

the **CrossFit**

JOURNAL ARTICLES

Gymnastics Hurdle

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In gymnastics, a hurdle is the final preparatory step before performing a skill from a run. The purpose of the hurdle is to properly position yourself for the takeoff while maintaining and/or building momentum.

In most cases, a hurdle should be low and long. This will maintain forward momentum and allow sufficient time for preparatory positioning. There are a few exceptions, such as a hurdle on a diving board, where little forward momentum is available and the jumping surface is highly flexible, in which case a high hurdle is optimal.

Even if you have no plans to perform gymnastics or acrobatic movements from a hurdle, practicing a hurdle will have transferable benefit. It will improve footwork in any athletic endeavor where step adjustment is necessary, and it will improve your ability to navigate uneven surfaces rapidly and without injury.

You must know how to skip in order to have an effective hurdle. If you have not skipped since you were young, or have never skipped before, now is the time to begin practicing. Focus on keeping your skips low, long and fast. Try to travel as fast as you can while skipping. Avoid any unnecessary lifting of your legs. This will slow you down and not contribute to forward momentum. In each hop phase, bring your legs together to prepare for the next step. As you step between each hop, drive yourself forward as this is the phase of the skip that generates your speed and power. Try substituting skipping in for a running segment of a workout for an easy way to add skipping practice to your workout. The power requirement for skipping is significantly greater than running. This demand is an excellent stimulus for power development.

Practice skipping backward. While this does not have direct application, you will encounter a situation where a backward

skip is necessary to avoid an object or to adjust your footing to change direction while traveling backward. If you are practiced, these movements will be far easier and more effective.

Practice skipping sideways. To do this, first you must learn the sashay. A sashay is a sideways gallop. If you are traveling to the left, you step the left foot out to the side, then the left foot pushes off the ground to jump sideways as the right legs comes in to meet the left. After the jump, the right foot lands and drives to the left to repeat the process. To then skip sideways, you will need to perform a 180 degree turn between each sashay. This turn occurs just after you leave the ground in the jump. So the result will be a repeating pattern of left and right sashays. This pattern of alternating steps and hops is an excellent footwork and coordination drill.

Forward Skip Video

<http://media.crossfit.com/cf-video/fskip.mpg>



Backward Skip Video

<http://media.crossfit.com/cf-video/bskip.mpg>



Sideways Skip Video

<http://media.crossfit.com/cf-video/sskip.mpg>



Hurdle to step

A hurdle to step is used to set up for front handsprings, round offs, aerial cartwheels, and other skills requiring a kick. A hurdle to step sets you up for a lunge, allows for proper positioning of arms and shoulders, and maintains momentum.

A hurdle is simply a single skip into an aggressive lunge. The hop will occur on the leg that you kick when kicking into

Gymnastics Hurdle *(continued)*

handstand. This discussion will assume that you kick with your left leg. Simply reverse all instructions if you kick with your right. Practice your hurdle from a single step.

Step-hop Video

<http://media.crossfit.com/cf-video/stepnoarm.mpg>

1. Initially simply perform step-hop-step: step forward with your left leg, hop on your left leg while swinging your right leg forward (with a brief pause when your legs are together), and then step forward onto your right leg. The step onto your right leg should be a large step and drive forward. Note that the hop should be low and long, not high.

Step with Arm Video

<http://media.crossfit.com/cf-video/stepwarm.mpg>

2. Add your arms to the step-hop-step. As you hop on your left leg, both arms should swing overhead. During the hop you should be fully extended and leaning forward about 20 degrees. Your body should be in a straight line between your hands and feet. Consciously think about stretching your hands away from your feet as much as possible. This maximizes the extension in your body and will allow for a more powerful kick. As will the previous drill finish with a large step onto your right leg.

Roundoff Video

<http://media.crossfit.com/cf-video/roundoff.mpg>

3. Add a skill to the sequence. Perform a step hurdle into a cartwheel, roundoff, or front handspring. Focus on maximizing distance. Make the hurdle long and powerful.

