

## FAST-FEET DRILLS

Improve athletic performance with a program that targets foot speed. By Carl Petersen and Nina Nittinger

**M**ost sports require quick movements that pass through many planes of motion and use numerous joints and muscles at the same time. The greatest athletes are noted for their agility and natural speed on field and on court. Speed of coverage in the venue of play, rather than just the skills of throwing, hitting, passing and kicking is an important quality to possess. A key to good play is speed and fast footwork. Having good balance and a strong dynamic core improves stability, prevents injury and optimizes performance.

The drills in this article were chosen because they mimic the type of specific quickness needed for running and reaction type sports. These drills will help improve athleticism, agility, balance, coordination, deceleration control, foot speed, lateral movement and multi-core stability.

Some type of warm-up should be done before doing any drills. Methodically warming the body's tissues helps prevent injuries that may be caused by going too hard, too fast and too soon with cold, unlubricated muscles and joints.

Do several sets of 10 reps of arm and leg swings, front to back, side to side and in a figure of eight motion. As well, do some high knees, high heels, skipping, crossovers and side shuffle steps to add to the hip and leg warm-up.



**LEG SWINGS:** Keep the core switched on and knees slightly bent.

### SPEED WARM-UP

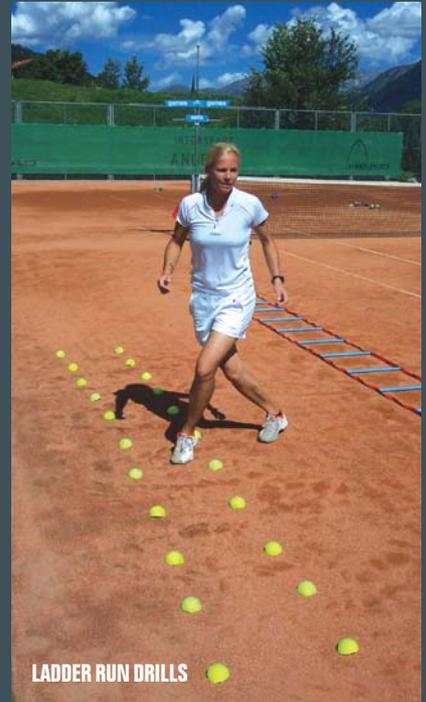
This speed warm up ensures that the central nervous system is firing properly. Do running on the spot "sewing machines" for 3 x 10 seconds at a medium tempo (60% of full speed). Follow this with 2-3 x "sewing machine" "accelerations"; start slowly, and gradually increase up to 80% of full speed at the 10 second mark. Next, repeat the same drill, but accelerate to 90% full speed at the 10 second mark and maintain for 2-3 sec.



**RICOCHET JUMPS:** Keep ground contact short.



**ALTERNATING LUNGES:** Progress the depth of the lunge slowly.



**LADDER RUN DRILLS**

### MUSCLE TENDON WARM-UP

Next, warm up the muscle-tendon system. One of the best ways is to combine ricochet jumps and alternating lunges.

**Ricochet jumps:** Jump in place at personal rhythm 2 x 20 jumps, then as fast as possible for 2 x 30 jumps.

Follow this with **Alternating Lunges:** Do 2 sets of 5-10 to warm up the muscles and tendons of the legs.

### FAST-FEET EXERCISES

Use these ideas and your imagination and create an agility circuit that fits your particular needs. Exercises can be varied depending on the setting and equipment available. Try doing 1-2 sets of 6-8 exercises for 10-15 seconds each with a 45-50 second rest between each set. Change the venue (e.g., the track, beach, gym, forest trail or tennis court) to keep it interesting.

**Here are some examples of agility, balance and coordination drills:**

### LADDER RUN DRILLS

Numerous patterns of running and easy jumping drills can be done using a flat ladder or half tennis balls set up like a ladder. Try leading with both the right and left foot doing a simple four count shuffle with right-left in and right-left out of the ladder. To add resistance, place the ladder on a hill. The body works against resistance going up the hill and has to control deceleration coming down.

### SUICIDE LINE DRILLS (NOT SHOWN)

Start on one side of a court with lines, or make your own lines with chalk or tape that are 1, 2, 4, 6 and 8 metres apart. Sprint to each line on the court and back. Concentrate on quick first steps and maintaining speed throughout. Do two sets per side. Make sure to touch each line, and explode out of a crouched position to work on deceleration strength of the legs.

### CONE TOUCH DRILLS

Set up three cones, and move back and forth laterally to each cone for the prescribed period of time. Try:

- side shuffles to cone
- kneel to touch cone
- circle around cone
- crossovers to cone

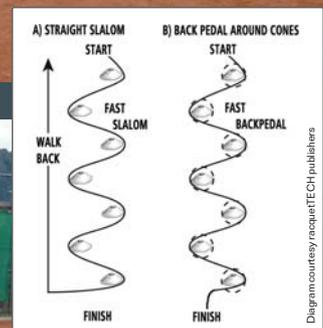
### CONE SLALOM DRILL

Set up cones or half tennis balls in a slalom, and do agility work running around the cones. Try:

- straight slalom
- fast backpedal around cone
- stutter or split step at cones
- straight and fast backpedal around cones



