



Spotting Drills for Safety

by Kirby Beck, *PCI #002T/EMSCI #017T*
Coon Rapids (MN) Police Department (retired)

by Mitch Trujillo, *PCI #244T/EMSCI #248T*
Boulder (CO) Police Department
IPMBA Education Director

The authors gratefully acknowledge Dominic Angiolillo, PCI #103T/EMSCI #079T and Al Simpson, PCI #165T/EMSCI #005T for their valuable contributions to this article.

As is the case with most physical activities, there are some risks associated with bicycle training. It is, therefore, essential that IPMBA Instructors take measures to ensure their students' safety during training, from the introduction of the simplest skills through mastery of the most complex. One of the most effective ways to reduce risk is the use of safety spotters. While it is not possible to "spot" all on-bike activities, spotters can and should be used when practicable.

Although it may not seem glamorous, spotters play one of the most important roles in bike training. Spotting effectively is a skill unto itself; therefore, spotters must receive guidance as to how to reduce the risk of injury. They must learn to recognize signs that a rider is about to fall and know how to properly and safely catch the rider. Prior to assigning students, aides, or other individuals to spot, the instructor must demonstrate the correct technique for spotting the skill being practiced. Instructors should be confident that each spotter has adequate strength to "catch" a falling rider. It is essential for the spotter to pay attention and remain focused on the rider's technique. Rider encouragement is also helpful.

As students begin to learn the various on-bike skills, spotters should be employed when it is practicable to do so. Skills that can and should be spotted include curb and stair ascents and descents, falling techniques, and technical sections of off-road riding. During these drills, every student should be spotted until the IPMBA instructor believes he/she has the skill and confidence to no longer require a spotter. This is usually a gradual process. **Spotters should always be used if the student requests them.**

When spotting stair and curb ascents and stair descents, it is important to ensure the student has adequate space and width and does not feel crowded. If the stairs are too narrow to comfortably accommodate the rider and the spotters, find another location. Feeling crowded can contribute to anxiety and result in a fall.

An effective method for spotting these skill stations is as follows.

Spotters should be positioned to the left and right of the rider, where they will be of most assistance. When spotting stairs, they should be spaced at regular intervals. Spotters should be ready before each student begins the maneuver; they should be mentally alert, with hands in front facing out while maintaining a firm footing with feet shoulder width apart.

The spotters should anticipate having to move in, thrust their whole arm into the space between the rider's arm and upper torso created by the riding position – basically hooking the student under their armpit – and secure them from that position. If the student encounters trouble and a



fall is imminent, the spotter essentially locks the “crook” of the elbow into the rider’s armpit. While a large rider may still fall over, their speed and momentum will be sufficiently reduced to prevent most injuries.

Use of this technique will prevent spotters from attempting to reach for or grab various body or bike parts with their hands. Catching the limbs is often not enough to stop the rider’s fall and may result in injury to the rider or the spotter, or an ineffective intervention of the fall.

Not all of the skills stations in IPMBA training can be effectively spotted; for instance, Maximum Braking, Quick Turns and the Decision Maker drill. In these cases, spotters would have to be far enough away from the drill so as not to interfere with the rider. When and if something goes wrong, it usually happens so quickly that spotters are unable to react and move in quickly enough to catch the rider or break his/her fall.

Because spotting is ineffective on these drills, instructors are encouraged to conduct Skill Station 5, Falling Techniques, prior to teaching these skills. Instructors must also effectively explain and demonstrate these skills, and ensure that students build up their skills slowly before allowing them to attempt them at full speed.

Here are a few rules for spotting:

- 🚲 Never assume a rider won’t fall. Even an experienced rider can crash.
- 🚲 Review the ITK procedures for implementing the drill and be prepared to prevent a rider from executing the skill if rider and bike are not set up for the skill (e.g., helmet secured, gear selection, skill level, etc.).
- 🚲 Pay attention to the rider’s body position and movement and be prepared to take action. Watch for signs of fear, anxiety, incorrect technique, and other indications that the rider may crash.
- 🚲 Focus on speed. Is there a sufficient and manageable amount of momentum for the rider to get safely negotiate the obstacle? Does the front wheel appear stable and under control?
- 🚲 If a rider falls, catch the body, not the limbs.

Ultimately, student safety is the responsibility of the instructor. Protect your students and yourself; provide knowledgeable, responsible spotters whenever practicable during on-bike exercises to help reduce the likelihood of injuries.

Kirby is one of IPMBA’s founding members and an author of both the Complete Guide to Police Cycling and the Complete Guide to Public Safety Cycling. He can be reached at kirbyp42@aol.com.

Mitch is an IPMBA Instructor Trainer, serves as Education Director on your IPMBA Board, and has a penchant for singlespeeds. He can be reached at trujillom@bouldercolorado.gov.

© 2010 IPMBA. This article appeared in the Fall 2010 issue of *IPMBA News*.