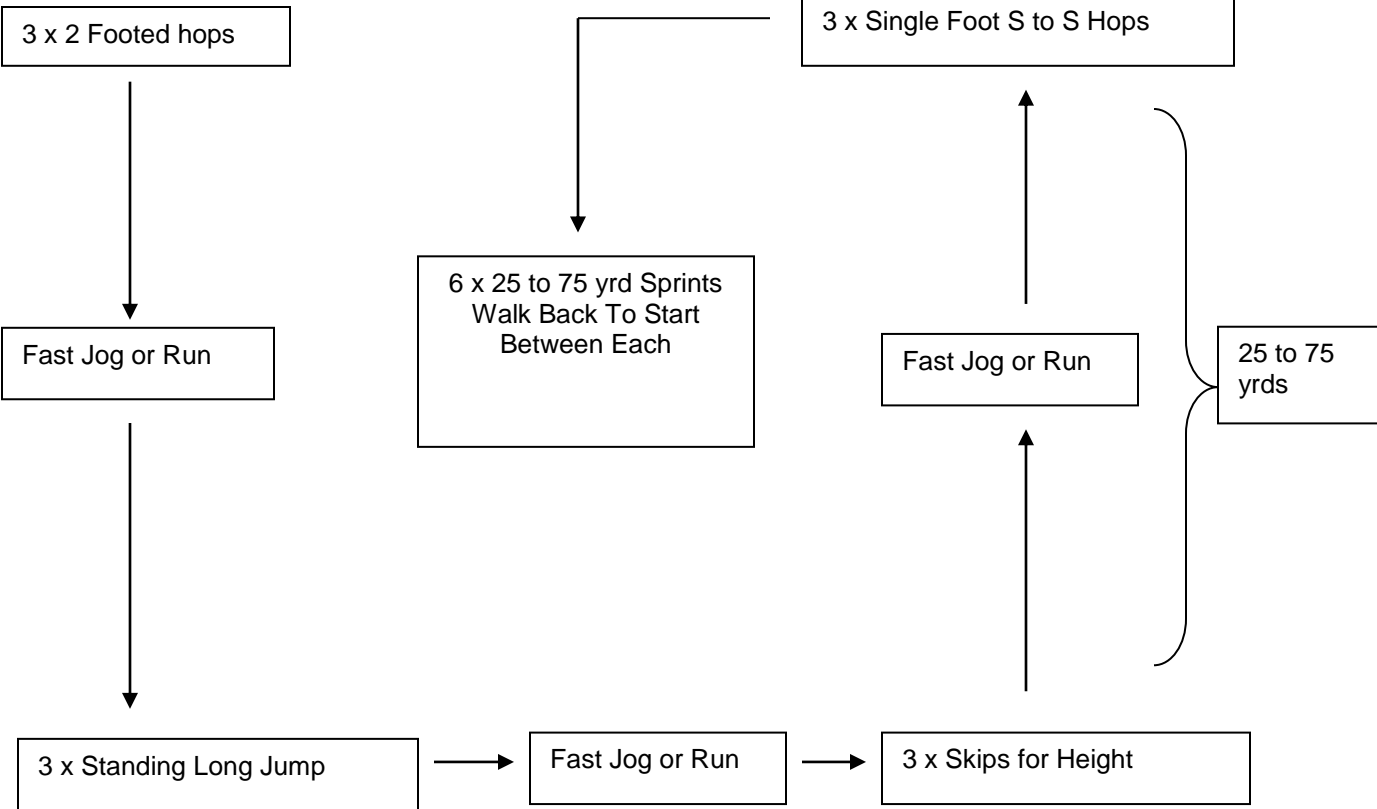
Plyo Circuit I



Plyo Circuit II



Plyo Circuit III



Dummy Lift

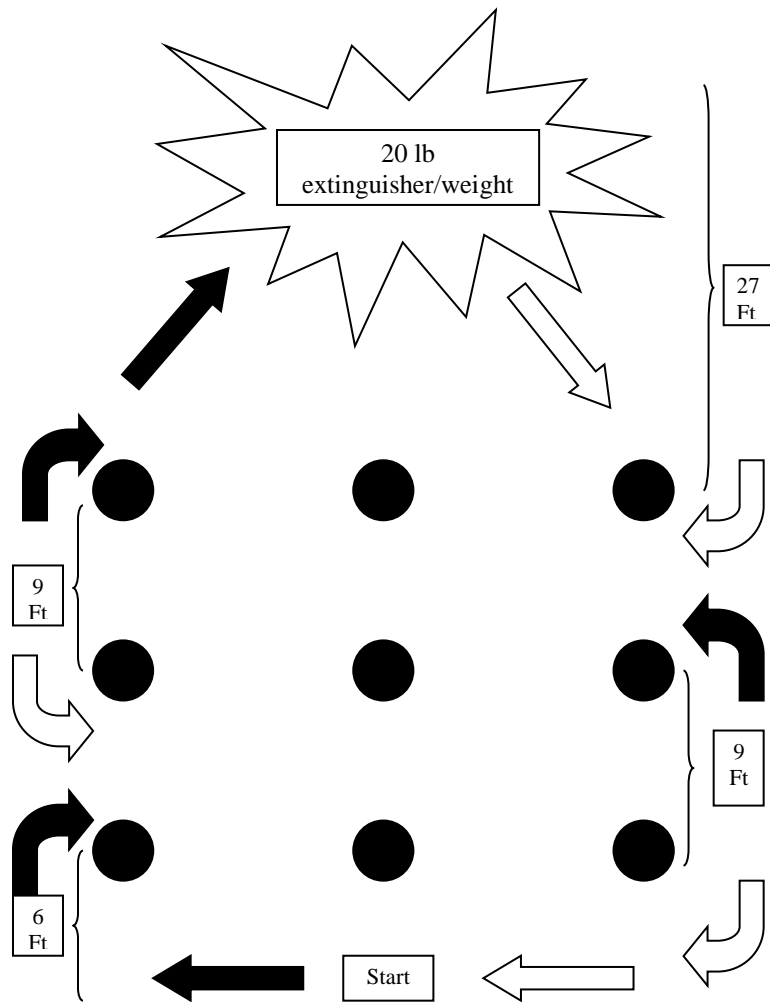
For 30 seconds, support the weight of a hanging 150-pound bag or dummy so that all stress is taken off the rope or chain from which it is suspended.