4. Add a run before the hurdle. Take a few steps into your hurdle. Start slow and focus on proper positioning and timing. As your timing improves, you can increase the speed. If technique degrades, slow down and back up. Far more power will come out of a slow technically correct hurdle than a fast sloppy hurdle.

Power hurdle / jump hurdle

A power hurdle is a hurdle to step that is performed from a two-leg jump. A power hurdle is used primarily as a drill to train powerful tumbling with little lead-in, but is also used when space is limited. Start standing with your legs together and arms at your side. Jump forward while swinging your arms up to fully extend your body, then land with your left leg behind you driving into a right leg lunge. As with other hurdles, the jump should be forward, not upward. Try to cover



Jumps Video

<http://media.crossfit.com/cf-video/jumps.mpg>

as much distance as possible while maintaining proper mechanics.

Gymnasts should train to perform their tumbling passes out of a power hurdle. This forces a strong hurdle and round off or handspring which will improve tumbling dramatically. This also forces leading skills to be technically correct so they can build momentum rather than diminish momentum. If you regularly practice tumbling from a power hurdle, you will notice a marked improvement in your power.

Hurdle to two feet

A hurdle to two feet is used on vault and any two-foot takeoff into a forward salto (flip or roll) skill. The general concepts of this hurdle are the same as other hurdles. Keep the steps and body positioning. This hurdle does not involve a skip; instead, it is a long low jump from one foot to two. The description below assumes a hurdle from the left foot; again, reverse all directions if the hurdle from your right foot feels more comfortable. Selection of the lead foot is not necessarily the same as that for the hurdle to step.

1. Start by practicing just the jump from one foot to two feet. Step forward with your left leg, then hop to land with both feet. Keep your arms down at your sides throughout. Try to land so that you are on the balls of your feet, your feet are in front of your knees, your knees are in front of your hips, and your torso is upright. You

Gymnastics Hurdle *(continued)*

will be leaning back and will need to step backward after the landing.

Punch (no arm) Video

<http://media.crossfit.com/cf-video/punchnowarm.mpg>

instead of landing when your feet contact the floor, aggressively drive through the floor with your feet and punch as high as you can. You should not travel forward on the punch. It should either stay in one place, or travel slightly backward. Some forward rotation is expected.

Punch (with arm) Video

<http://media.crossfit.com/cf-video/punchwarm.mpg>

the arms should be swung upward during the punch. The timing of the arm swing is difficult for many. Start by just jumping using an arm swing. This is a very natural movement and most people already do this when they jump. Simply jump as high as you can, swinging your arms upward as you take off. Your arms should reach about 45 degrees above horizontal as you leave the ground.

4. Include the arm swing into the hurdle punch. Your arms will complete a small circle during the hurdle to set up for the arm swing. As you step into the hurdle, swing your arms up and back so that they reach 45 degrees below horizontal, swinging back as you contact the floor. They should then be swung forward and up so that they reach about 45 degrees above horizontal as you leave the ground. The punch occurs in about 0.3 seconds, so the arm swing must be fast and aggressive.

5. Perform a hurdle to punch out of several steps. Now that your timing is getting better, try to do it out of a small run. Take a few steps and hurdle and punch. Remember to swing your arms aggressively, and lean back as your feet contact the ground. This will transfer your forward momentum into upward momentum. Forward travel should be minimized.

Learning an effective hurdle is essential in gymnastics and very useful for non-gymnasts as well. The timing, coordination, and development of power will carry over into other activities. Anyone who needs to navigate obstacles efficiently will be greatly benefited by developing an effective hurdle.



Roger Harrell is a former competitive gymnast with twenty years of experience in the sport. He has continued to train in the sport well beyond his competitive years. He has run several competitive gymnastics training programs and currently focuses on coaching adults and bringing the benefits of gymnastics to those outside the usual community. He is a CrossFitter and the developer, designer, and webmaster of DrillsAndSkills.com. 