

Tips from Coach Mike Reif  
Coach of the Genesee Valley Harriers  
**Improving your SPEED through drills**

All runners want to run faster and with greater ease. Speed is a function of power and coordination. The more power you can generate to propel you forward the faster you will move from point A to point B. The more bio-mechanically correct you are, the smoother your movements will be resulting in greater efficiency. The more efficient you are the less energy you use, resulting in increased ability to sustain faster speeds over longer distances.

In order to improve speed you need to pay attention to it. It takes years of focused training to improve the various physiologic systems that are required for running as well as the psychological aspects required to be successful. Nothing replaces a carefully planned, progressive and systematic running program to improve your running. Speed drills can enhance the development of power and improve your biomechanics. Speed drills and other exercises can improve the coordination of these two elements. They can also help reduce the chances of injury.

What follows are just some of the speed drills and exercises that can help your running performance dramatically. There are many more not listed here. Some drills are best explained through demonstration. Of course, speed drills will only help if you are diligent in doing them. They can be used as part of a warm-up, cool-down or as a specific workout. In general, they are listed below from the easiest to the more difficult. Naturally, some of these exercises are dynamic - plyometric type - therefore caution is advised. It is best to include a few of them very gradually at first. Start by doing a lower number of repetitions of just a few of the drills and then gradually build up to more repetitions and eventually add more of the drills to your daily routine. Make it a habit to include some of these during every one of your workouts.

Not included here is a discussion or description of basic stretching exercises that should be done once the body temperature has been raised. Static or Active Isolation (AI) stretching exercises can be incorporated in-between some of the speed drills or following them. Also not included here is a discussion of other training strategies to improve speed and economy (The running program, weight training, other cross training activities).

## Exercises

**Front lunge** - feet together, hands on hips, step forward with one foot while, bending the knee until in a lunging position and opposite knee is 6-9" off the ground. Push off the front foot and return to feet together position. The degree of effort can be varied but the amount of force you use to go forward and back. repeat

with other leg. do 5-10 per leg.

**Side lunge** - feet together, hands on hips, step side wards approximately 2" with one foot while, bend the knee until in a lunging position. Repeat with other leg. Do 5-10 per leg.

**Step ups** - on a step or bench. step up with one leg follow with other leg. step down with one, etc. You can add reps and eventually weights. The step should not be too high.

**Two legged jumps** - like a broad jump. This is an explosive dynamic movement. Do one jump at a time to begin with. When you have done these for a while - you would start doing several in a row to activate the rebound action. Over time it would look like a frog jumping quickly. But you are probably not ready for this stage for some time.

**One legged jumps** - as above however on one leg. this is more advanced in certain ways since you are putting all the forces into one leg instead of two. Short little jumps, flicking the ankle is what is desired and the eventual goal, however. For starters, little forward progress is needed. Much later, or with uninjured people I have them dash across 20-40 meters for speed doing this.

**Mogul jumps** - Again, in the beginning, very small lateral/forward jumps with feet together. These can be done one at a time or in multiples like a slalom skier.

**Stork stand** - stand on one foot - grab knee to chest. Hold position and maintain balance. This is a good ankle and balancing exercise. Like the Karate kid.

## Running Drills

**Fast feet** - can be done while running or standing in place. On your toes - tap the front portion of your feet in running motion to the ground as fast as possible. Do not lift your feet more than 1 - 2" off the ground. Start with 3x 5 seconds and gradually buildup.

**Fast feet ladder drill** - with markings on the ground (socks, paper, slats of wood) place 10-15 markers about 15" apart. With a running start. run between the markers. Speed can be varied depending upon degree of knee lift. the shorter the knee lift the fast.

**Skipping drills** - basic skipping can be done in slow motion (walking) or at a faster speed. There are many variations that can be done. Such as - explosive knee up lift, blocking of the thigh, short hop on opposite foot, snap foot down to ground in dorsi-flexed position, repeat with other foot. This can be a slow, forward moving drill or have various speeds and movements.

**Bounding drill** - A high skipping movement , bounding high in the air off one foot, opposite are drives high to the sky . There are many variations of bounding drills that can be done. These are often done best on hills with moderate inclines.

**Strides** - Speed Mechanics drills (40-100 meter repeats at about mile race pace).

**Running tall** - focus on head straight, chest out, hips forward, tight tummy.

**Heel recovery** - focus on high heel recovery to the butt. These will not only emphasize the height of the heel (close to the butt) but also the speed of getting it there from the ground.

**Recovery and block** - focus on recovery of the thigh to the forward position and block the thigh in the upward position.

**Pawing** - focus on dorsi-flexion of the foot and snapping the foot down to make contact with the ground. Start with the focus on one foot. Try to alternate with every other step. Eventually do one side every step, alternating. Conclude with both sides pawing.

**All together** - focus on putting all the above together or combinations of them.

**Remember: just add a few of these at a time - but do them regularly.**