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.



EXPLANATION OF PLYOMETRIC EXERCISES

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.



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.



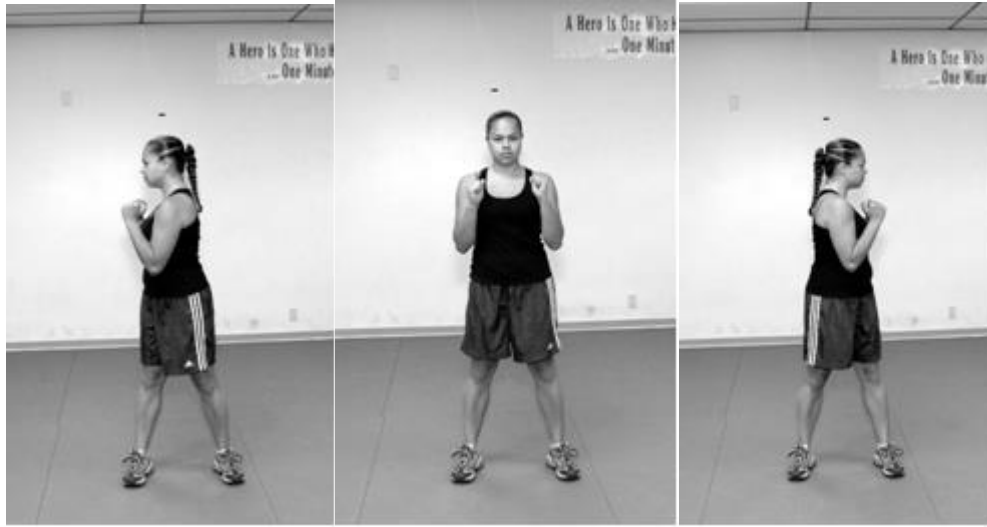
Windmills

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.