**CONE SLALOM**



**CONE TOUCH:** Varying the distance between cones adds variety and works on acceleration and deceleration control.



SQUARE RUN DRILL

**SQUARE RUN DRILL**

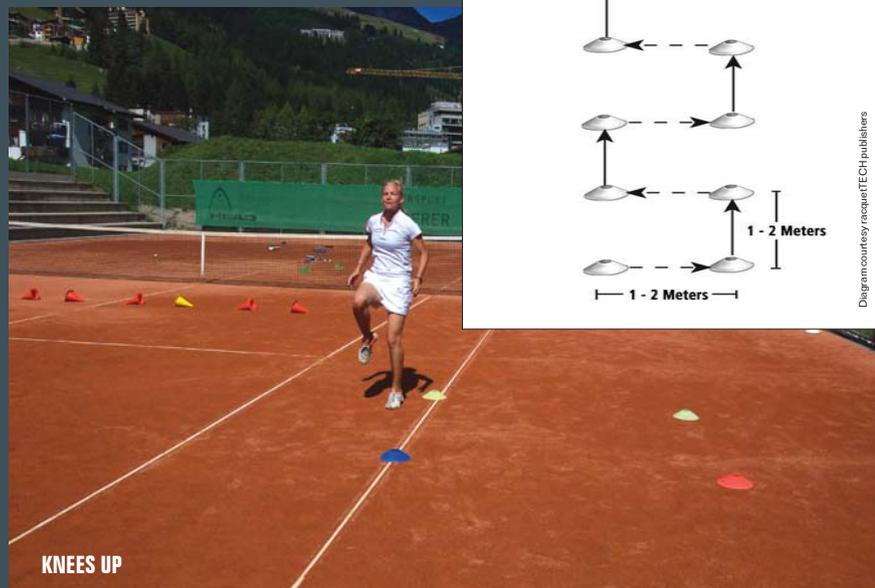
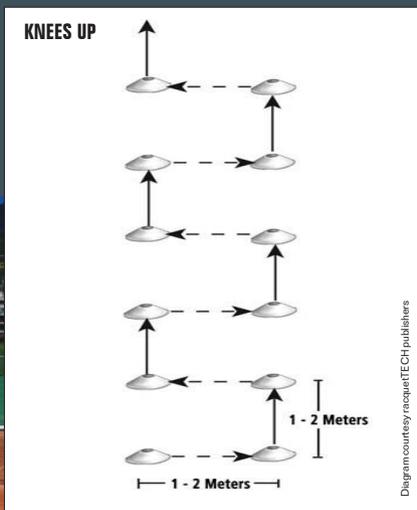
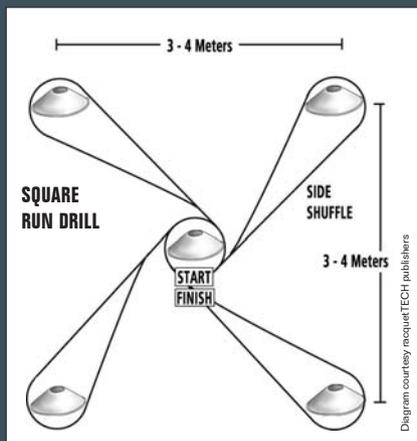
Arrange five cones or half tennis balls as shown in the diagram approximately 3–4 metres apart. Start in the middle of the square and, always facing the same direction, side shuffle step to the two front cones and back after circling them with short steps. Then proceed to the two back corner cones.

**KNEE-UPS DRILL**

Set up three lines of cones or pieces of tape, as shown in the figure and photo, and run each line as follows.

*Knee-ups*

- horizontal line – side shuffle
- vertical line – quick knees up.



KNEES UP

**TIPS TO IMPROVE FAST FEET**

**Proper Footwear**

- Shoes designed for another sport and have the wrong tread pattern won't optimize movement. Use a court shoe or cross trainer that has good lateral stability and a low heel. Avoid running shoes.
- Ensure proper size, adequate toe box room and the correct shoe for the foot.

**Stay on the balls of the feet and constantly keep moving**

- This keeps the body balanced and ready to move quickly in all directions.

**Widen the Stance**

- The pros stand poised in an athletic stance with their feet further apart than their shoulders, ready to drop-and-drive in order to move quickly in whatever direction is required.

**FIT TO PLAY™ & PERFORM TRAINING TIPS**

- Try different exercises in each training session.
- Treat fast-feet training as part of an overall program to improve sports performance.
- Try multi-sport training with soccer, ultimate Frisbee, squash, tennis, volleyball or touch rugby to improve coordination.
- Try unfamiliar sports to improve agility, balance, coordination and confidence.
- Do fast-feet training 2–4 times per week. Always begin with a dynamic warm-up.
- End with a cool-down of 5–10 minutes followed by easy flexibility exercises.
- Always warm up to play; don't just play to warm-up. FTC

Carl Petersen, P.T., is a partner and the director of high performance training at City Sports & Physiotherapy Clinics. He and coach/exercise model Nina Nittinger, who coaches in Davos, Switzerland, have written Fit to Play Tennis-High Performance Training Tips. Info on their new Fit to Play™ & Perform DVD series of training videos is available at [www.citysportsphysio.com](http://www.citysportsphysio.com).