

Sprint Problems and Solutions for Sprinters and Hurdlers

Bryan E. Hoddle

2004 Head Coach-USA Paralympic Track and Field Team-Athens, Greece

www.bryanhoddle.com

www.facebook.com/bryanhoddle

With track and field season just around the corner and the hope of much better weather this year, your sprinters will experience many technical problems throughout the season that you'll need to address. Dealing with the high volume of student-athletes, it'll be critical to have your problems and solutions list handy. Often times making the athlete aware of the possible problems ahead of time will eliminate unnecessary time needed to correct problems.

Problem: A short first step or stumble out of the blocks.

Solution: An active knee punch from the back knee is essential. If you are standing in front of the athlete, you should see their back knee coming through, not the sight of the back thigh. Be sure and split the elbows for longer ground time as you begin your push phase.

Problem: Poor acceleration.

Solution: Work on push mechanics. Make sure the foot is dorsi-flexed. Check shin angles. The shins will tell you what direction force will be applied. I like to cue this as drag, push and punch the back knee. The heel should come through low.

Problem: Poor top end (Due to over striding)

Solution: Frequency drills like B-Skips. More hip flexor work. Long bounds. Downhill towing-10% grade. Stride length and stride frequency should be balanced. I've met many athletes who believe if they have a long stride length, they'll be faster. Balance of stride length and stride frequency are essential.

Problem: Weak first three steps.

Solution: 3 bounds, 5 bounds, Short jumps, Single leg Standing long jumps-Standing triple jumps and depth jumps over hurdles.

Problems: Poor transition from acceleration to top end.

Solution: Tow and release (at least 20 meters) Using a device like the ultra-speed pacer will really help here.

Problem: Exaggerated forward lean while running.

Solution: Extensive torso-core work needed..

Problem: Continual Shin problems.

Solution: Barefoot walking and running (check the surface for safety). Towel pulls with toes and marbles pick up with toes. Warm up and down barefooted. Rope jumping barefooted. Short hops or pogo jumps. Short pogo skips. Massage the feet and inside shin area.

Problem: Poor transition from corner to straight

Solution: Race-model work. Stay tight on the corner, running in the inside 1/2 of the lane. As the corner meets the straight away, move gradually to the middle of the lane. The athlete will feel a slingshot off the corner if they do this correctly.

Problem: Passive arms at the start.

Solution: Split the arms/elbows. Take block starts into high jump pits.

Problem-Side to side push from the blocks. (like a football running back)

Solution: Punch knee straight through. Again, you should see the knee, not the thigh come through. I tell the athletes to pretend they have a camera on the knee and to film down the track. If they drag the thigh through, they'll film the ground.

Problem: Head pops up to soon. (poor transition from push to pull mechanics.)

Solution: Lack of focus. Bring eyes up naturally to keep hips back and in a good push position. With eyes down, hips will be back. Eyes up, hips will come under body. (Oculo Pelvic reflex)

Problem: Weak hands.

Solution: Finger tip pushups. Squeezing a racquetball.

Problem: Hips high or low in the blocks.

Solution: 90 (F)-120 (B) degrees or 100 to 130 for weaker athletes on block settings. Remember, the large angles require less power which tends to be more ideal for younger sprinters. Press heels to blocks in set position.

Problem: Moving forward in the set position.

Solution: Bring hips straight up. Press heels to blocks.

Problem: Lack of focus at meets.

Solution: Rehearse meet situation, things that could go wrong so athlete isn't unprepared and caught off guard. Like any physical activity, focus requires practice.

Another often overlooked area is compatible and non-compatible workouts. You may have a problem that can be solved by simply making sure your workouts are compatible. See below.

These are compatible. (They go together)

***Endurance runs(general strength, specific) with strength endurance exercises that help to develop general strength endurance.

***Speed Development runs with Strength Development exercises. Jumping and bounding. Do the strength development exercises first.

***Speed Development runs with movement coordination (starts and finishing drills and specific sprinting drills).

These aren't compatible. (They don't go together)

***Speed Development with any type of endurance run over 80 meters.

***Speed Development with strength endurance development exercises.

***Strength Development (maximal) with any type of endurance runs.

***Coordination Exercises with strength development. (Maximal)

Often times problems can be solved with correct cues or by using a different cue. A few tweaks here and there will solve many issues which will cause problems during the race and in many cases, prevent injuries.

Coach Hoddle is the Director of the 2014 Northwest Track and Field Clinic to be held at the Sea-Tac Double Tree on February 6 and 7, featuring Ton Volpentest. He's spoken at clinics throughout the USA. Bryan is on the Vice-Chairman on the Board of Trustees for the Invictus Foundation.