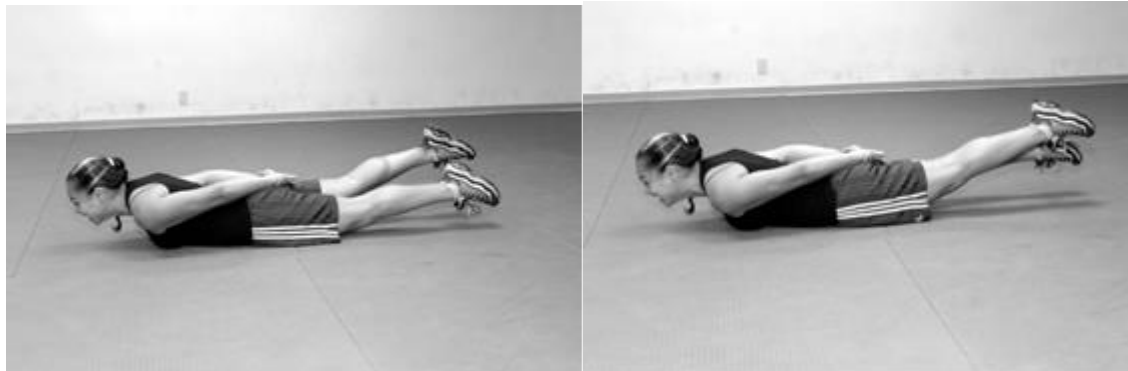
Trunk Twists

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.



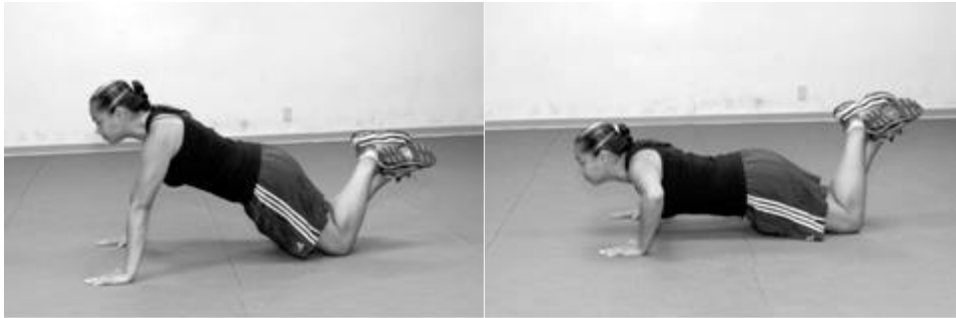
Knee-to-Forehead

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.



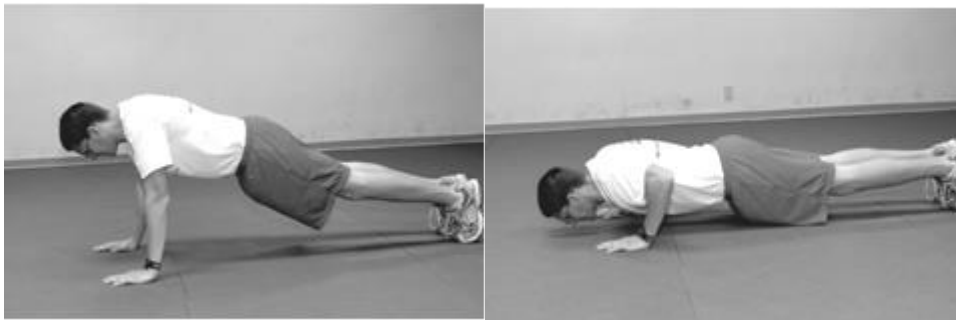
Push-ups (modified)

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.



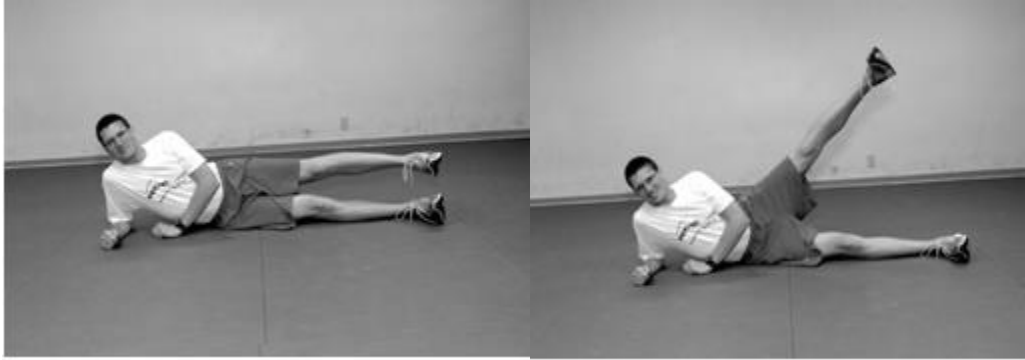
Sit-ups

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.



