

Speed and Agility Progression

Goals

1. Safely recondition the knee for the demands of sports activity
2. Provide a logical sequence of progressive drills for pre-sports conditioning
3. Provide objective criteria for safe return to sports

Phases of Training

Straight ahead running phase

Direction change running phase

Unrestricted direction change and impact phase

Prerequisites

Full Range of Motion

Strength at least 80 % of uninjured limb

Thigh girth within ½ inch of uninjured limb

Symmetrical quadriceps and hamstring flexibility

Perform and pass functional tests

Functional Tests

Before starting the running sequence you must be able to:

1. Hop forward on both legs at least 2 feet
2. Hop to either side at least 1 foot
3. Hop up and down on both feet 10 times
4. Jog with no limp for 100 yards

Warm-up, Stretch and Ice

Be sure that you warm-up and stretch before and after workouts. Generally, you should do some walking, cycling or elliptical so that you break a sweat before starting the running program. You can then stretch before beginning the running drills. Ice your knee for 20 minutes following workouts and stretch all muscle groups as you are cooling down.

Recommended Frequency 2-3 times per week

Criteria to Progress

Do not progress to the next step in the phase until the present step is pain free, and you can perform with proper technique and without difficulty (muscle soreness or fatigue). Add only one new step in the progression per workout.

Running Progression

I. Straight Ahead Running

1. Run $\frac{1}{2}$ speed 100 yards, 10 repetitions
2. Run $\frac{3}{4}$ speed 100 yards, 10 reps
3. Run $\frac{1}{2}$ speed 100 yards, 3 reps; $\frac{3}{4}$ speed 100 yards, 3 reps; full-speed 50 yards, 4 reps
4. Continue $\frac{1}{2}$ and $\frac{3}{4}$ speed 100-yard runs, for 3 reps each and add one 50-yard run each workout until you can do (10) 50-yard full speed runs.

II. Basic Change of Direction Running

Intensity: Progress drills from walking $\frac{1}{2}$ speed $\frac{3}{4}$ speed full speed

Continue current workout from above (Step 4): Run $\frac{1}{2}$ and $\frac{3}{4}$ speed 100 yd runs for 3 reps each. Run full speed 50-yard run for 5 reps

Progressively add each step below:

5. Zig-Zag run, round corners, 50 yards, 5 reps
6. Backward run 25 yards to gradual stop, then forward run 25 yards to gradual stop, 5 reps
7. Circle run 20 feet or greater diameter circle, 3 reps to left and 3 reps to right
8. Figure '8' run 20 feet or greater length, 5 reps
9. Carioca 50 yards, 5 reps left, 5 reps right

III. Advanced Speed and Agility Running

Intensity: Progress drill from walking $\frac{1}{2}$ speed $\frac{3}{4}$ speed full speed

Continue current workout above and progress with below:

10. Run forward to plant-and-cut off of the uninjured limb, $\frac{1}{2}$ speed, 5 reps
11. Run forward to plant-and-cut off of the injured limb, $\frac{1}{2}$ speed, 5 reps
12. Zig-Zag drill with alternate limb plant-and-cut, 6 reps
13. Box drill 20 yards square, 6 reps, alternate sides
14. Shuttle run 50 yards with direction change every 10 yards, 5 reps
15. Agility run, 5 reps, alternate starting sides

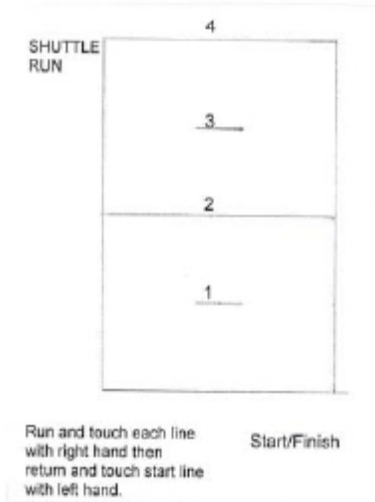
Suggested Final Workout Summary:

1. 100-yard run $\frac{1}{2}$ speed, $\frac{3}{4}$ speed and full speed each distance 2 reps each
2. Zig-Zag run, 6 reps
3. Forward/backward run, 6 reps
4. Circle run, 6 reps
5. Figure '8' runs, 6 reps
6. Carioca, 6 reps each way
7. Shuttle run 50 yards with direction change every 10 yards, 6 reps
8. Box drill 20 yards square, 6 reps, alternate starting side
9. Agility run, 6 reps, alternate starting side

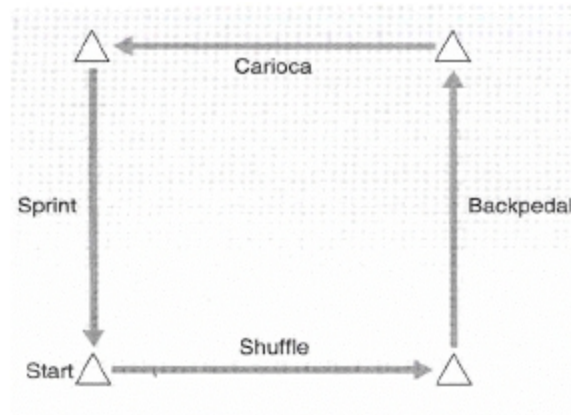
IV: Begin Sports Practice

Agility Drills

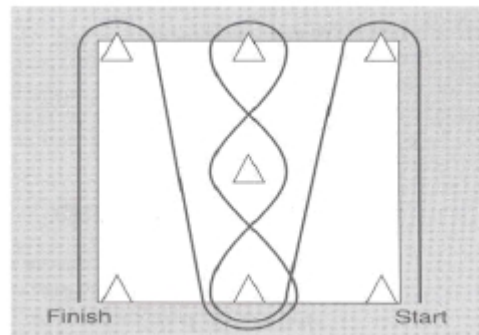
Shuttle Run



Box Drill



Agility Drill



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