

OVERVIEW: THE SPRINTS (100M-400M)

Power and coordination are important elements in producing speed. We can improve speed through good running mechanics and coordination. Read the "Basics of Running Mechanics" section for more information.

Speed is determined by two main factors.

- 1. Stride Length (Length of each step)
- 2. Stride Frequency (How often steps are made)

A sprint has four main phases:

- 1. The start,
- 2. Acceleration,
- 3. Maintaining momentum
- 4. The finish.

Coaches must break down each phase to help athletes understand and learn.

Sprinting Key Skills Checklist

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YOUR ATHLETE CAN
Perform a stand-up or block start
Maintain erect posture with hips tall
Push off the track with balls of feet
Move foot backward under body upon landing
Drive knees up so thigh is parallel (horizontal) to track
Maintain high heel recovery as drive foot leaves ground
Maintain tall posture, with slight forward body lean from ground, not from waist
Swing arms forward and back without rotating shoulders
Keep feet flexed, toes up
Sprint under control for entire race

^{**}Improving both of these factors will increase your speed.



Coaching the Four Sprint Phases

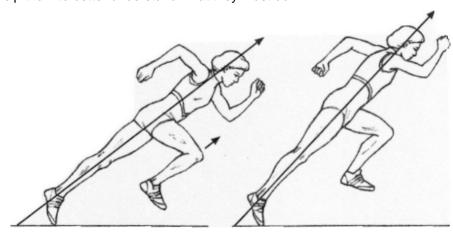
1. START PHASE

Please see "Starts" Document

2. ACCELERATING PHASE

After the Start, the accelerating phase begins.

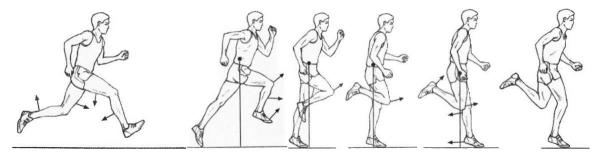
- 1. Acceleration is created by driving or pushing with the drive leg until it is straight.
- 2. The free leg drives low and fast the pace the foot under the body's center of gravity.
- 3. The athlete must lean forward. The more the athlete leans forward, the more acceleration they create.
- 4. Vigorous arm action helps keep balance, rhythm and relaxation.
- 5. It is helpful to show athletes a good demonstration, photos or videos of this skill. This can help them to better understand what they must do.



3. MAINTAINING MOMENTUM PHASE

In this phase, the focus is on maintaining speed.

- 1. The athlete must combine good basic mechanics with the speed they created in the accelerating phase.
- 2. The key focus areas are as follows:
 - a. Posture/Body Position
 - b. Head Position
 - c. Arm Action
 - d. Leg Action





COACHING POINTS - FINISH PHASE

This is a very important skill to practice. The point at which the athlete's chest crosses the line determines their final time. While sprinting toward the finish line, the athlete show have good running posture and a normal stride action.

In the final strides of the race, the athlete should:

- 1. Run through and not to the finish line. Coaches can help athletes to learn this by asking athletes to pretend that the finish is a few meters beyond where it really. This encourages them to maintain their momentum
- 2. The athlete should lunge forward and lean through finish line.

Coaches can create different scenarios to help learning. E.g. Place people standing in different areas at the finish line. This helps athletes to experience the reality of a race finish and to practice in a competition like situation