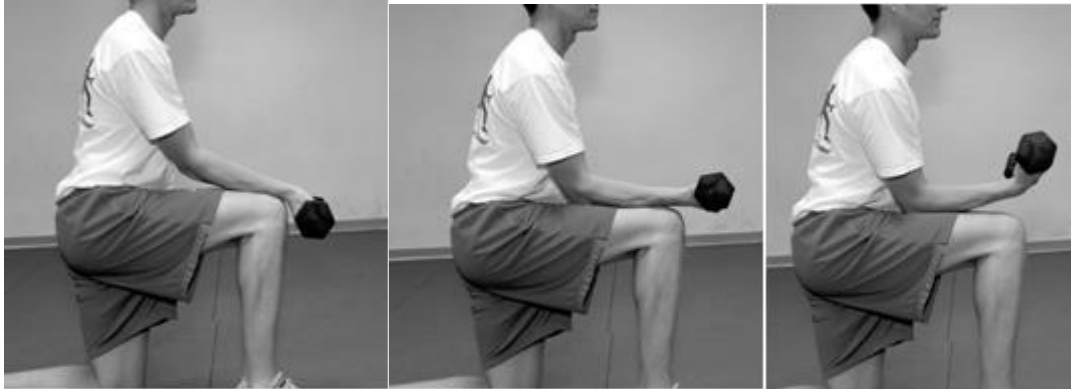
Skipping-for-Height

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.



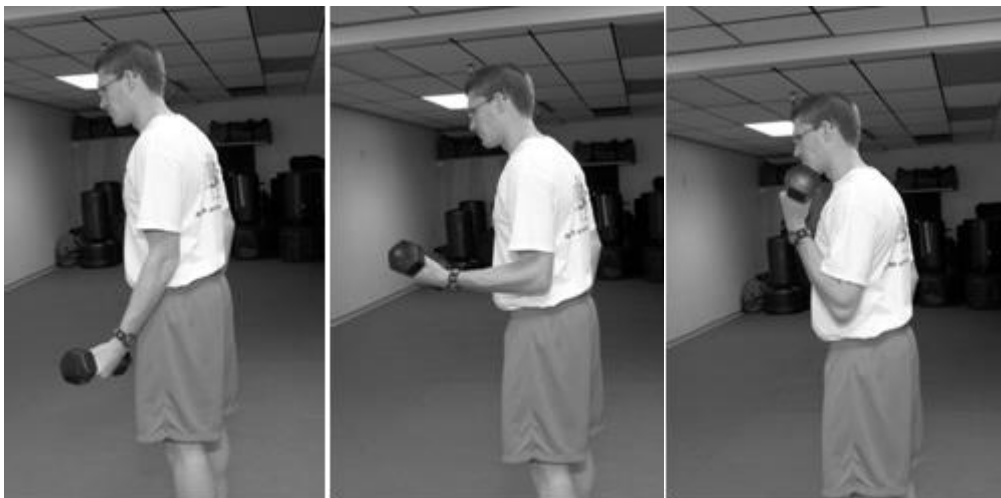
Wrist Curls

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 hopping 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.



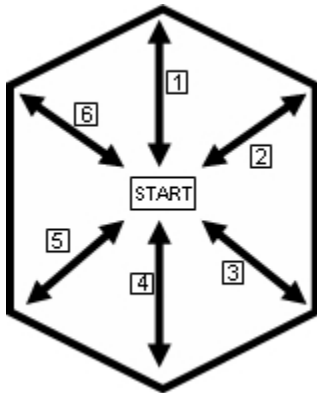
Standing Jump Over Barrier

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.

